Wolf	Wu	Young (FL)
Woolsey	Wynn	Young (AK)

NOES—65

Aderholt	Hooley	Schakowsky
Baird	Hulshof	Slaughter
Borski	Jones (OH)	Stenholm
Brady (PA)	Kennedy (MN)	Strickland
Capuano	Kucinich	Stupak
Carson (IN)	Larsen (WA)	Sweeney
Conyers	LoBiondo	Tanner
Costello	McDermott	Taylor (MS)
Cramer	McGovern	Thompson (CA)
Crane	McNulty	Thompson (MS)
Crowley	Markey	Thurman
DeFazio	Menendez	Towns
English	Moore	Udall (CO)
Filner	Moran (KS)	Udall (NM)
Fossella	Oberstar	Velazquez
Gephardt	Pallone	Visclosky
Gillmor	Peterson (MN)	Wamp
Gutknecht	Platts	Waters
Hefley	Ramstad	Weller
Hilliard	Rodriguez	Wexler
Hinchey	Sabo	Wicker
Holden	Schaffer	

ANSWERED ''PRESENT''—2

Tancredo	Whitfield

NOT VOTING—23

Andrews	Hastings (FL)	Manzullo
Baldacci	Honda	Phelps
Brown (FL)	Hutchinson	Regula
Clayton	Jackson-Lee (TX)	Sanders
Dicks	Kilpatrick	Spence
Dingell	LaFalce	Stark
Frost	Lipinski	Stearns
Gilman		Vitter

□ 1232

So the Journal was approved.

The result of the vote was announced as above recorded.

Stated for:

Mr. STEARNS. Mr. Speaker, on rollcall No. 308 I was unavoidably detained. Had I been present, I would have vote ''aye.''

AUTHORIZING THE SPEAKER TO DECLARE A RECESS ON WEDNESDAY, SEPTEMBER 12, 2001, FOR THE PURPOSE OF RECEIVING IN JOINT MEETING THE HONORABLE JOHN HOWARD, PRIME MINISTER OF AUSTRALIA

Mr. THUNE. Mr. Speaker, I ask unanimous consent that it may in order at any time on Wednesday, September 12, 2001, for the Speaker to declare a recess, subject to the call of the Chair, for the purpose of receiving in joint meeting the Honorable John Howard, Prime Minister of Australia.

The SPEAKER pro tempore (Mr. OSE). Is there objection to the request of the gentleman from South Dakota?

There was no objection.

AUTHORIZING THE SPEAKER TO DECLARE A RECESS ON THURSDAY, SEPTEMBER 6, 2001, FOR THE PURPOSE OF RECEIVING IN JOINT MEETING HIS EXCELLENCY VICENTE FOX, PRESIDENT OF THE UNITED MEXICAN STATES

Mr. THUNE. Mr. Speaker, I ask unanimous consent that it may in order at any time on Thursday, September 6, 2001, for the Speaker to declare a recess, subject to the call of the Chair, for the purpose of receiving in joint meeting His Excellency Vicente Fox, President of the United Mexican States.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from South Dakota?

There was no objection.

GENERAL LEAVE

Mr. TAUZIN. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days within which to revise and extend their remarks and to include extraneous material on the bill H.R. 4.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Louisiana?

There was no objection.

PERMISSION FOR COMMITTEE ON ENERGY AND COMMERCE TO FILE SUPPLEMENTAL REPORT ON H.R. 2587, ENERGY ADVANCEMENT AND CONSERVATION ACT OF 2001

Mr. TAUZIN. Mr. Speaker, I ask unanimous consent that the Committee on Energy and Commerce be allowed to file a supplemental report on the bill H.R. 2587, the Energy Advancement and Conservation Act of 2001.

The SPEAKER pro tempore. Is there objection to the request of the gentleman from Louisiana?

There was no objection.

SECURING AMERICA'S FUTURE ENERGY ACT OF 2001

The SPEAKER pro tempore. Pursuant to House Resolution 216 and rule XVIII, the Chair declares the House in the Committee of the Whole House on the State of the Union for the consideration of the bill, H.R. 4.

□ 1235

IN THE COMMITTEE OF THE WHOLE

Accordingly, the House resolved itself into the Committee of the Whole House on the State of the Union for the consideration of the bill (H.R. 4) to enhance energy conservation, research and development and to provide for security and diversity in the energy supply for the American people, and for other purposes, with Mr. Bonilla in the chair.

The Clerk read the title of the bill.

The CHAIRMAN. Pursuant to the rule, the bill is considered as having been read the first time.

The gentleman from Louisiana (Mr. TAUZIN) and the gentleman from Michigan (Mr. DINGELL) each will control 15 minutes.

The gentleman from New York (Mr. BOEHLERT), the gentleman from Texas (Mr. HALL), the gentleman from California (Mr. THOMAS), the gentlewoman from Florida (Mrs. THURMAN), the gentleman from Utah (Mr. HANSEN), and the gentleman from West Virginia (Mr. RAHALL) each will control 10 minutes.

The Chair recognizes the gentleman from Louisiana (Mr. TAUZIN).

Mr. TAUZIN. Mr. Chairman, I yield myself such time as I may consume.

Today we do something in this House we have not done in a decade. We enact a comprehensive energy policy for our country. After years of indifference toward America's energy future, we are about to take a giant leap forward.

The bill we are considering today, the Securing America's Future Energy Act, the SAFE Act, will be the first major energy legislation of the 21st century, and it reflects 21st century values and ideas. It advances a balanced approach to energy production and use by encouraging a responsible, diverse mix of energy sources along with a significant investment in conservation and increased efficiency. The SAFE Act charts a path to increased energy security and a cleaner environment; secure, reliable, affordable energy for Americans.

Americans last winter saw their natural gas heating bills rise in the Midwest 73 percent, saw the Northeast heating bills rise 27 percent, saw gasoline prices rise 40 and 50, in some cases 70 cents a gallon. Americans are pleased to know that today we begin a short-term and long-term permanent energy policy to correct those security deficiencies.

I am proud of the bipartisan work our committee did. The core of the bill passed the Committee on Energy and Commerce. It passed subcommittee by a vote of 29 to 1 and the full committee by a vote of 50 to 5. Big bipartisan support for the bulk of this bill.

I owe a great deal of compliments and thanks to my subcommittee chairman, the gentleman from Texas (Mr. BARTON), for helping to craft the legislation, and particularly to ranking members, the gentleman from Michigan (Mr. DINGELL), and the subcommittee ranking member, the gentleman from Virginia (Mr. BOUCHER), for the extraordinary cooperation and assistance and hard work and the willingness to work together they exhibited.

Today I hope this bipartisan spirit continues. This is not traditionally partisan legislation. This is about all Americans having affordable, reliable sources and supplies of energy, and all Americans believing enough in conservation and efficiency to play a role in making sure that our country is safe for the future.

This bill does some amazing things in conservation. First of all, it does something we have not done literally in 17 years. It reduces light truck fuel consumption, the SUVs and minivans, by 5 billion gallons over the next 6 years. That is like parking 2 years' production of minivans and SUVs, for 2 years out of that 6-year period. This increases funding for programs to assist low-income families.

I do not know if my colleagues realize it, but the number of families applying for LIHEAP help to pay their energy bills has been rising dramatically as the costs are going up, and

more and more families are having trouble meeting those costs.

This bill will provide incentives for cleaner energy sources and alternatively fueled vehicles. This bill will promote clean coal technologies. Coal provides 52 percent of our electricity. We want to make it as clean as we can make it, not just for the sake of America's environment but for the global environment.

This bill will set stricter standards on energy use in Federal buildings. We will make the Federal Government a leader by requiring by the year 2020 a 45 percent increase in efficiency in the use of energy in Federal buildings. And we will simplify and streamline the reauthorization, the relicensing of vital plants in the hydroelectric and nuclear area.

This bill will stabilize energy for our country, stabilize supplies, stabilize prices, stabilize markets. This bill is the answer to what is becoming a growing crisis in supply and demand in America, and I am pleased to bring it to the House as the main core of this bill that has been produced with the cooperation of four different committees.

I want to stress one thing more than anything else before I yield my time, and that is over half of our bill deals with conservation, efficiency, and alternative fuels. We lead with this effort because we believe logically Americans need first to control demand. We need to manage the demand of energy in this country first before we know how much more in supplies, how much more in deliverability we need to focus on in subsequent bills.

Later on, we will charge the subcommittee on energy and clean air, led by the gentleman from Texas (Mr. BARTON), to deliver on electricity and nuclear policy for this country. Today we build the broad policy, the permanent policy that stabilizes and protects America's energy future. I commend this bill to my colleagues' attention.

Mr. Chairman, I reserve the balance of my time.

The CHAIRMAN. The gentleman from Michigan (Mr. DINGELL) is recognized for 15 minutes.

Mr. DINGELL. Mr. Chairman, I yield myself 2 minutes.

(Mr. DINGELL asked and was given permission to revise and extend his remarks.)

Mr. DINGELL. Mr. Chairman, I rise to support those portions of H.R. 4 reported by the Committee on Energy and Commerce. In that committee, we had a bipartisan process and a bipartisan vote for passage of 50 to 5.

I want to specifically commend my good friend and colleague, the chairman of the committee, the gentleman from Louisiana (Mr. TAUZIN), and the chairman of the subcommittee, the gentleman from Texas (Mr. BARTON), for the way in which our committee addressed these issues. I also want to commend the distinguished ranking member, the gentleman from Virginia (Mr. BOUCHER), for his fine leadership and cooperation in this matter.

It is regrettable that some other provisions from other committees have not met the same high standards of work and bipartisanship that were included in the efforts of the Committee on Energy and Commerce. The tight deadlines imposed by the leadership, when coupled with lack of specific statutory proposals by the administration, meant that it was much more difficult to accomplish this legislation and that our successes were more limited.

Having said this, the Committee on Energy and Commerce has produced proposals well worthy of support in this body. Our bill provided for helpful conservation measures, balanced and targeted hydroelectric licensing reform, important protection of the nuclear waste fund, major incentives for the development and use of clean coal technology, and a needed analysis of the use of boutique fuels, a major problem.

And as a result of the bipartisan amendment adopted in the subcommittee by a vote of 29 to 3, the legislation required significant but prudent savings for light trucks and SUVs. I note that this is a floor, leaving the Department of Transportation to determine if higher standards are needed, with the full ability to exercise these powers through proper and careful rulemaking.

Virtually all of the committee's provisions in H.R. 4 are worthy of our support. I expect each Member will examine carefully other portions of this legislation, some of which are problematic, and see which amendments are to be adopted, if any, before rendering judgment on the entire matter.

Mr. Chairman, I reserve the balance of my time.

Mr. TAUZIN. Mr. Chairman, I yield 2 minutes to the gentleman from Texas (Mr. BARTON), the chairman of the Subcommittee on Energy and Air Quality of the Committee on Energy and Commerce.

(Mr. BARTON of Texas asked and was given permission to revise and extend his remarks.)

Mr. BARTON of Texas. Mr. Chairman, I wish to commend the full committee chairman, the gentleman from Louisiana (Mr. TAUZIN); the full committee ranking member, the gentleman from Michigan (Mr. DINGELL); and my ranking member, the gentleman from Virginia (Mr. BOUCHER). A fair amount of the bill before us came out of my subcommittee on a bipartisan basis. I believe that in subcommittee it passed 29 to 1, and in full committee, as amended, it passed 50 to 5.

The bill before us is a balanced approach to our Nation's energy policy. On the supply side we have components of the bill that would address nuclear power in this country, the issue of boutique fuels, some hydroelectric licensing reforms, a significant title on clean coal technology, and obviously a major title on conservation.

Bills that came out of other committees addressed the access issue, specifically the Alaska National Wildlife Reserve. The Committee on Ways and Means put together a tax provision. And I must say I am a little puzzled by some of the opposition to the tax title. Most of the tax extensions are just that, extensions of existing tax credits. To the extent they are new provisions in the tax title, they are for renewable and clean coal technology, which I think we have tremendous bipartisan support on.

The bill that is before us is not the total answer to our Nation's energy policy. It is a good step in the right direction. I hope later in the fall to put together a comprehensive electricity restructuring bill that will come out of subcommittee and full committee and come to the floor on a bipartisan basis.

We want to do something on the nuclear fuel cycle, including Price-Anderson, the insurance fund. And once the President makes a decision on a repository for the high level nuclear waste, we want to put together a nuclear waste bill. We also want to reauthorize and improve and reform our pipeline safety bill.

So the bill that is before us is simply a step in the right direction. This Congress has the opportunity, and I think the obligation, to be known as the energy Congress. We are going to start that today on a bipartisan basis. I urge Members to keep an open mind on the amendments, but on final passage I hope that we will vote in support of the bill.

Mr. DINGELL. Mr. Chairman, I yield 3 minutes to the distinguished gentleman from Virginia (Mr. BOUCHER).

(Mr. BOUCHER asked and was given permission to revise and extend his remarks.)

□ 1245

Mr. BOUCHER. Mr. Chairman, as ranking member on the Subcommittee on Energy and Air Quality of the Committee on Energy and Commerce, I have had the pleasure of participating actively with other subcommittee members and with the gentleman from Texas (Mr. BARTON), the chairman of the subcommittee, the gentleman from Louisiana (Mr. TAUZIN), chairman of the full committee, and the ranking member, the gentleman from Michigan (Mr. DINGELL) in the construction of the Committee on Energy and Commerce titles in H.R. 4. It is my pleasure today to rise in support of the Committee on Energy and Commerce's provisions. They make a significant contribution to our Nation's energy policy.

I want to commend the process that the Committee on Energy and Commerce employed in writing these titles. It was an open process. Both the gentleman from Texas (Mr. BARTON) and the gentleman from Louisiana (Mr. TAUZIN) welcomed the participation of Democratic members of the committee at every step, and I would note that the

committee approved its titles by the broad bipartisan margin of 50–5.

The Committee on Energy and Commerce usually works in a bipartisan fashion, and this legislation is very much in that tradition, and I want to extend my thanks to the gentleman from Texas (Mr. BARTON) and the gentleman from Louisiana (Mr. TAUZIN) for their cooperative work with us.

The measure before us today does not address every energy-related concern. Some matters were not ripe for resolution given the rapid schedule set for completing work on H.R. 4. But this legislation does make a significant contribution to a strengthened national energy policy. It assures that the entire nuclear waste fund is expended for its intended purpose, the construction of a repository for the permanent storage of nuclear waste. While the Committee on Rules has removed that provision from this legislation, the provision in the original bill makes the important statement that this fund of ratepayer dollars should no longer be diverted to general government purposes.

Another of our committee's titles makes major improvements in the process of relicensing hydroelectric facilities. Another provision embodies a carefully crafted bipartisan compromise on vehicle fuel efficiency standards, and the coal title will promote the introduction of a new generation of advanced clean coal technologies which electric utilities will be incented to use through a range of tax credits.

While I have reservations about some titles in H.R. 4 that were added by other committees, I am pleased to commend the Committee on Energy and Commerce's work to the Members of this House and to urge support for these constructive contributions to a stronger national energy policy.

Mr. TAUZIN. Mr. Chairman, I yield 1 minute to the gentleman from Ohio (Mr. OXLEY), the chairman of the Committee on Financial Services.

Mr. OXLEY. Mr. Chairman, let me briefly explain the Committee on Financial Services' contribution to this legislation. Our committee has produced language which furthers an essential element of the President's energy plan, reducing energy consumption, and the idea is to get HUD to improve energy efficiency and conservation.

This legislation will improve the community development block grants program to spur energy conservation, create incentives for energy-efficient single- and multifamily homes, and aid Americans who purchase homes that are energy efficient.

The Committee on Financial Services has worked hard to ensure that American families can live in cost-effective, energy-friendly homes that will both relieve the strain on their pocketbooks and the strain on our energy infrastructure.

Mr. Chairman, H.R. 4 addresses the most critical elements of our energy difficulties. It promotes development of environmentally friendly technology through market competition and not through government mandates. It promotes the wise use of resources without threatening to cripple American businesses. H.R. 4 will lessen our dependence on foreign oil while at the same time leading to lower energy costs for all of us.

Mr. Chairman, I congratulate all of my colleagues on the various committees who have worked on this historic legislation.

Mr. DINGELL. Mr. Chairman, I yield 2 minutes to the gentleman from Louisiana (Mr. JOHN).

Mr. JOHN. Mr. Chairman, I congratulate both the gentleman from Louisiana (Mr. TAUZIN), chairman of the full committee, and the ranking member, the gentleman from Michigan (Mr. DINGELL), and also the subcommittee chairman and ranking member, the gentleman from Texas (Mr. BARTON) and the gentleman from Virginia (Mr. BOUCHER), for putting together what I think is one of the most important pieces of legislation that this Congress can handle this year.

No economic prosperity can thrive and grow without an energy policy in place. I like to describe this situation that we have as Americans that when it deals with energy policy, we have attention deficit disorder. When oil was $10 a barrel and gasoline was 72 cents not very long ago, less than 2 years, energy was not on anyone's radar screen. But now when we have prices of oil that have risen to $30 a barrel, gasoline that reached $2, sometimes we make some hasty decisions.

Mr. Chairman, I think that that in itself should underscore the importance of why we should finally implement a national energy policy. It is something I talked about for many, many years being from the great State of Louisiana, but it is troubling in the times of the peaks and the valleys.

If we just look at USA Today, front page yesterday, it says, Energy Crisis: What Energy Crisis? Well, I can tell Members that my friends in the State of California and some of my friends in the Northeast will look at this a little differently. I believe if it is not a crisis today and we get lower prices in gasoline and natural gas, when is it going to be the next crisis? Next year, 2 years? But it is going to come, that is the history of this industry.

Mr. Chairman, I think it is paramountly important to not just the jobs in my district, and that is something that is important and precious to me, but it is about national security. We must pass this energy policy. It is balanced, and I am very proud to be a cosponsor of it.

Mr. TAUZIN. Mr. Chairman, I yield 1 minute to the gentleman from Iowa (Mr. GANSKE), a valuable member of the Committee on Energy and Commerce.

(Mr. GANSKE asked and was given permission to revise and extend his remarks.)

Mr. GANSKE. Mr. Chairman, number one, I think it would be unfortunate and misguided if we were to turn back the clock and grant an exemption from the oxygenate requirements of the Clean Air Act today. Such an amendment would inhibit the use of ethanol and decrease our use of renewable fuels.

Number two, conservation is one of the first avenues we should examine in approaching our energy problems. I support efforts to increase the corporate average fuel economy standards.

Number three, I believe we must have new sources of energy. Last winter, Iowans suffered when their natural gas heating bills spiked. We need to have new sources of natural gas. Therefore, I support provisions in this bill which anticipate drilling in ANWR. It should be done responsibly; and I will also support the Wilson amendments.

Mr. Chairman, I speak in favor of a national energy plan for America. A comprehensive strategy has been decades overdue. I particularly commend those provisions which further our development of renewable fuels, such as the extension of the wind energy tax credit. I believe in the development of renewable fuels . . . such as biodiesel and ethanol. It would be unfortunate and misguided if we were to turn back the clock and grant an exemption from the oxygenate requirements of the Clean Air Act today. Such an amendment would actually inhibit the use ethanol and decrease our use renewable fuels. It would be a huge step backward, which would *increase* our dependence on foreign oil. I urge my colleagues to reject such an amendment.

There are some advocates who believe energy conservation is not important to this debate. I strongly disagree. Conservation is one of the first avenues we should examine in approaching our energy problems. Therefore, it is my intention to support efforts today to increase the Corporate Average Fuel Economy Standards. I believe it is a responsible and appropriate step in increase our energy conservation efforts.

There are others who argue that conservation efforts alone are not enough. I think they are also correct. I also believe we must have new sources of energy. Last winter Iowans suffered when their natural gas heating bills spiked . . . we need to have new sources of natural gas. We could look on the coral reef off the coast of Florida, or under the Great Lakes, or under our national monuments . . . or we could depend on foreign sources to provide it to use . . . at whatever price they chose . . . but I don't believe those are the best options. Therefore, I support the provision in this bill which anticipates drilling in the ANWR. It should be done responsibly . . . and I support the Wilson amendments.

Mr. DINGELL. Mr. Chairman, I yield 2 minutes to the gentleman from Minnesota (Mr. LUTHER).

Mr. LUTHER. Mr. Chairman, clearly, as in most bills that we have before us, there are some positive provisions. There are some positive provisions in this bill, but we should be very disappointed in the bill before the House today.

Mr. Chairman, the administration has declared that there is an energy

crisis in America. If we are in a crisis, we need a far bolder approach than we are seeing today. This legislation is not an energy package for the 21st century. It focuses on the same old ideas that have led to many of our current problems. It is a plan for the previous century that perpetuates our reliance on dirty, inefficient energy sources while virtually ignoring the ideas of efficiency and renewable energy.

Our country deserves a national energy strategy that promotes energy security by encouraging cleaner renewable sources and increasing energy efficiency. As members of the Committee on Energy and Commerce, many of us have fought for aggressive strategies such as increased air conditioner standards and standards for other appliances that account for a high percentage of energy use. It simply defies common sense not to make these appliances just as efficient as possible.

By not even addressing this issue and many other issues, we are not even scratching the surface in terms of developing a comprehensive approach to our energy needs in this country.

Congress needs to go back to the drawing board and develop a real policy that moves our country toward true energy independence for the future.

Mr. TAUZIN. Mr. Chairman, I yield 30 seconds to myself to respond to the gentleman.

Mr. Chairman, the bill does contain new rulemaking for appliance efficiency. In fact, it requires rulemaking stand-by power standards on a number of home appliances and other large appliances, and it does provide for all Federal agencies to buy a new 20 percent increase in efficiency air conditioner, the CR–12 standard, which was recommended not only by the Department of Justice, but by the DOE in the Clinton administration.

So we have air conditioning efficiency standards, appliance standards, rulemaking for stand-by power to lower the energy use of many appliances. This is a comprehensive bill.

Mr. Chairman, I yield 1 minute to the gentleman from Kentucky (Mr. WHITFIELD), another valuable member of the Committee on Energy and Commerce.

Mr. WHITFIELD. Mr. Chairman, as a member of the Committee on Energy and Commerce, I was quite impressed with the way that the gentleman from Louisiana (Mr. TAUZIN), the gentleman from Michigan (Mr. DINGELL), the gentleman from Texas (Mr. BARTON) and the gentleman from Virginia (Mr. BOUCHER) worked to put this bill together. It is an important piece of legislation because it sets out a national energy policy for America, something we have not had in a long time.

It also pays some special attention to coal.

Coal is our most abundant resource. We have 250 years of coal in the ground in America today. It provides 51 percent of all of the electricity produced in America, and it is one of the low-cost fuels which benefits the consumers throughout the country. Not only that, but it is one of the very few fuels that we do not have to import from other countries.

Mr. Chairman, this bill is important because it authorizes $2 billion for research and development of clean coal technology. It provides tax credits for investment in clean coal technology, tax credits for production using clean coal technology, and I would urge everyone on this floor to support this legislation. I, for one, am particularly happy that it does place an emphasis on the importance of coal in America.

□ 1300

Mr. TAUZIN. Mr. Chairman, I yield 1 minute to the gentleman from Pennsylvania (Mr. GEKAS).

Mr. GEKAS. Mr. Chairman, I thank the gentleman for yielding me time.

Mr. Chairman, I rise in support of the manager's amendment and the underlying bill. Is there anyone in the entire Nation who does not believe that the time has come for our Nation to declare independence, to declare independence on foreign oil, on foreign energy sources? Should we not be self-sufficient and independent in providing for the demands of our public, for the energy needs that are part of our everyday standard of living?

That is what was the thrust of a bill that I introduced last term, to call for bringing about all the resources at our command, to focus on energy and to bring about independence of energy on foreign oil within 10 years. We cannot do that unless we buckle down and begin the process of amassing those resources and focusing on these problems, starting with today's legislation. We should be ecstatic at the outset of this endeavor to recognize that whatever we do today is the giant first step towards that total independence that we all crave.

Mr. TAUZIN. Mr. Chairman, I yield 3 minutes to the gentleman from the great State of Texas (Mr. DELAY), the majority whip, who makes almost as much of an energy contribution to America's future as does the great State of Louisiana.

Mr. DELAY. Mr. Chairman, I appreciate the kind words for Texas coming from the gentleman from Louisiana (Mr. TAUZIN). I greatly appreciate it. It is probably the only time we have heard good words about Texas coming from Louisiana. We appreciate that very much, Mr. Chairman.

I congratulate the chairman for bringing this bill to the floor and his participation in it.

I ask the Members, Mr. Chairman, to support this bill because it makes substantial progress towards strengthening America's energy security.

We find ourselves facing energy challenges that we simply cannot ignore any longer. Under the President and Vice President's leadership, the country has taken a hard look at both our short-term energy supply problems and the broader implications of long-term demands mandated by our expanding population and economy.

I want to thank the chairmen of so many committees for doing outstanding jobs in putting together this very important package: the gentleman from New York (Mr. BOEHLERT) of the Committee on Science, the gentleman from Alaska (Mr. YOUNG) of the Committee on Transportation and Infrastructure, the gentleman from California (Mr. THOMAS) of the Committee on Ways and Means, the gentleman from Louisiana (Mr. TAUZIN) of the Committee on Energy and Commerce. I also want to thank the ranking members, particularly the gentleman from Michigan (Mr. DINGELL) from the Committee on Energy and Commerce.

This is a very, very good package. This bill takes important steps to meet both those objectives that I was talking about. The SAFE Act, the Securing America's Future Energy Act, addresses our energy security with a thorough and comprehensive approach. It encourages conservation methods to enhance the dramatic improvements America has made over the past 20 years.

Today we are much more efficient, a much more efficient society than we were only shortly ago. This bill will help us become even better, and it spurs progress by offering incentives that will put our ingenuity and technological prowess to work. We best meet a challenge in this country by identifying the problem and by liberating the American people to solve it with entrepreneurial know-how.

New regulations and measures that deny choices to consumers are the wrong direction. This bill gets it right by offering incentives, not mandates.

The SAFE Act targets a significant problem: our growing dependence on foreign sources of energy. America faces a serious degradation of our national security unless we move at once to reduce our dependence on foreign sources of energy.

This bill takes important steps in that direction by promoting initiatives that will allow us to produce more energy at home. We need to take control of our own destiny, and this bill gives the American people much more control over their energy security.

Members from both parties, I ask support for this bill.

Mr. DINGELL. Mr. Chairman, I yield 2 minutes to the distinguished gentleman from Oregon (Mr. BLUMENAUER).

Mr. BLUMENAUER. Mr. Chairman, I appreciate the courtesy of the gentleman from Michigan (Mr. DINGELL) in allowing me an opportunity to address this issue.

I am concerned that a key component of any plan is to chart a course for the future. The energy plan we are debating today and voting on falls terribly short in preparing the United States for the future on a number of

issues: fiscal conservatism, environmental stewardship, and international relations.

This bill costs $34 billion without any offsets to pay for it. Just like the general tax cut from President Bush which primarily benefits the people who need help the least and puts our economic future for the country in a precarious position, this energy bill puts Medicare and Social Security Trust Funds at further risk of being raided.

We need to be focusing first and foremost on conservation and energy efficiency. With all due respect to the Vice President, energy conservation is more than a personal virtue. It should be the cornerstone of a long-term national energy policy. Nor does the bill that we are debating today provide adequate support for those families most in need to meet rising energy costs in the short term or provide incentives and funding for more long-term solutions such as investing in weatherization efforts, more energy-efficient appliances, and building design.

For too many elderly and poor people, we are still asking them to choose between energy and food. With the hot spells we are looking at in the course of the summer, it could, in fact, be a life or death decision for some senior citizens.

The energy bill is a direct assault on the environment by attempting to open up the Arctic Wildlife Refuge by drilling at a tremendous cost of 160 species of migratory birds, caribou, grizzlies, wolves and others that rely on the open space of the refuge.

Finally, it is the slap in the face of our allies around the globe. Earlier this month in Bonn, the international community came to an agreement to address greenhouse gas emissions.

I respect people who disagree, but this administration has been unable to formulate its own approach, leaving America out in the cold. America deserves a bill that balances economic and environmental considerations. I strongly urge a vote against this consideration.

Mr. DINGELL. Mr. Chairman, I yield 1 minute to the distinguished gentleman from Utah (Mr. MATHESON).

Mr. MATHESON. I thank the gentleman from Michigan for yielding me this time.

Mr. Chairman, I rise today to acknowledge the good work that took place on the committee that I am on. I recognize this is during the time of the Committee on Energy and Commerce, but I am on the Committee on Science. I just want to acknowledge that I think it fits well with this bill, a good bipartisan effort on that committee, an effort to focus a little bit more on the long-term objectives we are trying to do in this energy policy.

In the long run I think technology is going to be a key component of how we address our energy situation, technology that finds better ways for us to make energy from existing sources, technology that finds ways to produce energy from new sources, and technology that helps us use energy more efficiently.

I am particularly pleased in the research and development component. It incorporated a suggestion that I made to study ways to improve use of the electric transmission system to make it more efficient. However we want to produce energy, however we want to use energy, at the end if we can move it across those transmission lines on a more efficient basis, that helps us all.

Mr. DINGELL. Mr. Chairman, I yield 1 minute to the gentleman from Colorado (Mr. UDALL).

(Mr. UDALL of Colorado asked and was given permission to revise and extend his remarks.)

Mr. UDALL of Colorado. Mr. Chairman, I thank the distinguished ranking member for yielding time. I, too, like the previous speaker had scheduled to speak on behalf of the Committee on Science but want to take advantage of this opportunity.

Mr. Chairman, I rise in opposition to this bill. As I look it over, I am reminded of the old Western movie ''The Good, the Bad and the Ugly.'' There are a few good things in the bill. For example, it includes the text of my three bills dealing with clean school buses, energy-efficient schools, and distributed energy. There are a few other good things as well, but the good things are far outweighed by the bad.

The restrictive rule imposed by the leadership makes it impossible to remove or improve all those things that are bad for the environment, bad for taxpayers, bad for the economy and bad for the country. So even if the House adopts the amendments to protect the Arctic National Wildlife Refuge, as we should, the bill would still be so ugly that it should be rejected by the House.

Let us reject this bill.

Mr. TAUZIN. Mr. Chairman, I would ask the Chair, who has the right to close general debate.

The CHAIRMAN. The gentleman from Louisiana has the right to close.

Mr. DINGELL. Mr. Chairman, I yield 1 minute to the gentleman from Washington (Mr. INSLEE).

(Mr. INSLEE asked and was given permission to revise and extend his remarks.)

Mr. INSLEE. Mr. Chairman, in the final analysis, this bill is less a real energy policy for the next century than it is a scandal. It is an environmental and fiscal Teapot Dome. It is the result of $33 million in campaign contributions by the oil and gas industry which has derived $21 billion in benefits from the Federal taxpayers. Where is that going to come from? It is going to come from the Medicare Trust Fund, because our friends across the aisle are refusing to hue to a policy of fiscal responsibility.

It is also showing an amazing lack of vision. Forty years ago, President Kennedy stood right behind me and challenged Americans, said, this Nation is going to go to the Moon within the decade. President Bush's energy policy says, Let's not go anywhere. Let's rely on what we invented in the early 1900s, oil and gas. That is why 75 percent of all the fiscal benefits in this bill are for fossil fuels and only 17 percent is for the new technology. It is a great energy policy for the last century.

Mr. DINGELL. Mr. Chairman, I yield the balance of my time to the distinguished gentleman from Texas (Mr. GREEN).

Mr. GREEN of Texas. Mr. Chairman, I thank my ranking member and good friend for allowing me to close on our side.

I rise in support of H.R. 4 and want to commend the leaders on both sides, particularly in the Committee on Energy and Commerce that we worked on, what I consider a reasonable energy package. This legislation is long overdue and sorely needed because America has been wracked by unstable energy policies resulting from both internal and external pressures.

The legislation before us today will help stabilize these prices through a combination of exploration and conservation. I am not standing here to pretend that we can drill our way out of our dependence on foreign oil, but we need to do better. However, by more utilization of our domestic energy sources, we can better absorb unexpected price shocks.

In addition, the positive step this bill takes toward conservation will further stretch our energy supply. The bipartisan agreement in our committee between the gentleman from Michigan (Mr. DINGELL) and the gentleman from Louisiana (Mr. TAUZIN) has resulted in the first meaningful increase in the CAFE standard in over 2 decades.

I understand this compromise may not go far enough for some folks, but it is an increase. I am concerned about American jobs. We need to make sure we have production, and exploration. I will have a discussion on this in later amendments.

I am glad to support the bill and look forward to working with my colleagues.

Mr. TAUZIN. Mr. Chairman, I yield such time as he may consume to the gentleman from Ohio (Mr. SAWYER).

(Mr. SAWYER asked and was given permission to revise and extend his remarks.)

Mr. SAWYER. Mr. Chairman, I thank both the gentleman from Louisiana and the gentleman from Michigan for their courtesy.

Mr. Chairman, the bill before us is a modest effort. It bears the earmarks of a rushed process. Energy policy is too important to the well-being of this country to be produced in impromptu committee sessions.

I cannot emphasize strongly enough that no effort to solve this country's energy problems will be effective if we do not also tackle electricity issues. This bill almost entirely ignores the harder questions about electricity restructuring. It is bad enough that this bill turns its back on providing any help to the people of California. But it does nothing to demonstrate

to the American people that Congress is willing to take the steps necessary to provide the kind of Federal framework that will allow the developing electricity markets to work properly.

How can we tell our constituents that we are solving America's energy problems if we do nothing about an electrical transmission system that was designed to meet the needs of America in the 1930's? Several of us will shortly be introducing legislation that will provide for a transmission system appropriate to our new century.

Let us strive to achieve a truly comprehensive and effective solution to our energy problems. That solution is not before us today. Let us commit ourselves to the hard and deliberative work of addressing electrical transmission and generation.

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Mr. TAUZIN. Mr. Chairman, I yield myself such time as I may consume in closing on our Committee on Energy and Commerce time on this bill.

Mr. Chairman, much has been said in the last 30 minutes about this bill, some of it critical. I want to make a point here that I hope all Members will pay some attention to: this bill does not do everything that this Congress needs to do.

We are going to take up an electricity bill in the fall, we are going to take up a nuclear policy bill in the fall, we will hopefully renew Price-Anderson. We are going to do a number of other things in the fall which may carry forward some of our conservation efforts in this bill. But this bill is a giant step forward to securing America's energy future. I want to focus on two parts of it that I hope Americans will really appreciate.

The first is this awful problem that boutique fuels have caused in our gasoline markets. To all Americans who found themselves, particularly in Chicago and Milwaukee a few years ago, paying incredible prices for gasoline because there was such a shortage, look to the boutique fuel market for your enemy.

The boutique fuel market, designed to help clean air, unfortunately ended up with over 50 different formulations of fuel. It is a dysfunctional market that has raised the price in the Midwest from 30 to 35 cents a gallon. This bill begins to straighten out that dysfunction and sets in place a method to lower the numbers of those reformulations of gasoline, still keeping strict abidance with the clean air requirements of our great Nation.

Secondly, I want to focus on the CAFE standards in this bill. The CAFE standards to be adopted in this bill will require for the first time in 17 years SUVs and minivans to begin saving fuel the way we require it to be saved in the car fleets of America. Today the SUVs and minivans consume about 2.4 billion gallons of gasoline a year.

This bill will require a savings of 5 billion gallons over the next 6 years. That is the equivalent of parking two production years of all the SUVs and minivans that we produce on our highways in America, parking them for 2 years out of that 6. That is a significant floor upon which NHTSA will build its new CAFE requirements.

This is only a floor. This is the minimum NHTSA must do, our National Highway Traffic Safety Administration. They can and should do more. We will be faced with an amendment later by several of our friends to dramatically increase that number in the bill. Let me warn all Americans, all of us in this room, the numbers we have, the report from the NAS, tells us if you move those numbers too fast, just because you want to, if you push those numbers too high, too fast, you will produce lighter vehicles on the road. History tells us you will have more deaths and injury.

The industry can do a great deal with technology to move fuel efficiency up. This bill pushes them hard and we will get new fuel efficiencies in SUVs and minivans. You go too far, and you end up compromising safety.

This a good bill, a great step forward. I commend it to a favorable vote of this body.

The CHAIRMAN. All debate time allotted to the Committee on Energy and Commerce has expired.

The Chair will now recognize for 10 minutes of debate each the gentleman from New York (Mr. BOEHLERT) and the gentleman from Texas (Mr. HALL).

The Chair recognizes the gentleman from New York (Mr. BOEHLERT).

Mr. BOEHLERT. Mr. Chairman, I yield myself such time as I may consume.

Mr. Chairman, I am pleased to bring before the House the Committee on Science portions of H.R. 4 which are primarily found in division B of the bill. These provisions were originally part of H.R. 2460, which our committee passed unanimously.

I would like to submit for the RECORD at this point materials that were prepared for the report accompanying H.R. 2460, which describe in detail the nature of the provisions that are now in division B.

1. SECTION-BY-SECTION ANALYSIS OF H.R. 4, SECURING AMERICA'S FUTURE ENERGY (SAFE) ACT OF 2001

DIVISION E: CLEAN COAL POWER INITIATIVE ACT OF 2001

Section 5000. Short Title

Subsection 5000 cites the division as the ''Clean Coal Power Initiative Act of 2001.''

Sec. 5001. Findings

Section 5001 contains the eight findings.

Sec. 5002. Definitions

Section 5003 defines the term ''cost and performance-based goals'' to mean the cost and performance-based goals established under section 5004, and the term ''Secretary'' to mean the Secretary of Energy.

Sec. 5003. Clean Coal Power Initiative

Subsection 5003(a) requires the Secretary to carry out the Clean Coal Power Initiative under: (1) this division; (2) the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C.5901 et seq.); (3) the Energy Reorganization Act of 1974 (42 U.S.C.5801 et seq.); and (4) title XIII of the Energy Policy Act of 1992 (42 U.S.C.13331 et seq.), to achieve cost and performance goals established by the Secretary under section 5004.

Sec. 5004. Cost and Performance Goals

Subsection 5004(a) requires the Secretary to perform an assessment that establishes measurable cost and performance goals for 2005, 2010, 2015, and 2020 for the programs authorized by this division. Such assessment must be based on the latest scientific, economic, and technical knowledge.

In establishing the cost and performance goals, subsection 5004(b) requires the Secretary to consult with representatives of: (1) the United States coal industry; (2) State coal development agencies; (3) the electric utility industry; (4) railroads and other transportation industries; (5) manufacturers of advanced coal-based equipment; (6) institutions of higher learning, national laboratories, and professional and technical societies; (7) organizations representing workers; (8) organizations formed to—(A) promote the use of coal; (B) further the goals of environmental protection; and (C) promote the production and generation of coal-based power from advanced facilities; and (9) other appropriate Federal and State agencies.

Under subsection 5004(c), the Secretary shall: (1) not later than 120 days after the date of enactment of this division, issue a set of draft cost and performance goals for public comment; and (2) not later than 180 days after the date of enactment, after taking into consideration any public comments received, submit to the Committee on Energy and Commerce and the Committee on Science of the House of Representatives, and to the Senate, the final cost and performance goals.

Sec. 5005. Authorization of Appropriations

Except as provided in subsection 5005(c), subsection 5005(a) authorizes to be appropriated to the Secretary to carry out the Clean Coal Power Initiative under section 5003 $200.0 million for each of the fiscal years 2002 through 2011, to remain available until expended.

Notwithstanding subsection 5005(a), subsection 5005(b) prohibits the use of funds to carry out the activities authorized by this division after September 30, 2002, unless the Secretary has transmitted to the Committee on Energy and Commerce and the Committee on Science of the House of Representatives, and to the Senate, the report required by this subsection and one month has elapsed since that transmission. The report shall include, with respect to subsection 5005(a), a 10–year plan containing: (1) a detailed assessment of whether the aggregate funding levels provided under subsection 5005(a) are the appropriate funding levels for that program; (2) a detailed description of how proposals will be solicited and evaluated, including a list of all activities expected to be undertaken; (3) a detailed list of technical milestones for each coal and related technology that will be pursued; (4) recommendations for a mechanism for recoupment of Federal funding for successful commercial projects; and (5) a detailed description of how the program will avoid problems enumerated in General Accounting Office reports on the Clean Coal Technology Program, including problems that have resulted in unspent funds and projects that failed either financially or scientifically.

Subsection 5005(c) provides that subsection 5005(b) shall not apply to any project begun before September 30, 2002.

Sec. 5006. Project Criteria

Subsection 5006(a) prohibits the Secretary from providing funding for project that does

not advance efficiency, environmental performance, and cost competitiveness well beyond the level of technologies that are in operation or have been demonstrated as of the date of the enactment of this division.

Subsection 5006(b) contains the technical criteria for the Clean Coal Power Initiative.

Under subsection 5006(b)(1)(A), in allocating the funds authorized under section 5005(a), the Secretary shall ensure that at least 80 percent of the funds are used only for projects on coalbased gasification technologies, including gasification combined cycle, gasification fuel cells, gasification coproduction and hybrid gasification/combustion.

Subsection 5006(b)(1)(B) requires the Secretary to set technical milestones specifying emissions levels that coal gasification projects must be designed to and reasonably expected to achieve. The milestones shall get more restrictive through the life of the program, and such milestones shall be designed to achieve by 2020 coal gasification projects able to: (1) remove 99 percent of sulfur dioxide; (2) emit no more than 0.05 pounds (lbs) of nitrous oxides (NOx) per million British Thermal Unit (BTU); (3) achieve substantial reductions in mercury emissions; and (4) achieve a thermal efficiency of 60 percent (higher heating value).

For projects not described in subsection 5006(b)(1)(A) or subsection 5006(b)(1)(B), subsection 5006(b)(2) requires the Secretary to set technical milestones specifying emissions levels that the projects must be designed to and reasonably expected to achieve. The milestones shall get more restrictive through the life of the program, and such milestones shall be designed to achieve by 2010 projects able to: (1) remove 97 percent of sulfur dioxide; (2) emit no more than 0.08 lbs of NO_X per million BTU; (3) achieve substantial reductions in mercury emissions; and (4) achieve a thermal efficiency of 45 percent (higher heating value).

Subsection 5006(c) prohibits the Secretary from providing a funding award under this division unless the recipient of the award has documented to the satisfaction of the Secretary that: (1) the award recipient is financially viable without the receipt of additional Federal funding; (2) the recipient will provide sufficient information to the Secretary for the Secretary to ensure that the award funds are spent efficiently and effectively; and (3) a market exists for the technology being demonstrated or applied, as evidenced by statements of interest in writing from potential purchasers of the technology.

Subsection 5006(d) requires the Secretary to provide financial assistance to projects that meet the requirements of subsections 5006 (a), (b), and (c) and are likely to: (1) achieve overall cost reductions in the utilization of coal to generate useful forms of energy; (2) improve the competitiveness of coal among various forms of energy in order to maintain a diversity of fuel choices in the United States to meet electricity generation requirements; and (3) demonstrate methods and equipment that are applicable to 25 percent of the electricity generating facilities that use coal as the primary feedstock as of the date of enactment of this division.

Subsection 5006(e) limits the Federal share of the cost of a coal or related technology project funded by the Secretary to not more than 50 percent.

Subsection 5006(f) provides that neither the use of any particular technology, nor the achievement of any emission reduction, by any facility receiving assistance under this division shall be taken into account for purposes of making any determination under the Clean Air Act in applying the provisions of that Act to a facility not receiving assistance under this division, including any determination concerning new source performance standards, lowest achievable emission rate, best available control technology, or any other standard, requirement, or limitation.

Sec. 5007. Study

Under subsection 5007(a), not later than one year after the date of enactment of this division, and once every two years thereafter through 2016, the Secretary, in cooperation with other appropriate Federal agencies, must transmit to the Committee on Energy and Commerce and the Committee on Science of the House of Representatives, and to the Senate, a report containing the results of a study to: (1) identify efforts (and the costs and periods of time associated with those efforts) that, by themselves or in combination with other efforts, may be capable of achieving the cost and performance goals; (2) develop recommendations for the Department of Energy to promote the efforts identified under (1); and (3) develop recommendations for additional authorities required to achieve the cost and performance goals.

In carrying out this section, subsection 5007(b) requires the Secretary shall give due weight to the expert advice of representatives of the entities described in subsection 5004(b).

Sec. 5008. Clean Coal Centers of Excellence

As part of the Clean Coal Power Initiative authorized in section 5003, section 5008, which is included in the manager's amendment, requires the Secretary to award competitive, merit-based grants to universities for the establishment of Centers of Excellence for Energy Systems of the Future. Such centers shall be located at universities with a proven record of conducting research on, developing, or demonstrating clean coal technologies. The Secretary shall provide grants to universities that can show the greatest potential for demonstrating new clean coal technologies.

II. COMMITTEE ON SCIENCE VIEWS ON H.R. 4, SECURING AMERICA'S FUTURE ENERGY (SAFE) ACT OF 2001

DIVISION E: CLEAN COAL POWER INITIATIVE ACT OF 2001

Division E of H.R. 4, the Clean Coal Power Initiative Act of 2001, provides $2 billion over 10 years for the Administration's Clean Coal Power Initiative. Like the Administration, the Committee believes that coal is likely to continue to be a significant source of electric power in the U.S. for years to come, given its domestic abundance. However, if that is to be the case, coal must become a far more efficient and cleaner fuel. Such improvements will require, among other actions, government investment in research, development, demonstration and commercial application of truly advanced coal technologies. Neither the taxpayers nor the coal industry will be well served in the long run if government investments are made in technologies that do not "push the envelope." Moreover, a concerted effort will be needed to strengthen the management of clean coal programs.

With those concerns in mind, division E places a number of requirements and restrictions on the Clean Coal Power Initiative.

First, the Committee is requiring a detailed report on how the Initiative will be organized and implemented. The Committee is disturbed that at Committee hearings, the Administration could neither explain how the $2 billion figure was arrived at nor how the money would be spent. Given the priority the Administration has placed on the Initiative, the Committee will allow the Initiative to begin. However, no funds may be as of October 1, 2002, unless the Administration has submitted the detailed report required by this division and it has been before the Congress for 1 month.

The report must be specific in explaining how the $2 billion figure was developed, the scope of the Initiative, how the Initiative will operate, what technical milestones will be established and how they will be achieved, and how the Initiative can be guided or informed by the successes and failures of past clean coal efforts. The report must also include recommendations for recoupment of federal funds for successful projects.

The division also establishes strict, environmental standards that projects must be designed to meet and reasonably be expected to achieve in order to receive funding. Moreover, at least 80 percent of the funding must be devoted to projects related to gasification technologies that are furthest from development and promise the greatest environmental benefit among economically viable technologies, and, therefore, the ones most deserving of government support.

The Committee intends that the Secretary set strict, achievable, specific environmental milestones to ensure that the projects comply with section 5006. The environmental criteria in this division, which are taken from industry's own technology roadmap, are not mere advisory guidelines. They are precise requirements that the Initiative must be designed to meet.

The Committee intends that the efficiency requirements refer to generation efficiency and that the efficiency numbers apply to plants that are exclusively generating power. The Secretary should issue equivalent efficiency numbers for plants involved in the production of industrial chemicals or other activities.

The division also sets strict financial criteria for participants in the Initiative. These criteria are absolutely essential to the success of the program. The Committee intends that the Secretary require specific, written documentation and audits from the participants to meet the requirements of subsection 5006(c). For example, a market should exist for the technology being demonstrated or applied, as evidenced by statements of interest in writing from potential purchasers of technology.

The Committee recommends that the Secretary consult with objective, outside experts in developing the report, including those from the National Academies of Science and Engineering (who will eventually be reviewing the Initiative, pursuant to section 2616 of H.R. 4) and the General Accounting Office. The Committee also recommends that, in writing the report and carrying out the program, the Secretary consult with environmental groups and other environmental experts (as a primary goal of the program is making coal a more environmentally benign fuel), the coal industry, the utility industry, and the coal equipment manufacturing industry.

The Committee is aware of a proposed dry coal cleaning technology demonstration involving a pulverizer and dry separator operating together to remove impurities from coal and other minerals. The Committee encourages the Secretary to provide assistance for demonstration of such innovative magnetic separator technologies.

Sec. 5008. Clean Coal Centers of Excellence

Section 5008 directs the Secretary to provide grants to universities for the establishment of clean coal centers of excellence. Based on the Subcommittee on Energy's June 12, 2001 hearing on Clean Coal Technology and subsequent discussions and materials, the Committee strongly encourages

the Secretary to consider as potential recipients Southern Illinois University, the University of Pittsburgh, Carnegie-Mellon University, and the Center for Electric Power at Tennessee Technological University.

I. SUMMARY OF MAJOR PROVISIONS OF H.R. 4, SECURING AMERICA'S FUTURE ENERGY (SAFE) ACT OF 2001

DIVISION B: COMPREHENSIVE ENERGY RESEARCH AND TECHNOLOGY ACT OF 2001

Division B of H.R. 4, the Comprehensive Energy Research and Technology Act of 2001, authorizes a total of $16,802,153,000 for the period FY 2002–2009 in five titles for research, development, demonstration, and commercial application programs, projects, and activities of the Department of Energy (DOE) and the Environmental Protection Agency (EPA) Office of Air and Radiation (OAR).

Title I (Energy Conservation and Energy Efficiency) authorizes $3,025,542,000 for FY 2002–FY 2006 in six subtitles, as follows:

1. A—Alternative Fuel Vehicles: $200.0 million for FY 2002 for not more than 15 grants (with a maximum grant size of $20.0 million) to State and local governments, or metropolitan transit authorities for the demonstration and commercial application of alternative fuel and ultra-low sulfur diesel vehicles.

2. B—Distributed Power Hybrid Energy Systems: Section 2125 authorizes $20.0 million for FY 2002 for competitive, merit-based grants for the development of micro-generation energy technology.

3. C—Secondary Electric Vehicle Battery Use: $1.0 million for FY 2002, and $7.0 million for each of FY 2003 and FY 2004 for a research, development, and demonstration (RD&D) program.

4. D—Green School Buses: $40.0 million for FY 2002, $50.0 million for FY 2003, $60.0 million for FY 2004, $70.0 million for FY 2005, and $70.0 million for FY 2006 for competitive grants for the demonstration and commercial application of alternative fuel and ultra-low sulfur diesel school buses.

5. E—Next Generation Lighting Initiative: Authorizes the Secretary of Energy (Secretary) to research, develop, and conduct demonstration activities on advanced lighting technologies, including white light emitting diodes.

6. F—DOE Authorization of Appropriations: In addition to the amounts authorized under subtitle A, section 2125 of subtitle B, and subtitle D, authorizes $625.0 million for FY 2002, $700.0 million for FY 2003, and $800.0 million for FY 2004 for subtitles B, C, E, and for Energy Conservation operation and maintenance (including Building Technology, State and Community Sector (Nongrants), Industry Sector, Transportation Sector, Power Technologies, and Policy and Management).

7. G—EPA OAR Authorization of Appropriations: $121.9 million for FY 2002, $126.8 million for FY 2003, and $131.8 million for FY 2004.

In addition, subtitle H (National Building Performance Initiative) requires the Director of the Office of Science and Technology Policy (OSTP) to establish and Interagency Group responsible for the development and implementation of a National Building Performance Initiative to address energy conservation research and development (R&D) and related issues.

Title II (Renewable Energy) authorizes $2,468,200,000 for FY 2002–FY 2006 in four subtitles, as follows:

1. A—Hydrogen: $60.0 million for FY 2002, $70.0 million for FY 2003, $80.0 million for FY 2004, $90.0 million for FY 2005, and $100.0 million for FY 2006.

2. B—Bioenergy: $148.2 million for FY 2002, $162.9 million for FY 2003, $179.9 million for FY 2004, $199.4 million for FY 2005, and $221.8 million for FY 2006.

3. C—Transmission Infrastructure Systems: Directs the Secretary to develop and implement a comprehensive RD&D and commercial application program to ensure the reliability, efficiency, and environmental integrity of electrical transmission systems.

4. D—DOE Authorization of Appropriations: $535.0 million for FY 2002, $639.0 million for FY 2003, and $683.0 million for FY 2004, $70.0 million for FY 2005, and $70.0 million for FY 2006, including the amounts authorized under subtitle A and subtitle B and for Renewable Energy operation and maintenance, including subtitle C, Geothermal Technology Development, Hydropower, Concentrating Solar Power, Photovoltaic Energy Systems, Solar Building Technology Research, Wind Energy Systems, High Temperature Superconducting Research and Development, Energy Storage Systems, Transmission Reliability, International Renewable Energy Program, Renewable Energy Production Incentive Program, Renewable Program Support, National Renewable Energy Laboratory, and Program Direction.

Title III (Nuclear Energy) authorizes $724,995,000 for FY 2002–FY 2006 in three subtitles, as follows:

1. A—University Nuclear Science and Energy: $30.2 million for FY 2002, $41.0 million for FY 2003), $47.9 million for FY 2004, $55.6 million for FY 2004, and $61.4 million for FY 2005.

2. B—Advanced Fuel Recycling Technology R&D Program: $10.0 million for FY 2002, and such sums as are necessary for each of FY 2003 and FY 2004.

3. C—DOE Authorization of Appropriations: $191.2 million for FY 2002, $199.0 million for FY 2003, and $207.0 million for FY 2004 for nuclear energy operation and maintenance, including subtitle A, the Nuclear Energy Research Initiative ($60.0 million for FY 2002, and such sums as are necessary for each of FY 2003 and FY 2004), the Nuclear Energy Plant Optimization Program ($15.0 million for FY 2002, and such sums as are necessary for each of FY 2003 and FY 2004), Nuclear Energy Technologies ($20.0 million for FY 2002, and such sums as are necessary for each of FY 2003 and FY 2004), Advanced Radioisotope Power Systems, Test Reactor Landlord, and Program Direction. In addition, funds are authorized to complete two construction projects.

Title IV (Fossil Energy) authorizes $5,933,000,000 for FY 2002–FY 2009 in five subtitles, as follows:

1. A—Coal: $172.0 million for FY 2002, $179.0 million for FY 2003, $186.0 million for FY 2005 for coal and related technologies programs.

2. B—Oil and Gas: Authorizes RD&D and commercial application programs on petroleum-oil technology and natural gas technologies.

3. C—Ultra-Deepwater and Unconventional Drilling: $4,516.0 million for the period FY 2002–FY 2009 for RD&D of ultra-deepwater natural gas and other petroleum exploration and production technologies.

4. D—Fuel Cells: Authorizes an RD&D program on fuel cells, including $28.0 million for each of FY 2002–FY 2004 for the demonstration of manufacturing production and processes.

5. E—DOE Authorization of Appropriations: $282.0 million for FY 2002, $293.0 million for FY 2003, and $305.0 million for subtitle B, subtitle D, and for Fossil Energy R&D Headquarters Program Direction, Field Program Direction, Plant and Capital Equipment, Cooperative Research and Development, Import/Export Authorization, and Advanced Metallurgical Processes.

Title V (Science) authorizes $4,541,858,000 for FY 2002–FY 2006 in four subtitles, as follows:

1. A—Fusion Energy Sciences: $320.0 million for FY 2002 and $335.0 million for FY 2003.

2. B—Spallation Neutron Source (SNS): $276.3 million for FY 2002, $201.571 million for FY 2003, $124.6 million for FY 2004, $79.8 million for FY 2005, and $41.1 million for FY 2006 for completion of construction, and $15.353 million for FY 2002 and $103.279 million for FY 2003–FY 2006 for other project costs. Caps the project at $1,192.7 million for costs of construction, $219.0 million for other project costs, and $1,411.7 million for total project cost.

3. C—Facilities, Infrastructure, and User Facilities—Requires the Secretary to develop and implement a least-cost nonmilitary energy laboratory facility and infrastructure strategy, and requires full and open competition for universities and other entities in the establishment or operation of a DOE user facility.

4. E—DOE Authorization of Appropriations: $3,299,558,000 for FY 2002 for Office of Science operation and maintenance (also including Fusion Energy Sciences, SNS, subtitle C, High Energy Physics, Nuclear Physics, Biological and Environmental Research, Basic Energy Sciences (except for the Spallation Neutron Source), Advanced Scientific Computing Research, Energy Research Analysis, Multiprogram Energy Laboratories-Facilities Support, Facilities and Infrastructure, Safeguards and Security, and Program Direction), and including $5.0 million for FY 2002 for research in the use of precious metals in catalysts. Also authorizes funds to complete a number of construction projects.

In addition, subtitle D (Advisory Panel on Office of Science) requires the Director of OSTP to establish an Advisory Panel on the DOE Office of Science.

Title VI (Miscellaneous) contains two subtitles. Subtitle A (General Provisions for the Department of Energy), identifies current statutes that should be used for procedures and guidelines to carry out the Act, limits use of funds, and establishes cost-sharing requirements and reprogramming guidelines. Subtitle B (Other Miscellaneous Provisions) establishes limits on general plant projects and construction projects, provides authority for conceptual and construction design activities, requires that certain reports prepared pursuant to the National Energy Policy Development Group recommendations be transmitted to specific congressional committees, and requires periodic reviews and assessments of the programs authorized by the Act.

Table I summarizes the authorizations for the period FY 2002–2009 for programs, projects, and activities in five titles in Division B. Table 2 summarizes and Table 3 details the division's authorizations for FY 2002–FY 2004.

Table 1. H.R. 4, DIVISION B, Comprehensive Energy Research and Technology Act of 2001
Summary of Authorizations: Fiscal Years 2002-2009
(Dollars in Thousands)

FISCAL YEAR	TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY	TITLE II—RENEWABLE ENERGY	TITLE III—NUCLEAR ENERGY	TITLE IV—FOSSIL ENERGY	TITLE V—SCIENCE	TOTAL
2002	1,006,942	535,000	192,650	1,163,500	3,624,479	**6,522,571**
2003	876,800	639,000	201,700	1,088,500	669,879	**3,475,879**
2004	991,800	683,000	208,746	1,054,500	126,600	**3,064,646**
2005	70,000	289,400	57,799	541,500	79,800	**1,038,499**
2006	80,000	321,800	64,100	508,500	41,100	**1,015,500**
2007				524,500		**524,500**
2008				538,500		**538,500**
2009				513,500		**513,500**
Total	**3,025,542**	**2,468,200**	**724,995**	**5,933,000**	**4,541,858**	**16,693,595**

Table 2. H.R. 4, DIVISION B, Comprehensive Energy Research and Technology Act of 2001, Summary: Fiscal Years 2002-2004
(Dollars in Thousands)

TITLE	FY 2001 Comparable Appropriation	FY 2002 Request	FY 2002 Recommendation	FY 2002 Recommendation Compared With (+ or -) FY 2001 Comparable Appropriation	FY 2002 Recommendation Compared With (+ or -) FY 2002 Request	FY 2003 Recommendation	FY 2003 Recommendation Compared With (+ or -) FY 2002 Recommendation	FY 2004 Recommendation	FY 2004 Recommendation Compared With (+ or -) FY 2003 Recommendation
TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY									
Department of Energy (DOE)	578,605	419,388	885,000	+306,395	+465,612	750,000	-135,000	860,000	+110,000
Environmental Protection Agency (EPA)	122,668	121,942	121,942	-726	0	126,800	+4,858	131,800	+5,000
Total, TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY	701,273	541,330	1,006,942	+305,669	+465,612	876,800	-130,142	991,800	+115,000
TITLE II—RENEWABLE ENERGY	364,610	275,653	535,000	+170,390	+259,347	639,000	+104,000	683,000	+44,000
TITLE III—NUCLEAR ENERGY	120,489	101,942	192,650	+72,161	+90,708	201,700	+9,050	208,746	+7,046
TITLE IV—FOSSIL ENERGY	519,547	434,750	1,163,500	+643,953	+728,750	1,088,500	-75,000	1,054,500	-34,000
Subtotal, Budget Authorization	1,705,919	1,353,675	2,898,092	+1,192,173	+1,544,417	2,806,000	-92,092	2,938,046	+132,046
TITLE V—SCIENCE	3,155,454	3,159,890	3,624,479	+469,025	+464,589	669,879	-2,954,600	126,600	-543,279
Total, Budget Authorization	**4,861,373**	**4,513,565**	**6,522,571**	**+1,661,198**	**+2,009,006**	**3,475,879**	**-3,046,692**	**3,064,646**	**-411,233**
Gas Hydrates Budget Authority/Authorization (P.L. 106-193)	9,938	4,750	7,500	-2,438	+2,750	11,000	+3,500	12,000	+1,000
Total, Budget Authority	**4,871,311**	**4,518,315**	**6,530,071**	**+1,658,760**	**+2,011,756**	**3,486,879**	**-3,043,192**	**3,076,646**	**-410,233**

Table 3. H.R. 4, DIVISION B, Comprehensive Energy Research and Technology Act of 2001: Fiscal Years 2002-2004
(Dollars in Thousands)

Title/Subtitle/Section/Program/Project/Activity	FY 2001 Comparable Appropriation	FY 2002 Request	FY 2002 Recommendation	FY 2002 Recommendation Compared With (+ or -) FY 2001 Comparable Appropriation	FY 2002 Recommendation Compared With (+ or -) FY 2002 Request	FY 2003 Recommendation	FY 2003 Recommendation Compared With (+ or -) FY 2002 Recommendation	FY 2004 Recommendation	FY 2004 Recommendation Compared With (+ or -) FY 2003 Recommendation
TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY									
Subtitle A—Alternative Fuel Vehicles (Section 2105)	0	0	200,000	+200,000	+200,000	0	-200,000	0	0
Subtitle B—Distributed Power Hybrid Energy Systems (Section 2125. Micro-Cogeneration Energy Technology)	0	0	20,000	+20,000	+20,000	0	-20,000	0	0
Subtitle D—Green School Buses (Section 144)	0	0	40,000	+40,000	+40,000	50,000	+10,000	60,000	+10,000
Subtitle F—Department of Energy Authorization of Appropriations									
Subtitle B—Distributed Power Hybrid Energy Systems (Except Section 2125)	0	0							
Subtitle C—Secondary Electric Vehicle Battery Use (Section 2133	0	0	1,000	+1,000	+1,000	7,000	+6,000	7,000	0
Subtitle E—Next Generation Lighting Initiative	0	0							
Building Technology, State and Community Sector (Nongrants)									
Building Research									
Technology Roadmaps and Competitive R&D	6,870	857							
Commercial Buildings Integration	11,536	6,888							
Commercial Buildings Integration	3,891	1,969							
Equipment, Materials and Tools	31,276	17,121							
Total, Building Research	53,573	26,835							
Building Technology Assistance (Nongrants)									
Community Partnerships	18,095	8,488							
Energy Star Program	2,204	2,000							
Total, Building Technology Assistance (Nongrants)	20,299	10,488							

Title/Subtitle/Section/Program/Project/Activity	FY 2001 Comparable Appropriation	FY 2002 Request	FY 2002 Recommendation	FY 2002 Recommendation Compared With (+ or -) FY 2001 Comparable Appropriation	FY 2002 Recommendation Compared With (+ or -) FY 2002 Request	FY 2003 Recommendation	FY 2003 Recommendation Compared With (+ or -) FY 2002 Recommendation	FY 2004 Recommendation	FY 2004 Recommendation Compared With (+ or -) FY 2003 Recommendation
Cooperative Programs with States	1,996	0							
Energy Efficiency Science Initiative	3,891	0							
Management and Planning	14,133	15,090							
Total, Building Technology, State and Community Sector (Nongrants)	93,892	52,413							
Industry Sector									
Industries of the Future (Specific)	72,390	46,424							
Industries of the Future (Crosscutting)	61,719	31,900							
Cooperative Programs with States	1,996	0							
Energy Efficiency Science Initiative	3,891	0							
Management and Planning	8,626	9,400							
Total, Industry Sector	148,622	87,724							
Transportation Sector									
Vehicle Technologies R&D	159,610	126,422							
Fuels Utilization R&D	23,509	20,908							
Materials Technologies	42,223	30,293							
Technology Deployment	5,090	3,300							
Cooperative Programs with States	1,996	0							
Energy Efficiency Science Initiative	3,891	0							
Management and Planning	9,152	10,232							
Total, Transportation Sector Total	245,471	191,155							
Power Technologies									
Distributed Generation Technologies Development	45,899	45,896							
Management and Planning	1,447	1,450							
Total, Power Technologies	47,346	47,346							
Policy and Management	43,274	40,750							
Total, Subtitle C—DOE Authorization of Appropriations	**578,605**	**419,388**	**625,000**	**+46,395**	**+205,612**	**700,000**	**+75,000**	**800,000**	**+100,000**
Total, Title I—DOE	**578,605**	**419,388**	**885,000**	**+306,395**	**+465,612**	**750,000**	**-135,000**	**860,000**	**+110,000**

Title/Subtitle/Section/Program/Project/Activity	FY 2001 Comparable Appropriation	FY 2002 Request	FY 2002 Recommendation	FY 2002 Recommendation Compared With (+ or -) FY 2001 Comparable Appropriation	FY 2002 Recommendation Compared With (+ or -) FY 2002 Request	FY 2003 Recommendation	FY 2003 Recommendation Compared With (+ or -) FY 2002 Recommendation	FY 2004 Recommendation	FY 2004 Recommendation Compared With (+ or -) FY 2003 Recommendation
Subtitle D—EPA Office of Air and Radiation Authorization of Appropriations									
Climate Change Protection Programs									
Buildings	52,535	52,731	52,731	+196	0	54,800	+2,069	57,000	+2,200
Transportation	29,435	32,441	32,441	+3,006	0	33,700	+1,259	35,000	+1,300
Industry	31,930	27,295	27,295	-4,635	0	28,400	+1,105	29,500	+1,100
Carbon Removal	998	1,700	1,700	+702	0	1,800	+100	1,900	+100
State and Local Climate Change Program	2,495	2,500	2,500	+5	0	2,600	+100	2,700	+100
International Capacity Building	5,275	5,275	5,275	0	0	5,500	+225	5,700	+200
Total, Climate Change Protection Programs	**122,668**	**121,942**	**121,942**	**-726**	**0**	**126,800**	**+4,858**	**131,800**	**+5,000**
Total, Subtitle D—EPA Office of Air and Radiation Authorization of Appropriations	**122,668**	**121,942**	**121,942**	**-726**	**0**	**126,800**	**+4,858**	**131,800**	**+5,000**
Total, TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY	**701,273**	**541,330**	**1,006,942**	**+305,669**	**+465,612**	**876,800**	**-130,142**	**991,800**	**+115,000**
TITLE II—RENEWABLE ENERGY									
Subtitle D—DOE Authorization of Appropriations									
Renewable Energy Technologies									
Subtitle A—Hydrogen	**26,881**	**26,881**	**60,000**	**+33,119**	**+33,119**	**70,000**	**+10,000**	**80,000**	**+10,000**
Subtitle B—Bioenergy									
Biopower	39,742	37,754	45,700	+5,958	+7,946	52,500	+6,800	60,300	+7,800
Biofuels	46,526	44,201	53,500	+6,974	+9,299	61,400	+7,900	70,600	+9,200
Integrated Bioenergy R&D	0	0	49,000	+49,000	+49,000	49,000	0	49,000	0
Total, Subtitle B—Bioenergy	**86,268**	**81,955**	**148,200**	**+61,932**	**+66,245**	**162,900**	**+14,700**	**179,900**	**+17,000**

Title/Subtitle/Section/Program/Project/Activity	FY 2001 Comparable Appropriation	FY 2002 Request	FY 2002 Recommendation	FY 2002 Recommendation Compared With (+ or -) FY 2001 Comparable Appropriation	FY 2002 Recommendation Compared With (+ or -) FY 2002 Request	FY 2003 Recommendation	FY 2003 Recommendation Compared With (+ or -) FY 2002 Recommendation	FY 2004 Recommendation	FY 2004 Recommendation Compared With (+ or -) FY 2003 Recommendation
Subtitle C—Transmission Infrastructure Systems	**0**	**0**							
Geothermal Technology Development	26,911	13,900							
Hydropower	4,989	4,989							
Solar									
Concentrating Solar Power	13,710	1,932							
Photovoltaic Energy Systems	75,060	39,000							
Solar Building Technology Research	3,911	2,000							
Total, Solar Energy	92,681	42,932							
Wind Energy Systems	39,553	20,500							
Total, Renewable Energy Technologies	277,283	191,157							
Electric Energy Systems and Storage									
High Temperature Superconducting R&D	36,819	36,819							
Energy Storage Systems	5,987	5,987							
Transmission Reliability	8,940	8,940							
Total, Electric Energy Systems and Storage	51,746	51,746							
Renewable Support and Implementation									
International Renewable Energy Program	4,949	2,500							
Renewable Energy Production Incentive Program	3,991	3,991							
Renewable Program Support	3,991	2,059							
Total, Renewable Support and Implementation	12,931	8,550							
National Renewable Energy Laboratory	3,991	5,000							
Program Direction	18,659	19,200							
Wave Power Electric Generation	0	0							
Total, Subtitle C—DOE Authorization of Appropriations	**364,610**	**275,653**	**535,000**	**+170,390**	**+259,347**	**639,000**	**+104,000**	**683,000**	**+44,000**
Total, TITLE II—RENEWABLE ENERGY	**364,610**	**275,653**	**535,000**	**+170,390**	**+259,347**	**639,000**	**+104,000**	**683,000**	**+44,000**

Title/Subtitle/Section/Program/Project/Activity	FY 2001 Comparable Appropriation	FY 2002 Request	FY 2002 Recommendation	FY 2002 Recommendation Compared With (+ or -) FY 2001 Comparable Appropriation	FY 2002 Recommendation Compared With (+ or -) FY 2002 Request	FY 2003 Recommendation	FY 2003 Recommendation Compared With (+ or -) FY 2002 Recommendation	FY 2004 Recommendation	FY 2004 Recommendation Compared With (+ or -) FY 2003 Recommendation
TITLE III—NUCLEAR ENERGY									
Subtitle C—DOE Authorization of Appropriations									
Operation and Maintenance									
Subtitle A—University Nuclear Research and Engineering									
Graduate and Undergraduate Fellowships	1,374	1,374	3,000	+1,626	+1,626	3,100	+100	3,200	+100
Junior Faculty Research Initiative Grant Program	0	0	5,000	+5,000	+5,000	7,000	+2,000	8,000	+1,000
Nuclear Engineering Education Research Program	5,000	5,000	8,000	+3,000	+3,000	12,000	+4,000	13,000	+1,000
Communication and Outreach Related to Nuclear Science and Engineering	0	0	200	+200	+200	200	0	300	+100
Refueling of Research Reactors and Instrumentation Upgrades	3,700	3,700	6,000	+2,300	+2,300	6,500	+500	7,000	+500
Re-Licensing Assistance	0	0	1,000	+1,000	+1,000	1,100	+100	1,200	+100
Reactor Research and Training Award Program	1,900	1,900	6,000	+4,100	+4,100	10,000	+4,000	14,000	+4,000
University-DOE Laboratory Interactions	0	0	1,000	+1,000	+1,000	1,100	+100	1,200	+100
Total, Subtitle A—University Nuclear Research and Engineering	**11,974**	**11,974**	**30,200**	**+18,226**	**+18,226**	**41,000**	**+10,800**	**47,900**	**+6,900**
Subtitle B—Advanced Fuel Recycling Technology Research and Development Program	**0**	**0**	**10,000**	**+10,000**	**+10,000**				
Nuclear Energy Research Initiative (Section 2341)	34,826	18,079	60,000	+25,174	+41,921				
Nuclear Energy Plant Optimization Program (Section 2342)	4,989	4,500	15,000	+10,011	+10,500				
Nuclear Energy Technologies (Section 2343)	7,483	4,500	20,000	+12,517	+15,500				
Advanced Radioisotope Power Systems	31,794	29,094							
Test Reactor Area	7,399	7,283							
Program Direction	23,042	25,062							
Subtotal, Operation and Maintenance	121,507	100,492	191,200	+69,693	+90,708	199,000	+7,800	207,000	+8,000
Offset from Nuclear Energy Activities	-2,352	0	0	+2,352	0	0	0	0	0
Total, Operation and Maintenance	119,155	100,492	191,200	+72,045	+90,708	199,000	+7,800	207,000	+8,000

Title/Subtitle/Section/Program/Project/Activity	FY 2001 Comparable Appropriation	FY 2002 Request	FY 2002 Recommendation	FY 2002 Recommendation Compared With (+ or -) FY 2001 Comparable Appropriation	FY 2002 Recommendation Compared With (+ or -) FY 2002 Request	FY 2003 Recommendation	FY 2003 Recommendation Compared With (+ or -) FY 2002 Recommendation	FY 2004 Recommendation	FY 2004 Recommendation Compared With (+ or -) FY 2003 Recommendation
Construction									
Project 99-E-200, Test Reactor Area Electric Utility Upgrade, Idaho National Engineering and Environmental Laboratory	877	950	950	+73	0	2,200	+1,250	1,246	-954
Project 95-E-201, Test Reactor Area Fire and Life Safety Improvements, Idaho National Engineering and Environmental Laboratory	457	500	500	+43	0	500	0	500	0
Total, Construction	1,334	1,450	1,450	+116	0	2,700	+1,250	1,746	-954
Total, Subtitle C—DOE Authorization of Appropriations	**120,489**	**101,942**	**192,650**	**+72,161**	**+90,708**	**201,700**	**+9,050**	**208,746**	**+7,046**
Total, TITLE III—NUCLEAR ENERGY	**120,489**	**101,942**	**192,650**	**+72,161**	**+90,708**	**201,700**	**+9,050**	**208,746**	**+7,046**
TITLE IV—FOSSIL ENERGY									
Subtitle A—Coal									
Coal and Related Technologies Programs (Section 2401(a))	269,441	114,677	172,000	-97,441	+57,323	179,000	+7,000	186,000	+7,000
Total, Subtitle A—Coal	**269,441**	**114,677**	**172,000**	**-97,441**	**+57,323**	**179,000**	**+7,000**	**186,000**	**+7,000**
Subtitle C—Unconventional and Ultra-Deep Natural Gas and Petroleum	**0**	**0**	**709,500**	**+709,500**	**+709,500**	**616,500**	**-93,000**	**563,500**	**-53,000**

Title/Subtitle/Section/Program/Project/Activity	FY 2001 Comparable Appropriation	FY 2002 Request	FY 2002 Recommendation	FY 2002 Recommendation Compared With (+ or -) FY 2001 Comparable Appropriation	FY 2002 Recommendation Compared With (+ or -) FY 2002 Request	FY 2003 Recommendation	FY 2003 Recommendation Compared With (+ or -) FY 2002 Recommendation	FY 2004 Recommendation	FY 2004 Recommendation Compared With (+ or -) FY 2003 Recommendation
Subtitle D—Authorization of Appropriations									
Operation and Maintenance									
Subtitle B—Oil and Gas									
Petroleum-Oil Technology (Section 2421)									
Exploration and Production	28,844	20,350							
Reservoir Life Extension/Management	14,662	4,849							
Effective Environmental Protection	10,796	5,300							
Emerging Processing Technology Applications	2,594	0							
Ultra Clean Fuels	9,978	0							
Total, Petroleum-Oil Technology (Section 2421)	66,874	30,499							
Gas (Section 2422)									
Exploration and Production	14,221	9,350							
Infrastructure	8,110	5,050							
Emerging Processing Technology	10,146	250							
Effective Environmental Protection	2,614	1,600							
Total, Gas (Section 2422)	35,091	16,250							
Total, Subtitle B—Oil and Gas	**101,965**	**46,749**							
Subtitle D—Fuel Cells									
Advance Research	2,794	1,000							
Systems Development	30,932	11,500							
Vision 21-Hybrids	14,967	11,500							
Innovative Concepts	3,891	21,124							
Manufacturing Production and Processes (Section 461(b))	0	0	28,000	+28,000	+28,000	28,000	0	28,000	0
Total, Subtitle D—Fuel Cells	**52,584**	**45,124**							
Headquarters Program Direction	16,930	14,700							
Field Program Direction	63,156	55,300							
Plant and Capital Equipment	3,891	2,000							
Cooperative Research and Development	8,071	0							
Import/Export Authorization	2,295	1,000							
Advanced Metallurgical Processes	5,214	5,200							
Total, Subtitle D—Authorization of Appropriations	**254,106**	**170,073**	**282,000**	**+27,894**	**+111,927**	**293,000**	**+11,000**	**305,000**	**+12,000**

Title/Subtitle/Section/Program/Project/Activity	FY 2001 Comparable Appropriation	FY 2002 Request	FY 2002 Recommendation	FY 2002 Recommendation Compared With (+ or -) FY 2001 Comparable Appropriation	FY 2002 Recommendation Compared With (+ or -) FY 2002 Request	FY 2003 Recommendation	FY 2003 Recommendation Compared With (+ or -) FY 2002 Recommendation	FY 2004 Recommendation	FY 2004 Recommendation Compared With (+ or -) FY 2003 Recommendation
Subtotal, TITLE IV—FOSSIL ENERGY	523,547	284,750	1,163,500	+639,953	+878,750	1,088,500	-75,000	1,054,500	+19,000
Use of Prior Year Balances	-4,000	0	0	+4,000	0	0	0	0	0
Total, TITLE IV—FOSSIL ENERGY	**519,547**	**284,750**	**1,163,500**	**+643,953**	**+878,750**	**1,088,500**	**-75,000**	**1,054,500**	**+19,000**
TITLE V—SCIENCE									
Subtitle D—Advisory Panel on Office of Science	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
Subtitle E—DOE Authorization of Appropriations									
Operation and Maintenance									
Subtitle C—Facilities, Infrastructure, and User Facilities	**0**	**0**							
High Energy Physics									
Research and Technology	242,836	247,870							
High Energy Physics Facilities	436,836	456,830							
Total, High Energy Physics	679,672	704,700							
Nuclear Physics	360,508	360,510							
Biological and Environmental Research	480,025	432,970							
Basic Energy Sciences									
Spallation Neutron Source Other Project Costs (Section 2522(b)	19,179	15,353	15,353	-3,826	0	103,279	+87,926	0	-103,279
Materials Sciences (Non-Spallation Neutron Source)	424,063	419,000							
Chemical Sciences	216,526	218,714							
Engineering and Geosciences	39,766	38,938							
Energy Biosciences	33,216	32,400							
Total, Basic Energy Sciences	732,750	724,405	15,353	-717,397	-709,052	103,279	+87,926	0	-103,279

Title/Subtitle/Section/Program/Project/Activity	FY 2001 Comparable Appropriation	FY 2002 Request	FY 2002 Recommendation	FY 2002 Recommendation Compared With (+ or -) FY 2001 Comparable Appropriation	FY 2002 Recommendation Compared With (+ or -) FY 2002 Request	FY 2003 Recommendation	FY 2003 Recommendation Compared With (+ or -) FY 2002 Recommendation	FY 2004 Recommendation	FY 2004 Recommendation Compared With (+ or -) FY 2003 Recommendation
Advanced Scientific Computing Research	165,750	163,050							
Energy Research Analysis	976	1,000							
Multiprogram Energy Laboratories - Facilities Support									
Infrastructure Support	1,020	1,020							
Oak Ridge Landlord	7,359	7,359							
Total, Multiprogram Energy Laboratories – Facilities Support	8,379	8,379							
Subtitle A—Fusion Energy Sciences	**248,493**	**248,495**	**320,000**	**+71,507**	**+71,505**	**335,000**	**+15,000**		
Facilities and Infrastructure	0	0							
Safeguards and Security	41,569	55,412							
Program Direction									
Field Operations	61,366	64,400							
Program Direction	61,080	73,525							
Science Education	4,460	4,460							
Total, Program Direction	126,906	142,385							
Precious Metal Catalysis Research (Section 2581(b)	0	0	5,000	+5,000	0	0	-5,000	0	0
Subtotal, Operation and Maintenance	2,845,028	2,841,306	3,304,470	+459,442	+463,164	438,279	-2,866,191	0	-438,279
Less Security Charge for Reimbursable Work	-5,122	-4,912	-4,912	+210	0	0	+4,912	0	0
Total, Operation and Maintenance	2,839,906	2,836,394	3,299,558	+459,652	+463,164	438,279	-2,861,279	0	-438,279
Construction									
High Energy Physics									
Project 00-G-307 Research Office Building, Stanford Linear Acceleration Center	5,189	0	0	-5,189	0	0	0	0	0
Project 99-G-306 Wilson Hall Safety Improvements Project, Fermi National Accelerator Laboratory	4,191	0	0	-4,191	0	0	0	0	0
Project 98-G-304 Neutrinos at the Main Injector (NuMI), Fermi National Accelerator Laboratory	22,949	11,400	11,400	-11,549	0	11,400	0	11,400	0
Total, High Energy Physics	32,329	11,400	11,400	-20,929	0	11,400	0	11,400	0

Title/Subtitle/Section/Program/Project/Activity	FY 2001 Comparable Appropriation	FY 2002 Request	FY 2002 Recommendation	FY 2002 Recommendation Compared With (+ or -) FY 2001 Comparable Appropriation	FY 2002 Recommendation Compared With (+ or -) FY 2002 Request	FY 2003 Recommendation	FY 2003 Recommendation Compared With (+ or -) FY 2002 Recommendation	FY 2004 Recommendation	FY 2004 Recommendation Compared With (+ or -) FY 2003 Recommendation
Biological and Environmental Research: Project 01-E-300 Laboratory for Comparative and Functional Genomics, Oak Ridge National Laboratory	2,495	10,000	11,405	+8,910	+1,405	0	-11,405	0	0
Basic Energy Sciences									
Spallation Neutron Source, Oak Ridge National Laboratory (Section 2522(a))	258,929	276,300	276,300	+17,371	0	210,571	-65,729	124,600	-85,971
Project 02-SC-002: Project Engineering Design (PED), Various Locations	0	4,000	4,000	+4,000	0	8,000	+4,000	2,000	-6,000
Total, Basic Energy Sciences	258,929	280,300	280,300	+21,371	0	218,571	-61,729	126,600	-91,971
Multiprogram Energy Laboratories - Facilities Support									
Project 02-SC-002, Multiprogram Energy Laboratories Infrastructure Project Engineering Design (PED), Various Locations	0	3,183	3,183	+3,183	0	0	-3,183	0	0
Project MEL-001, Multiprogram Energy Laboratories, Infrastructure, Various Locations	21,795	18,613	18,633	-3,162	+20	13,029	-5,604	0	-13,029
Total, Multiprogram Energy Laboratories – Facilities Support	21,795	21,796	21,816	+21	+20	13,029	-8,787	0	-13,029
Total, Construction	315,548	323,496	324,921	+9,373	+1,425	231,600	-93,321	126,600	-105,000
Total, Title V, SCIENCE	**3,155,454**	**3,159,890**	**3,624,479**	**+469,025**	**+464,589**	**669,879**	**-2,954,600**	**126,600**	**-543,279**

II. SECTION-BY-SECTION ANALYSIS OF H.R. 4, SECURING AMERICA'S FUTURE ENERGY (SAFE) ACT OF 2001

DIVISION B: COMPREHENSIVE ENERGY RESEARCH AND TECHNOLOGY ACT OF 2001

Section 2001. Short Title

Subsection 2001 cites the division as the ''Comprehensive Energy Research and Technology Act of 2001.''

Sec. 2002. Findings

Section 2003 contains the eight findings.

Sec. 2003. Purposes

Section 2003 contains the eight purposes of the Act.

Sec. 2004. Goals

Subsection 2004(a) states that, subject to subsection 2004(b), the Secretary should conduct a balanced energy RD&D and commercial application portfolio of programs guided by the specific goals listed for each of (1) Energy Conservation and Energy Efficiency, (2) Renewable Energy, (3) Nuclear Energy, (4) Fossil Energy and (5) Science.

Subsection 2004(b) requires the Secretary of Energy, in consultation with others, to perform an assessment that establishes measurable cost and performance-based goals, or that modifies the goals under subsection (a), for 2005, 2010, 2015, and 2020, for each of the programs authorized by this Act, that would enable each such program to meet the purposes under section 2003. The assessment is to be based on the latest scientific and technical knowledge, and shall also take into consideration, as appropriate, the comparative environmental impacts (including emissions of greenhouse gases) of the energy saved or produced by specific programs.

In establishing the measurable cost and performance-based goals under subsection 2004(b), subsection 2004(c) requires the Secretary to consult with the private sector, institutions of higher learning, national laboratories, environmental organizations, professional and technical societies, and any other persons the Secretary considers appropriate.

Subsection 2004(d) requires the Secretary, within 120 days of the date of enactment of this Act, to issue and publish in the Federal Register a set of draft measurable cost and performance-based goals for public comment for those programs established before the date of enactment of this Act. (In the case of a program not established before the date of the enactment of this Act, then not later than 120 days after the date of establishment of the program). Not later than 60 days after the date of publication, after taking into consideration any public comments received, the Secretary is to transmit to the Congress and publish in the Federal Register the final measurable cost and performance-based goals. Such goals must be updated on a biennial basis.

Sec. 2005. Definitions

Section 2005 defines the terms: (1) ''Administrator'' to mean the Administrator of the Environmental Protection Agency (EPA); (2) ''appropriate congressional committees'' to mean (A) the Committee on Science and the Committee on Appropriations of the House of Representatives; and (B) the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate; (3) the ''Department'' to mean the Department of Energy; and (4) the ''Secretary'' to mean the Secretary of Energy.

Sec. 2006. Authorizations

Section 2006 states that authorizations of appropriations under this Act are for environmental R&D, scientific and energy RD&D and commercial application of energy technology programs, projects, and activities. This is consistent with the Science Committee's jurisdiction under rule X, clause I (n) of the Rules of the House.

Sec. 2007. Balance of Funding Priorities

Subsection 2007(a) expresses the sense of the Congress that the funding of the various programs authorized by titles I through IV of this Act should remain in the same proportion to each other as provided in this Act, regardless of the total amount of funding made available for those programs.

If the amounts appropriated in general appropriations Acts for FY 2002, FY 2003, or FY 2004 for the programs authorized in titles I through IV of this Act are not in the same proportion to one another as are the authorizations for such programs in this Act, subsection 2207(b) requires the Secretary and the Administrator, within 60 days after the date of the enactment of the last general appropriations Act appropriating amounts for such programs, to transmit to the appropriate congressional committees a report describing the programs, projects, and activities that would have been funded if the proportions provided for in this Act had been maintained in the appropriations. The amount appropriated for the program receiving the highest percentage of its authorized funding for a fiscal year shall be used as the baseline for calculating the proportional deficiencies of appropriations for other programs in that fiscal year.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle A—Alternative Fuel Vehicles

Sec. 2101. Short Title

Subsection 2101 cites the subtitle as the ''Alternative Fuel Vehicle Acceleration Act of 2001.''

Sec. 2102. Definitions

Section 2102 defines the terms ''alternative fuel vehicle,'' ''pilot program,'' and ''ultra-low sulfur diesel vehicle.''

Sec. 2103. Pilot Program

Subsection 2103(a) directs the Secretary to establish an alternative fuel and ultra-low sulfur diesel vehicle energy demonstration and commercial application competitive grant pilot program to provide not more than 15 grants to State governments, local governments, or metropolitan transportation authorities to carry out a project or projects for the purposes described in subsection (b).

Subsection 2103(b) defines the purposes for which the grants may be used.

Subsections 2103(c), (d), and (e) set out the grant application requirements, selection criteria, and pilot project requirements, respectively.

Subsection 2103(e) limits: (1) the amount of an award to any one applicant to not more than $20.0 million; (2) the Federal cost share to not more than 50 percent; and (3) the length of the funding period to not more than five years. It also directs the Secretary to assure nationwide deployment of alternative fuel vehicles through broad geographic distribution of project sites; and to establish mechanisms that ensure the dissemination of information gained by the pilot program participants to all interested parties including all other applicants.

Subsection 2103(f) directs the Secretary to publish in the Federal Register, Commerce Business Daily, and elsewhere requests for project grant applications under the pilot program, which shall be due within six months after the notice publication. The Secretary shall select from among the project grant applications by a competitive, peer review process to award grants under the pilot program.

Section 2103(g) mandates that the Secretary shall provide not less than 20 percent and not more than 25 percent of the grant funding for the acquisition of ultra-low sulfur diesel vehicles.

Sec. 2104. Reports to Congress

Section 2104 requires the Secretary to transmit an initial report to the appropriate congressional committees within two months after the grants are awarded detailing the successful applicants' projects, a listing of the applicants and a description of the information dissemination mechanism under 2103(e)(5). Not later than three years after the date of enactment, and annually thereafter until the program ends, the Secretary is required to transmit a report containing an evaluation of the pilot program's effectiveness to the same committees. This evaluation report is to include an assessment of the benefits to the environment derived from the projects included in the pilot program as well as an estimate of the potential benefits to the environment to be derived from widespread application of alternative fuel vehicles and ultralow sulfur diesel vehicles.

Sec. 2105. Authorization of Appropriations

Section 2105 authorizes $200.0 million for FY 2002 for the pilot program, to remain available until expended.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle B—Distributed Power Hybrid Energy Systems

Sec. 2121. Findings

Section 2121 lists 4 findings.

Sec. 2122. Definitions

Section 2122 defines the terms ''distributed power hybrid system'' and ''distributed power source.''

Sec. 2123. Strategy

Under subsection 2123(a), not later than one year after the date of the enactment of this Act, the Secretary shall develop and transmit to the Congress a distributed power hybrid systems strategy showing: (1) needs best met with distributed power hybrid systems configurations, especially systems including one or more solar or renewable power sources; and (2) technology gaps and barriers (including barriers to efficient connection with the power grid) that impede the use of distributed power hybrid systems.

Subsection 2123(b) specifies five elements the strategy should address, including a comprehensive RD&D and commercial application program to ensure the reliability, efficiency, and environmental integrity of distributed energy resources.

Subsection 2123(c) requires the Secretary to implement the strategy transmitted under subsection 2123(a) and the research program under subsection 2123(b). Activities pursuant to the strategy are to be integrated with other activities of the DOE's Office of Power Technologies.

Sec. 2124. High Power Density Industry Program

Subsection 2124(a) requires the Secretary to develop and implement a comprehensive RD&D and commercial application program to improve energy efficiency, reliability, and environmental responsibility in high power density industries, such as data centers, server farms, telecommunications facilities, and heavy industry.

Subsection 2124(b) provides that in carrying out this section, the Secretary shall consider technologies that provide: (1) significant improvement in efficiency of high power density facilities, and in data and telecommunications centers, using advanced thermal control technologies; (2) significant improvements in air-conditioning efficiency

in facilities such as data centers and telecommunications facilities; (3) significant advances in peak load reduction; and (4) advanced real time metering and load management and control devices.

Subsection 2124(c) requires that activities pursuant to this program be integrated with other activities of the DOE's Office of Power Technologies.

Sec. 2125. Micro-Cogeneration Energy Technology

Section 2125 requires the Secretary to make competitive, merit-based grants to consortia of private sector entities for the development of micro-cogeneration energy technology. The consortia shall explore the creation of small-scale combined heat and power through the use of residential heating appliances. The section also authorizes $20.0 million, to remain available until expended.

Sec. 2126. Program Plan

Section 2126 directs the Secretary to consult with appropriate representatives of the distributed energy resources, power transmission, and high power density industries, other appropriate entities, and Federal, State and local agencies, within four months of enactment, to present to Congress a five-year program plan to guide activities under this subtitle.

Sec. 2127. Report

Section 2127 instructs the Secretary, jointly with other appropriate Federal agencies, to report to Congress within two years of enactment and every two years thereafter for the duration of the program on the program's progress made to achieve the purposes of this subtitle.

Sec. 2128. Voluntary Consensus Standards

Under this section, not later than two years after the date of enactment of this Act, the Secretary, in consultation with the NIST, sball work with the Institute of Electrical and Electronic Engineers and other standards development organizations toward the development of voluntary consensus standards for distributed energy systems for use in manufacturing and using equipment and systems for connection with electric distribution systems, for obtaining electricity from, or providing electricity to, such systems.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle C—Secondary Electric Vehicle Battery Use

Sec. 2131. Definitions

Section 2131 defines the terms ''battery'' and ''associated equipment.''

Sec. 2132. Establishment of Secondary Electric Vehicle Battery Use Program

Subsection 2132(a) directs the Secretary to establish and carry out a RD&D program for the secondary use of batteries originally used in transportation applications. The program should demonstrate the use of batteries in secondary application, including utility and commercial power storage and power quality and should be structured to evaluate the performance, including longevity of useful service life and costs, of such batteries in field operations, and evaluate the necessary supporting infrastructure, including disposal and reuse of batteries. The Secretary is directed to coordinate with ongoing secondary battery use programs underway at the national laboratories and in industry.

Subsection 2132(b) directs the Secretary, no later than six months after the date of the enactment of this Act, to solicit proposals to demonstrate the secondary use of batteries and associated equipment and supporting infrastructure in geographic locations throughout the United States. The Secretary may make additional solicitations for proposals if the Secretary determines that such solicitations are necessary to carry out this section. Proposals submitted in response to a solicitation under this section shall include: (1) a description of the project, including the batteries to be used in the project; the proposed locations and applications for the batteries; the number of batteries to be demonstrated; and the type, characteristics, and estimated life-cycle costs of the batteries compared to other energy storage devices currently in use; (2) the contribution, if any, of State or local governments and other persons to the demonstration project; (3) the type of associated equipment to be demonstrated and the type of supporting infrastructure to be demonstrated; and (4) any other information the Secretary considers appropriate. If the proposal includes a lease arrangement, the proposal shall indicate the terms of such lease arrangement for the batteries and associated equipment.

Subsection 2132(c) directs the Secretary, no later than three months after the closing date established by the Secretary for receipt of proposals under subsection 2132(b), to select at least five proposals to receive financial assistance under this subsection. No one project selected is permitted to receive more than 25 percent of the funds authorized under this section, and no more than three projects selected under this section shall demonstrate the same battery type.

In selecting a proposal under subsection 2132(c), the Secretary must consider:

(1) the ability of the proposer to acquire the batteries and associated equipment and to successfully manage and conduct the demonstration project, including the reporting requirements;

(2) the geographic and climatic diversity of the projects selected;

(3) the long-term technical and competitive viability of the batteries to be used in the project and of the original manufacturer of such batteries;

(4) the suitability of the batteries for their intended uses;

(5) the technical performance of the battery, including the expected additional useful life and the battery's ability to retain energy;

(6) the environmental effects of the use of and disposal of the batteries proposed to be used in the project selected;

(7) the extent of involvement of State or local government and other persons in the demonstration project and whether such involvement will permit a reduction of the Federal cost share per project or otherwise be used to allow the Federal contribution to be provided to demonstrate a greater number of batteries; and

(8) such other criteria as the Secretary considers appropriate.

The Secretary must require that as a part of a demonstration project, the users of the batteries provide to the proposer information regarding the operation, maintenance, performance, and use of the batteries, and the proposer provide such information to the battery manufacturer, for three years after the beginning of the demonstration project. The Secretary must also require the proposer to provide to the Secretary information regarding the operation, maintenance, performance, and use of the batteries that the Secretary may request during the period of the demonstration project. The proposer must provide at least 50 percent of the costs associated with the proposal.

Sec. 2133. Authorization of appropriations

Section 2133 authorizes (from amounts authorized under section 2161(a)) for purposes of this subtitle $1.0 million for FY 2002, $7.0 million for FY 2003 and $7.0 million for FY 2004, to remain available until expended.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle D—Green School Buses

Sec. 2141. Short Title

Section 2141 cites the subtitle as the ''Clean Green School Bus Act of 2001.''

Sec. 2142. Establishment of Pilot

Subsection 2142(a) directs the Secretary to establish a pilot program for awarding grants on a competitive basis to eligible entities for the demonstration and commercial application of alternative fuel school buses and ultra-low sulfur diesel school buses.

Subsection 2142(b) requires the Secretary, no later than three months after the date of enactment of this Act, to establish and publish in the Federal Register grant requirements on eligibility for assistance, and on implementation of the program established under subsection (a), including certification requirements to ensure compliance with this subtitle.

Subsection 2142(c) requires the Secretary, no later than six months after the date of enactment of this Act, to solicit proposals for grants under this section.

Subsection 2142(d) requires that a grant be awarded, under this section only, to a local governmental entity responsible for providing school bus service for one or more public school systems or, jointly with a contracting entity that provides school bus service to the public school system or systems.

Subsection 2142(e) requires that grants under this section shall be for the demonstration and commercial application of technologies to facilitate the use of alternative fuel school buses and ultra-low sulfur diesel school buses in lieu of buses manufactured before model year 1977 and diesel-powered buses manufactured before model year 1991. Other than the receipt of the grant, a recipient of a grant under this section may not receive any economic benefit in connection with the receipt of the grant. When awarding grants, the Secretary shall give priority to applicants who can demonstrate the use of alternative fuel buses and ultra-low sulfur diesel school buses in lieu of buses manufactured before model year 1977.

Subsection 2142(f) requires that a grant provided under this section shall include the following conditions:

(1) all buses acquired with funds provided under the grant shall be operated as part of the school bus fleet for which the grant was made for a minimum of five years;

(2) funds provided under the grant may only be used to pay the cost, except as provided in the following paragraph (3), of new alternative fuel school buses or ultra-low sulfur diesel school buses, including State taxes and contract fees to provide-

(i) up to 10 percent of the price of the alternative fuel school buses acquired, for necessary alternative fuel infrastructure if the infrastructure will only be available to the grant recipient; and

(ii) up to 15 percent of the price of the alternative fuel school buses acquired, for necessary alternative fuel infrastructure if the infrastructure will be available to the grant recipient and to other bus fleets;

(3) the grant recipient shall be required to provide at least the lesser of 15 percent of the total cost of each bus received or $15,000 per bus;

(4) in the case of a grant recipient receiving a grant to demonstrate ultra-low sulfur diesel school buses, the grant recipient shall be required to provide documentation to the satisfaction of the Secretary that diesel fuel containing sulfur at not more than 15 parts

per million (PPM) is available for carrying out the purposes of the grant, and a commitment by the applicant to use such fuel in carrying out the purposes of the grant.

Subsection 2142(g) requires that funding under a grant made under this section may be used to demonstrate the use only of new alternative fuel school buses or ultra-low sulfur diesel school buses:

(1) with a gross vehicle weight of greater than 14,000 pounds;

(2) that are powered by a heavy duty engine;

(3) that, in the case of alternative fuel school buses, emit not more than—

(A) 2.5 grains per brake horsepower-hour of non-methane hydrocarbons and oxides of nitrogen and 0.01 grains per brake horsepower-hour of particulate matter for buses manufactured in model years 2001 and 2002; and

(B) 1.8 grams per brake horsepower-hour of non-methane hydrocarbons and oxides of nitrogen and 0.01 grains per brake horsepower-hour of particulate matter for buses manufactured in model years 2003 through 2006; and

(4) that, in the case of ultra-low sulfur diesel school buses, emit not more than—

(A) 3.0 grams per brake horsepower-hour of non-methane hydrocarbons and oxides of nitrogen and 0.01 grams per brake horsepower-hour of particulate matter for buses manufactured in model years 2001 through 2003; and

(B) 2.5 grams per brake horsepower-hour of non-methane hydrocarbons and oxides of nitrogen and 0.01 grams per brake horsepower-hour of particulate matter for buses manufactured in model years 2004 through 2006, except that under no circumstances shall buses be acquired under this section that emit non-methane hydrocarbons, oxides of nitrogen, or particulate matter at a rate greater than the best performing technology of ultra-low sulfur diesel school buses commercially available at the time the grant is made.

Subsection 2142(h) requires the Secretary, to the maximum extent practicable, to achieve nationwide deployment of alternative fuel school buses through the program under this section, and to ensure a broad geographic distribution of grant awards, with a goal of no State receiving more than 10 percent of the grant funding made available under this section for a fiscal year.

Subsection 2142(i) requires the Secretary to provide not less than 20 percent and not more than 25 percent of the grant funding made available under this section for any fiscal year for the acquisition of ultra-low sulfur diesel school buses.

Subsection 2142(j) defines the term ''alternative fuel school bus'' to mean a bus powered substantially by electricity (including electricity supplied by a fuel cell), or by liquefied natural gas, compressed natural gas, liquefied petroleum gas, hydrogen, propane, or methanol or ethanol at no less than 85 percent by volume. It also defines the term ''Ultra-low sulfur diesel school bus'' to mean a school bus powered by diesel fuel which contains not more than 15 PPM sulfur.

Sec. 2143. Fuel Cell Development and Demonstration Program

Subsection 2143(a) requires the Secretary to establish a program for entering into cooperative agreements with private-sector fuel cell bus developers for the development of fuel-cell-powered school buses, and subsequently with not less than two units of local government using natural-gas-powered school buses and such private sector fuel cell bus developers to demonstrate the use of fuel-cell-powered school buses.

Subsection 2143(b) requires the non-Federal contribution for activities funded under this section to be no less than 20 percent for fuel infrastructure development activities and no less than 50 percent for demonstration activities and for non-fuel infrastructure development activities.

Subsection 2143(c) limits the amount authorized under section 2144 that may be used for carrying out this section for the period encompassing FY 2002 through FY 2006 to no more than $25.0 million.

Subsection 2143(d) requires the Secretary, no later than three years after the date of enactment of this Act, and, again, no later than October 1, 2006, to transmit to Congress a report that evaluates the process of converting natural gas infrastructure to accommodate fuel-cell-powered school buses and assesses the results of the development and demonstration program under this section.

Sec. 2144. Authorization of Appropriations

Section 2144 authorizes $40.0 million for FY 2002, $50.0 million for FY 2003, $60.0 million for FY 2004, $70.0 million for FY 2005, and $80.0 million for FY 2006, to remain available until expended, to carry out this subtitle.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle E—Next Generation Lighting

Sec. 2151. Short Title

Section 2151 cites the subtitle as ''Next Generation Lighting Initiative Act.''

Sec. 2152. Definition

Section 2152 defines the term ''Lighting Initiative'' to mean the ''Next Generation Lighting Initiative'' established under subsection 2153(a).

Sec. 2153. Next Generation Lighting Initiative

Subsection 2153(a) authorizes the Secretary to establish a Lighting Initiative to be known as the ''Next Generation Lighting Initiative'' to research, develop, and conduct demonstration activities on advanced lighting technologies, including white light emitting diodes.

Subsection 2153(b) states the research objectives of the Lighting Initiative to develop, by 2011, advanced lighting technologies that, compared to incandescent and fluorescent lighting technologies as of the date of the enactment of this Act, are longer lasting, more energy-efficient and cost-competitive.

Sec. 2154. Study

Subsection 2154(a) requires the Secretary, in consultation with other Federal agencies, as appropriate, no later than six months after the date of enactment of this Act, to complete a study on strategies for the development and commercial application of advanced lighting technologies. The Secretary shall request a review by the National Academies of Sciences and Engineering of the study under this subsection, and shall transmit the results of the study to the appropriate congressional committees.

Subsection 2154(b) requires that the study include the development of a comprehensive strategy to implement the Lighting Initiative and identifying the research and development, manufacturing, deployment, and marketing barriers that must be overcome to achieve a goal of a 25 percent market penetration by advanced lighting technologies into the incandescent and fluorescent lighting market by the year 2012.

Subsection 2154(c) requires the Secretary to modify the implementation of the Lighting Initiative, if necessary, to take into consideration the recommendations of the National Academies of Sciences and Engineering, as soon as practicable after the review of the study under subsection 2154(a) is transmitted to the Secretary by the National Academies of Sciences and Engineering.

Sec. 2155. Grant Program

Subsection 2155(a) permits the Secretary to make merit-based competitive grants to firms and research organizations that conduct RD&D projects related to advanced lighting technologies, subject to section 2603 of this Act.

Subsection 2155(b) requires an annual independent review of the grant-related activities of firms and research organizations receiving a grant under this section to be conducted by a committee appointed by the Secretary under the Federal Advisory Committee Act (5 U.S.C. App.), or, at the request of the Secretary, a committee appointed by the National Academies of Sciences and Engineering. Using clearly defined standards established by the Secretary, the review shall assess technology advances and progress toward commercialization of the grant-related activities of firms or research organizations during each fiscal year of the grant program.

Subsection 2155(c) requires the national laboratories and other Federal agencies, as appropriate, to cooperate with and provide technical and financial assistance to firms and research organizations.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle F—Department of Energy Authorization of Appropriations

Sec. 2161. Authorization of Appropriations

Subsection 2161 (a) authorizes $625.0 million for FY 2002, $700.0 million for FY 2003; and (3) $800 million for FY 2004 for Energy Conservation operation and maintenance (including Building Technology, State and Community Sector, Industry Sector, Transportation Sector, Power Technologies, and Policy and Management), to remain available until expended. These amount are in addition to: (1) $200.0 million authorized for FY 2002 under section 2105 for alternative fuel and ultra-low sulfur diesel vehicles; (2) $20.0 million for FY 2002 authorized under section 2125 for micro-cogeneration energy technology; and (3) $40.0 million for FY 2002, $50.0 million for FY 2003, and $60.0 million for FY 2004 authorized under section 2144 for green school buses.

Subsection 2161(b) provides that none of the funds authorized to be appropriated in subsection 2131(a) may be used for: ''(1) Building Technology, State and Community Sector—(A) Residential Building Energy Codes; (B) Commercial Building Energy Codes; (C) Lighting and Appliance Standards; (D) Weatherization Assistance Program; (E) State Energy Program; or (2) Federal Energy Management Program.'' These limitations are included to preserve the Science Committee's sole jurisdiction over the bill since the jurisdiction of programs under this subsection 2131(b) either resides with the Committee on Energy and Commerce or is shared with that Committee.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle G—Environmental Protection Agency Office of Air and Radiation Authorization of Appropriations

Sec. 2171. Short Title

Section 2171 cites the subtitle as the ''Environmental Protection Agency Office of Air and Radiation Authorization Act of 2001.''

Sec. 2172. Authorization of Appropriations

Section 2172 authorizes to be appropriated to the Administrator for the Office of Air and Radiation Climate Change Protection Programs $121.942 million for FY 2002, $126.8 million for FY 2003, and $131.8 million for FY 2004, to remain available until expended, of which:

(1) $52.731 million for FY 2002, $54.8 million for FY 2003, and $57.0 million for FY 2004 shall be for Buildings;

(2) $32.441 million for FY 2002, $33.7 million for FY 2003, and $35.0 million for FY 2004 shall be for Transportation;

(3) $27.295 million FY 2002, $28.4 million for FY 2003, and $29.5 million for FY 2004 shall be for Industry;

(4) $1.7 million for FY 2002, $1.8 million FY 2003, and $1.9 million for FY 2004 shall be for Carbon Removal;

(5) $2.5 million for FY 2002, $2.6 million for FY 2003, and $2.7 million for FY 2004 shall be for State and Local Climate; and

(6) $5.275 million for FY 2002, $5.5 million for FY 2003, and $5.7 million for FY 2004 shall be for International Capacity Building.

Sec. 2173. Limits on Use of Funds

Subsection 2173(a) prohibits EPA from using funds to produce or provide articles or services for the purpose of selling the articles or services to a person outside the Federal Government, unless the Administrator determines that comparable articles or services are not available from a commercial source in the United States.

Subsection 2173(b) prohibits EPA from using funds to prepare or initiate Requests for Proposals for a program if Congress has not authorized the program.

Sec. 2174. Cost Sharing

Except as other-wise provided in this subtitle, subsection 2174(a) mandates that for R&D programs carried out under this subtitle, the Administrator shall require a commitment from non-Federal sources of at least 20 percent of the cost of the project. The Administrator may reduce or eliminate the non-Federal requirement under this subsection if the Administrator determines that the R&D is of a basic or fundamental nature.

Similarly, under subsection 2174(b) the Administrator shall require at least 50 percent of the costs directly and specifically related to any demonstration or commercial application project under this subtitle to be provided from non-Federal sources. The Administrator may reduce the non-Federal requirement under this subsection if the Administrator determines that the reduction is necessary and appropriate considering the technological risks involved in the project and is necessary to meet the objectives of this subtitle.

In calculating the amount of the non-Federal commitment under subsection (a) or (b), subsection 2174(c) permits the Administrator to include personnel, services, equipment, and other resources.

Sec. 2175. Limitations on Demonstrations and Commercial Application of Energy Technology

Section 2175 requires the Administrator to provide funding only for scientific or energy demonstration or commercial application programs, projects or activities for technologies or processes that can reasonably be expected to yield new, measurable benefits to the cost, efficiency, or performance of the technology or process.

Sec. 2176. Reprogramming

Section 2176 prohibits the reprogramming of funds in excess of 105 percent of the amount authorized for a program, project, or activity, or in excess of $0.25 million above the amount authorized for the program, program, project, or activity until the Administrator submits a report to the appropriate congressional committees and a period of 30 days has elapsed after the date on which the report is received. Such reprogramming of funds is limited to no more than the total amount authorized to be appropriated by this subtitle and such funds may not be reprogrammed or used for a program, project, or activity for which Congress has not authorized appropriation.

Sec. 2177. Budget Request Format

Section 2177 requires the Administrator to provide to the appropriate congressional committees, to be transmitted at the same time as the EPA's annual budget request submission, a detailed justification for budget authorization for the programs, projects, and activities for which funds are authorized by this subtitle.

Each such document shall include, for the fiscal year for which funding is being requested and for the two previous fiscal years: (1) a description of, and funding requested or allocated for, each such program, project, or activity; (2) an identification of all recipients of funds to conduct such programs, projects, and activities; and (3) an estimate of the amounts to be expended by each recipient of funds under (2).

Sec. 2178. Other Provisions

Subsection 2178(a) requires the Administrator to provide simultaneously to the Committee on Science: (1) any annual operating plan or other operational funding document, including any additions or amendments thereto; and (2) any report relating to the environmental research or development, scientific or energy research, development, or demonstration, or commercial application of energy technology programs, projects, or activities of the EPA, provided to any committee of Congress.

Subsection 2178(b) requires the Administrator to provide notice to the appropriate congressional committees not later than 15 days before any reorganization of any environmental research or development, scientific or energy research, development, or demonstration, or commercial application of energy technology program, project, or activity of the Office of Air and Radiation.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle H—National Building Performance Initiative

Not later than three months after the date of the enactment of this Act, subsection 2181(a) requires the Director of the OSTP to establish an Interagency Group responsible for the development and implementation of a National Building Performance Initiative to address energy conservation and R&D and related issues. The NIST shall provide necessary administrative support for the Interagency Group.

Under subsection 2181(b), not later than nine months after the date of the enactment of this Act, the Interagency Group shall transmit to the Congress a multiyear implementation plan describing the Federal role in reducing the costs, including energy costs, of using, owning, and operating commercial, institutional, residential, and industrial buildings by 30 percent by 2020. The plan shall include: (1) RD&D of systems and materials for new construction and retrofit, on the building envelope and components; and (2) the collection and dissemination, in a usable form, of research results and other pertinent information to the design and construction industry, government officials, and the general public.

Subsection 2181(c) requires the establishment of a National Building Performance Advisory Committee to advise on creation of the plan, review progress made under the plan, advise on any improvements that should be made to the plan, and report to the Congress on actions that have been taken to advance the Nation's capability in furtherance of the plan. The members shall include representatives of a broad cross-section of interests such as the research, technology transfer, architectural, engineering, and financial communities; materials and systems suppliers; State, county, and local governments; the residential, multi-family, and commercial sectors of the construction industry; and the insurance industry.

Subsection 2181(d) requires the Interagency Group, within 90 days after the end of each fiscal year, to transmit a report to the Congress describing progress achieved during the preceding fiscal year by goverranent at all levels and by the private sector, toward implementing the plan developed under subsection (b), and including any amendments to the plan.

TITLE II—RENEWABLE ENERGY

Subtitle A—Hydrogen

Sec. 2201. Short Title

Section 2201 cites the subtitle as the ''Robert S. Walker and George E. Brown, Jr. Hydrogen Energy Act of 2001.''

Sec. 2202. Purposes

Section 2202 amends section 102(b) the Spark M. Matsunaga Hydrogen RD&D Act of 1990 (1990 Act) to include RD&D activities leading to the use of hydrogen for commercial applications, information dissemination and education, and development of a hydrogen production methodology that minimizes adverse environmental impacts, including efficient and cost-effective production from renewable and nonrenewable resources.

Sec. 2203. Definitions

Section 2203 amends section 102(c) of the 1990 Act to include the definition of ''advisory committee.''

Sec. 2204. Reports to Congress

Section 2204 amends section 103 of the 1990 Act by requiring the Secretary to submit to Congress a detailed report on the status and progress of the programs and activities authorized under the Act within one year of its enactment, and biennially thereafter.

Sec. 2205. Hydrogen Research and Development

Section 2205 amends section 104 of the 1990 Act by streamlining the text. Also, for R&D programs carried out under this section, the Secretary shall require a commitment from nonFederal sources of at least 20 percent of the cost of the project. The Secretary may reduce or eliminate the non-Federal requirement under this subsection if the Secretary determines that the R&D is of a basic or fundamental nature.

Sec. 2206. Demonstrations

Section 2206 amends section 105 of the 1990 Act by eliminating the requirement that demonstration of critical technologies and small-scale demonstrations be conducted in or at ''self-contained locations.'' In addition, the small-scale demonstrations are to include a fuel cell bus demonstration program to address hydrogen production, storage, and use in transit bus applications.

Sec. 2207. Technology Transfer

Section 2207 amends section 106 of the 1990 Act by requiring the Secretary to conduct a hydrogen technology transfer program designed to accelerate wider application of hydrogen production, storage, transportation and use technologies, including application in foreign countries to increase the global market for hydrogen technologies and foster global economic development without harmful environmental effects.

Sec. 2208. Coordination and Consultation

Section 2208 amends section 107 of the 1990 Act by requiring the Secretary to establish a central point for coordination of all DOE hydrogen RD&D activities. It also requires the Secretary to consult with other Federal agencies, as appropriate, and the advisory committee established under section 2209.

Sec. 2209. Advisory Committee

Section 2209 amends section 108 of the 1990 Act by requiring the Secretary to enter into arrangements with the National Academies of Sciences and Engineering to establish an advisory committee to replace the current Hydrogen Technical Advisory Panel.

Sec. 2210. Authorization of Appropriations

Subsection 2210 amends section 109 of the 1990 Act to provide authorization of appropriations for the five-year period, FY 2002 through FY 2006.

Subsection 2210(a) authorizes $40.0 million for FY 2002, $45.0 million for FY 2003, $50.0 million for FY 2004, $55.0 million for FY 2005, and $60.0 million for FY 2006 for hydrogen R&D activities and the advisory committee.

Subsection 2210(b) authorizes $20.0 million for FY 2002, $25.0 million for FY 2003, $30.0 million for FY 2004, $35.0 million for FY 2005, and $40.0 million for FY 2006 for hydrogen demonstration activities.

Sec. 2211. Repeal

Section 2211 amends the Hydrogen Future Act of 1996 to repeal title 11 containing the program relating to the integration of fuel cells with hydrogen production systems.

TITLE II—RENEWABLE ENERGY

Subtitle B—Bioenergy

Sec. 2221. Short Title

Section 2221 cites the subtitle as the ''Bioenergy Act of 2001.''

Sec. 2222. Findings

Section 2222 lists five findings.

Sec. 2223. Definitions

Section 2223 defines the terms ''bioenergy,'' ''biofuels,'' ''biopower,'' and ''integrated bioenergy research and development.''

Sec. 2224. Authorizations

Section 2224 authorizes the Secretary to conduct bioenergy-related RD&D and commercial application programs, projects, and activities, including: (1) biopower energy systems, (2) biofuels energy systems, and (3) integrated bioenergy R&D.

Sec. 2225. Authorization of Appropriations

As shown in the following table, subsections 2225(a), 2225(b), and 2225(c) authorize a total of $912.2 million for Biopower Energy Systems, Biofuels Energy Systems, and Integrated Bioenergy R&D for the five-year period, FY 2002 through FY 2006.

BIOENERGY ACT OF 2001 AUTHORIZATIONS: FY 2002–FY 2006

[In thousands of dollars]

Program (subsection)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	Total (FY 2002–FY 2006)
Biopower (2225(a))	45,700	52,500	60,300	69,300	79,600	307,400
Biofuels (2225(b))	53,500	61,400	70,600	81,100	93,200	359,800
Integrated Bioenergy R&D (2225(c))	49,000	49,000	49,000	49,000	49,000	245,000
Total	148,200	162,900	179,900	199,400	221,800	912,200

Also, Integrated Bioenergy R&D activities funded under subsection 2225(c) are to be coordinated with ongoing related programs of other Federal agencies, including the NSF Plant Genome Program.

Subsection 2225(d) authorizes amounts under this subtitle to be used to assist in the planning, design, and implementation of projects to convert rice straw and barley grain into biopower or biofuels.

TITLE II—RENEWABLE ENERGY

Subtitle C—Transmission Infrastructure Systems

Sec. 2241. Transmission Infrastructure Systems RD&D and Commercial Application

Subsection 2241(a) requires the Secretary to develop and implement a comprehensive RD&D and commercial application program to ensure the reliability, efficiency, and environmental integrity of electrical transmission systems. Such program shall include advanced energy technologies and systems, high capacity superconducting transmission lines and generators, advanced grid reliability and efficiency technologies development, technologies contributing to significant load reductions, advanced metering, load management and control technologies, and technology transfer and education.

In carrying out this subtitle, subsection 2241(b) allows the Secretary to include RD&D on and commercial application of improved transmission technologies including the integration of the following technologies into improved transmission systems: (1) high temperature superconductivity; (2) advanced transmission materials; (3) self-adjusting equipment, processes, or software for survivability, security, and failure containment; (4) enhancements of energy transfer over existing lines; and (5) any other infrastructure technologies, as appropriate.

Sec. 2242. Program Plan

Section 2242 requires the Secretary, within four months after the date of the enactment of this Act and in consultation with other appropriate Federal agencies, to prepare and transmit to Congress a five-year program plan to guide activities under this subtitle. In preparing the program plan, the Secretary shall consult with appropriate representatives of the transmission infrastructure systems industry to select and prioritize appropriate program areas. The Secretary shall also seek the advice of utilities, energy services providers, manufacturers, institutions of higher learning, other appropriate State and local agencies, environmental organizations, professional and technical societies, and any other persons as the Secretary considers appropriate.

Sec. 2243. Report

Under section 2243, two years after the date of the enactment of this Act, and at two year intervals thereafter, the Secretary, in consultation with other appropriate Federal agencies, shall transmit a report to Congress describing the progress made to achieve the purposes of this subtitle and identifying any additional resources needed to continue the development and commercial application of transmission infrastructure technologies.

TITLE II—RENEWABLE ENERGY

Subtitle D—Authorization of Appropriations

Sec. 2261. Authorization of Appropriations

Including the amounts authorized for hydrogen R&D under section 2210 and for bioenergy R&D under section 2225, subsection 261(a) authorizes $535.0 million for FY 2002, $639.0 million for FY 2003, and $683.0 million for FY 2004 for Renewable Energy operation and maintenance, including subtitle C (Transmission Infrastructure Systems), Geothermal Technology Development, Hydropower, Concentrating Solar Power, Photovoltaic Energy Systems, Solar Building Technology Research, Wind Energy Systems, High Temperature Superconducting Research and Development, Energy Storage Systems, Transmission Reliability, International Renewable Energy Program, Renewable Energy Production Incentive Program, Renewable Program Support, National Renewable Energy Laboratory, and Program Direction, to remain available until expended.

Subsection 2281(b) requires the Secretary to carry out a research program, in conjunction with other appropriate Federal agencies, on wave powered electric generation within the amounts authorized under subsection 2281(a).

Using funds authorized in subsection 2281(a), subsection 2281(c) requires the Secretary to transmit to the Congress, within one year after the date of the enactment of this Act, an assessment of all renewable energy resources available within the United States. The report shall include a detailed inventory describing the available amount and characteristics of solar, wind, biomass, geothermal, hydroelectric, and other renewable energy sources, and an estimate of the costs needed to develop each resource. The report shall also include such other information as the Secretary believes would be useful in siting renewable energy generation, such as appropriate terrain, population and load centers, nearby energy infrastructure, and location of energy resources. The information and cost estimates in this report shall be updated annually and made available to the public, along with the data used to create the report. This subsection shall expire at the end of FY 2004.

Subsection 2261(d) provides that none of the funds authorized to be appropriated in subsection 2241(a) may be used for: ''(1) Departmental Energy Management Program; or (2) Renewable Indian Energy Resources.'' These limitations are included to preserve the Science Committee's sole jurisdiction over the bill, since the jurisdiction of these programs either resides with the Committee on Energy and Commerce, or is shared with that Committee.

TITLE III—NUCLEAR ENERGY

Subtitle A—University, Nuclear Science and Engineering

Sec. 2301. Short Title

Section 2301 cites the subtitle as the ''Department of Energy University Nuclear Science and Engineering Act.''

Sec. 2302. Findings

Section 2302 lists three findings.

Sec. 2303. Department of Energy Program

Subsection 2303(a) directs the Secretary, through the Office of Nuclear Energy, Science and Technology (Office) to maintain the Nation's human resource investment and infrastructure related to civilian nuclear R&D.

Subsection 2303(b) requires the Director of the Office to: (1) develop a robust graduate and undergraduate program to attract new students; (2) develop a Junior Faculty Research Initiation Grant to recruit and maintain new faculty; (3) maintain investment in the Nuclear Engineering Education Research Program; (4) encourage collaborative nuclear research between industry, national labs and universities through Nuclear Energy Research Initiative (NERI); (5) support public outreach regarding nuclear science and engineering; and (6) support communication and outreach related to nuclear science and engineering.

Subsection 2303(c) directs the Office to provide for: (1) university research reactor refueling with low enriched fuels, operational

instrumentation upgrading, and reactor sharing among universities; (2) assistance in relicensing and upgrading university training reactors as part of a student training program in collaboration with the U.S. nuclear industry; and (3) awards for reactor improvements for research, training and education.

Subsection 2303(d) directs the Secretary to develop a program in the Office for: nuclear science and technology sabbatical fellowships for university professors at the Department labs and for student fellowships at Department labs; and a visiting scientist program for Department lab staff to visit universities' nuclear science programs to work with faculty and staff.

Subsection 2303(e) requires the host institution to provide at least 50 percent of the cost of a university research reactor's operation when funds authorized under this subtitle are used to supplement operation of such research reactor.

Subsection 2303(f) requires that all grants, contracts, cooperative agreements or other financial assistance awards under this Act be made based on independent merit review.

Subsection 2303(g) requires the Secretary to prepare a report within six months of enactment of this Act, laying out a five-year plan on the programs authorized in this section. This report is to be delivered to the appropriate congressional committees.

Sec. 2304. Authorization of Appropriations

Subsection 2304(a) authorizes total appropriation of funds to carry out the purposes of this subtitle and for all funds to remain available until expended: $30.2 million for FY 2002; $41.0 million for FY 2003; $47.9 million for FY 2004; $55.6 million for FY 2005; and $64.1 million for FY 2006.

For the Graduate and Undergraduate Fellowships to carry out subsection 2303(b)(1) from the funds authorized in subsection 2304(a), subsection 2304(b) authorizes $3.0 million for FY 2002, $3.1 million for FY 2003, $3.2 million for FY 2004, $3.2 million for FY 2005, and $3.2 million for FY 2006.

For the Junior Faculty Research Initiation Grant Program to carry out subsection 2303(b)(2) from the funds authorized in subsection 2304(a), subsection 2304(c) authorizes $5.0 million for FY 2002, $7.0 million for FY 2003, $8.0 million for FY 2004, $9.0 million for FY 2005, and $10.0 million for FY 2006.

For the Nuclear Engineering and Education Research Program to carry out subsection 2303(b)(3) from the funds authorized in subsection 2304(a), subsection 2304(d) authorizes $8.0 million for FY 2002, $12.0 million for FY 2003, $13.0 million for FY 2004, $15.0 million for FY 2005, and $20.0 million for FY 2006.

For Communication and Outreach Related to Nuclear Science and Engineering to carry out subsection 2303(b)(5) from the funds authorized in subsection 2304(a), subsection 2304(e) authorizes $0.2 million for each of FY 2002 and FY 2003, and $0.3 million for each of FY 2004 through FY 2006.

For Refueling of Research Reactors and Instrumentation Upgrades to carry out subsection 2303(c)(1) from the funds authorized in subsection 2304(a), subsection 2304(f) authorizes $6.0 million for FY 2002, $6.5 million for FY 2003, $7.0 million for FY 2004, $7.5 million for FY 2005, and $8.0 million for FY 2006.

For Relicensing Assistance to carry out subsection 2303(c)(2) from the funds authorized in subsection 2304(a), subsection 2304(g) authorizes $1.0 million for FY 2002, $1.1 million for FY 2003, $1.2 million for FY 2004, and $1.3 million for each of FY 2005 and FY 2006.

For the Reactor Research and Training Award Program to carry out subsection 2303(c)(3) from the funds authorized in subsection 2304(a), subsection 2304(h) authorizes $6.0 million for FY 2002, $10.0 million for FY 2003, $14.0 million for FY 2004, $18.0 million for FY 2005, and $20.0 million for FY 2006.

For University-Department Laboratory Interactions to carry out subsection 2303(d) from the funds authorized in subsection 2304(a), subsection 2304(i) authorizes $1.0 million for FY 2002, $1.1 million for FY 2003, $1.2 million for FY 2004, and $1.3 million for each of FY 2005 and FY 2006.

TITLE III—NUCLEAR ENERGY

Subtitle B—Advanced Fuel Recycling Technology Research and Development Program

Sec. 2321. Program

Section 2321(a) requires the Secretary, through the Director of the Office, to conduct an advanced fuel recycling technology R&D program to further the availability of proliferation resistant fuel recycling technologies as an alternative to aqueous reprocessing in support of evaluation of alternative national strategies for spent nuclear fuel and the Generation IV advanced reactor concepts, subject to annual review by the Secretary's Nuclear Energy Research Advisory Committee or other independent entity, as appropriate.

Section 2321(b) requires the Secretary to report on the activities of the advanced fuel recycling technology R&D program as part of the Department's annual budget submission.

Section 2321(c) authorizes: (1) $10.0 million for FY 2002, and (2) such sums as are necessary for FY 2003 and FY 2004.

TITLE III—NUCLEAR ENERGY

Subtitle C—Department of Energy Authorization of Appropriations

Sec. 2341. Nuclear Energy Research Initiative

Subsection 2341(a) requires the Secretary, through the Office, to conduct a Nuclear Energy Research Initiative for grants to be competitively awarded and subject to peer review for research relating to nuclear energy.

Subsection 2341(b) mandates that the program be directed toward accomplishing the objectives of: (1) developing advanced concepts and scientific breakthroughs in nuclear fission and reactor technology to address and overcome the principal technical and scientific obstacles to the expanded use of nuclear energy in the United States; (2) advancing the state of nuclear technology to maintain a competitive position in foreign markets and a future domestic market; (3) promoting and maintaining a United States nuclear science and engineering infrastructure to meet future technical challenges; (4) providing an effective means to collaborate on a cost-shared basis with international agencies and research organizations to address and influence nuclear technology development worldwide; and (5) promoting United States leadership and partnerships in bilateral and multilateral nuclear energy research.

Subsection 2341(c) authorizes to be appropriated to the Secretary to carry out this section: (1) $60.0 million for FY 2002; and (2) such sums as are necessary for FY 2003 and FY 2004.

Sec. 2342. Nuclear Energy Plant Optimization Program

Subsection 2342(a) requires the Secretary to conduct a Nuclear Energy Plant Optimization R&D program jointly with industry and cost-shared by industry by at least 50 percent and subject to annual review by the Secretary's Nuclear Energy Research Advisory Committee or other independent entity, as appropriate.

Subsection 2342(b) states the program shall be directed toward accomplishing the following technical objectives: (1) managing long-term effects of component aging; and (2) improving efficiency and productivity of existing nuclear power stations.

Subsection 2342(c) authorizes to be appropriated to the Secretary to carry out this section: (1) $15.0 million for FY 2002; and (2) such sums as are necessary for FY 2003 and FY 2004.

Sec. 2343. Nuclear Energy Technologies

Subsection 2343(a) requires the Secretary to conduct a study of Generation IV nuclear energy systems, including development of a technology roadmap and performance of R&D necessary to make an informed technical decision regarding the most promising candidates for commercial application.

Under subsection 2343(b), to the extent practicable, in conducting the study under subsection 2343(a), the Secretary shall study nuclear energy systems that offer the highest probability of achieving the goals for Generation IV nuclear energy systems, including: (1) economics competitive with any other generators; (2) enhanced safety features, including passive safety features; (3) substantially reduced production of high-level waste, as compared with the quantity of waste produced by reactors in operation on the date of enactment of this Act; (4) highly proliferation-resistant fuel and waste; (5) sustainable energy generation including optimized fuel utilization; and (6) substantially improved thermal efficiency, as compared with the thermal efficiency of reactors in operation on the date of enactment of this Act.

In preparing the study under subsection 2343(b), subsection 2343(c) requires the Secretary to consult with appropriate representatives of industry, institutions of higher education, Federal agencies, and international, professional and technical organizations.

Subsection 2343(d) requires that, not later than December 31, 2002, the Secretary shall transmit to the appropriate congressional committees a report describing the activities of the Secretary under this section, and plans for R&D leading to a public/private cooperative demonstration of one or more Generation IV nuclear energy systems. The report shall contain: (A) an assessment of all available technologies; (B) a summary of actions needed for the most promising candidates to be considered as viable commercial options within the five to ten years after the date of the report, with consideration of regulatory, economic, and technical issues; (C) a recommendation of not more than three promising Generation IV nuclear energy system concepts for further development; (D) an evaluation of opportunities for public/private partnerships; (E) a recommendation for the structure of a public/private partnership to share in development and construction costs; (F) a plan leading to the selection and conceptual design, by September 30, 2004, of at least one Generation IV nuclear energy system concept recommended under subparagraph (C) for demonstration through a public/private partnership; (G) an evaluation of opportunities for siting demonstration facilities on DOE land; and (H) a recommendation for appropriate involvement of other Federal agencies.

Subsection 2343(e) authorizes to be appropriated to the Secretary to carry out this section: (1) $20.0 million for FY 2002; and (2) such sums as are necessary for FY 2003 and FY 2004.

Sec. 2344. Authorization of Appropriations

Subsection 2344(a) authorizes activities under this title for nuclear energy operation

and maintenance, including amounts authorized under sections 2304(a) (University Nuclear Science and Engineering), 2321(c) (Advanced Fuel Recycling Technology R&D Program), 2341(c) (Nuclear Energy Research Initiative), 2342(c) (Nuclear Energy Plant Optimization Program), and 2343(e) (Nuclear Energy Technologies), and including Advanced Radioisotope Power Systems, Test Reactor Landlord, and Program Direction, $191.2 million for FY 2002, $199.0 million for FY 2003, and $207.0 million for FY 2004, to remain available until expended.

Subsection 2344(b) authorizes:

(1) $0.95 million for FY 2002, $2.2 million for FY 2003, $1.246 million for FY 2004, and $1.699 million for FY 2005 for completion of construction of Project 99–E–200, Test Reactor Area (TRA) Electric Utility Upgrade, Idaho National Engineering and Environmental Laboratory (INEEL); and

(2) $0.5 million for each of FY 2002 through FY 2005 for completion of construction of Project 95–E–201, TRA Fire and Life Safety Improvements, INEEL.

Subsection 2344(c) provides that none of the funds authorized to be appropriated in subsection 2481(a) may be used for: ''(1) Nuclear Energy Isotope Support and Production; (2) Argonne National Laboratory-West Operations; (3) Fast Flux Test Facility; or (4) Nuclear Facilities Management.'' These limitations are included to preserve the Science Committee's sole jurisdiction over the bill since the jurisdiction of programs under this subsection either resides with the Committee on Energy and Commerce or is shared with that Committee.

TITLE IV—FOSSIL ENERGY

Subtitle A—Coal

Sec. 2401. Coal and Related Technologies Programs

Subsection 2401(a) authorizes to be appropriated to the Secretary $172.0 million for FY 2002, $179.0 million for FY 2003, and $186.0 million for FY 2004, to remain available until expended, for other coal and related technologies programs, which shall include: (1) Innovations for Existing Plants; (2) Integrated Gasification Combined Cycle; (3) advanced combustion systems; (4) Turbines; (5) Sequestration Research and Development; (6) innovative technologies for demonstration; (7) Transportation Fuels and Chemicals; (8) Solid Fuels and Feedstocks; (9) Advanced Fuels Research; and (10) Advanced Research.

Notwithstanding subsection 2401(a), subsection 2405(b) prohibits the use of funds to carry out the activities authorized by this subtitle after September 30, 2002, unless the Secretary has transmitted to the appropriate congressional committees the report required by this subsection and one month have elapsed since that transmission. The report must include a plan containing: (1) a detailed description of how proposals will be solicited and evaluated, including a list of all activities expected to be undertaken; (2) a detailed list of technical milestones for each coal and related technology that will be pursued; and (3) a description of how the programs authorized in this section will be carried out so as to complement and not duplicate activities authorized under division E (Clean Coal Power Initiative).

TITLE IV—FOSSIL ENERGY

Subtitle B—Oil and Gas

Sec. 2421. Petroleum-Oil Technology

Section 2421 directs the Secretary to conduct a RD&D and commercial application program on petroleum-oil technology. The programs shall address: (1) Exploration and Production Supporting Research; (2) Oil Technology Reservoir Management/Extension; and (3) Effective Environmental Protection.

Sec. 2422. Gas

Section 2422 directs the Secretary to conduct a program of RD&D and commercial application on natural gas technologies. The program shall address: (1) Exploration and Production; (2) Infrastructure; and (3) Effective Environmental Protection.

TITLE IV—FOSSIL ENERGY

Subtitle C—Ultra-Deepwater and Unconventional Drilling

Sec. 2441. Short Title

Section 2441 cites the subtitle as the ''Natural Gas and Other Petroleum Research, Development, and Demonstration Act of 2001.''

Sec. 2442. Definitions

Section 2442 defines six terms, including the terms ''deepwater'' to mean water depths greater than 200 meters but less than 1,500 meters, ''ultra-deepwater'' to mean water depths greater than 1,500 meters, and ''unconventional'' to mean located in heretofore inaccessible or uneconomic formations on land.

Sec. 2443. Ultra-Deepwater Program

Section 2443 requires the Secretary to establish a program of RD&D of ultra-deepwater natural gas and other petroleum exploration and production technologies, in areas currently available for Outer Continental Shelf leasing. The program shall be carried out by the Research Organization as provided in this subtitle.

Sec. 2444. National Energy Technology Laboratory

The National Energy Technology Laboratory (NETL) and the U.S. Geological Survey (USGS), when appropriate, shall carry out programs of long-term research into new natural gas and other petroleum exploration and production technologies and environmental mitigation technologies for production from unconventional and ultra-deepwater resources, including methane hydrates. NETL shall conduct a program of RD&D of new technologies for the reduction of greenhouse gas emissions from unconventional and ultra-deepwater natural gas or other petroleum exploration and production activities, including sub-sea floor carbon sequestration technologies.

Sec. 2445. Advisory Committee

Within six months after the date of the enactment of this Act, subsection 2445(a) requires the Secretary to establish an Advisory Committee consisting of seven members, each having extensive operational knowledge of and experience in the natural gas and other petroleum exploration and production industry who are not Federal Government employees or contractors. A minimum of four members shall have extensive knowledge of ultra-deepwater natural gas or other petroleum exploration and production technologies, a minimum of two members shall have extensive knowledge of unconventional natural gas or other petroleum exploration and production technologies, and at least one member shall have extensive knowledge of greenhouse gas emission reduction technologies, including carbon sequestration.

Subsection 2445(b) defines the function of the Advisory Committee to be to advise the Secretary on the selection of an organization to create the Research Organization and on the implementation of this subtitle.

Under subsection 2445(c), members of the Advisory Committee shall serve without compensation but shall receive travel expenses, including per diem in lieu of subsistence, in accordance with applicable provisions under subchapter I of chapter 57 of title 5, United States Code.

Subsection 2445(d) provides that the costs of activities carried out by the Secretary and the Advisory Committee under this subtitle shall be paid or reimbursed from the Fund established in section 2450.

Under subsection 2455(e), Section 14 of the Federal Advisory Committee Act shall not apply to the Advisory Committee.

See. 2446. Research Organization

Subsection 2446(a) requires the Secretary, within six months after the date of the enactment of this Act, to solicit proposals from eligible entities for the creation of the Research Organization, and within three months after such solicitation, to select an entity to create the Research Organization.

Under subsection 2446(b), entities eligible to create the Research Organization shall: (1) have been in existence as of the date of the enactment of this Act; (2) be entities exempt from tax under section 501(c)(3) of the Internal Revenue Code of 1986; and (3) be experienced in planning and managing programs in natural gas or other petroleum exploration and production RD&D.

Subsection 24246(c) requires that a proposal from an entity seeking to create the Research Organization shall include a detailed description of the proposed membership and structure of the Research Organization.

The functions of the Research Organization, as defined in subsection 2446(c) are to: (1) award grants on a competitive basis to qualified research institutions, institutions of higher education, companies, and consortia of same for the purpose of conducting RD&D of unconventional and ultra-deepwater natural gas or other petroleum exploration and production technologies; and (2) review activities under those grants to ensure that they comply with the requirements of this subtitle and serve the purposes for which the grants were made.

Sec. 2447. Grants

Subsection 2447(a) provides for three types of grants: (1) unconventional, for RD&D of technologies aimed at unconventional reservoirs; (2) ultra-deepwater, for R&D of technologies aimed at ultra-deepwater areas; and (3) ultra-deepwater architecture. In the case of ultradeepwater architecture, the Research Organization shall award a grant to one or more consortia for the purpose of developing and demonstrating the next generation architecture for ultradeepwater production of natural gas and other petroleum.

Subsection 2447(b) provides that grants under this section shall contain seven specific conditions:

1. If the grant recipient consists of more than one entity, the recipient shall provide a signed contract agreed to by all participating members clearly defining all rights to intellectual property for existing technology and for future inventions conceived and developed using funds provided under the grant, in a manner that is consistent with applicable laws.

2. There shall be a repayment schedule for Federal dollars provided for demonstration projects under the grant in the event of a successful commercialization of the demonstrated technology. Such repayment schedule shall provide that the payments are made to the Secretary with the express intent that these payments not impede the adoption of the demonstrated technology in the marketplace. In the event that such impedance occurs due to market forces or other factors, the Research Organization shall renegotiate the grant agreement so that the acceptance of the technology in the marketplace is enabled.

3. Applications for grants for demonstration projects shall clearly state the intended commercial applications of the technology demonstrated.

4. The total amount of funds made available under a grant provided under subsection

2447(a)(3) for ultra-deepwater architecture shall not exceed 50 percent of the total cost of the activities for which the grant is provided.

5. The total amount of funds made available under a grant provided either under subsection 2447(a)(1) for unconventional reservoirs or under subsection 2447(a)(2) for ultradeepwater areas shall not exceed 50 percent of the total cost of the activities covered by the grant, except that the Research Organization may elect to provide grants covering a higher percentage, not to exceed 90 percent, of total project costs in the case of grants made solely to independent producers.

6. An appropriate amount of funds provided under a grant shall be used for the broad dissemination of technologies developed under the grant to interested institutions of higher education, industry, and appropriate Federal and State technology entities to ensure the greatest possible benefits for the public and use of government resources.

7. Demonstrations of ultra-deepwater technologies for which funds are provided under a grant may be conducted in ultra-deepwater or deepwater locations.

Subsection 2447(c) requires that funds available for grants under this subtitle be allocated as follows: (1) 15 percent shall be for grants under subsection 2447(a)(1) for unconventional reservoirs; (2) 15 percent shall be for grants under subsection 2447(a)(2) for ultra-deepwater areas; (3) 60 percent shall be for grants under subsection 2447(a)(3) for ultra-deepwater architecture; and (4) 10 percent shall be for the NETL and the USGS, when appropriate, for carrying out section 2444.

Sec. 2448. Plan and Funding

Subsection 2448(a) requires the Research Organization to transmit to the Secretary an annual plan proposing projects and funding of activities under each paragraph of section 2447(a).

Under subsection 2448(b), the Secretary shall have one month to review the annual plan, and shall approve the plan, if it is consistent with this subtitle. If the Secretary approves the plan, the Secretary shall provide funding as proposed in the plan. If the Secretary does not approve the plan, subsection 2448(c) provides that the Secretary shall notify the Research Organization of the reasons for disapproval and shall withhold funding until a new plan is submitted which the Secretary approves, Within one month after notifying the Research Organization of a disapproval, the Secretary shall notify the appropriate congressional committees of the disapproval.

Sec. 2449. Audit

Section 2449 requires the Secretary to retain an independent, commercial auditor to determine the extent to which the funds authorized by this subtitle have been expended in a manner consistent with the purposes of this subtitle. The auditor must transmit a report annually to the Secretary, who shall transmit the report to the appropriate congressional committees, along with a plan to remedy any deficiencies cited in the report.

Sec. 2450. Fund

Subsection 2450(a) establishes a fund to be known as the ''Ultra-Deepwater and Unconventional Gas Research Fund'' (Fund) in the United States Treasury (Treasury), which shall be available for obligation to the extent provided in advance in appropriations Acts for allocation under section 2447(c) above.

Subsection 2450(b) specifies the Fund's three funding sources:

1 . Loans from the Treasury—Subsection 2450(b)(1) authorizes to be appropriated to the Secretary $900.0 million for the period encompassing FY 2002 through FY 2009. Such amounts shall be deposited by the Secretary in the Fund, and shall be considered loans from the Treasury. Income received by the United States in connection with any ultra-deepwater oil and gas leases shall be deposited in the Treasury and considered as repayment for the loans under this paragraph.

2. Additional Appropriations—Subsection 2450(b)(2) authorizes to be appropriated to the Secretary such sums as may be necessary for FY 2002 through FY 2009, to be deposited in the Fund.

3. Oil and Gas Lease Income—To the extent provided in advance in appropriations Acts, not more than 7.5 percent of the income of the United States from Federal oil and gas leases may be deposited in the Fund for FY 2002 through FY 2009. The Congressional Budget Office estimates these amounts to total $3.616 billion.

Sec. 2451. Sunset

Under section 2451, no funds are authorized to be appropriated for carrying out this subtitle after FY 2009, and the Research Organization is terminated when it has expended all funds made available pursuant to this subtitle.

TITLE IV—FOSSIL ENERGY

Subtitle D—Fuel Cells

Sec. 2461. Fuel Cells

Section 2461(a) requires the Secretary to conduct a program of research, development, RD&D and commercial application on fuel cells. The program shall address: (1) Advanced Research; (2) Systems Development; (3) Vision 21-Hybrids; and (4) Innovative Concepts.

In addition to the program under subsection 2461(a), subsection 2461(b) requires the Secretary, in consultation other Federal agencies, as appropriate, to establish a program for the demonstration of fuel cell technologies, including fuel cell proton exchange membrane technology, for commercial, residential, and transportation applications. The program shall specifically focus on promoting the application of and improved manufacturing production and processes for fuel cell technologies.

Under subsection 2461(c), within the amounts authorized to be appropriated under subsection 2481(a), there are authorized to be appropriated to the Secretary for the purpose of carrying out subsection 2461 (b) $28.0 million for each of FY 2002, 2003, and 2004.

TITLE IV—FOSSIL ENERGY

Subtitle E—DOE Authorization of Appropriations

Sec. 2481. Authorization of appropriations

Subsection 2481 (a) authorizes appropriations for subtitle B (Oil and Gas) and subtitle D (Fuel Cells), and for Fossil Energy Research and Development Headquarters Program Direction, Field Program Direction, Plant and Capital Equipment, Cooperative Research and Development, Import/Export Authorization, and Advanced Metallurgical Processes $282.0 million for FY 2002, $293.0 million for FY 2003, and $305.0 million for FY 2004.

Subsection 2481(b) provides that none of the funds authorized to be appropriated in subsection 2481(a) may be used for: ''(1) Gas Hydrates; (2) Fossil Energy Environmental Restoration; or (3) RD&D and commercial application on coal and related technologies, including activities under subtitle A.'' The first limitation is imposed because the Methane Hydrate Act of 2000 has been recently enacted and has its own separate authorization. The second limitation is included to preserve the Science Committee's sole jurisdiction over the bill, since the jurisdiction of Fossil Energy Environmental Restoration is shared with the Committee on Energy and Commerce. The third limitation is imposed to limit the amount of coal funding to that contained in subtitle A.

TITLE V—SCIENCE

Subtitle A—Fusion Energy Sciences

Sec. 2501. Short Title

Section 2501 cites the subtitle as the ''Fusion Energy Sciences Act of 2001.''

Sec. 2502. Findings

Section 2502 lists nine findings.

Sec. 2503. Plan for Fusion Experiment

Subsection 2503(a) requires the Secretary, in full consultation with the Fusion Energy Sciences Advisory Committee and the Secretary of Energy Advisory Board as appropriate, to develop a plan for construction in the United States of a magnetic fusion burning plasma experiment for the purpose of accelerating scientific understanding of fusion plasmas. The Secretary shall request a review of the plan by the National Academy of Sciences (NAS), and shall transmit the Department plan and the NAS review to the Congress by July 1, 2004.

Subsection 2503(b) requires the plan to: (1) address key burning plasma physics issues; and (2) include specific information on the scientific capabilities of the proposed experiment, the relevance of these capabilities to the goal of practical fusion energy, and the overall design of the experiment including its estimated cost and identifying potential construction sites.

Subsection 2503(c) authorizes the Secretary, in full consultation with the Fusion Energy Sciences Advisory Committee and the Secretary of Energy Advisory Board as appropriate, to develop a plan for the United States participation in an international burning plasma experiment for the purpose of accelerating scientific understanding of fusion plasmas, whose construction is found by the Secretary to be highly likely and where the United States participation is cost effective relative to the cost and scientific benefits of a domestic experiment described in subsection 2503(a). If the Secretary elects to develop a plan under this subsection, the Secretary shall include the information described in subsection 2503(b), and an estimate of the cost of United States participation in such an international experiment. The Secretary shall request a review by the NAS of any such plan, shall transmit the plan and the review to the Congress by July 1, 2004.

Subsection 2503(d) authorizes the Secretary, through the Department's Fusion Energy Sciences Program, to conduct any R&D necessary to fully develop the plans described in this section.

Sec. 2504. Plan for Fusion Energy Sciences Program

Section 2504 requires that within six months after the enactment of this Act, the Secretary, in full consultation with the Fusion Energy Sciences Advisory Committee, to develop and transmit to the Congress a plan for the purpose of ensuring a strong scientific base for the Fusion Energy Sciences Program and to enable the burning plasma experiment described in section 2503. Such plan shall ensure: (1) that existing fusion research facilities and equipment are more fully utilized with appropriate measurements and control tools; (2) a strengthened fusion science theory and computational base; (3) that the selection of and funding for new magnetic and inertial fusion research facilities is based on scientific innovation and cost effectiveness; (4) improvement in the communication of scientific results and methods between the fusion science community and the wider scientific community; (5)

that adequate support is provided to optimize the design of the magnetic fusion burning plasma experiment referred to in section 2503; (6) that inertial confinement fusion facilities are utilized to the extent practicable for the purpose of inertial fusion energy R&D; (7) the development of a roadmap for a fusion-based energy source that shows the important scientific questions, the evolution of confinement configurations, the relation between these two features, and their relation to the fusion energy goal; (8) the establishment of several new centers of excellence, selected through a competitive peer-review process and devoted to exploring the frontiers of fusion science; (9) that the NSF, and other agencies, as appropriate, play a role in extending the reach of fusion science and in sponsoring general plasma science; and (10) that there be continuing broad assessments of the outlook for fusion energy and periodic external reviews of fusion energy sciences.

Sec. 2505. Authorization of Appropriations

Section 2505 authorizes—for ongoing activities in Department's Fusion Energy Sciences Program and for the purpose of planning activities under section 2503, but not for implementation of such plans—$320.0 million for FY 2002 and $335.0 million for FY 2003 of which up to $15 million for each of FY 2002 and FY 2003 may be used to establish several new centers of excellence under section 2504(8).

TITLE V—SCIENCE

Subtitle B—Spallation Neutron Source

Sec. 2521. Definition

Section 2521 defines the term ''Spallation Neutron Source'' to mean Department Project 99E–334, Oak Ridge National Laboratory, Oak Ridge, Tennessee.

Sec. 2522. Authorization of Appropriations

Subsection 2522(a) authorizes to be appropriated to the Secretary for construction of the Spallation Neutron Source (SNS): (1) $276.3 million for FY 2002, (2) $210.571 million for FY 2003, (3) S 124.6 million for FY 2004, (4) $79.8 million for FY 2005, and (5) $41.1 million for FY 2006 for completion of construction.

Subsection 2522(b) authorizes appropriation for other SNS project costs (including R&D necessary to complete the project, preoperations costs, and capital equipment not related to construction) $15.353 million for FY 2002 and $103.279 million for FY 2003 through 2006, to remain available until expended through September 30, 2006.

Sec. 2523. Report

Section 2523 requires the Secretary to report on the SNS as part of Department's annual budget submission, including a description of the achievement of milestones, a comparison of actual costs to estimated costs, and any changes in estimated project costs or schedule.

Sec. 2524. Limitations

Section 2524 limits the total amount obligated for the SNS by the Department, including prior year appropriations, to not more than: (1) S1,192.7 million for costs of construction; (2) $219.0 million for other project costs; and (3) $1,411.7 million for total project cost.

TITLE V—SCIENCE

Subtitle C—Facilities, Infrastructure, and User Facilities

Sec. 2541. Definition

Subsection 2541(1) defines the term ''nonmilitary energy laboratory'' to mean: (A) Ames Laboratory; (B) Argonne National Laboratory; (C) Brookhaven National Laboratory; (D) Fermi National Accelerator Laboratory; (E) Lawrence Berkeley National Laboratory; (F) Oak Ridge National Laboratory; (G) Pacific Northwest National Laboratory; (H) Princeton Plasma Physics Laboratory; (1) Stanford Linear Accelerator Center; (J) Thomas Jefferson National Accelerator Facility; or (K) any other facility of the Department that the Secretary, in consultation with the Director, Office of Science and the appropriate congressional committees, determines to be consistent with the mission of the Office of Science.

Subsection 2541(2) defines the term ''user facility'' to mean: (A) an Office of Science facility at a non-military energy laboratory that provides special scientific and research capabilities, including technical expertise and support as appropriate, to serve the research needs of the Nation's universities, industry, private laboratories, Federal laboratories, and others, including research institutions or individuals from other nations where reciprocal accommodations are provided to United States research institutions and individuals or where the Secretary considers such accommodation to be in the national interest; and (B) any other Office of Science funded facility designated by the Secretary as a user facility.

Sec. 2542. Facility and Infrastructure Support for Nonmilitary Energy Laboratories

Subsection 2542(a) requires the Secretary to develop and implement a least-cost nonmilitary energy laboratory facility and infrastructure strategy for: (1) maintaining existing facilities and infrastructure, as needed; (2) closing unneeded facilities; (3) making facility modifications; and (4) building new facilities.

Subsection 2542(b) requires the Secretary to prepare a comprehensive ten-year plan for conducting future facility maintenance, making repairs, modifications, and new additions, and constructing new facilities at each nonmilitary energy laboratory. Such plan is to provide for facilities work in accordance with the following priorities: (1) providing for the safety and health of employees, visitors, and the general public with regard to correcting existing structural, mechanical, electrical, and environmental deficiencies; (2) providing for the repair and rehabilitation of existing facilities to keep them in use and prevent deterioration, if feasible; and (3) providing engineering design and construction services for those facilities that require modification or additions in order to meet the needs of new or expanded programs.

Subsection 2542(c) requires the Secretary to prepare and transmit to the appropriate congressional committees a report containing the plan prepared under subsection 2542(b) within one year after the date of the enactment of this Act. For each nonmilitary energy laboratory, the report is to contain: (1) the current priority list of proposed facilities and infrastructure projects, including cost and schedule requirements; (2) a current ten-year plan that demonstrates the reconfiguration of its facilities and infrastructure to meet its missions and to address its long-term operational costs and return on investment; (3) the total current budget for all facilities and infrastructure funding; and (4) the current status of each facilities and infrastructure project compared to the original baseline cost, schedule, and scope.

The report shall also: (1) include a plan for new facilities and facility modifications at each nonmilitary energy laboratory that will be required to meet the Department's changing missions for the twenty-first century, including schedules and estimates for implementation, and including a section outlining long-term funding requirements consistent with anticipated budgets and annual authorization of appropriations; (2) address the coordination of modernization and consolidation of facilities among the nonmilitary energy laboratories in order to meet changing mission requirements; and (3) provide for annual reports to the appropriate congressional committees on accomplishments, conformance to schedules, commitments, and expenditures.

Sec. 2543. User Facilities

Under subsection 2543(a), when the Department makes a user facility available to universities and other potential users, or seeks input from universities and other potential users regarding significant characteristics or equipment in a user facility or a proposed user facility, the Department shall ensure broad public notice of such availability or such need for input to universities and other potential users.

Subsection 2543(b) requires the Department to employ full and open competition in selecting participants when the Department considers the participation of a university or other potential user in the establishment or operation of a user facility.

Section 2543(c) prohibits the Department from redesignating a user facility, as defined by section 2541 (b) as something other than a user facility to avoid the requirements of subsections (a) and (b).

TITLE V—SCIENCE

Subtitle D—Advisory Panel on Office of Science

Sec. 2561. Establishment

Section 2561 requires the Director of the Office of Science and Technology Policy, in consultation with the Secretary, to establish an Advisory Panel on the Office of Science comprised of knowledgeable individuals to: (1) address concerns about the current status and the future of scientific research supported by the Office; (2) examine alternatives to the current organizational structure of the Office within the Department, taking into consideration existing structures for the support of scientific research in other Federal agencies and the private sector; and (3) suggest actions to strengthen the scientific research supported by the Office that might be taken jointly by the Department and Congress.

Sec. 2562. Report

Under section 2562, within six months after the date of the enactment of this Act, the Advisory Panel shall transmit its findings and recommendations in a report to the Director of the Office of Science and Technology Policy and the Secretary. The Director and the Secretary shall jointly: (1) consider each of the Panel's findings and recommendations, and comment on each as they consider appropriate; and (2) transmit the Panel's report and the comments of the Director and the Secretary on the report to the appropriate congressional committees within nine months after the date of the enactment of this Act.

TITLE V—SCIENCE

Suhtitle E—Department of Energy Authorization of Appropriations

Sec. 2581. Authorization of appropriations

Including the amounts authorized to be appropriated for FY 2002 under section 2505 for Fusion Energy Sciences and under subsection 2522(b) for the SNS, subsection 2581(a) authorizes to be appropriated to the Secretary for the Office of Science (also including subtitle C—Facilities, Infrastructure, and User Facilities, High Energy Physics, Nuclear Physics, Biological and Environmental Research, Basic Energy Sciences (except for the SNS authorization under subsection 2522(b)), Advanced Scientific Computing Research, Energy Research Analysis, Multiprogram Energy Laboratories-Facilities Support, Facilities and Infrastructure, Safeguards and Security, and Program Direction) operation and maintenance $3,299.558

million for FY year 2002, to remain available until expended.

Subsection 2581(b) provides that within the amounts authorized under subsection (a), $5.0 million for FY 2002 may be used to carry out research in the use of precious metals (excluding platinum, palladium, and rhodium) in catalysis, either directly though national laboratories, or through the award of grants, cooperative agreements, or contracts with public or nonprofit entities.

Subsection 2581(c) provides that in addition to the amounts authorized under subsection 2522(a) for SNS construction, subsection 2581 (b) authorizes:

(1) $11.4 million for FY 2002 for completion of construction of Project 98–G–304, Neutrinos at the Main Injector, Fermi National Accelerator Laboratory;

(2) $11.405 million for FY 2002 for completion of construction of Project 01–E–300, Laboratory for Comparative and Functional Genomics, Oak Ridge National Laboratory;

(3) $4.0 million for FY 2002, $8.0 million for FY 2003, and $2.0 million for FY 2004 for completion of construction of Project 02–SC–002, Project Engineering Design (PED), Various Locations;

(4) $3.183 million for FY 2002 for completion of construction of Project 02–SC–002, Multiprogram Energy Laboratories Infrastructure Project Engineer-ing Design (PED), Various Locations; and

(5) $18.633 million for FY 2002 and $13.029 million for FY 2003 for completion of construction of Project MEL–001, Multiprogram Energy Laboratories, Infrastructure, Various Locations.

Subsection 2581(d) provides that none of the funds authorized to be appropriated in subsection 2581(b) may be used for construction at any national security laboratory as defined in section 3281(l) of the National Defense Authorization Act for Fiscal Year 2000 (50 U.S.C. 2471(l)) or at any nuclear weapons production facility as defined in section 3281(2) of the National Defense Authorization Act for 2000 (50 U.S.C. 2471(2)). This limitation is included to preserve the Science Committee's sole jurisdiction over the bill, since the jurisdiction of these laboratories and facilities reside with the Committee on Armed Services.

TITLE VI—MISCELLANEOUS

Subtitle A—General Provisions for the Department of Energy

Sec. 2601. Research, Development, Demonstration and Commercial Application of Energy Technology Programs, Projects, and Activities

Subsection 2601(a) requires that RD&D and commercial application programs, projects, and activities authorized under this Act be carried out under the procedures of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5901 et seq.), the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.), or any other Act under which the Secretary is authorized to carry out such programs, projects, and activities, only to the extent the Secretary is authorized to carry out such activities under each Act and except as otherwise provided in this Act.

Subsection 2601(b) authorizes the Secretary to use grants, joint ventures, and any other form of agreement available to the Secretary to the extent authorized under applicable provisions of law, contracts, cooperative agreements, cooperative R&D agreements under the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.), except as otherwise provided in this Act, to carry out RD&D and commercial application programs, projects, and activities.

Subsection 2601(c) defines the term ''joint venture'' for the purpose of this section to have the meaning given that term under section 2 of the National Cooperative Research and Production Act of 1993 (15 U.S.C. 4301), except that such term applies to RD&D and commercial application of energy technology joint ventures.

Subsection 2601(d) requires that section 12(c)(7) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(c)(7)), relating to the protection of information, will apply to RD&D and commercial application of energy technology programs, projects, and activities under this Act.

Under subsection 2601(e), an invention conceived and developed by any person using funds provided through a grant under this Act shall be considered a subject invention for the purposes of chapter 18 of title 35, United States Code (commonly referred to as the Bayh-Dole Act).

Subsection 2601(f) requires the Secretary to ensure that each program authorized by this Act includes an outreach component to provide information, as appropriate, to manufacturers, consumers, engineers, architects, builders, energy service companies, universities, facility planners and managers, State and local governments, and other entities.

Subsection 2601(g) requires the Secretary to provide guidelines and procedures for the transition of energy technologies from research through development and demonstration to commercial application of energy technology where appropriate. Nothing in this section precludes the Secretary from: (1) entering into a contract, cooperative agreement, cooperative R&D agreement under the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.), grant, joint venture, or any other form of agreement available to the Secretary under this section that relates to RD&D and commercial application of energy technology; or (2) extending a contract, cooperative agreement, cooperative R&D agreement under the Stevenson-Wydler Technology Innovation Act of 1980, grant, joint venture, or any other form of agreement available to the Secretary that relates to RD&D to cover commercial application of energy technology.

Subsection 2601(h) states that this section shall not apply to any contract, cooperative agreement, cooperative R&D agreement under the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.), grant, joint venture, or any other form of agreement available to the Secretary that is in effect as of the date of enactment of this Act.

Sec. 2602. Limits on Use of Funds

Subsection 2602(a) prohibits the use of funds authorized by this Act to award a management and operating contract for a federally owned or operated nonmilitary energy laboratory of the Department unless such contract is awarded using competitive procedures or the Secretary grants, on a case-by-cease basis, a waiver to allow for such a deviation. The Secretary may not delegate the authority to grant such a waiver. At least 60 days before a contract award, amendment, or modification for which the Secretary intends to grant such a waiver, the Secretary shall submit to the appropriate congressional committees a report notifying the committees of the waiver and setting forth the reasons for the waiver.

Subsection 2602(b) prohibits the Secretary from using funds to produce or provide articles or services for the purpose of selling the articles or services to a person outside the Federal Government, unless the Secretary determines that comparable articles or services are not available from a commercial source in the United States.

Subsection 2602(c) prohibits the Secretary from using funds to prepare or initiate Requests for Proposals for a program if Congress has not authorized the program.

Sec. 2603. Cost Sharing

Except as otherwise provided in this subtitle, subsection 2603(a) mandates that for R&D programs carried out under this subtitle, the Secretary shall require a commitment from non-Federal sources of at least 20 percent of the cost of the project. The Secretary may reduce or eliminate the non-Federal requirement under this subsection if the Secretary determines that the R&D is of a basic or fundamental nature.

Similarly, under subsection 2603(b) the Secretary shall require at least 50 percent of the costs directly and specifically related to any demonstration or commercial application project under this subtitle to be provided from non-Federal sources. The Secretary may reduce the non-Federal requirement under this subsection if the Secretary determines that the reduction is necessary and appropriate considering the technological risks involved in the project and is necessary to meet the objectives of this subtitle.

In calculating the amount of the non-Federal commitment under subsection (a) or (b), the Secretary may include personnel, services, equipment, and other resources.

Sec. 2604. Limitations on Demonstrations and Commercial Application of Energy Technology

Section 2604 requires the Secretary to provide funding only for scientific or energy demonstration and commercial application of energy technology programs, projects or activities for technologies or processes that can reasonably be expected to yield new, measurable benefits to the cost, efficiency, or performance of the technology or process.

Sec. 2605. Reprogramming

Section 2605 prohibits the reprogramming of funds in excess of 105 percent of the amount authorized for a program, project, or activity, or in excess of $0.25 million above the amount authorized for the program, program, project, or activity until the Secretary submits a report to the appropriate congressional committees and a period of 30 days has elapsed after the date on which the report is received. The report shall be a full and complete statement of the proposed reprogramming and the facts and circumstances in support of the proposed reprogramming. This section prohibits the Secretary from obligating funds in excess of the total amount authorized to be appropriated to the Secretary by this Act and prohibits the Secretary from using funds for any use for which Congress has declined to authorize funds.

TITLE VI—MISCELLANEOUS

Suhtitle B—Other Miscellaneous Provisions

Sec. 2611. Notice of Reorganization

Section 2611 requires the Secretary to provide notice to the appropriate congressional committees not later than 15 days before any reorganization of environmental research or development, scientific or energy research, development, or demonstration, or commercial application of energy technology program, project, or activity of the Department.

Sec. 2612. Limits on General Plant Projects

Section 2612 requires the Secretary to halt the construction of a civilian environmental research, development, or demonstration, or commercial application of energy technology ''general plant project'' if the estimated cost of the project (including any revisions) exceeds $5.0 million unless the Secretary has famished a complete report to the appropriate congressional committees explaining the project and the reasons for the estimate or revision.

Sec. 2613. Limits on Construction Projects

Section 2613 prohibits construction on a civilian environmental R&D, scientific or energy RD&D, or commercial application of energy technology project for which funding has been specifically authorized by law to be initiated and continued if the estimated cost for the project exceeds 110 percent of the higher of: (1) the amount authorized for the project; or (2) the most recent total estimated cost presented to Congress as budget justification for such project. To exceed such limits, the Secretary must report in detail to the appropriate congressional committees on the related circumstances and the report must be before the appropriate congressional committees for 30 legislative days (excluding any day on which either House of Congress is not in session because of an adjournment of more than three days to a day certain). This section shall not apply to any construction project that has a current estimated cost of less than $5.0 million.

Sec. 2614. Authority for Conceptual and Construction Design

Section 2614 limits the Secretary's authority to request construction funding in excess of $5.0 million for a civilian environmental R&D, scientific or energy research, development, or demonstration, or commercial application of energy technology program, project, or activity until the Secretary has completed a conceptual design for that project. Furthermore, if the estimated cost of completing a conceptual design for the construction project exceeds $0.75 million, the Secretary must submit a request to Congress for funds for the conceptual design before submitting a request for the construction project. In addition, the subsection allows the Secretary to carry out construction design (including architectural and engineering services) in connection with any proposed construction project that is in support of a civilian environmental R&D, scientific or energy research, development, and demonstration, or commercial application of energy technology program, project, or activity of the Department if the total estimated cost for such design does not exceed $0.25 million; if the total estimated cost for construction design exceeds $0.25 million, funds for such design must be specifically authorized by law.

Sec. 2615. National Energy Policy Group Mandated Reports

Subsection 2615(a) requires that upon completion of the Secretary's review of current funding and historic performance of the Department's energy efficiency, renewable energy, and alternative energy R&D programs in response to the recommendations of the May 16, 2001, Report of the National Energy Policy Development Group, the Secretary shall transmit a report containing the results of such review to the appropriate congressional committees.

Subsection 2615(b) requires that upon completion of the Office of Science and Technology Policy and the President's Council of Advisors on Science and Technology reviewing and making recommendations on using the Nation's energy resources more efficiently, in response to the recommendations of the May 16, 2001, Report of the National Energy Policy Development Group, the Director of the Office of Science and Technology Policy shall transmit a report containing the results of such review and recommendations to the appropriate congressional committees.

Sec. 2616. Independent Reviews and Assessments

Section 2616 requires the Secretary to enter into appropriate arrangements with the National Academies of Sciences and Engineering to ensure that there be periodic reviews and assessments of the programs authorized by this Act, as well as the goals for such programs as established under section 2004. Such reviews and assessments shall be conducted at least every five years, and the Secretary shall transmit to the appropriate congressional committees reports containing the results of these reviews and assessments.

III. COMMITTEE ON SCIENCE VIEWS ON H.R. 4, SECURING AMERICA'S FUTURE ENERGY (SAFE) ACT OF 2001

DIVISION B: COMPREHENSIVE ENERGY RESEARCH AND TECHNOLOGY ACT OF 2001

Sec. 2004. Goals

The cost and performance-based goals in section 2004 guide and unify the RD&D and commercial applications programs authorized in this Act. The Secretary must refine and update measurable cost and performance-based goals in furtherance of the Act's purposes in section 2003 on a biennial basis. As provided in section 2616, the Secretary must enter into arrangements with the National Academies of Sciences and Engineering for periodic reviews and assessments of the programs in the Act and the goals established under section 2004.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle A—Alternative Fuel Vehicles

In selecting applicants and project sites, the Secretary should, consistent with subsection 2103(d)(1), give special consideration to proposals that address environmental needs in actual and potential Clean Air Act nonattainment areas like the Washington, DC metropolitan region and in communities seeking to meet zero air emissions goals, like Santa Clara County, California.

The Committee considers the United States Postal Service (USPS) a ''partner'' or entity eligible for funding under the alternative fuel vehicle program, The Committee commends the USPS for taking a leadership role in the conversion of its aging fleet to more environmentally sound electric vehicles. Over the next five years, some 6,000 Long-Life Vehicles will replace an aging fleet of trucks in southern California, New York, and the Washington, DC metropolitan area. It is estimated that over three million gallons of fuel will be saved, and 170,000 tons of carbon dioxide will be removed from the environment as a result of the effort. The Committee encourages the USPS to continue this important procurement and, in doing so, show leadership to other governmental entities considering the advancement and deployment of alternative fuel vehicles.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle B—Distributed Power Hybrid Energy Systems

The Committee notes that the National Renewable Energy Laboratory (NREL) currently performs certain duties of this subtitle, especially with regard to performing and integrating RD&D activities related to distributed power hybrid systems, and expects NREL to continue and expand these activities.

The Committee encourages the Secretary to solicit proposals from institutions of higher education for sharing costs of acquisitions, installation, instrumentation, data acquisition, and data analysis and reporting for building cooling/heating and power systems, district energy systems, and other distributed energy resources. In this regard, the Secretary should consider, proposals emphasizing installations using emerging technologies, developed with the support of the Department, that offer energy efficiency and/or environmental benefits. The Committee also encourages the Department to require performance reports back from recipients of these awards detailing steps taken, efficiency gains achieved, and educational benefits realized. These reports would constitute ''case studies'' demonstrating the viability of these systems. Should the Secretary require such reports, funding for the reporting should be included in the grant or contract.

Sec. 2123. Strategy, Sec. 2124. High Power Density Industry Program

Subsection 2123(b)(5) describes a RD&D and commercial application program to be implemented as part of the Distributed Power Hybrid Systems Strategy. Subsection 2124(b) identifies areas that should be considered in carrying out the program to improve energy efficiency, reliability, and environmental responsibility in high power density industries. Existing programs are already researching real-time performance monitoring, conserving and optimizing energy systems, simulation and analysis of power systems, and utilization of power generation byproducts in an environmentally friendly manner. This work can become a base for implementing the Distributed Power Hybrid Systems Strategy and the High Power Density Industry Program. The Secretary should rely on research and technology development work already begun at State Centers of Excellence such as the Center for Electric Power at Tennessee Technological University to accelerate implementation of sections 2123 and 2124.

Sec. 2125. Micro-Cogeneration Energy Technology

Section 2125 is intended to help realize the potential of cogeneration technology as a clean source of energy for a variety of applications. Many believe the space heating industry is often overlooked in the development of such distributed cogeneration systems. The Committee believes that, with further research and development, cogeneration of electric power as a byproduct of building heating system operation could provide significant environmental benefits at low cost and high reliability and that the heating appliance industry is uniquely positioned to provide reliable electricity using environmentally friendly cogeneration power with practical technology.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle D—Green School Buses

The Committee directs the Secretary to ensure that grants under this subtitle will demonstrate the use of alternative fuel school buses and, as a result, lead to the replacement of pre–1977 (model year) diesel and gas buses and pre–1991 (model year) diesel buses and, in limited situations (such as in low income areas), the expansion of existing fleets using conventional fuel buses with new, alternative fuel buses. In providing grants under this subtitle, the Secretary shall ensure that recipients of assistance certify that replaced buses are crushed or otherwise appropriately disposed of in accordance with law.

Coordination of Alternative Fuel Bus Programs

Division B contains various authorities relating to alternative fuel buses, such as title I, subtitle A (Alternative Fuel Vehicles), title I, subtitle D (Green School Buses), section 2206(2) (fuel cell bus demonstrations under the Spark M. Matsunaga Hydrogen RD&D Act of 1990), and relating to transportation applications for fuel cells (subsection 2461 (b)). The Committee intends that the Secretary will coordinate implementation of the various provisions to maximize their integration and effectiveness.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Suhtitle F—DOE Authorization of Appropriations

The Committee directs the Department to continue RD&D on Smart Window technologies including electro-chromics and other advanced technologies in energy-efficient windows, doors, and skylights.

The Committee is aware of the potential of optical/graphical programming for driving, controlling, and improving virtually all types of electric motors. Successful development of a simple, low cost, and generic solution for the intelligent control of electric motors could significantly improve the energy efficiency of electric motors. Such technology could have tremendous impact on the heating, ventilation, and air conditioning industry, among others. In FY 2001, the DOE, through the Office of Industrial Technologies, invested in several promising energy efficient technologies, including the development of an optical programming system for intelligent control of electric air conditioning motors. The Committee strongly encourages the Department to further increase its investment in optical/graphical programming technologies.

The Committee is aware of various engine technologies, including an axial piston OX2 engine, which have numerous potential advantages over the design of conventional internal combustion engines. The Secretary should, where appropriate, support efforts by universities and the private sector to continue, and expand, development and testing of technologies that provide environmental advantages over current conventional engines, such as improved power-to-weight ratios, improved fuel efficiencies, and reduced air emissions.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle G—EPA Office of Air and Radiation Authorization of Appropriations

Sec. 2175. Limitation on Demonstration and Commercial Applications of Energy Technology

The phrase ''measurable benefits to the cost, efficiency, or performance of the technology or process'' in section 2175 includes environmental considerations. The Committee does not intend for this provision to curtail the demonstration or commercial application of energy technologies that are efficient, effective, and environmentally beneficial. The Committee believes this interpretation regarding EPA technologies should also apply to section 2604, relating to DOE technologies.

TITLE II—RENEWABLE ENERGY

Subtitle A—Hydrogen

Section 2206 amends the Spark M. Matsunaga Hydrogen RD&D Act of 1990 to establish a fuel cell bus demonstration program to address hydrogen production, storage, and use in transit bus applications. The Committee recognizes that fuel cell technology could significantly contribute to improving the cost effectiveness and environmental impact of mass transit options, particularly in municipal buses and in shuttle buses such as those operating at large airports. However, more research needs to be done to address a number of issues related to this technology. This demonstration program should specifically address all aspects of the introduction of this new technology, including the following components:

(1) Development, installation, and operation of a hydrogen delivery system located on-site at transit bus terminals.

(2) Development, installation, and operation of on-site storage associated with the hydrogen delivery systems as well as storage tank systems incorporated into the bus itself.

(3) Demonstration of use of hydrogen as a practical, safe, renewable energy source in a highly efficient, zero-emission power system for buses.

(4) Development of a hydrogen proton exchange membrane fuel cell power system that is confirmed and verified as being compatible with transit bus application requirements.

(5) Durability testing of the fuel cell bus.

(6) Identification and implementation of necessary codes and standards for the safe use of hydrogen as a fuel suitable for bus application, including the fuel cell power system and related operational facilities.

(7) Identification and implementation of maintenance and overhaul requirements for hydrogen proton exchange membrane fuel cell transit buses.

(8) Completion of fleet vehicle evaluation program by bus operators along normal transit routes, providing equipment manufacturers and transit operators with the necessary analyses to enable operation of the hydrogen proton exchange membrane fuel cell bus under a range of operating environments.

The Committee is aware that the Department of Transportation is currently developing and funding a number of Bus Rapid Transit (BRT) demonstration programs around the country. The Committee believes that the BRT program is structured in a way that would facilitate the execution of this fuel cell bus demonstration program, as well as reducing redundancy in interagency research, and recommends the Secretary consider integrating this fuel cell demonstration with existing BRT initiatives where there is local support to do so.

TITLE II—RENEWABLE ENERGY

Subtitle B—Bioenergy

Sec. 2225. Authorization of Appropriations

Subsection 2225(b) authorizes funds for biofuels energy systems. The Committee is aware of a proposal to establish a biofuels processing facility in New York to convert cellulose materials into levulinic acid for multiple applications. As part of the proposal, the State University of New York College of Environmental Science and Forestry would also develop a Bioenergy and Bioproducts Technology Center, focusing on biofuels from lignocellulosic biomaterial. The Committee strongly encourages the Secretary to consider providing substantial financial assistance for this biofuels proposal.

Subsection 2225(d) authorizes the Secretary to provide assistance for an integrated rice straw project in Gridley, California, to convert rice straw into ethanol, electric power, and silica, and an ethanol production facility in Maryland to convert barley grain into ethanol for use in motor vehicles or other uses.

TITLE II—RENEWABLE ENERGY

Subtitle D—DOE Authorization of Appropriations

Sec. 2261. Authorization of Appropriations

As pointed out in a recent National Research Council review, geothermal energy research at the DOE may be undervalued in light of the significant U.S. and international resource base.

DOE should consider establishing a national geothermal research center with the resources necessary to lead an expanded multi-laboratory geothermal research effort in the years ahead. DOE should also continue to build upon its past efforts to involve industry, university researchers and the national laboratories in strategic planning for the geothermal energy program as it moves this program forward.

The Committee is aware of the promise of emerging geothermal energy systems. Within the Department's budget for geothermal research, the committee urges on-going support for university research on enhanced geothermal systems. University research programs, such as the Energy & Geoscience Institute (EGI) at the University of Utah and the ''Geothermal of the West'' program, offer the promise of tapping into under-utilized geothermal resources. This program has specific relevance for electrical power in the West, including the Great Basin, Northern California Coast and Cascade Range. Continued investment by DOE in the research into these promising geothermal systems may dramatically reduce dependence on other energy sources, and improve the sustainability of existing geothermal energy systems.

The Committee is aware of the capabilities of Texas Southern University's (TSU) Photovoltaic Laboratory, which has experience in demonstrating the potential of using commercially available photovoltaic equipment to generate electric power for electrically isolated applications in the small commercial sector. The Committee urges the Department to consider using the capabilities of the TSU laboratory in testing and demonstrating components in the R&D phase as well as those already commercialized.

Subsection 2261(b) directs the Secretary to carry out a research program, in conjunction with ''other appropriate Federal agencies'' on wave powered electric generation. The Committee intends the term ''other appropriate Federal agencies'' to mean the Office of Naval Research.

TITLE III—NUCLEAR ENERGY

Subtitle A—University Nuclear Science and Engineering

Sec. 2303. Department of Energy Program

The Committee is aware of concerns within the university nuclear research reactor community that DOE may be considering downscaling its support for numerous university reactors. The Committee's authorization of Nuclear Education Programs stands as a strong signal of our desire to see the Department continue to maintain, and even expand, its support of the existing research reactor infrastructure. Institutions such as the University of Utah Nuclear Engineering Program run robust nuclear research reactor centers. Without their involvement, and the maintenance of their reactor infrastructure, necessary expertise on nuclear safety and storage would be lost to the Western region, at the exact time that nuclear waste products may arrive within the region. The Committee believes that a balanced approach to nuclear power must include on-going support for nuclear research reactors throughout the various regions of the United States.

TITLE IV—FOSSIL ENERGY

SUBTITLE C—ULTRA-DEEPWATER AND UNCONVENTIONAL DRILLING

Subtitle C of title IV, the Natural Gas and Other Petroleum Research, Development, and Demonstration Act of 2001, authorizes a new, ten-year program at the Department for research, development and demonstration of ultra-deepwater natural gas and other petroleum exploration technologies. For purposes of this program, ultra-deepwater is defined to be in excess of 1,500 meters, or approximately 5,000 feet, below the surface of the ocean. The Committee is hopeful that this technology will enable the U.S. to increase the supplies of oil and gas from the middle and western Gulf of Mexico and other areas already open to drilling.

The Department is to carry out the program through a non-profit Research Organization. The Committee based this model on the highly successful example of

SEMATECH, which guided jointly-funded efforts of the Department of Defense and the semiconductor industry.

The Committee intends that the Secretary exercise continuing oversight over the Research Organization. It is the Secretary's responsibility to ensure that the public interest is being served by the Research Organization's projects, that the projects are making the desired technical progress, and that the public's money is being properly spent. The Act requires that the Secretary receive and review a specific research plan from the Research Organization each year, and allows the Secretary to withhold the Research Organization's funding for the year until the research plan is satisfactory. The Act also requires annual audits by an independent, outside auditing firm. Such audits were also required of SEMATECH.

The Act provides specific allocations for each of the types of activities enumerated. However, in running the program, the Secretary may find that these allocations are preventing the most efficient and effective expenditure of funds. The Secretary should notify the Committee if the allocations prove problematic.

The Act requires that all the projects undertaken under this program have among their major goals the improvement of safety and the limiting of environmental impacts. The Committee expects the Secretary to carefully monitor the program to ensure that safety and environmental impacts are specifically addressed in the projects funded through the Research Organization.

This program of RD&D would only be applicable in certain areas. Section 2443 prohibits activities through the RD&D provisions of this Act or through any new technologies developed under this section (or any other part of subtitle C) in any offshore areas that are currently under federal moratoria, such as areas off the coasts of California or North Carolina.

TITLE IV—FOSSIL ENERGY

Subtitle D—Fuel Cells

The Committee notes that three separate sections of the bill authorize fuel cell RD&D and commercial application: section 2143(c) pertaining to fuel-cell school buses, section 2206(2) pertaining to fuel cell bus demonstration programs, and section 2461 pertaining to fuel cells. The Committee intends that the Secretary will coordinate implementation of these three provisions to maximize their integration and effectiveness.

The Committee also recognizes that local organizations, such as the Houston-Galveston Area Council, are well equipped to assist the Federal government in demonstrating the benefits from research on fuel cell technologies used for low-emission mass transit vehicles.

TITLE V—SCIENCE

Subtitle E—DOE Authorization of Appropriations

The Committee is concerned about practices employed by the Department to enforce security at DOE scientific laboratories funded under this section. The Committee notes that the perception of racial profiling may have fostered a hostile work environment and may be discouraging certain employees and potential employees from working at DOE facilities. The Committee is concerned that such loss of talent at DOE would endanger DOE's missions to remain technologically competitive and to protect national security.

Mr. Chairman, these provisions reflect a balanced, bipartisan comprehensive approach to energy policy. They significantly increase the Nation's investments in R&D, on conservation and renewable energy sources, two fundamental public needs that are unlikely to be adequately addressed by market forces alone. At the same time, we continue and enhance our investment in research in oil, gas, coal, and nuclear power. We do so in a responsible way.

I am pleased that the bill includes two measures I introduced, one to promote the use of alternative vehicles in general, and the other to promote the use of alternative fuel school buses in particular. These programs will both demonstrate the viability of hybrid electric, natural gas, and ultra-clean diesel technologies and help lower their cost in the marketplace.

Many other Members of Congress on our committee on both sides of the aisle have contributed to portions of the bill, but I want to especially draw attention to the ultra-deep oil drilling research supported by our ranking member, the gentleman from Texas (Mr. HALL), the biofuels section introduced by our Subcommittee on Energy chairman, the gentleman from Maryland (Mr. BARTLETT), numerous sections promoting clean energy supported by our Subcommittee on Energy ranking member, the gentlewoman from California (Ms. WOOLSEY), nuclear science provisions brought to us by the gentlewoman from Illinois (Mrs. BIGGERT), and the hydrogen provision sponsored by the gentleman from California (Mr. CALVERT). That is just the beginning of a long list of contributors. This is a bipartisan team effort.

I also want to draw attention to division E, which includes clean coal provisions worked out in arduous negotiations with the Committee on Energy and Commerce. I want to thank the gentleman from Louisiana (Chairman TAUZIN) and the gentleman from Texas (Mr. BARTON) and the ranking members, the gentleman from Michigan (Mr. DINGELL) and the gentleman from Virginia (Mr. BOUCHER), and their staffs for their cooperation in reaching these agreements. We all agreed to put jurisdictional claims aside for the moment to have the tough decisions and discussions necessary to come up with a good program.

I have to say though that those discussions were made more difficult by the behavior of the coal industry, which continues to display the same sort of sense of entitlement that has made past clean coal programs questionably productive. That is why in this program we have strict environmental and financial standards, to ensure that the projects we fund truly need a taxpayer subsidy; that they will result in marketable advances in technology; and that those technologies will result in real improvements in efficiency and emissions.

Most importantly, we require that at least 80 percent of the money be spent on gasification technology, which, among its other attributes, provides the best chance of preventing carbon dioxide, the leading man-made greenhouse gas, from escaping into the atmosphere.

In fact, throughout the Committee on Science portions of the bill, we are cognizant of the very real threat of global climate change, and we worked to ensure that our Nation's energy policy takes climate change and other environmental issues into account.

I wish that were true of every portion of H.R. 4, but it is not. That is why I oppose the bill in its current form, and I will vote against it if it is not amended. I will be supporting two key amendments. Let me just speak about them for a moment.

If we are serious about reducing our dependence on foreign-source oil, and we have to be serious about that, if we are serious about protecting our environment, and that is of the highest priority, if we are serious about conserving energy, and if we are serious about helping the consumer, then we must pass the Boehlert-Markey amendment to raise corporate average fuel economy standards.

H.R. 4 takes the smallest of steps in the direction of raising CAFE standards, far smaller steps than the National Academy of Sciences says are possible. We do not need a fig leaf CAFE provision that will still leave us exposed to oil shortages, high gas prices and environmental degradation. We need a real, feasible moderate CAFE increase, and that is what the Boehlert-Markey amendment would provide.

Let me point out that the previous speaker said if we go too fast, too far, too soon, we will, and then he outlined some concerns. We are not going too fast, we are not going too far, we are not going too soon. We have come up with a reasonable standard, supported by the documentation of the National Academy of Sciences.

Mr. Chairman, I urge the passage when we get to those amendments.

Mr. Chairman, I reserve the balance of my time.

Mr. HALL of Texas. Mr. Chairman, I yield myself such time as I may consume.

(Mr. HALL of Texas asked and was given permission to revise and extend his remarks.)

Mr. HALL of Texas. Mr. Chairman, I rise, of course, in support of H.R. 4, aptly termed the Securing America's Future Energy Act of 2001.

The Committee on Science has worked hard and in a very highly cooperative fashion, I think, to report a comprehensive bill that authorizes existing energy research and development programs of the Department of Energy and authorizes new programs to meet the challenging research needs of this Nation.

I think the committee has done a good job. They certainly have recognized that we cannot put all of our eggs in one basket. We need to pursue research and development activities in energy conservation and energy efficiency and renewable energy technologies, as well as in fossil fuel energy and nuclear energy programs. We need

them all. In short, we need to support these applied research programs, which we know are the basic energy research programs of the office of science.

I think we have been generous in funding the program at the National Laboratories and colleges and universities throughout the Nation that are engaged in energy research.

Before yielding time to others, I want to take the opportunity to thank this good chairman, the gentleman from New York (Mr. BOEHLERT), for his interest in working with us to craft a bill that is supported by all the members of the committee. I think that is very unusual for a chairman. That does not happen very often here, but it has happened in our committee. We have worked together.

I thank also the staff of the committee for their tireless efforts in putting together the kind of bill from the Committee on Science that we should all feel very proud to support.

Finally, thanks also to the members of the committee for their suggestions and their contributions and their willingness to work on the committee's bill.

Mr. Chairman, I yield 2 minutes to the gentlewoman from California (Ms. WOOLSEY), the ranking member of the Subcommittee on Energy, Ms. Woolsey.

Ms. WOOLSEY. Mr. Chairman, I thank the gentleman for yielding me time, and I thank the gentleman for getting the pronunciation of my name right.

As the ranking member on the Committee on Science's Subcommittee on Energy, I was pleased that the gentleman from Texas (Mr. HALL) and the gentleman from New York (Mr. BOEHLERT) led the way so that the Committee on Science was able to report out a bill that accomplishes much of what I consider important to bring our country's energy policy into the 21st century. In fact, the Committee on Science bill reflects my push for aggressive R&D goals and funding levels for all renewable energy sources. I appreciate the chairman working with me on this shared priority. Unfortunately, this bipartisan model did not take root in the final bill.

It is no surprise to me that in this Chamber we have a variety of visions on what our energy future should look like, but there are points where the people of this country know what is best. And we ought to look at them to be our leaders. For example, many in my district share in the Nation's opposition to drilling for oil in ANWR. They consider it outrageous that drilling in this area is even included in this legislation.

Americans around the country also cringe when they learn that this bill lines the pockets of the fossil fuel and nuclear industries, making these industries, as this bill reflects, our number one priority. It is not appropriate that these industries should be our number one priority, when we know that our focus must be to reduce reliance on fossil fuels and expensive, dangerous nuclear energy. Instead, we should be investing in renewable, safe, and efficient energy sources.

Despite massive financial and scientific investments—not to mention a new PR campaign—the facts about nuclear power are unchanged. It's dangerous, expensive and has not delivered on decades-old promises of energy security and independence.

While the nuclear industry claims that nuclear power is safe, the fact remains that people are skeptical—especially if a plant or disposal site is in their backyard, or nuclear waste is transported through their community.

Americans want, need and deserve a smart energy policy that will take us into the 21st century—not a bill that continues down the path we've traveled for the last 100 years—a path that has led to global warming because of our overdependence on fossil fuels. That's why I can't vote for this energy bill.

□ 1330

Mr. BOEHLERT. Mr. Chairman, I proudly yield 1 minute to the gentlewoman from Illinois (Mrs. BIGGERT), a valuable member of the committee.

Mrs. BIGGERT. Mr. Chairman, I rise today to commend all who have worked on H.R. 4, the Securing America's Future Energy Act. A national energy policy is long overdue; and this bill is a step in the right direction, and we need to include all sources of energy in this bill.

As a Member of the Committee on Science, I was very pleased that the bill our committee reported included provisions to strengthen nuclear research and nuclear science and engineering programs at America's universities and colleges. Fewer Americans are entering this field and even fewer institutions are left with the capability to train them. Current projections are that 25 to 30 percent of the nuclear industry's workforce and 76 percent of the nuclear workforce at our national laboratories will begin to retire in the next 5 years.

Nuclear science and energy engineering in the United States is a 50-year success story that has been written by some of the brightest minds the world has ever known. America has truly been blessed as the world leader in this area, and this bill assures we maintain our leadership.

Mr. Chairman, I urge my colleagues to support this bill.

Mr. HALL of Texas. Mr. Chairman, I yield 1 minute to the gentlewoman from California (Ms. LOFGREN).

(Ms. LOFGREN asked and was given permission to revise and extend her remarks.)

Ms. LOFGREN. Mr. Chairman, I want to salute the chairman and the ranking member of the committee for working together as a bipartisan team. The portion of this bill that came out of the Committee on Science is pretty darn good. It has a balance of conservation and renewable energies, and I am very proud and satisfied with it. The Fusion Energy Sciences Act was also included and, for our planet, it is going to be key in the long run.

The problem in the bill is the things that did not come from the Committee on Science. Here is what is wrong: It provides no help for California to collect the $9 billion that we are owed by out-of-state energy providers; it lacks protection for oil drilling in the Arctic National Wildlife Refuge; it does not increase the CAFE standards for motor vehicles.

The bill that did not go through the Committee on Science is short on vision and long on special interests. With over $36 billion in tax breaks to fat cats, the United States is going to have to borrow the money to give these tax breaks. So if there is a Texas equivalent to a Bronx cheer, that is what the President is giving to California once again.

Mr. BOEHLERT. Mr. Chairman, I yield 1 minute to the gentleman from California (Mr. ROHRABACHER).

Mr. ROHRABACHER. Mr. Chairman, I rise in strong support of President Bush's comprehensive energy legislation. In California, we are on the edge of an economic disaster because for decades our State has turned down every effort to develop oil and natural gas resources, not to mention nuclear power, of course.

The President's bill is a positive bill. It has provisions in it for conservation and, yes, my colleague is right, we in the Committee on Science have participated in this process, because this bill also contains provisions for developing alternative energy resources.

But most important, this bill enables us to increase the supply of oil and natural gas in the United States of America. We have no reason to be ashamed of that. Of course, there will never be an energy bill that is good enough for the fanatic environmentalists who oppose us every time we try to increase our Nation's oil and natural gas supplies.

This bill will help us have more oil and natural gas, take us off of foreign dependency and ensure American prosperity.

Mr. Chairman, I support the President's comprehensive bill.

Mr. HALL of Texas. Mr. Chairman, I yield 1½ minutes to the gentleman from Pennsylvania (Mr. HOEFFEL).

Mr. HOEFFEL. Mr. Chairman, I thank the gentleman for yielding time.

Mr. Chairman, for 25 years, this country has not permitted the commercial reprocessing of spent nuclear fuel. We have said that the reactor waste generated around this country at reactors shall not be reprocessed, for the very sound reason that the reprocessing of this reactor waste generates plutonium, and plutonium is the key ingredient in nuclear weapons. And if we are generating plutonium through reprocessing, that is going to threaten our efforts to stop the proliferation of weapons around the world and to keep the supply of plutonium away from rogue nations and dictators.

Now, this bill very quietly reverses that 25-year policy. It says that we

shall now have research and development spending on what they call advanced fuel recycling technology. That is reprocessing. That is taking spent reactor waste and reprocessing it, creating plutonium, which threatens our nonproliferation regime around the world.

There was very little debate on this in the Committee on Science, and no consideration on the floor. The rule did not permit an amendment by the gentlewoman from California (Ms. WOOLSEY) that would have allowed a straight up-or-down vote.

Mr. Chairman, this is not just an issue for our national energy policy; it affects our international relations as well. And there is no way, with so little debate and so little public notice and no hearings, that we should be approving this. Vote no.

Mr. BOEHLERT. Mr. Chairman, I yield 1 minute to the gentleman from Michigan (Mr. SMITH).

(Mr. SMITH of Michigan asked and was given permission to revise and extend his remarks.)

Mr. SMITH of Michigan. Mr. Chairman, as a former member of the Presidential Oil Policy Commission, I have seen how energy policy mistakes can contribute to supply disruptions and high prices.

This legislation supports my vision for a broad portfolio of energy options by making traditional sources of energy cleaner, by researching and making alternative and renewable sources of energy more available, and by educating the next generation of scientists.

The Committee on Science has contributed to this legislation by authorizing the research and development programs that will help increase supplies of clean, renewable, and affordable energy. Coal is an abundant domestic source of power that plays a truly critical role in electricity generation in States like Michigan. However, we do need to make it cleaner and more efficient, and this legislation's provisions for clean coal technology point us in that direction.

Nuclear power, which accounts now for 28 percent of the Nation's electricity, is a critical energy source that produces nearly zero greenhouse gas emissions. However, we are in danger of losing international leadership in nuclear technologies, and that is why I support the nuclear R&D provisions in this bill.

Mr. Chairman, this is a good bill that will ensure that we have the energy needed to power the economic growth of the future.

Mr. HALL of Texas. Mr. Chairman, I yield 1½ minutes to the gentleman from California (Mr. FARR).

Mr. FARR of California. Mr. Chairman, I thank the gentleman for yielding time.

I rise today to compliment the committee that is before the floor today. The Committee on Science in this House did a tremendous job of designing a bill that really meets the science needs of America on energy. This bill is being used as the carrot tied to a stick, which is tied to a very ugly vehicle behind. I want to compliment the members of the Committee on Science on both sides of the aisle for producing a real substantive bill. Unfortunately, the rest of the bill that is incorporated with is one that we cannot support.

I look at this bill and what I see in it is whoever wrote the whole big package had one thing in mind, and that is that they were looking at the price, without understanding the value. So this bill addresses the price of everything and the value of nothing.

The bill knows the price of rewards for special interests. They put those special interests in perspective by giving them a $36.4 billion tax break in this bill. That is equivalent to what 9.7 million Americans in 1998 paid in taxes.

The cost of this bill is in the value to the environment. This bill says drill, drill, drill wherever oil may be. If we had oil under this Capitol, I am sure there would be proposals to drill for oil under the Capitol and under the Supreme Court and under the Library of Congress. This bill costs California ratepayers, who are not allowed to debate on the issue of rebates from obscene costs. This bill, in totality, is a bad bill.

Mr. BOEHLERT. May I ask the Chair how much time is remaining?

The CHAIRMAN pro tempore (Mr. LINDER). The gentleman from New York (Mr. BOEHLERT) has 1½ minutes remaining.

Mr. BOEHLERT. Mr. Chairman, I do not mean to challenge the umpire's call, that is cause for automatic ejection in baseball, but our scorecard says 2 minutes. Can the Chair look at those numbers again?

The CHAIRMAN pro tempore. Our scorecard does not. Ours says the gentleman from New York has 1½ minutes remaining, and the gentleman from Texas has 2 minutes remaining.

Mr. BOEHLERT. Mr. Chairman, I do not want to be ejected, but does the gentleman from Texas have 30 seconds he could yield to me?

Mr. HALL of Texas. Mr. Chairman, I yield 30 seconds to the gentleman from New York (Mr. BOEHLERT).

The CHAIRMAN pro tempore. The gentleman is willing to do that.

Mr. BOEHLERT. So now I can say on my scorecard we have 2 minutes?

The CHAIRMAN pro tempore. The gentleman can do that.

Mr. BOEHLERT. And we still have an affection for the umpire. I thank the Chair.

Mr. Chairman, I yield 1 minute to the gentleman from Kansas (Mr. AKIN).

Mr. AKIN. Mr. Chairman, I rise to support the clean coal power initiative in division E of H.R. 4. It is an effective and important initiative because it is going to give us environmentally friendly electricity at a reasonable cost and for decades to come.

Coal comprises 85 percent of our fossil fuel resources. We have enough coal for 250 years of additional use. More than 50 percent of our current electricity comes from coal.

Burning coal is our chief source of electricity, but by making it more efficient and by making it cleaner, we can improve the air quality. That is important to me, because we have air quality problems in the St. Louis area. This bill will do that.

Already, we have made investments in coal technology over the last 30 years that have reduced pollutants by 21 percent even though coal generation has tripled. Coal provides a clean, affordable and domestic energy source for us. This bill is very positive in cleaning that up and making it more reasonable.

Mr. HALL of Texas. Mr. Chairman, I yield 1 minute to the gentleman from Guam (Mr. UNDERWOOD), the very capable delegate.

Mr. UNDERWOOD. Mr. Chairman, I thank the gentleman from Texas for yielding.

I want to draw attention to one part of this very large energy bill which draws attention to the insular areas and allows them to develop alternative sources and gives that additional emphasis.

However, I am concerned about, under section 701, assessment of renewable energy resources, and section 702, renewable energy production incentives. There is a lot of attention drawn to solar power, there is attention drawn to geothermal, but there is no attention drawn to ocean thermal energy, which is a distinct possibility, particularly for those areas that are in the tropical zones.

So I would like to ask the chairman of the Committee on Science to enter into a brief colloquy.

Would the chairman be willing to work with us to consider inserting some language about ocean thermal energy into the assessment of renewable energy resources?

Mr. BOEHLERT. Mr. Chairman, will the gentleman yield?

Mr. UNDERWOOD. I yield to the gentleman from New York.

Mr. BOEHLERT. Mr. Chairman, as my distinguished colleague knows, we are always very enthusiastic in our committee about alternative sources of energy, so the gentleman can be assured that both the gentleman from Texas (Mr. HALL) and I will work closely with the gentleman to address this.

Mr. Chairman, I am pleased to yield 1 minute to the gentlewoman from Pennsylvania (Ms. HART), a new but very valued member of the committee.

Ms. HART. Mr. Chairman, I thank the gentleman for yielding me this time.

It is with pleasure that I stand up to support this energy bill. It contains a lot of different things; it is broad, it is all-encompassing.

The problems that we are looking to solve are not new ones. In fact, people in my constituency and probably all over the country have been calling

their congressional Members about these for a number of years.

But the problem of high gas prices, high electrical prices, high gasoline prices at the pump cannot be solved unless we have a comprehensive energy policy. That is what this bill does.

Vice President Cheney came to my district to launch the discussion nationwide. It was very well received. People are very happy to hear that we finally are going to have a comprehensive plan. Advancements in technology are included in here: clean coal technologies, nuclear advancements, fuel cells, investigation of renewable energy sources such as biomass, wind energy, hydro energy. But conservation is a very large part of this, and it is very important that we all understand that it is everyone's responsibility to be part of that conservation.

We all intend to work hard to get this passed. I am a big supporter of this, and I want to commend everyone who has been a part of making it happen.

Mr. HALL of Texas. Mr. Chairman, I will close by thanking the committee. I would just like to go on record, though, as saying we do need to drill ANWR. It makes sense to drill ANWR. It does not make sense not to drill ANWR, because if we do not find the resources we have here in this country, we have to send our kids overseas to fight for energy when we have it right here.

Japan was forced out into Malaysia by Franklin Roosevelt in 1939. We sent 450,000 kids to Kuwait. That was for energy. We did not need to do that. We need to take care of our children, and this is a bill that takes care of them and takes care of the country's energy needs for this Nation.

Mr. Chairman, the U.S. will likely need to produce 45% more natural gas to meet growing demand and environmental goals in the next decade. A new, industry-led research, development and demonstration program is being established in this legislation to enhance and extend the natural gas and other petroleum resource base in areas where production is currently allowed by law and reserves are most prolific. These areas are largely in unconventional onshore gas fields, primarily in the Rocky Mountains and Southwestern United States, and the ultra-deepwater in the central and western Gulf of Mexico. Research, development and demonstration of technological capabilities in these provinces will improve the nation's capacity to meet incremental natural gas demand over the next twenty years in an economic, safe and environmentally responsible manner.

Section 2441 of the ''Securing of America's Future Act of 2001'' (H.R. 4), ordered reported from the Committee on July 19, directs DOE to conduct long-term supply research and to establish a new industry-led research, development and demonstration program. The Department will utilize the expertise of our nation's energy industry, institutions of higher education, public and private research institutions, large and small businesses and federal agencies to lower the cost, improve the efficiency and production of natural gas and other petroleum resources while improving safety and minimizing environmental impacts of this activity.

The industry-led activities authorized by this legislation will be managed by an established 501(c)(3), tax-exempt research organization experienced in planning and managing programs in natural gas or other petroleum research, development and demonstration. The program is designed to ensure that the requirements of meeting near-term demand for natural gas supply will be conducted in the most efficient and cost-effective manner possible. This will require flexibility, unprecedented focus and input from industry, academia, and our national laboratories, and an acceleration of R&D activities. These goals can be best accomplished through an industry-driven effort, with key oversight provided by the Department of Energy, consistent with its stewardship role in energy policy and the use of public funds.

The Department is directed to focus the industry-led activities authorized by this legislation on unconventional onshore natural gas and other petroleum resource research and development projects, individual deepwater research and development projects, and the development of new ultra-deepwater natural gas and other petroleum architectures. it will carry out programs of long-term research into new natural gas and other petroleum exploration and production technologies, such as methane hydrates; and environmental mitigation technologies for production from unconventional and ultra-deepwater resources, including carbon sequestration.

All research, development and demonstration activities authorized by this legislation will be cost-shared by participants in the program. The deepwater and ultra-deepwater research, development and demonstration provisions of this bill shall be exercised only in the central and western Gulf of Mexico in areas that are already leased or are available for leasing. No offshore areas that are currently covered under federal leasing moratoria will be affected.

This program will be funded from loans from the Treasury to be repaid from revenues from ultra-deepwater natural gas and other petroleum leases currently available for lease that would otherwise not be sold, additional appropriations and 7.5% of federal natural gas and other petroleum lease income.

I believe that a concentrated industry effort with support from the government will enable us to produce the tremendous natural gas resources that exist in the Gulf of Mexico sooner and at lower cost than a traditional government R&D program. The model for this program is SEMATECH, the government-industry consortium that was established for the semiconductor industry in the 1980s. By combining industry R&D efforts, the semiconductor industry was able to remain competitive with the Japanese—a competitive advantage that the U.S. has maintained. This has been responsible, at least in part, for the enormous technology-drive growth that the U.S. enjoyed through the nineties—and even at a lower growth rate today.

These R&D models work and we should not be reluctant to employ them as needed. The government's interests are protected thorough recoupment provision in the legislation. These provisions provide for the repayment of government funds used to develop and demonstrate the successful technologies that emerge from this program. The recoupment provisions in the bill, combined with the additional royalties that will be collected on the natural gas production from these ultradeep structures will recoup the government's investment in this program many times over.

It's a win-win for the government and the taxpayers: The government funding up front makes it possible for this high-risk research to be undertaken by industry, which will generally be matching the government outlays on a dollar for dollar basis. The needed gas supplies will be produced sooner and at a time when domestic natural gas production is declining and demand is rapidly increasing.

□ 1345

The CHAIRMAN. All time for the Committee on Science has expired.

It is now in order under the rule for the Committee on Ways and Means, represented by the gentleman from California (Mr. THOMAS) and the gentlewoman from Florida (Mrs. THURMAN). Each will control 10 minutes.

The Chair recognizes the gentleman from California (Mr. THOMAS).

Mr. THOMAS. Mr. Chairman, I yield myself 1 minute.

Mr. Chairman, as we look at this tax component, it has been characterized today in a number of different ways.

Our friends on the other side of the aisle like to talk about the enormous giveaway to special interests. I would like to point out that the special interests in the bill who get the major-appliance reductions for energy efficiency are the American taxpayers. Those who invest in their home in energy-efficient ways are also the special interests involved in this bill. If they buy a more fuel-efficient car, they get significant tax credits.

I think Members will find that throughout this tax provision, individuals who seek conservation and alternate energy get rewarded for that behavior. That is one of the major special interests.

The other area that I think needs to be emphasized that people do not talk about is under the heading of reliability. That actually gets the largest percentage of money, almost 39 percent in this tax structure, because we frankly need to deal with electric transmission lines. We need to deal with natural gas transmission lines. Then, once we develop the natural gas transmission lines for clean-burning natural gas, we need distribution lines.

One of the difficulties, I think, that we forget about is that it is not just the switch on the wall. Our ability to function in a post-industrial energy-efficient world requires significant investment in infrastructure. Even a transition from the highly regulated one that we are in in the area of electricity to a more deregulated one requires attention in the Tax Code.

Mr. Chairman, I reserve the balance of my time.

Mrs. THURMAN. Mr. Chairman, I yield myself 4 minutes.

Mr. Chairman, the chairman talked about some very wonderful things that

are in this piece of legislation, but I have to say that the problem and regret is that earlier this year the congressional Republican leadership decided to enact a large tax reduction and did not reserve the resources for these other priorities. I believe they are important priorities.

But as a result of that decision, and because this bill contains no revenue offsets, I believe that there is a substantial certainty that the tax reductions contained in the energy bill will be funded, at least in part, by raiding the Medicare and possibly the Social Security Trust Funds. Therefore, I cannot support this bill, and I would oppose it.

Mr. Chairman, we are not the only ones saying this. Even a recent Republican memo on the surplus states that we are possibly already into the Medicare Trust Fund, and we are very close to touching the Social Security surplus in fiscal year 2003.

When we did the markup of the charitable tax incentive bill the week before the Committee on Ways and Means approved an energy tax cut bill, the Committee on the Budget chairman, the gentleman from Iowa (Mr. NUSSLE), produced a letter that said that using economic projections from earlier in the year, there was enough of a surplus to support the charitable tax bill if no further tax or spending bills were ever enacted.

When the committee considered the energy tax bill, no security letter from the Committee on the Budget was ever produced. Does this mean that there will not be sufficient surpluses to support the energy bill? I think we all know the answer is yes.

Further, during the committee debate on the energy tax bill, when I asked how it is going to be paid for, I was told that there is a slush fund in the fiscal year 2002 budget resolution that is available on a first-come, first-served basis.

Well, which one of the following priorities, then, will not be funded if they succeed in their current strategy of being first in line? I might add, many of these have been promised and debated.

What about the $300 billion for a Medicare prescription drug benefit; the $134 billion from the Secretary of Defense, who states it is necessary just to maintain our current level of defense; the $200 billion or $300 billion for defense modernization; $73 billion for agriculture; $6 billion for higher veterans benefits; the $14 billion that we did in reduction in the SEC fees; the $50 billion for promised health insurance; the $82 billion to fully fund the new educational bill, to all of which we have agreed; and $122 billion to extend expiring tax benefits; $119 billion for President Bush's remaining tax cuts in health insurance, long-term care, and housing; and $200 billion to $400 billion to address the AMT issue? There is $138 billion to end the tax cut sunsets in the last bill, and $13 billion for the charitable tax incentives just passed by this House.

Mr. Chairman, we could have done something differently. We heard about this in the rules debate; but the fact of the matter is, there was a Democratic amendment that could have been brought to this floor that could have in fact taken care of both of these priorities which would have been offered by the gentleman from Massachusetts (Mr. MARKEY).

He requested, but was denied by the Committee on Rules, this amendment, which would have paid for the energy tax provisions provided by the amendment and made the tax benefits contingent on a surplus outside of the Social Security and Medicare Trust Fund. By the way, that would not be the first time that we have voted on this floor to, in fact, make benefits contingent on surpluses outside of the Social Security and Medicare Trust Fund.

So what might we do today? Instead of passing a fairly good energy package, one of many things that I believe and agree with, we are going to in fact allow the use of payroll taxes to pay for corporate tax relief.

Mr. Chairman, I reserve the balance of my time.

Mr. THOMAS. Mr. Chairman, it is my privilege to yield 1 minute to the gentleman from Oklahoma (Mr. Watkins), a member of the Committee on Ways and Means.

Mr. WATKINS of Oklahoma. Mr. Chairman, I want to thank the gentleman from California (Chairman THOMAS) and the gentleman from Louisiana (Chairman MCCRERY) for putting together the most balanced and comprehensive energy legislation that has been here in 3 decades, and I speak from experience; and this has more conservation and reliability in this bill, and some production, but the emphasis is on conservation and reliability.

I was here in 1997 when President Jimmy Carter said we had an energy crisis of the moral equivalent to war. Some of us might remember that. There was a lot of conservation and also some renewable energy activity. It helped. But let me say, from that standpoint, we cannot conserve and we cannot just count on foreign sources to help us have a reliable source.

This bill today does move us in a direction in the short term and in the long term in trying to have a reliable source of energy for this country. We need this bill. We must have this bill. If not, we are doing a disservice to our children and our grandchildren.

Mrs. THURMAN. Mr. Chairman, I yield 2 minutes to the distinguished gentleman from Michigan (Mr. LEVIN).

(Mr. LEVIN asked and was given permission to revise and extend his remarks.)

Mr. LEVIN. Mr. Chairman, I thank the gentlewoman for yielding time to me.

Mr. Chairman, when one adds to the oversized tax cut the slowing economy and the billions of dollars of unbudgeted spending for defense, education, and other priorities, this $33 billion grab bag of energy tax provisions, with no offsets to pay for them, four times more than the administration requested, is fiscally irresponsible.

The Bureau of National Affairs reports today, this from an internal GOP memo, ''We are possibly already into the Medicare trust fund this year and every year through FY 05. We are very close to touching the Social Security surplus in FY 03.'' The Republicans believe that they can pull a Houdini trick, taking trust fund monies out of the lockbox without anybody seeing or catching them at the raid.

I also want to urge the House to reject the Boehlert amendment on CAFE later today. The cure would be worse than the disease. That amendment is based on a very selective reading of an NAS report which particularly warns against forcing through a CAFE increase too quickly, saying, ''Technology changes require very long lead times to be introduced into the manufacturer's product line. Any policy that is implemented too aggressively has the potential to adversely affect manufacturers, their suppliers, their employees, their consumers.''

This amendment of the gentleman from New York (Mr. BOEHLERT) is fundamentally flawed. It does not give the industry enough time to comply. The only way to meet the CAFE requirements of the Boehlert amendment would be for the manufacturers to close down entire vehicle lines. The Boehlert amendment would force the dislocation of American workers and job loss.

Vote ''no'' on the Boehlert amendment. Because of what I have said, and others, regarding the tax provisions. Vote ''no'' on final passage of H.R. 4.

Mr. THOMAS. Mr. Chairman, it is my privilege to yield 1 minute to the gentleman from Arizona (Mr. HAYWORTH), a member of the Committee on Ways and Means.

Mr. HAYWORTH. Mr. Chairman, I thank the gentleman for yielding time to me.

Mr. Chairman, it is rather curious to note that if we could have converted into energy some of the fear and smear being employed here, we would have enough energy for the entire next century and well beyond.

Mr. Chairman, every dollar that comes in for Medicare is going to be used for Medicare. What we have here is a comprehensive energy bill. We concentrate here on tax relief and tax incentives to make sure we work on new technologies, on conservation, and on exploring for the energy we need.

While others want to play a game of wolf and fear, we have a comprehensive, reasonable, rational response. It is easy to be on all sides of the issue, as we often hear from our friends in the opposition.

But still, we have the invitation: join us and work together, because the

stakes are too high to bury our heads in the sand or pull the fire alarm falsely.

Mrs. THURMAN. Mr. Chairman, I yield 2 minutes to the gentleman from Washington (Mr. MCDERMOTT).

Mr. MCDERMOTT. Mr. Chairman, in January when George II was appointed by the Supreme Court, the oil dynasty took this country over again. The real issue of the tax cut, that was a minor issue, but today is a big deal. We have had five sets of elves working in five different places, never talking to each other, with half-day notice when they are going to have a bill, who put together something which we gave to the Committee on Rules, and last night, in the middle of the night, they put it out here on the floor.

They were offered 143 amendments. They chose 16, of which three were from the Democrats, as though the Democrats had nothing to say about this whole thing.

Mr. Chairman, we have had an interesting crisis created in this country in energy, so we have to have an energy policy. So we have an energy policy in process, but then the prices go down.

The Wall Street Journal yesterday told the truth: ''Major oil companies struggle to spend huge hoards of cash. Shell oil is sitting on $11 billion they do not know what to do with. Yet, in this bill, we have to give them $12 billion more.''

Bad enough as that is, we are not even paying for it. This is not a real bill; this is a PR piece for Republicans going home to their districts to say, We passed a comprehensive energy bill in the House of Representatives. They will all do it; they will each pick a piece they like. The folks back home should understand, none of this is paid for. It is all smoke and mirrors.

When we come back in the fall, I do not know what they are planning to knock out to come up with $33 billion more. They threw a few things in for solar and a few things here and there, and they are going to stand up and tell us all about the electric cars and all this stuff. But the bulk of it, $20 billion out of the $33 billion, goes to the guys who have hordes of cash they do not know what to do with, and they are driving our electric prices on the west coast out of sight.

Mr. Chairman, when are we really going to have a discussion? Maybe we will have to get a new President who is not appointed.

Mr. THOMAS. Mr. Chairman, it is my pleasure to yield 1 minute to the gentlewoman from Washington (Ms. DUNN), a member of the Committee on Ways and Means, so we can get a slightly different perspective on this issue.

Ms. DUNN. Mr. Chairman, I am very happy that the bill we are debating today promotes energy conservation and efficiency. These elements are critical, especially in my home State of Washington, where many continue to suffer from the high cost of utility bills.

In times of energy supply shortages that result in retail rate increases, it is the role of the Government to empower families and businesses around America with the information that they need to make choices regarding their power usage.

□ 1400

As public servants, we can encourage efficiency by providing incentives for the use of ''smart meters,'' in this case for the use of smart meters installed at the cost to the company in many homes throughout my district. These are high-tech devices that tell consumers what time of day is most cost effective to flip on the switch to run their washers, their dryers, their sprinkler systems.

Smart meters serve as evidence that conservation does not need to be dictated by the Federal Government, but rather can be learned, and with the right motivation and structure, conservation can work. I want to thank the chairman, the gentleman from California (Mr. THOMAS), for including the smart meter provision I offered as part of this comprehensive bill and urge its passage.

Mrs. THURMAN. Mr. Chairman, may I inquire as to how much time remains on each side?

The CHAIRMAN pro tempore Mr. LINDER). The gentlewoman from Florida (Mrs. THURMAN) has 2 minutes remaining and the gentleman from California (Mr. THOMAS) has 5½ minutes remaining.

Mr. THOMAS. Mr. Chairman, I yield 1 minute to the gentleman from Michigan Mr. CAMP), a member of the Committee on Ways and Means.

Mr. CAMP. Mr. Chairman, I thank the chairman for yielding me this time, and I rise in support of H.R. 4 because this is a balanced and comprehensive energy strategy for our Nation.

I would just like to point out two important initiatives in this bill. The first is an initiative that would help to encourage the collection and utilization of landfill gases and energy resource. A medium-sized landfill can produce enough energy to meet the annual electrical needs of 3,000 homes. I believe our Nation should harness the energy resources that are sitting in the backyards of most of our communities rather than allow them to be wasted.

The second proposal is the CLEAR Act, which would help provide consumers tax incentives for the purchasing of advanced technology and alternative fuel vehicles. These incentives are positive steps that can be taken today to increase fuel economy of new vehicles. What is important about this provision is that it will allow the consumer to be part of the decision.

All major auto makers that sell cars in the United States have alternative and hybrid fuel vehicles available. This will make our country the winner by providing the opportunity to pull these new exciting technologies into the marketplace, and I urge support for this legislation.

Mr. THOMAS. Mr. Chairman, I yield such time as she may consume to the gentlewoman from Connecticut (Mrs. JOHNSON).

(Mrs. JOHNSON of Connecticut asked and was given permission to revise and extend her remarks.)

Mrs. JOHNSON of Connecticut. Mr. Chairman, I support this bill; and I particularly want to recognize its understanding of the importance of renewable, clean sources of energy for the future.

I firmly believe that a national energy policy must include promotion of alternatives to traditional energy sources. Doing so will reduce our reliance on imported oil, give consumers greater choice, stabilize energy prices, and benefit the environment at the same time. The reason our constituents find themselves faced with out-of-control heating oil and fuel prices is because our nation has no long-term energy policy.

I am pleased that the tax portion of this package includes my legislation to promote the use of fuel cells which remove the hydrogen from fossil fuels to create energy with virtually no pollutants. They function must like a battery except fuel cells do not require recharging and are far more efficient than a combustion engine or power plant.

H.R. 4 proposes a fuel cell tax credit for five years to create a market incentive for this revolutionary technology, which is reliable and will provide economic and environmental advantages to traditional fuel sources. The bill will accelerate commercialization of this technology by providing a $1,000 per kilowatt credit for efficient, stationary fuel cell systems.

Stationary fuel cells capable of running 24 hours a day, seven days a week for five years with only routine maintenance are currently in operation today. As a distributed generation technology, fuel cells address the immediate need for secure, efficient, clean energy supplies, while reducing grid demand and increasing grid flexibility.

First used by NASA in the space program, they are now in hospitals, schools, military installations, and manufacturing facilities and may be available for homeowners by the end of this year. Although these early products have proven energy efficiency and environmental advantages, help in accelerating volume production is essential in realizing lower prices for consumers and the full benefits of fuel cells.

I am also a strong supporter of another provision included in this energy package to encourage the development of projects that capture landfill gas (LFG) and use it as an alternative energy source. LFG is produced as waste decomposes in landfills that serve our communities. LFG projects capture and use the gas to generate electricity or directly as an alternative fuel.

H.R. 4 would extend the Section 45 tax credit for wind energy, closed-loop biomass, and poultry waste to LFG projects. It is estimated that an additional 700 landfill gas-to-energy projects could be made economically feasible with such an incentive. Helping to bring these projects online would help the nation save more than 40 million barrels of oil annually. With that kind of potential, we must ensure that we are tapping into LFG, which is

available in nearly every community in America.

It is technologies like fuel cells and landfill gas projects that will help us decrease our dependence on foreign oil, conserve existing oil supplies, and reduce air pollution.

Mr. THOMAS. Mr. Chairman, I yield 3 minutes to the gentleman from Louisiana (Mr. McCRERY), the chairman of the Subcommittee on Select Revenue Measures, one of the significant hands and minds that allowed us to put this package together.

Mr. McCRERY. Mr. Chairman, I thank the chairman for yielding me this time and for the role he played in putting this excellent package together.

Mr. Chairman, first of all, let me just say that any speaker here on the floor today who says that this bill or any other bill that the Congress passes raids the Social Security trust fund is either intentionally misleading the public or is exhibiting a lack of understanding of the Social Security trust fund, the Medicare trust fund. The fact is that is not true, and I hope that we will get off of that.

But with respect to the bill before us, Mr. Chairman, it is clear that our country continues to struggle with the fact that our domestic energy production does not meet our demand. The time is now for Congress to pass an energy policy that will address present needs and secure a stable supply of power for the future, and this bill accomplishes those goals.

As chairman of the House Committee on Ways and Means Subcommittee on Select Revenue Measures, I had the opportunity to help find energy solutions through our Tax Code. My subcommittee held three hearings on the issue, giving us an opportunity to hear from the administration, Members of Congress, and many other interested parties.

At our second hearing, I outlined several principles which should be adhered to in formulating a national energy tax policy. First and foremost, our complex problems require a balanced solution. We have heard that here today: we need balance. We have it in this bill, in the tax portion of the bill. Conservation, renewable, and alternative fuels, and expanded production of traditional fuels, such as oil and gas and coal, must all be part of the solution. The portion of the energy bill passed through the Committee on Ways and Means is faithful to that goal of a balanced solution.

Conservation plays a key role, with expanded incentives for solar power, fuel cells and clean cars. Alternative fuels receive a boost, with new incentives to produce electricity from biomass and landfill gases. This legislation also encourages production through modifications to the existing section 29 program, which has been very successful in stimulating the production of oil and gas from tight sands and other difficult areas of production.

At our hearings, the committee heard how bottlenecks in distribution were a significant problem. A stable supply of energy is only of use if we can get it to where it is needed when it is needed. Accordingly, the bill before us today helps utilities spin off their transmission assets to ensure they are used as efficiently as possible. In addition, we provide faster depreciation for oil refining properties and for gas distribution lines. Commonsense things to get the power to the people.

Our energy tax policy should be sensitive to the environment also. Several provisions of the Ways and Means energy legislation reflect that. It assists refiners in coping with the cost of producing low-sulfur fuel. It reduces taxes on diesel water emulsions, which have substantially lowered emissions than traditional diesel fuel. And it helps cover the cost of installing new technologies which will dramatically reduce the emissions from coal-fired plans.

For too long Congress has viewed energy policy as a dilemma: produce or conserve; the economy or the environment. We do not have to have it one way or the other. We can do both. This bill does that. Vote for it.

Mrs. THURMAN. Mr. Chairman, I yield the balance of my time to the gentleman from Texas (Mr. DOGGETT).

Mr. DOGGETT. Mr. Chairman, this bill represents another partisan Republican failure. It offers no balance either for our energy policy or our federal budget. The only balance involved in this plan is the balance sheets of big oil, dirty coal, and dangerous nuclear industries. They receive substantial boons and largesse from the bounty of this bill.

The balance here is the balance of sweet words about conservation and the environment, like those we just heard, with the harsh reality of huge subsidies for these industries at the expense of all the rest of us.

Yesterday, we learned that the Treasury is having to borrow more money, incurring more public debt, increasing the amount of red ink in order to fund the already unwieldy tax cut upon which the President has insisted. What solution do the Republicans offer us today? Well, they are going to increase the flow of red ink. Today, they are drilling. They are drilling for red ink.

And as we would say in Texas, they have hit a real ''gusher'' of red ink in this bill, because they have over $30 billion of mostly special interest tax breaks to be paid for directly out of the Medicare trust fund. And it is not my word, but a recent Republican memo, as reported in the July 27th BNA Daily Tax Report, that says they are already into the Medicare trust fund, and the Social Security trust fund is next. Those hard-earned payroll taxes going right back to these special interests that have been so generous with their campaign money and their special interest lobbying.

This is not an energy policy, it is a collection of unjustified tax breaks, loopholes, and dodges masquerading as an energy policy. The only energy it reflects is the energy of campaign fund-raising and high-powered lobbying. Little wonder this plan was concocted in secret by Vice President CHENEY and that he is afraid to disclose the participants and contents of his various conclaves with special interests, even to the nonpartisan General Accounting Office.

Each year, Taxpayers for Common Sense, Friends of the Earth, and the U.S. Public Interest Research Group, identify subsidies that both waste taxpayer money and harm the environment. It is called the ''Green Scissors Report.'' And if this hodgepodge of a bill is approved, there will be plenty more to cut. Indeed it is the American people that are really getting cut by this bad bill, which should be rejected.

We need a conservative national energy policy that emphasizes conserving our precious natural resources, increasing energy efficiency, and providing reasonable production incentives. This bill fails to achieve any of these goals.

Mr. THOMAS. Mr. Chairman, I yield myself the remainder of my time.

Volume will not stop the truth from getting out. At my request, the Democrats wrote me letters indicating what they would like to see in this energy package. In fact, the ranking member of the committee, the gentleman from New York (Mr. RANGEL), wrote me a letter indicating there were 17 provisions that they requested. Twelve of them were included in their entirety and several in part.

I found it ironic that the gentleman from Michigan took the very scant few minutes the Committee on Ways and Means has to talk about the tax package to, in fact, urge people to vote against an amendment to be offered by the chairman of the Committee on Science. So much for the real concern about this tax provision.

Now, I am not going to answer in kind the comments that were made in terms of who is getting the money, except to say I cannot believe anyone out there listening really believes that the $12 billion identified by the gentleman from Washington was going to big oil. As a matter of fact, the largest energy production structure in the United States gets the smallest amount in this bill.

It is a balanced bill. It contains many of the provisions the Democrats wanted. And if we will listen to their rhetoric, take a look at their vote, I think we will find a significant difference between what they are saying and how they are voting.

The CHAIRMAN. All time for the Committee on Ways and Means portion has expired.

It is now in order under the rule to provide time for the Committee on Resources. The gentleman from Utah (Mr. HANSEN) and the gentleman from West Virginia (Mr. RAHALL) each will control 10 minutes.

The Chair recognizes the gentleman from Utah (Mr. HANSEN).

Mr. HANSEN. Mr. Chairman, I yield myself 4 minutes.

Mr. Chairman, America needs more energy. During months of national discussion over energy, I have not heard anyone challenge the fact that our Nation needs more energy. Our Nation's demand for natural gas alone has risen by 45 percent over the past 15 years, 45 percent. Our National need for ore oil is on the rise. Our need for electricity has jumped sharply since the advent of the high-tech age and continues to rise. Most of the electricity in this country still comes from coal. That means our Nation's need for coal is rising.

These are indisputable facts. What is in dispute is what we do about it. I say let us use a little common sense. We need a little old-fashioned American integrity. We look for ways to curb our energy appetite. We look for ways to increase our production. We look for ways to be more efficient in the way we use energy, and we invent new technology and new kinds of energy.

This bill, the Securing America's Future Energy Act of 2001, does every one of those things. It follows the dictates of reason and common sense. With this bill, we get by with less, we produce more, and we figure out ways to do things better.

If we take out any part of this equation, we invite failure. If we take out increased production, we fail faster and faster. We cannot conserve our way out of the energy challenge that faces us today. We cannot research or design our way out of it. We cannot get through this with windmills and solar panels. Increased production has to be a part of our national energy policy. Without increased production, this entire Nation will be the next California.

California is the Nation's leader in conservation, and we compliment them for that.

□ 1415

California is also the Nation's leader in the use of alternative fuels. Almost all of our best alternative fuel projects, solar, wind turbine farms, biomass plants, are in California.

Where did California go wrong? California refused to increase production. California looked at its rising energy demands and said, We can conserve our way out of this. Apparently they cannot. They were wrong. I could have told them that. Whoever drives up to a pump that is marked alternative energy sources? There is not such a thing.

As for conservation, may I just observe, when it comes to oil, at least Americans do not seem to have jumped on the conservation bandwagon. Look at what people are driving today here, both here within the Beltway and outside of the Beltway. Conservation is something that does not come to mind.

The problem we have now with the bill that will be very controversial is going to be ANWR. But what people do not realize is that section 1002 is one very small, small part and was never in the Arctic Refuge. This was left out when Congress did it with the idea that basically we someday can come and drill with the new technology we have in this particular area. So on the coastal plains it makes a lot of sense to look at it.

This big, huge area, the size of South Carolina, 19 million acres, and we are using an infinitesimal fraction of it. I am amazed the people opposed to it have not taken the time to go and look at it.

We are talking about a Congress and President who have come through the energy crisis of 1977. Look what happened then. We made a few mistakes. We were not ready to go. We cannot get behind the power curve of this particular issue.

Mr. Chairman, I reserve the balance of my time.

Mr. RAHALL. Mr. Chairman, I yield myself such time as I may consume.

Mr. Chairman, I am among these who believe this country does need a new national energy policy, and we need to stick to it through times of energy scarcity as well as abundance. But not this energy policy, not what is in the pending legislation.

The bill has nothing to do with providing Americans with energy security. Instead, it is a multibillion dollar giveaway of America's resources and America's taxpayer dollars to big oil, already awash in record profits. The headline, as we see here and has already been referred to in today's debate, from a Wall Street Journal article of this week: Major Oil Companies Struggle to Spend Huge Hoards of Cash.

Imagine that. They have profited so mightily from the American public that they now cannot figure out what to do with all of their hoards of cash. Yet the Republican leadership of this body wants to reward big oil even further. Tax credits and tax cuts with no offsets. At least we have paid for ours in our version of an energy bill. Relief from compensating the American public from drilling on our Federal lands and waters.

Make no mistake about it, these giveaways will come at the expense of our elderly. There are no more surpluses. There is no reserve into which we can dip. The $33.5 billion tax cuts in this bill, largely for energy companies, will come out of Medicare.

Rob the elderly to pay Exxon, Shell and the rest of them? This is an energy policy? I think not.

The Committee on Resources provision in this bill, in particular, provides unnecessary, uncalled for and unjust giveaways that are part and parcel of this legislation. One of these provisions, for example, would provide companies that want to drill for oil and gas in the Gulf of Mexico relief from having to pay royalties to the American people, a royalty holiday.

Under this bill, a company drilling in Federal waters between 400 and 800 meters deep can receive, for free, 5 million barrels of oil or gas equivalent. The owners of these resources are the American people. The American people get nothing, zero, zilch.

Wait a minute, it gets even sweeter.

Nine million barrels of oil or gas equivalent for drilling in waters between 800 to 1,600 meters for free, and if they drill deeper, a whopping 23 million barrels of oil or gas equivalent for free. This stuff is the makings of Ripley's ''Believe It or Not.''

At a time when there is widespread public concern that collusion of gasoline price fixing has taken place, when there is widespread concern, such as in the Wall Street Journal, that these companies are already awash in cash, we are providing a royalty holiday in this legislation and that is a message that is simply wrong, plain wrong.

Even Secretary Norton has expressed concern with the extent of the generosity to the gas companies offered by the royalty holiday language. When I brought the issue up with the President personally at the White House, the Vice President chipped in, We are not going to be offering these royalties to oil companies.

The same goes to the royalty in-kind proposal which is nothing more than a thinly disguised ruse to reduce royalty payments. This bill would have the Federal Government receive oil and gas royalties, not in cash but in the form of actual crude oil and natural gas. Federal bureaucrats would then be in the business of marketing oil and gas, joining the ranks of Exxon, the Shells and the rest of them. It does not make any sense.

I have never heard of it. This surprises me when it comes from the majority that rules this body. At a time when Russia and China are shedding themselves of state-run industries, why is the effort being made by this body to toss the Communist Manifesto into our national energy policy?

To be clear, in their effort to award big oil, Republican leadership has not forgotten about big coal as well, certain coal, that is, coal produced on Federal lands, mostly in the West.

The pending legislation would eliminate current law requirements providing for the diligent development of Federal coal leases. What does this do for America's energy security? Again, absolutely nothing, zero, zilch. But it will give rise to the rank speculation in Federal coal leasing to the detriment of consumers and coal field jobs. Members need to be aware of this provision, not considered by our committee, but slipped into this massive bill without even being publicly reviewed or debated after full committee action.

Mr. Chairman, Democrats do not believe we have to shortchange the American taxpayer and short shrift the economy and the environment by doling out a royalty holiday to big oil. We do not believe we should be providing this unfettered access to drilling rigs into environmentally sensitive lands.

We recognize the contributions certain Federal lands can make to our Nation's energy mix, already one-quarter of America's oil consumption and over one-third of our natural gas and coal use. But at the same time we recognize, as responsible public stewards of our land, that there are environmental and social costs to energy development which also need to be addressed in any national energy policy. This concern and this public responsibility is noticeably absent in this legislation.

Mr. Chairman, I reserve the balance of my time.

Mr. HANSEN. Mr. Chairman, I yield 2 minutes to the gentlewoman from Wyoming (Mrs. CUBIN), chairman of the Subcommittee on Energy and Mineral Resources of the Committee on Resources.

Mrs. CUBIN. Mr. Chairman, I rise in strong support of H.R. 4. Division F of this bill is a product of the Committee on Resources. The previous speaker should know very well that he has spent his precious time misleading Members and misrepresenting what is actually in this bill. He should be ashamed.

We have held many hearings on issues involving the role of the public lands on our domestic energy supplies. Our work has led us to include provisions in H.R. 4 which require studies and analyses of impediments to environmentally sound development of potential energy resources on and under public lands. Section 6102 requires an inventory of public lands for solar, wind and geothermal energy potential and for coal resources. The SAFE Act expands current law to cover renewable energy supplies and coal resources. We need to know exactly what is in our energy bank, what energy is available to us as a country.

Subtitle A of title II mandates a 2-year extension of the Deep Water Royalty Relief Act of 1995, which has been extremely successful. The previous speaker said, What does the United States get out of this, zero, zilch, nada, when the gentleman knows from just the Deep Water Royalty Relief Act of 1995, we have over $5 billion in the bank as a result of only bonuses that were bid in the Gulf of Mexico. That does not count any royalties. $5 billion is far from zero, nada, zilch.

If we continue the program started by President Clinton, which is a much smaller program than was signed into law by President Clinton, we will get $5, $10, $15, $20 billion in bonuses that we otherwise will not get because it is simply too expensive to risk that kind of money to drill in the deep water.

This is a good bill. I will refer to the other complaints about the bill later.

Mr. RAHALL. Mr. Chairman, I yield 2 minutes to the gentleman from Oregon (Mr. DEFAZIO), a valuable member of the Committee on Resources.

Mr. DEFAZIO. Mr. Chairman, gouge them at the gas pump, and stick it to them in their home heating or cooling bill. Seniors have been particularly hard hit, but that is not enough for the energy conglomerates in this country. Now they want to dip into the taxpayers' pockets.

The same group that yesterday in the Wall Street Journal was revealed to have tens of billions of dollars sitting around that they cannot figure out what to do with because of the obscene profits they made in the last year by manipulating the West Coast electricity markets, the gas market, and the gasoline market, they need more. They want more. They want it all. And the Republican Party and the President want to deliver because they helped them get elected.

Royalty exemption, $7 billion, right from the taxpayers to the oil and gas companies. Tax deductions for nonproducing wells, $1.2 billion, right from the taxpayers to the oil and gas companies.

Income averaging. Average Americans, salespersons, people who sell cars for a living, for instance, they cannot do income averaging because that would cost the Treasury too much money. But guess what, this bill provides income averaging for the oil and gas industry. Since they made a $10 or $12 billion profit last year, maybe next year they will only make $6 billion, they should be able to average, unlike normal Americans.

Guess what, they cannot afford to pay for the environmental analyses for the drilling that they want to do on our sensitive lands. The taxpayers should pay for that analysis. Absolutely unprecedented.

Mr. Chairman, we are opening the Medicare lockbox, and we are taking the trust funds out and we are handing them to the oil and gas industry. They already have billions that they cannot spend. This is not going to get us one more well, one more gallon, one more cubic foot of gas, but it is going to enrich the coffers of these obscenely wealthy companies that are ripping off Americans.

Mr. Chairman, we should be ashamed of the thrust of this bill. This is a 1950s energy policy. The only thing that is worthwhile to produce energy here is to send every American a copy and let them burn it in their fireplace next winter because they will not be able to afford their home heating bill.

Mr. HANSEN. Mr. Chairman, I yield 1 minute to the gentleman from New York (Mr. GILMAN).

(Mr. GILMAN asked and was given permission to revise and extend his remarks.)

Mr. GILMAN. Mr. Chairman, a comprehensive national energy policy is in our Nation's best interest, and I am gratified that the President and the Congress are making our Nation's energy needs a national priority. There are many provisions of H.R. 4, Securing America's Future Energy Act of 2001, that I support.

However, I have some reservations about allowing drilling in the Arctic, as well as the need to fully address a meaningful increase in the corporate average fuel economy, CAFE, standards.

Mr. Chairman, as we consider this measure, let us bear in mind that we cannot drill our way to energy security, and we cannot out-pump OPEC. OPEC has cut production this year by 13 percent, some 3.5 million barrels a day. For every barrel we pump, OPEC cuts its production further to maintain their high prices of oil.

Mr. Chairman, by approving the CAFE standards, we would be conserving some 40 percent of the consumption of oil used in our cars and light trucks by some 8 million barrels a day. I hope we can do that. Our advanced technology for meeting CAFE standards has lagged behind.

I urge my colleagues to support this measure. It is a sound measure.

□ 1430

Mr. HANSEN. Mr. Chairman, I yield 1 minute to the gentleman from Oklahoma (Mr. CARSON).

Mr. CARSON of Oklahoma. Mr. Chairman, I rise today in strong support of legislation that would establish a national energy policy and to suggest as a Democrat that populist rhetoric against energy conglomerates is in fact not only misconceived but entirely counterproductive.

America's economic prosperity and national security depend on the availability of reliable, affordable energy. The United States has an overwhelming demand for energy which is ever increasing due to our population growth. Fortunately, we have an incredible wealth of varied energy resources. Conservation and production, far from being competing policies, are in fact complementary solutions to our Nation's problems.

Today this energy legislation has a tax credit for oil and gas production for marginal wells that will provide an incentive to keep them producing when oil prices drop and provide economic stability to States such as Oklahoma which have many marginal wells. It has royalty relief to encourage energy companies to go and invest in the deep-water drilling that is so essential if we are going to have more production in this country to meet our energy needs.

Mr. Chairman, for these and many other reasons, I strongly encourage my colleagues to support this bill and to vote ''aye'' on final passage.

Mr. HANSEN. Mr. Chairman, I yield 1 minute to the gentleman from Louisiana (Mr. JOHN).

Mr. JOHN. Mr. Chairman, I rise today in support of H.R. 4. Our Nation's future economic prosperity, our national security and our quality of life is all in the hands of what we do today in Congress as it relates to an energy policy.

Americans have been on a roller coaster ride for the last 2 years with historically low prices for oil and natural gas being followed up with price spikes all over the country. We should

not have to wait until the next crisis to put a long-term energy policy in place.

H.R. 4 is a good starting point to start this debate. It represents a balanced effort of expanding our energy supplies while creating incentives to reduce our reliance on fossil fuels. I personally would support a stronger production side in this piece of legislation because it troubles me that over 60 percent of our oil is imported from foreign countries. But I understand and I expect lively debate on some of the issues that we have to deal with.

I will oppose efforts at striking the language dealing with ANWR. I have visited ANWR. I believe we can develop ANWR with the technology that leaves just a small, temporary footprint on the Alaskan north slope.

For the sake of our national economy and security, we cannot continue to deny access to oil exploration on Federal lands.

Mr. RAHALL. Mr. Chairman, I yield the balance of my time to the gentleman from California (Mr. GEORGE MILLER), the former chairman of the Committee on Resources, now the Democratic leader on the Committee on Education and the Workforce.

(Mr. GEORGE MILLER of California asked and was given permission to revise and extend his remarks.)

Mr. GEORGE MILLER of California. Mr. Chairman, I rise in opposition to this legislation.

Mr. Chairman, this legislation is really not about increasing America's energy independence. This legislation is about whether or not the automobile companies can continue to fail to meet their obligations to American society to improve the mileage standards in our automobiles. It is about whether or not the oil companies can find more money by drilling the American Treasury than they can find for drilling oil.

This legislation in the heart of it has a terrible trade-off. It suggests that we go to the Arctic and that we drill in ANWR, in the Arctic National Wildlife Refuge, and then we take that oil and we put it into automobiles in this country to continue to waste it. Seventy percent of our energy in this country, our oil in this country, is used for transportation. Yet the Republicans have continued to put riders on appropriations bills so that we can continue to refuse to improve those automobile CAFE standards, the mileage per gallon standards that can save the American consumer, the American family billions of dollars over the coming years.

Yet at the same time this bill is a raid on the Treasury. We are going to have a royalty holiday for those who drill in the deepwater on the theory that this will get them to drill. Ladies and gentlemen, read the oil and gas journals, read Forbes, read Fortune magazine, read the business journals, read the Wall Street Journal. The Gulf of Mexico is the hottest oil play in the world today. Yet you are going to give them an incentive to go there. You are going to give them an incentive to go there. And you are going to rave about the $5 billion in bonus royalties and bonus bids that you got as a result of this. Yet CBO tells us it is going to cost us $7 billion to get $5 billion. And the losses continue over time.

Keep doing that and you end up with a deficit. Keep doing that and you end up socializing an industry from doing what it is already supposed to be doing and what it is already doing in the marketplace.

This is a very bad bill.

Mr. HANSEN. Mr. Chairman, I yield myself the balance of my time.

Mr. Chairman, it is time to take a long, hard look at what must be done to help our Nation meet its energy needs. It is time to look past the special interest groups, the people who feel they run this Nation, their letter campaigns and political partisanship. This bill is right for the country. ANWR is right for the country. Producing more energy on existing energy sites is right for the country. It is right for American workers who look forward to 735,000 new, high-paying jobs.

Why are these people against American workers? American workers are the greatest people on earth. They work hard, they get their money, they are patriotic Americans. Yet we hear from the other side that they are against these workers. I would hope that every person who looks at this takes care of the American workers.

It is right for American consumers discouraged by wildly fluctuating prices. Look what they paid in their energy bills this year. Every time they drive up to the gas pump, they do not know whether it is 15 cents higher or lower. That should not happen.

It is right for the national security of America because we cannot rely on those we can hardly rely on. That is what we are doing now.

This bill is a bill whose time has come. This is a bill that is necessary for America, so we can stabilize the prices that we have, we can take care of our energy needs, we can take care of our elderly people, and we can take care of the American workers.

That is the point I want to make. What do those folks voting against this have against the American workers? That to me is a critical issue. I would hope they would take that into consideration.

The CHAIRMAN pro tempore (Mr. LINDER). All time for general debate has expired.

Pursuant to the rule, the amendment printed in part A of House Report 107–178 is adopted and the bill, as amended, is considered as the original bill for the purpose of further amendment under the 5-minute rule and is considered read.

The text of H.R. 4, as amended, is as follows:

H.R. 4

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE AND TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the ''Securing America's Future Energy Act of 2001'' or the ''SAFE Act of 2001''.

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

Sec. 1. Short title and table of contents.

DIVISION A

Sec. 100. Short title.

TITLE I—ENERGY CONSERVATION

Subtitle A—Reauthorization of Federal Energy Conservation Programs

Sec. 101. Authorization of appropriations.

Subtitle B—Federal Leadership in Energy Conservation

Sec. 121. Federal facilities and national energy security.
Sec. 122. Enhancement and extension of authority relating to Federal energy savings performance contracts.
Sec. 123. Clarification and enhancement of authority to enter utility incentive programs for energy savings.
Sec. 124. Federal central air conditioner and heat pump efficiency.
Sec. 125. Advanced building efficiency testbed.
Sec. 126. Use of interval data in Federal buildings.
Sec. 127. Review of Energy Savings Performance Contract program.
Sec. 128. Capitol complex.

Subtitle C—State Programs

Sec. 131. Amendments to State energy programs.
Sec. 132. Reauthorization of energy conservation program for schools and hospitals.
Sec. 133. Amendments to Weatherization Assistance Program.
Sec. 134. LIHEAP.
Sec. 135. High performance public buildings.

Subtitle D—Energy Efficiency for Consumer Products

Sec. 141. Energy Star program.
Sec. 142. Labeling of energy efficient appliances.
Sec. 143. Appliance standards.

Subtitle E—Energy Efficient Vehicles

Sec. 151. High occupancy vehicle exception.
Sec. 152. Railroad efficiency.
Sec. 153. Biodiesel fuel use credits.
Sec. 154. Mobile to stationary source trading.

Subtitle F—Other Provisions

Sec. 161. Review of regulations to eliminate barriers to emerging energy technology.
Sec. 162. Advanced idle elimination systems.
Sec. 163. Study of benefits and feasibility of oil bypass filtration technology.
Sec. 164. Gas flare study.
Sec. 165. Telecommuting study.

TITLE II—AUTOMOBILE FUEL ECONOMY

Sec. 201. Average fuel economy standards for nonpassenger automobiles.
Sec. 202. Consideration of prescribing different average fuel economy standards for nonpassenger automobiles.
Sec. 203. Dual fueled automobiles.
Sec. 204. Fuel economy of the Federal fleet of automobiles.
Sec. 205. Hybrid vehicles and alternative vehicles.
Sec. 206. Federal fleet petroleum-based non-alternative fuels.
Sec. 207. Study of feasibility and effects of reducing use of fuel for automobiles.

TITLE III—NUCLEAR ENERGY
Sec. 301. License period.
Sec. 302. Cost recovery from Government agencies.
Sec. 303. Depleted uranium hexafluoride.
Sec. 304. Nuclear Regulatory Commission meetings.
Sec. 305. Cooperative research and development and special demonstration projects for the uranium mining industry.
Sec. 306. Maintenance of a viable domestic uranium conversion industry.
Sec. 307. Paducah decontamination and decommissioning plan.
TITLE IV—HYDROELECTRIC ENERGY
Sec. 401. Alternative conditions and fishways.
Sec. 402. FERC data on hydroelectric licensing.
TITLE V—FUELS
Sec. 601. Tank draining during transition to summertime RFG.
Sec. 602. Gasoline blendstock requirements.
Sec. 603. Boutique fuels.
Sec. 604. Funding for MTBE contamination.
TITLE VI—RENEWABLE ENERGY
Sec. 701. Assessment of renewable energy resources.
Sec. 702. Renewable energy production incentive.
TITLE VII—PIPELINES
Sec. 801. Prohibition on certain pipeline route.
Sec. 802. Historic pipelines.
TITLE VII—MISCELLANEOUS PROVISIONS
Sec. 901. Waste reduction and use of alternatives.
Sec. 902. Annual report on United States energy independence.
Sec. 903. Study of aircraft emissions.
DIVISION B
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Sec. 2002. Findings.
Sec. 2003. Purposes.
Sec. 2004. Goals.
Sec. 2005. Definitions.
Sec. 2006. Authorizations.
Sec. 2007. Balance of funding priorities.
TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY
Subtitle A—Alternative Fuel Vehicles
Sec. 2101. Short title.
Sec. 2102. Definitions.
Sec. 2103. Pilot program.
Sec. 2104. Reports to Congress.
Sec. 2105. Authorization of appropriations.
Subtitle B—Distributed Power Hybrid Energy Systems
Sec. 2121. Findings.
Sec. 2122. Definitions.
Sec. 2123. Strategy.
Sec. 2124. High power density industry program.
Sec. 2125. Micro-cogeneration energy technology.
Sec. 2126. Program plan.
Sec. 2127. Report.
Sec. 2128. Voluntary consensus standards.
Subtitle C—Secondary Electric Vehicle Battery Use
Sec. 2131. Definitions.
Sec. 2132. Establishment of secondary electric vehicle battery use program.
Sec. 2133. Authorization of appropriations.
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Sec. 2141. Short title.
Sec. 2142. Establishment of pilot program.
Sec. 2143. Fuel cell bus development and demonstration program.
Sec. 2144. Authorization of appropriations.
Subtitle E—Next Generation Lighting Initiative
Sec. 2151. Short title.
Sec. 2152. Definition.
Sec. 2153. Next Generation Lighting Initiative.
Sec. 2154. Study.
Sec. 2155. Grant program.
Subtitle F—Department of Energy Authorization of Appropriations
Sec. 2161. Authorization of appropriations.
Subtitle G—Environmental Protection Agency Office of Air and Radiation Authorization of Appropriations
Sec. 2171. Short title.
Sec. 2172. Authorization of appropriations.
Sec. 2173. Limits on use of funds.
Sec. 2174. Cost sharing.
Sec. 2175. Limitation on demonstration and commercial applications of energy technology.
Sec. 2176. Reprogramming.
Sec. 2177. Budget request format.
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Sec. 2181. National Building Performance Initiative.
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Sec. 2201. Short title.
Sec. 2202. Purposes.
Sec. 2203. Definitions.
Sec. 2204. Reports to Congress.
Sec. 2205. Hydrogen research and development.
Sec. 2206. Demonstrations.
Sec. 2207. Technology transfer.
Sec. 2208. Coordination and consultation.
Sec. 2209. Advisory Committee.
Sec. 2210. Authorization of appropriations.
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Subtitle B—Bioenergy
Sec. 2221. Short title.
Sec. 2222. Findings.
Sec. 2223. Definitions.
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Subtitle C—Transmission Infrastructure Systems
Sec. 2241. Transmission infrastructure systems research, development, demonstration, and commercial application.
Sec. 2242. Program plan.
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Subtitle D—Department of Energy Authorization of Appropriations
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TITLE III—NUCLEAR ENERGY
Subtitle A—University Nuclear Science and Engineering
Sec. 2301. Short title.
Sec. 2302. Findings.
Sec. 2303. Department of Energy program.
Sec. 2304. Authorization of appropriations.
Subtitle B—Advanced Fuel Recycling Technology Research and Development Program
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Subtitle B—Oil and Gas
Sec. 2421. Petroleum-oil technology.
Sec. 2422. Gas.
Subtitle C—Ultra-Deepwater and Unconventional Drilling
Sec. 2441. Short title.
Sec. 2442. Definitions.
Sec. 2443. Ultra-deepwater program.
Sec. 2444. National Energy Technology Laboratory.
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Sec. 2446. Research Organization.
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Subtitle A—Fusion Energy Sciences
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Sec. 2542. Facility and infrastructure support for nonmilitary energy laboratories.
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Subtitle D—Advisory Panel on Office of Science
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Subtitle E—Department of Energy Authorization of Appropriations
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Sec. 2601. Research, development, demonstration, and commercial application of energy technology programs, projects, and activities.
Sec. 2602. Limits on use of funds.
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Sec. 2605. Reprogramming.
Subtitle B—Other Miscellaneous Provisions
Sec. 2611. Notice of reorganization.
Sec. 2612. Limits on general plant projects.
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Sec. 2614. Authority for conceptual and construction design.
Sec. 2615. National Energy Policy Development Group mandated reports.
Sec. 2616. Periodic reviews and assessments.
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Sec. 3101. Credit for residential solar energy property.
Sec. 3102. Extension and expansion of credit for electricity produced from renewable resources.
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Sec. 3104. Alternative motor vehicle credit.
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Sec. 3106. Modification of credit for qualified electric vehicles.
Sec. 3107. Tax credit for energy efficient appliances.
Sec. 3108. Credit for energy efficiency improvements to existing homes.
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Sec. 3110. Allowance of deduction for energy efficient commercial building property.
Sec. 3111. Allowance of deduction for qualified energy management devices and retrofitted qualified meters.
Sec. 3112. 3-year applicable recovery period for depreciation of qualified energy management devices.
Sec. 3113. Energy credit for combined heat and power system property.
Sec. 3114. New nonrefundable personal credits allowed against regular and minimum taxes.
Sec. 3115. Phaseout of 4.3-cent motor fuel excise taxes on railroads and inland waterway transportation which remain in general fund.
Sec. 3116. Reduced motor fuel excise tax on certain mixtures of diesel fuel.
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Sec. 3201. Natural gas gathering lines treated as 7-year property.
Sec. 3202. Natural gas distribution lines treated as 10-year property.
Sec. 3203. Petroleum refining property treated as 7-year property.
Sec. 3204. Expensing of capital costs incurred in complying with environmental protection agency sulfur regulations.
Sec. 3205. Environmental tax credit.
Sec. 3206. Determination of small refiner exception to oil depletion deduction.
Sec. 3207. Tax-exempt bond financing of certain electric facilities.
Sec. 3208. Sales or dispositions to implement Federal Energy Regulatory Commission or State electric restructuring policy.
Sec. 3209. Distributions of stock to implement Federal Energy Regulatory Commission or State electric restructuring policy.
Sec. 3210. Modifications to special rules for nuclear decommissioning costs.
Sec. 3211. Treatment of certain income of cooperatives.
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Sec. 3213. Arbitrage rules not to apply to prepayments for natural gas.

TITLE III—PRODUCTION

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Sec. 3304. Election to expense geological and geophysical expenditures.
Sec. 3305. 5-year net operating loss carryback for losses attributable to operating mineral interests of oil and gas producers.
Sec. 3306. Extension and modification of credit for producing fuel from a nonconventional source.
Sec. 3307. Business related energy credits allowed against regular and minimum tax.
Sec. 3308. Temporary repeal of alternative minimum tax preference for intangible drilling costs.
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Sec. 3310. Extension of certain benefits for energy-related businesses on Indian reservations.

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Sec. 4101. Capacity building for energy-efficient, affordable housing.
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Sec. 5002. Definitions.
Sec. 5003. Clean coal power initiative.
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Sec. 6101. Study of existing rights-of-way on Federal lands to determine capability to support new pipelines or other transmission facilities.
Sec. 6102. Inventory of energy production potential of all Federal public lands.
Sec. 6103. Review of regulations to eliminate barriers to emerging energy technology.
Sec. 6104. Interagency agreement on environmental review of interstate natural gas pipeline projects.
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Sec. 6204. Analysis of Gulf of Mexico field size distribution, international competitiveness, and incentives for development.

Subtitle B—Improvements to Federal Oil and Gas Management

Sec. 6221. Short title.
Sec. 6222. Study of impediments to efficient lease operations.
Sec. 6223. Elimination of unwarranted denials and stays.
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Sec. 6231. Offshore subsalt development.
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TITLE III—GEOTHERMAL ENERGY DEVELOPMENT

Sec. 6301. Royalty reduction and relief.
Sec. 6302. Exemption from royalties for direct use of low temperature geothermal energy resources.
Sec. 6303. Amendments relating to leasing on Forest Service lands.
Sec. 6304. Deadline for determination on pending noncompetitive lease applications.
Sec. 6305. Opening of public lands under military jurisdiction.
Sec. 6306. Application of amendments.
Sec. 6307. Review and report to Congress.
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TITLE IV—HYDROPOWER

Sec. 6401. Study and report on increasing electric power production capability of existing facilities.
Sec. 6402. Installation of powerformer at Folsom power plant, California.
Sec. 6403. Study and implementation of increased operational efficiencies in hydroelectric power projects.
Sec. 6404. Shift of project loads to off-peak periods.

TITLE V—ARCTIC COASTAL PLAIN DOMESTIC ENERGY

Sec. 6501. Short title.
Sec. 6502. Definitions.
Sec. 6503. Leasing program for lands within the Coastal Plain.
Sec. 6504. Lease sales.
Sec. 6505. Grant of leases by the Secretary.
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Sec. 6508. Expedited judicial review.
Sec. 6509. Rights-of-way across the Coastal Plain.
Sec. 6510. Conveyance.
Sec. 6511. Local government impact aid and community service assistance.
Sec. 6512. Revenue allocation.

TITLE VI—CONSERVATION OF ENERGY BY THE DEPARTMENT OF THE INTERIOR

Sec. 6601. Energy conservation by the Department of the Interior.

TITLE VII—COAL

Sec. 6701. Limitation on fees with respect to coal lease applications and documents.
Sec. 6702. Mining plans.
Sec. 6703. Payment of advance royalties under coal leases.
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TITLE VIII—INSULAR AREAS ENERGY SECURITY

Sec. 6801. Insular areas energy security.

DIVISION A

SEC. 100. SHORT TITLE.

This division may be cited as the ''Energy Advancement and Conservation Act of 2001''.

TITLE I—ENERGY CONSERVATION

Subtitle A—Reauthorization of Federal Energy Conservation Programs

SEC. 101. AUTHORIZATION OF APPROPRIATIONS.

Section 660 of the Department of Energy Organization Act (42 U.S.C. 7270) is amended as follows:

(1) By inserting ''(a)'' before ''Appropriations''.

(2) By inserting at the end the following new subsection:

''(b) There are hereby authorized to be appropriated to the Department of Energy for fiscal year 2002, $950,000,000; for fiscal year 2003, $1,000,000,000; for fiscal year 2004, $1,050,000,000; for fiscal year 2005, $1,100,000,000; and for fiscal year 2006, $1,150,000,000, to carry out energy efficiency activities under the following laws, such sums to remain available until expended:

''(1) Energy Policy and Conservation Act, including section 256(d)(42 U.S.C. 6276(d)) (promote export of energy efficient products), sections 321 through 346 (42 U.S.C. 6291–6317) (appliances program).

''(2) Energy Conservation and Production Act, including sections 301 through 308 (42 U.S.C. 6831–6837) (energy conservation standards for new buildings).

''(3) National Energy Conservation Policy Act, including sections 541–551 (42 U.S.C. 8251–8259) (Federal Energy Management Program).

''(4) Energy Policy Act of 1992, including sections 103 (42 U.S.C. 13458) (energy efficient lighting and building centers), 121 (42 U.S.C. 6292 note) (energy efficiency labeling for windows and window systems), 125 (42 U.S.C. 6292 note) (energy efficiency information for commercial office equipment), 126 (42 U.S.C. 6292 note) (energy efficiency information for luminaires), 131 (42 U.S.C. 6348) (energy efficiency in industrial facilities), and 132 (42 U.S.C. 6349) (process-oriented industrial energy efficiency).''.

Subtitle B—Federal Leadership in Energy Conservation

SEC. 121. FEDERAL FACILITIES AND NATIONAL ENERGY SECURITY.

(a) PURPOSE.—Section 542 of the National Energy Conservation Policy Act (42 U.S.C. 8252) is amended by inserting '', and generally to promote the production, supply, and marketing of energy efficiency products and services and the production, supply, and marketing of unconventional and renewable energy resources'' after ''by the Federal Government''.

(b) ENERGY MANAGEMENT REQUIREMENTS.—Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is amended as follows:

(1) In subsection (a)(1), by striking ''during the fiscal year 1995'' and all that follows through the end and inserting ''during—

''(1) fiscal year 1995 is at least 10 percent;

''(2) fiscal year 2000 is at least 20 percent;

''(3) fiscal year 2005 is at least 30 percent;

''(4) fiscal year 2010 is at least 35 percent;

''(5) fiscal year 2015 is at least 40 percent; and

''(6) fiscal year 2020 is at least 45 percent,

less than the energy consumption per gross square foot of its Federal buildings in use during fiscal year 1985. To achieve the reductions required by this paragraph, an agency shall make maximum practicable use of energy efficiency products and services and unconventional and renewable energy resources, using guidelines issued by the Secretary under subsection (d) of this section.''.

(2) In subsection (d), by inserting ''Such guidelines shall include appropriate model technical standards for energy efficiency and unconventional and renewable energy resources products and services. Such standards shall reflect, to the extent practicable, evaluation of both currently marketed and potentially marketable products and services that could be used by agencies to improve energy efficiency and increase unconventional and renewable energy resources.'' after ''implementation of this part.''.

(3) By adding at the end the following new subsection:

''(e) STUDIES.—To assist in developing the guidelines issued by the Secretary under subsection (d) and in furtherance of the purposes of this section, the Secretary shall conduct studies to identify and encourage the production and marketing of energy efficiency products and services and unconventional and renewable energy resources. To conduct such studies, and to provide grants to accelerate the use of unconventional and renewable energy, there are authorized to be appropriated to the Secretary $20,000,000 for each of the fiscal years 2003 through 2010.''.

(c) DEFINITION.—Section 551 of the National Energy Conservation Policy Act (42 U.S.C. 8259) is amended as follows:

(1) By striking ''and'' at the end of paragraph (8).

(2) By striking the period at the end of paragraph (9) and inserting ''; and''.

(3) By adding at the end the following new paragraph:

''(10) the term 'unconventional and renewable energy resources' includes renewable energy sources, hydrogen, fuel cells, cogeneration, combined heat and power, heat recovery (including by use of a Stirling heat engine), and distributed generation.''.

(d) EXCLUSIONS FROM REQUIREMENT.—The National Energy Conservation Policy Act (42 U.S.C. 7201 and following) is amended as follows:

(1) In section 543(a)—

(A) by striking ''(1) Subject to paragraph (2)'' and inserting ''Subject to subsection (c)''; and

(B) by striking ''(2) An agency'' and all that follows through ''such exclusion.''.

(2) By amending subsection (c) of such section 543 to read as follows:

''(c) EXCLUSIONS.—(1) A Federal building may be excluded from the requirements of subsections (a) and (b) only if—

''(A) the President declares the building to require exclusion for national security reasons; and

''(B) the agency responsible for the building has—

''(i) completed and submitted all federally required energy management reports; and

''(ii) achieved compliance with the energy efficiency requirements of this Act, the Energy Policy Act of 1992, Executive Orders, and other Federal law;

''(iii) implemented all practical, life cycle cost-effective projects in the excluded building.

''(2) The President shall only declare buildings described in paragraph (1)(A) to be excluded, not ancillary or nearby facilities that are not in themselves national security facilities.''.

(3) In section 548(b)(1)(A)—

(A) by striking ''copy of the''; and

(B) by striking ''sections 543(a)(2) and 543(c)(3)'' and inserting ''section 543(c)''.

(e) ACQUISITION REQUIREMENT.—Section 543(b) of such Act is amended—

(1) in paragraph (1), by striking ''(1) Not'' and inserting ''(1) Except as provided in paragraph (5), not''; and

(2) by adding at the end the following new paragraph:

''(5)(A)(i) Agencies shall select only Energy Star products when available when acquiring energy-using products. For product groups where Energy Star labels are not yet available, agencies shall select products that are in the upper 25 percent of energy efficiency as designated by FEMP. In the case of electric motors of 1 to 500 horsepower, agencies shall select only premium efficiency motors that meet a standard designated by the Secretary, and shall replace (not rewind) failed motors with motors meeting such standard. The Secretary shall designate such standard within 90 days of enactment of paragraph, after considering recommendations by the National Electrical Manufacturers Association. The Secretary of Energy shall develop guidelines within 180 days after the enactment of this paragraph for exemptions to this section when equivalent products do not exist, are impractical, or do not meet the agency mission requirements.

''(ii) The Administrator of the General Services Administration and the Secretary of Defense (acting through the Defense Logistics Agency), with assistance from the Administrator of the Environmental Protection Agency and the Secretary of Energy, shall create clear catalogue listings that designate Energy Star products in both print and electronic formats. After any existing federal inventories are exhausted, Administrator of the General Services Administration and the Secretary of Defense (acting through the Defense Logistics Agency) shall only replace inventories with energy-using products that are Energy Star, products that are rated in the top 25 percent of energy efficiency, or products that are exempted as designated by FEMP and defined in clause (i).

''(iii) Agencies shall incorporate energy-efficient criteria consistent with Energy Star and other FEMP designated energy efficiency levels into all guide specifications and project specifications developed for new construction and renovation, as well as into product specification language developed for Basic Ordering Agreements, Blanket Purchasing Agreements, Government Wide Acquisition Contracts, and all other purchasing procedures.

''(iv) The legislative branch shall be subject to this subparagraph to the same extent and in the same manner as are the Federal agencies referred to in section 521(1).

''(B) Not later than 6 months after the date of the enactment of this paragraph, the Secretary of Energy shall establish guidelines defining the circumstances under which an agency shall not be required to comply with subparagraph (A). Such circumstances may include the absence of Energy Star products, systems, or designs that serve the purpose of the agency, issues relating to the compatibility of a product, system, or design with existing buildings or equipment, and excessive cost compared to other available and appropriate products, systems, or designs.

''(C) Subparagraph (A) shall apply to agency acquisitions occurring on or after October 1, 2002.''.

(f) METERING.—Section 543 of such Act (42 U.S.C. 8254) is amended by adding at the end the following new subsection:

''(f) METERING.—(1) By October 1, 2004, all Federal buildings including buildings owned by the legislative branch and the Federal court system and other energy-using structures shall be metered or submetered in accordance with guidelines established by the Secretary under paragraph (2).

''(2) Not later than 6 months after the date of the enactment of this subsection, the Secretary, in consultation with the General Services Administration and representatives from the metering industry, energy services industry, national laboratories, colleges of higher education, and federal facilities energy managers, shall establish guidelines for agencies to carry out paragraph (1). Such guidelines shall take into consideration each of the following:

''(A) Cost.

''(B) Resources, including personnel, required to maintain, interpret, and report on data so that the meters are continually reviewed.

''(C) Energy management potential.

''(D) Energy savings.

''(E) Utility contract aggregation.

''(F) Savings from operations and maintenance.

''(3) A building shall be exempt from the requirement of this section to the extent that compliance is deemed impractical by the Secretary. A finding of impracticability

shall be based on the same factors as identified in subsection (c) of this section.''.

(g) RETENTION OF ENERGY SAVINGS.—Section 546 of such Act (42 U.S.C. 8256) is amended by adding at the end the following new subsection:

''(e) RETENTION OF ENERGY SAVINGS.—An agency may retain any funds appropriated to that agency for energy expenditures, at buildings subject to the requirements of section 543(a) and (b), that are not made because of energy savings. Except as otherwise provided by law, such funds may be used only for energy efficiency or unconventional and renewable energy resources projects.''.

(h) REPORTS.—Section 548 of such Act (42 U.S.C. 8258) is amended as follows:

(1) In subsection (a)—

(A) by inserting ''in accordance with guidelines established by and'' after ''to the Secretary,'';

(B) by striking ''and'' at the end of paragraph (1);

(C) by striking the period at the end of paragraph (2) and inserting a semicolon; and

(D) by adding at the end the following new paragraph:

''(3) an energy emergency response plan developed by the agency.''.

(2) In subsection (b)—

(A) by striking ''and'' at the end of paragraph (3);

(B) by striking the period at the end of paragraph (4) and inserting ''; and''; and

(C) by adding at the end the following new paragraph:

''(5) all information transmitted to the Secretary under subsection (a).''.

(3) By amending subsection (c) to read as follows:

''(c) AGENCY REPORTS TO CONGRESS.—Each agency shall annually report to the Congress, as part of the agency's annual budget request, on all of the agency's activities implementing any Federal energy management requirement.''.

(i) INSPECTOR GENERAL ENERGY AUDITS.—Section 160(c) of the Energy Policy Act of 1992 (42 U.S.C. 8262f(c)) is amended by striking ''is encouraged to conduct periodic'' and inserting ''shall conduct periodic''.

(j) FEDERAL ENERGY MANAGEMENT REVIEWS.—Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is amended by adding at the end the following:

''(g) PRIORITY RESPONSE REVIEWS.—Each agency shall—

''(1) not later than 9 months after the date of the enactment of this subsection, undertake a comprehensive review of all practicable measures for—

''(A) increasing energy and water conservation, and

''(B) using renewable energy sources; and

''(2) not later than 180 days after completing the review, develop plans to achieve not less than 50 percent of the potential efficiency and renewable savings identified in the review.

The agency shall implement such measures as soon thereafter as is practicable, consistent with compliance with the requirements of this section.''.

SEC. 122. ENHANCEMENT AND EXTENSION OF AUTHORITY RELATING TO FEDERAL ENERGY SAVINGS PERFORMANCE CONTRACTS.

(a) COST SAVINGS FROM OPERATION AND MAINTENANCE EFFICIENCIES IN REPLACEMENT FACILITIES.—Section 801(a) of the National Energy Conservation Policy Act (42 U.S.C. 8287(a)) is amended by adding at the end the following new paragraph:

''(3)(A) In the case of an energy savings contract or energy savings performance contract providing for energy savings through the construction and operation of one or more buildings or facilities to replace one or more existing buildings or facilities, benefits ancillary to the purpose of such contract under paragraph (1) may include savings resulting from reduced costs of operation and maintenance at such replacement buildings or facilities when compared with costs of operation and maintenance at the buildings or facilities being replaced, established through a methodology set forth in the contract.

''(B) Notwithstanding paragraph (2)(B), aggregate annual payments by an agency under an energy savings contract or energy savings performance contract referred to in subparagraph (A) may take into account (through the procedures developed pursuant to this section) savings resulting from reduced costs of operation and maintenance as described in that subparagraph.''.

(b) EXPANSION OF DEFINITION OF ENERGY SAVINGS TO INCLUDE WATER AND REPLACEMENT FACILITIES.—

(1) ENERGY SAVINGS.—Section 804(2) of the National Energy Conservation Policy Act (42 U.S.C. 8287c(2)) is amended to read as follows:

''(2)(A) The term 'energy savings' means a reduction in the cost of energy or water, from a base cost established through a methodology set forth in the contract, used in an existing federally owned building or buildings or other federally owned facilities as a result of—

''(i) the lease or purchase of operating equipment, improvements, altered operation and maintenance, or technical services;

''(ii) the increased efficient use of existing energy sources by solar and ground source geothermal resources, cogeneration or heat recovery (including by the use of a Stirling heat engine), excluding any cogeneration process for other than a federally owned building or buildings or other federally owned facilities; or

''(iii) the increased efficient use of existing water sources.

''(B) The term 'energy savings' also means, in the case of a replacement building or facility described in section 801(a)(3), a reduction in the cost of energy, from a base cost established through a methodology set forth in the contract, that would otherwise be utilized in one or more existing federally owned buildings or other federally owned facilities by reason of the construction and operation of the replacement building or facility.''.

(2) ENERGY SAVINGS CONTRACT.—Section 804(3) of the National Energy Conservation Policy Act (42 U.S.C. 8287c(3)) is amended to read as follows:

''(3) The terms 'energy savings contract' and 'energy savings performance contract' mean a contract which provides for—

''(A) the performance of services for the design, acquisition, installation, testing, operation, and, where appropriate, maintenance and repair, of an identified energy or water conservation measure or series of measures at one or more locations; or

''(B) energy savings through the construction and operation of one or more buildings or facilities to replace one or more existing buildings or facilities.''.

(3) ENERGY OR WATER CONSERVATION MEASURE.—Section 804(4) of the National Energy Conservation Policy Act (42 U.S.C. 8287c(4)) is amended to read as follows:

''(4) The term 'energy or water conservation measure' means—

''(A) an energy conservation measure, as defined in section 551(4) (42 U.S.C. 8259(4)); or

''(B) a water conservation measure that improves water efficiency, is life cycle cost effective, and involves water conservation, water recycling or reuse, improvements in operation or maintenance efficiencies, retrofit activities, or other related activities, not at a Federal hydroelectric facility.''.

(4) CONFORMING AMENDMENT.—Section 801(a)(2)(C) of the National Energy Conservation Policy Act (42 U.S.C. 8287(a)(2)(C)) is amended by inserting ''or water'' after ''financing energy''.

(c) EXTENSION OF AUTHORITY.—Section 801(c) of the National Energy Conservation Policy Act (42 U.S.C. 8287(c)) is repealed.

(d) CONTRACTING AND AUDITING.—Section 801(a)(2) of the National Energy Conservation Policy Act (42 U.S.C. 8287(a)(2)) is amended by adding at the end the following new subparagraph:

''(E) A Federal agency shall engage in contracting and auditing to implement energy savings performance contracts as necessary and appropriate to ensure compliance with the requirements of this Act, particularly the energy efficiency requirements of section 543.''.

SEC. 123. CLARIFICATION AND ENHANCEMENT OF AUTHORITY TO ENTER UTILITY INCENTIVE PROGRAMS FOR ENERGY SAVINGS.

Section 546(c) of the National Energy Conservation Policy Act (42 U.S.C. 8256(c)) is amended as follows:

(1) In paragraph (3) by adding at the end the following: ''Such a utility incentive program may include a contract or contract term designed to provide for cost-effective electricity demand management, energy efficiency, or water conservation.''.

(2) By adding at the end of the following new paragraphs:

''(6) A utility incentive program may include a contract or contract term for a reduction in the energy, from a base cost established through a methodology set forth in such a contract, that would otherwise be utilized in one or more federally owned buildings or other federally owned facilities by reason of the construction or operation of one or more replacement buildings or facilities, as well as benefits ancillary to the purpose of such contract or contract term, including savings resulting from reduced costs of operation and maintenance at new or additional buildings or facilities when compared with the costs of operation and maintenance at existing buildings or facilities.

''(7) Federal agencies are encouraged to participate in State or regional demand side reduction programs, including those operated by wholesale market institutions such as independent system operators, regional transmission organizations and other entities. The availability of such programs, and the savings resulting from such participation, should be included in the evaluation of energy options for Federal facilities.''.

SEC. 124. FEDERAL CENTRAL AIR CONDITIONER AND HEAT PUMP EFFICIENCY.

(a) REQUIREMENT.—Federal agencies shall be required to acquire central air conditioners and heat pumps that meet or exceed the standards established under subsection (b) or (c) in the case of all central air conditioners and heat pumps acquired after the date of enactment of this Act.

(b) STANDARDS.—The standards referred to in subsection (a) are the following:

(1) For air-cooled air conditioners with cooling capacities of less than 65,000 Btu/hour, a Seasonal Energy Efficiency Ratio of 12.0.

(2) For air-source heat pumps with cooling capacities less than 65,000 Btu/hour, a Seasonal Energy Efficiency Ratio of 12 SEER, and a Heating Seasonal Performance Factor of 7.4.

(c) MODIFIED STANDARDS.—The Secretary of Energy may establish, after appropriate notice and comment, revised standards providing for reduced energy consumption or increased energy efficiency of central air conditioners and heat pumps acquired by the Federal Government, but may not establish standards less rigorous than those established by subsection (b).

(d) DEFINITIONS.—For purposes of this section, the terms ''Energy Efficiency Ratio'', ''Seasonal Energy Efficiency Ratio'', ''Heating Seasonal Performance Factor'', and ''Coefficient of Performance'' have the meanings used for those terms in Appendix M to Subpart B of Part 430 of title 10 of the Code of Federal Regulations, as in effect on May 24, 2001.

(e) EXEMPTIONS.—An agency shall be exempt from the requirements of this section with respect to air conditioner or heat pump purchases for particular uses where the agency head determines that purchase of a air conditioner or heat pump for such use would be impractical. A finding of impracticability shall be based on whether—

(1) the energy savings pay-back period for such purchase would be less than 10 years;

(2) space constraints or other technical factors would make compliance with this section cost-prohibitive; or

(3) in the case of the Departments of Defense and Energy, compliance with this section would be inconsistent with the proper discharge of national security functions.

SEC. 125. ADVANCED BUILDING EFFICIENCY TESTBED.

(a) ESTABLISHMENT.—The Secretary of Energy shall establish an Advanced Building Efficiency Testbed program for the development, testing, and demonstration of advanced engineering systems, components, and materials to enable innovations in building technologies. The program shall evaluate government and industry building efficiency concepts, and demonstrate the ability of next generation buildings to support individual and organizational productivity and health as well as flexibility and technological change to improve environmental sustainability.

(b) PARTICIPANTS.—The program established under subsection (a) shall be led by a university having demonstrated experience with the application of intelligent workplaces and advanced building systems in improving the quality of built environments. Such university shall also have the ability to combine the expertise from more than 12 academic fields, including electrical and computer engineering, computer science, architecture, urban design, and environmental and mechanical engineering. Such university shall partner with other universities and entities who have established programs and the capability of advancing innovative building efficiency technologies.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Energy to carry out this section $18,000,000 for fiscal year 2002, to remain available until expended, of which $6,000,000 shall be provided to the lead university described in subsection (b), and the remainder shall be provided equally to each of the other participants referred to in subsection (b).

SEC. 126. USE OF INTERVAL DATA IN FEDERAL BUILDINGS.

Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is amended by adding at the end the following new subsection:

''(h) USE OF INTERVAL DATA IN FEDERAL BUILDINGS.—Not later than January 1, 2003, each agency shall utilize, to the maximum extent practicable, for the purposes of efficient use of energy and reduction in the cost of electricity consumed in its Federal buildings, interval consumption data that measure on a real time or daily basis consumption of electricity in its Federal buildings. To meet the requirements of this subsection each agency shall prepare and submit at the earliest opportunity pursuant to section 548(a) to the Secretary, a plan describing how the agency intends to meet such requirements, including how it will designate personnel primarily responsible for achieving such requirements, and otherwise implement this subsection.''.

SEC. 127. REVIEW OF ENERGY SAVINGS PERFORMANCE CONTRACT PROGRAM.

Within 180 days after the date of the enactment of this Act, the Secretary of Energy shall complete a review of the Energy Savings Performance Contract program to identify statutory, regulatory, and administrative obstacles that prevent Federal agencies from fully utilizing the program. In addition, this review shall identify all areas for increasing program flexibility and effectiveness, including audit and measurement verification requirements, accounting for energy use in determining savings, contracting requirements, and energy efficiency services covered. The Secretary shall report these findings to the Committee on Energy and Commerce of the House of Representatives and the Committee on Energy and Natural Resources of the Senate, and shall implement identified administrative and regulatory changes to increase program flexibility and effectiveness to the extent that such changes are consistent with statutory authority.

SEC. 128. CAPITOL COMPLEX.

(a) ENERGY INFRASTRUCTURE.—The Architect of the Capitol, building on the Master Plan Study completed in July 2000, shall commission a study to evaluate the energy infrastructure of the Capital Complex to determine how the infrastructure could be augmented to become more energy efficient, using unconventional and renewable energy resources, in a way that would enable the Complex to have reliable utility service in the event of power fluctuations, shortages, or outages.

(b) AUTHORIZATION.—There is authorized to be appropriated to the Architect of the Capitol to carry out this section, not more than $2,000,000 for fiscal years after the enactment of this Act.

Subtitle C—State Programs

SEC. 131. AMENDMENTS TO STATE ENERGY PROGRAMS.

(a) STATE ENERGY CONSERVATION PLANS.—Section 362 of the Energy Policy and Conservation Act (42 U.S.C. 6322) is amended by inserting at the end the following new subsection:

''(g) The Secretary shall, at least once every three years, invite the Governor of each State to review and, if necessary, revise the energy conservation plan of such State submitted under subsection (b) or (e). Such reviews should consider the energy conservation plans of other States within the region, and identify opportunities and actions carried out in pursuit of common energy conservation goals.''.

(b) STATE ENERGY EFFICIENCY GOALS.—Section 364 of the Energy Policy and Conservation Act (42 U.S.C. 6324) is amended by inserting ''Each State energy conservation plan with respect to which assistance is made available under this part on or after the date of the enactment of Energy Advancement and Conservation Act of 2001, shall contain a goal, consisting of an improvement of 25 percent or more in the efficiency of use of energy in the State concerned in the calendar year 2010 as compared to the calendar year 1990, and may contain interim goals.'' after ''contain interim goals.''.

(c) AUTHORIZATION OF APPROPRIATIONS.—Section 365(f) of the Energy Policy and Conservation Act (42 U.S.C. 6325(f)) is amended by striking ''for fiscal years 1999 through 2003 such sums as may be necessary'' and inserting ''$75,000,000 for fiscal year 2002, $100,000,000 for fiscal years 2003 and 2004, $125,000,000 for fiscal year 2005''.

SEC. 132. REAUTHORIZATION OF ENERGY CONSERVATION PROGRAM FOR SCHOOLS AND HOSPITALS.

Section 397 of the Energy Policy and Conservation Act (42 U.S.C. 6371f) is amended by striking ''2003'' and inserting ''2010''.

SEC. 133. AMENDMENTS TO WEATHERIZATION ASSISTANCE PROGRAM.

Section 422 of the Energy Conservation and Production Act (42 U.S.C. 6872) is amended by striking ''for fiscal years 1999 through 2003 such sums as may be necessary'' and inserting ''$273,000,000 for fiscal year 2002, $325,000,000 for fiscal year 2003, $400,000,000 for fiscal year 2004, and $500,000,000 for fiscal year 2005''.

SEC. 134. LIHEAP.

(a) AUTHORIZATION OF APPROPRIATIONS.—Section 2602(b) of the Low-Income Home Energy Assistance Act of 1981 (42 U.S.C. 8621(b)) is amended by striking the first sentence and inserting the following: ''There are authorized to be appropriated to carry out the provisions of this title (other than section 2607A), $3,400,000,000 for each of fiscal years 2001 through 2005.''.

(b) GAO STUDY.—The Comptroller General of the United States shall conduct a study to determine—

(1) the extent to which Low-Income Home Energy Assistance (LIHEAP) and other government energy subsidies paid to consumers discourage energy conservation and energy efficiency investments; and

(2) the extent to which the goals of conservation and assistance for low income households could be simultaneously achieved through cash income supplements that do not specifically target energy, thereby maintaining incentives for wise use of expensive forms of energy, or through other means.

SEC. 135. HIGH PERFORMANCE PUBLIC BUILDINGS.

(a) PROGRAM ESTABLISHMENT AND ADMINISTRATION.—

(1) ESTABLISHMENT.—There is established in the Department of Energy the High Performance Public Buildings Program (in this section referred to as the ''Program'').

(2) IN GENERAL.—The Secretary of Energy may, through the Program, make grants—

(A) to assist units of local government in the production, through construction or renovation of buildings and facilities they own and operate, of high performance public buildings and facilities that are healthful, productive, energy efficient, and environmentally sound;

(B) to State energy offices to administer the program of assistance to units of local government pursuant to this section; and

(C) to State energy offices to promote participation by units of local government in the Program.

(3) GRANTS TO ASSIST UNITS OF LOCAL GOVERNMENT.—Grants under paragraph (2)(A) for new public buildings shall be used to achieve energy efficiency performance that reduces energy use at least 30 percent below that of a public building constructed in compliance with standards prescribed in Chapter 8 of the 2000 International Energy Conservation Code, or a similar State code intended to achieve substantially equivalent results. Grants under paragraph (2)(A) for existing public buildings shall be used to achieve energy efficiency performance that reduces energy use below the public building baseline consumption, assuming a 3-year, weather-normalized average for calculating such baseline. Grants under paragraph (2)(A) shall be made to units of local government that have—

(A) demonstrated a need for such grants in order to respond appropriately to increasing

population or to make major investments in renovation of public buildings; and

(B) made a commitment to use the grant funds to develop high performance public buildings in accordance with a plan developed and approved pursuant to paragraph (5)(A).

(4) OTHER GRANTS.—

(A) GRANTS FOR ADMINISTRATION.—Grants under paragraph (2)(B) shall be used to evaluate compliance by units of local government with the requirements of this section, and in addition may be used for—

(i) distributing information and materials to clearly define and promote the development of high performance public buildings for both new and existing facilities;

(ii) organizing and conducting programs for local government personnel, architects, engineers, and others to advance the concepts of high performance public buildings;

(iii) obtaining technical services and assistance in planning and designing high performance public buildings; and

(iv) collecting and monitoring data and information pertaining to the high performance public building projects.

(B) GRANTS TO PROMOTE PARTICIPATION.—Grants under paragraph (2)(C) may be used for promotional and marketing activities, including facilitating private and public financing, promoting the use of energy service companies, working with public building users, and communities, and coordinating public benefit programs.

(5) IMPLEMENTATION.—

(A) PLANS.—A grant under paragraph (2)(A) shall be provided only to a unit of local government that, in consultation with its State office of energy, has developed a plan that the State energy office determines to be feasible and appropriate in order to achieve the purposes for which such grants are made.

(B) SUPPLEMENTING GRANT FUNDS.—State energy offices shall encourage qualifying units of local government to supplement their grant funds with funds from other sources in the implementation of their plans.

(b) ALLOCATION OF FUNDS.—

(1) IN GENERAL.—Except as provided in paragraph (3), funds appropriated to carry out this section shall be provided to State energy offices.

(2) PURPOSES.—Except as provided in paragraph (3), funds appropriated to carry out this section shall be allocated as follows:

(A) Seventy percent shall be used to make grants under subsection (a)(2)(A).

(B) Fifteen percent shall be used to make grants under subsection (a)(2)(B).

(C) Fifteen percent shall be used to make grants under subsection (a)(2)(C).

(3) OTHER FUNDS.—The Secretary of Energy may retain not to exceed $300,000 per year from amounts appropriated under subsection (c) to assist State energy offices in coordinating and implementing the Program. Such funds may be used to develop reference materials to further define the principles and criteria to achieve high performance public buildings.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Energy to carry out this section such sums as may be necessary for each of the fiscal years 2002 through 2010.

(d) REPORT TO CONGRESS.—The Secretary of Energy shall conduct a biennial review of State actions implementing this section, and the Secretary shall report to Congress on the results of such reviews. In conducting such reviews, the Secretary shall assess the effectiveness of the calculation procedures used by the States in establishing eligibility of units of local government for funding under this section, and may assess other aspects of the State program to determine whether they have been effectively implemented.

(e) DEFINITIONS.—For purposes of this section:

(1) HIGH PERFORMANCE PUBLIC BUILDING.—The term ''high performance public building'' means a public building which, in its design, construction, operation, and maintenance, maximizes use of unconventional and renewable energy resources and energy efficiency practices, is cost-effective on a life cycle basis, uses affordable, environmentally preferable, durable materials, enhances indoor environmental quality, protects and conserves water, and optimizes site potential.

(2) RENEWABLE ENERGY.—The term ''renewable energy'' means energy produced by solar, wind, geothermal, hydroelectric, or biomass power.

(3) UNCONVENTIONAL AND RENEWABLE ENERGY RESOURCES.—The term ''unconventional and renewable energy resources'' means renewable energy, hydrogen, fuel cells, cogeneration, combined heat and power, heat recovery (including by use of a Stirling heat engine), and distributed generation.

Subtitle D—Energy Efficiency for Consumer Products

SEC. 141. ENERGY STAR PROGRAM.

(a) AMENDMENT.—The Energy Policy and Conservation Act (42 U.S.C. 6201 and following) is amended by inserting the following after section 324:

''SEC. 324A. ENERGY STAR PROGRAM.

''(a) IN GENERAL.—There is established at the Department of Energy and the Environmental Protection Agency a program to identify and promote energy-efficient products and buildings in order to reduce energy consumption, improve energy security, and reduce pollution through labeling of products and buildings that meet the highest energy efficiency standards. Responsibilities under the program shall be divided between the Department of Energy and the Environmental Protection Agency consistent with the terms of agreements between the two agencies. The Administrator and the Secretary shall—

''(1) promote Energy Star compliant technologies as the preferred technologies in the marketplace for achieving energy efficiency and to reduce pollution;

''(2) work to enhance public awareness of the Energy Star label; and

''(3) preserve the integrity of the Energy Star label.

For the purposes of carrying out this section, there is authorized to be appropriated for fiscal years 2002 through 2006 such sums as may be necessary, to remain available until expended.

''(b) STUDY OF CERTAIN PRODUCTS AND BUILDINGS.—Within 180 days after the date of enactment of this section, the Secretary and the Administrator, consistent with the terms of agreements between the two agencies (including existing agreements with respect to which agency shall handle a particular product or building), shall determine whether the Energy Star label should be extended to additional products and buildings, including the following:

''(1) Air cleaners.

''(2) Ceiling fans.

''(3) Light commercial heating and cooling products.

''(4) Reach-in refrigerators and freezers.

''(5) Telephony.

''(6) Vending machines.

''(7) Residential water heaters.

''(8) Refrigerated beverage merchandisers.

''(9) Commercial ice makers.

''(10) School buildings.

''(11) Retail buildings.

''(12) Health care facilities.

''(13) Homes.

''(14) Hotels and other commercial lodging facilities.

''(15) Restaurants and other food service facilities.

''(16) Solar water heaters.

''(17) Building-integrated photovoltaic systems.

''(18) Reflective pigment coatings.

''(19) Windows.

''(20) Boilers.

''(21) Devices to extend the life of motor vehicle oil.

''(c) COOL ROOFING.—In determining whether the Energy Star label should be extended to roofing products, the Secretary and the Administrator shall work with the roofing products industry to determine the appropriate solar reflective index of roofing products.''.

(b) TABLE OF CONTENTS AMENDMENT.—The table of contents of the Energy Policy and Conservation Act is amended by inserting after the item relating to section 324 the following new item:

''Sec. 324A. Energy Star program.''.

SEC. 142. LABELING OF ENERGY EFFICIENT APPLIANCES.

(a) STUDY.—Section 324(e) of the Energy Policy and Conservation Act (42 U.S.C. 6294(e)) is amended as follows:

(1) By inserting ''(1)'' before ''The Secretary, in consultation''.

(2) By redesignating paragraphs (1) and (2) as subparagraphs (A) and (B), respectively.

(3) By adding the following new paragraph at the end:

''(2) The Secretary shall make recommendations to the Commission within 180 days of the date of enactment of this paragraph regarding labeling of consumer products that are not covered products in accordance with this section, where such labeling is likely to assist consumers in making purchasing decisions and is technologically and economically feasible.''.

(b) NONCOVERED PRODUCTS.—Section 324(a)(2) of the Energy Policy and Conservation Act (42 U.S.C. 6294(a)(2)) is amended by adding the following at the end:

''(F) Not later than one year after the date of enactment of this subparagraph, the Commission shall initiate a rulemaking to prescribe labeling rules under this section applicable to consumer products that are not covered products if it determines that labeling of such products is likely to assist consumers in making purchasing decisions and is technologically and economically feasible.

''(G) Not later than three months after the date of enactment of this subparagraph, the Commission shall initiate a rulemaking to consider the effectiveness of the current consumer products labeling program in assisting consumers in making purchasing decisions and improving energy efficiency and to consider changes to the label that would improve the effectiveness of the label. Such rulemaking shall be completed within 15 months of the date of enactment of this subparagraph.''.

SEC. 143. APPLIANCE STANDARDS.

(a) STANDARDS FOR HOUSEHOLD APPLIANCES IN STANDBY MODE.—(1) Section 325 of the Energy Policy and Conservation Act (42 U.S.C. 6295) is amended by adding at the end the following:

''(u) STANDBY MODE ELECTRIC ENERGY CONSUMPTION BY HOUSEHOLD APPLIANCES.—(1) In this subsection:

''(A) The term 'household appliance' means any device that uses household electric current, operates in a standby mode, and is identified by the Secretary as a major consumer of electricity in standby mode, except digital televisions, digital set top boxes, digital video recorders, any product recognized under the Energy Star program, any product

that was on the date of enactment of this Act subject to an energy conservation standard under this section, and any product regarding which the Secretary finds that the expected additional cost to the consumer of purchasing such product as a result of complying with a standard established under this section is not economically justified within the meaning of subsection (o).

''(B) The term 'standby mode' means a mode in which a household appliance consumes the least amount of electric energy that the household appliance is capable of consuming without being completely switched off (provided that, the amount of electric energy consumed in such mode is substantially less than the amount the household appliance would consume in its normal operational mode).

''(C) The term 'major consumer of electricity in standby mode' means a product for which a standard prescribed under this section would result in substantial energy savings as compared to energy savings achieved or expected to be achieved by standards established by the Secretary under subsections (o) and (p) of this section for products that were, at the time of enactment of this subsection, covered products under this section.

''(2)(A) Except as provided in subparagraph (B), a household appliance that is manufactured in, or imported for sale in, the United States on or after the date that is 2 years after the date of enactment of this subsection shall not consume in standby mode more than 1 watt.

''(B) In the case of analog televisions, the Secretary shall prescribe, on or after the date that is 2 years after the date of enactment of this subsection, in accordance with subsections (o) and (p) of section 325, an energy conservation standard that is technologically feasible and economically justified under section 325(o)(2)(A) (in lieu of the 1 watt standard under subparagraph (A)).

''(3)(A) A manufacturer or importer of a household appliance may submit to the Secretary an application for an exemption of the household appliance from the standard under paragraph (2).

''(B) The Secretary shall grant an exemption for a household appliance for which an application is made under subparagraph (A) if the applicant provides evidence showing that, and the Secretary determines that—

''(i) it is not technically feasible to modify the household appliance to enable the household appliance to meet the standard;

''(ii) the standard is incompatible with an energy efficiency standard applicable to the household appliance under another subsection; or

''(iii) the cost of electricity that a typical consumer would save in operating the household appliance meeting the standard would not equal the increase in the price of the household appliance that would be attributable to the modifications that would be necessary to enable the household appliance to meet the standard by the earlier of—

''(I) the date that is 7 years after the date of purchase of the household appliance; or

''(II) the end of the useful life of the household appliance.

''(C) If the Secretary determines that it is not technically feasible to modify a household appliance to meet the standard under paragraph (2), the Secretary shall establish a different standard for the household appliance in accordance with the criteria under subsection (l).

''(4)(A) Not later than 1 year after the date of enactment of this subsection, the Secretary shall establish a test procedure for determining the amount of consumption of power by a household appliance operating in standby mode.

''(B) In establishing the test procedure, the Secretary shall consider—

''(i) international test procedures under development;

''(ii) test procedures used in connection with the Energy Star program; and

''(iii) test procedures used for measuring power consumption in standby mode in other countries.

''(5) FURTHER REDUCTION OF STANDBY POWER CONSUMPTION.—The Secretary shall provide technical assistance to manufacturers in achieving further reductions in standby mode electric energy consumption by household appliances.

''(v) STANDBY MODE ELECTRIC ENERGY CONSUMPTION BY DIGITAL TELEVISIONS, DIGITAL SET TOP BOXES, AND DIGITAL VIDEO RECORDERS.—The Secretary shall initiate on January 1, 2007 a rulemaking to prescribe, in accordance with subsections (o) and (p), an energy conservation standard of standby mode electric energy consumption by digital television sets, digital set top boxes, and digital video recorders. The Secretary shall issue a final rule prescribing such standards not later than 18 months thereafter. In determining whether a standard under this section is technologically feasible and economically justified under section 325(o)(2)(A), the Secretary shall consider the potential effects on market penetration by digital products covered under this section, and shall consider any recommendations by the FCC regarding such effects.''.

(2) Section 325(o)(3) of the Energy Policy and Conservation Act (42 U.S.C. 6295(n)(1)) is amended by inserting at the end of the paragraph the following: ''Notwithstanding any provision of this part, the Secretary shall not amend a standard established under subsection (u) or (v) of this section.''.

(b) STANDARDS FOR NONCOVERED PRODUCTS.—Section 325(m) of the Energy Policy and Conservation Act (42 U.S.C. 6295(m)) is amended as follows:

(1) Inserting ''(1)'' before ''After''.

(2) Inserting the following at the end:

(2) ''Not later than one year after the date of enactment of the Energy Advancement and Conservation Act of 2001, the Secretary shall conduct a rulemaking to determine whether consumer products not classified as a covered product under section 322(a)(1) through (18) meet the criteria of section 322(b)(1) and is a major consumer of electricity. If the Secretary finds that a consumer product not classified as a covered product meets the criteria of section 322(b)(1), he shall prescribe, in accordance with subsections (o) and (p), an energy conservation standard for such consumer product, if such standard is reasonably probable to be technologically feasible and economically justified within the meaning of subsection (o)(2)(A). As used in this paragraph, the term 'major consumer of electricity' means a product for which a standard prescribed under this section would result in substantial aggregate energy savings as compared to energy savings achieved or expected to be achieved by standards established by the Secretary under paragraphs (o) and (p) of this section for products that were, at the time of enactment of this paragraph, covered products under this section.''.

(c) CONSUMER EDUCATION ON ENERGY EFFICIENCY BENEFITS OF AIR CONDITIONING, HEATING AND VENTILATION MAINTENANCE.—Section 337 of the Energy Policy and Conservation Act (42 U.S.C. 6307) is amended by adding the following new subsection after subsection (b):

''(c) HVAC MAINTENANCE.—For the purpose of ensuring that installed air conditioning and heating systems operate at their maximum rated efficiency levels, the Secretary shall, within 180 days of the date of enactment of this subsection, develop and implement a public education campaign to educate homeowners and small business owners concerning the energy savings resulting from regularly scheduled maintenance of air conditioning, heating, and ventilating systems. In developing and implementing this campaign, the Secretary shall consider support by the Department of public education programs sponsored by trade and professional and energy efficiency organizations. The public service information shall provide sufficient information to allow consumers to make informed choices from among professional, licensed (where State or local licensing is required) contractors. There are authorized to be appropriated to carry out this subsection $5,000,000 for fiscal years 2002 and 2003 in addition to amounts otherwise appropriated in this part.''.

(d) EFFICIENCY STANDARDS FOR FURNACE FANS, CEILING FANS, AND COLD DRINK VENDING MACHINES..—

(1) DEFINITIONS.—Section 321 of the Energy Policy and Conservation Act (42 U.S.C. 6291) is amended by adding the following at the end thereof:

''(32) The term 'residential furnace fan' means an electric fan installed as part of a furnace for purposes of circulating air through the system air filters, the heat exchangers or heating elements of the furnace, and the duct work.

''(33) The terms 'residential central air conditioner fan' and 'heat pump circulation fan' mean an electric fan installed as part of a central air conditioner or heat pump for purposes of circulating air through the system air filters, the heat exchangers of the air conditioner or heat pump, and the duct work.

''(34) The term 'suspended ceiling fan' means a fan intended to be mounted to a ceiling outlet box, ceiling building structure, or to a vertical rod suspended from the ceiling, and which as blades which rotate below the ceiling and consists of an electric motor, fan blades (which rotate in a direction parallel to the floor), an optional lighting kit, and one or more electrical controls (integral or remote) governing fan speed and lighting operation.

''(35) The term 'refrigerated bottled or canned beverage vending machine' means a machine that cools bottled or canned beverages and dispenses them upon payment.''.

(2) TESTING REQUIREMENTS.—Section 323 of the Energy Policy and Conservation Act (42 U.S.C. 6293) is amended by adding the following at the end thereof:

''(f) ADDITIONAL CONSUMER PRODUCTS.—The Secretary shall within 18 months after the date of enactment of this subsection prescribe testing requirements for residential furnace fans, residential central air conditioner fans, heat pump circulation fans, suspended ceiling fans, and refrigerated bottled or canned beverage vending machines. Such testing requirements shall be based on existing test procedures used in industry to the extent practical and reasonable. In the case of residential furnace fans, residential central air conditioner fans, heat pump circulation fans, and suspended ceiling fans, such test procedures shall include efficiency at both maximum output and at an output no more than 50 percent of the maximum output.''.

(3) STANDARDS FOR ADDITIONAL CONSUMER PRODUCTS.—Section 325 of the Energy Policy and Conservation Act (42 U.S.C. 6295) is amended by adding the following at the end thereof:

''(w) RESIDENTIAL FURNACE FANS, CENTRAL AIR AND HEAT PUMP CIRCULATION FANS, SUSPENDED CEILING FANS, AND VENDING MACHINES.—(1) The Secretary shall, within 18 months after the date of enactment of this subsection, assess the current and projected future market for residential furnace fans,

residential central air conditioner and heat pump circulation fans, suspended ceiling fans, and refrigerated bottled or canned beverage vending machines. This assessment shall include an examination of the types of products sold, the number of products in use, annual sales of these products, energy used by these products sold, the number of products in use, annual sales of these products, energy used by these products, estimates of the potential energy savings from specific technical improvements to these products, and an examination of the cost-effectiveness of these improvements. Prior to the end of this time period, the Secretary shall hold an initial scoping workshop to discuss and receive input to plans for developing minimum efficiency standards for these products.

''(2) The Secretary shall within 24 months after the date on which testing requirements are prescribed by the Secretary pursuant to section 323(f), prescribe, by rule, energy conservation standards for residential furnace fans, residential central air conditioner and heat pump circulation fans, suspended ceiling fans, and refrigerated bottled or canned beverage vending machines. In establishing these standards, the Secretary shall use the criteria and procedures contained in subsections (l) and (m). Any standard prescribed under this section shall apply to products manufactured 36 months after the date such rule is published.''.

(4) LABELING.—Section 324(a) of the Energy Policy and Conservation Act (42 U.S.C. 6294(a)) is amended by adding the following at the end thereof:

''(5) The Secretary shall within 6 months after the date on which energy conservation standards are prescribed by the Secretary for covered products referred to in section 325(w), prescribe, by rule, labeling requirements for such products. These requirements shall take effect on the same date as the standards prescribed pursuant to section 325(w).''.

(5) COVERED PRODUCTS.—Section 322(a) of the Energy Policy and Conservation Act (42 U.S.C. 6292(a)) is amended by redesignating paragraph (19) as paragraph (20) and by inserting after paragraph (18) the following:

''(19) Beginning on the effective date for standards established pursuant to subsection (v) of section 325, each product referred to in such subsection (v).''.

Subtitle E—Energy Efficient Vehicles

SEC. 151. HIGH OCCUPANCY VEHICLE EXCEPTION.

(a) IN GENERAL.—Notwithstanding section 102(a)(1) of title 23, United States Code, a State may, for the purpose of promoting energy conservation, permit a vehicle with fewer than 2 occupants to operate in high occupancy vehicle lanes if such vehicle is a hybrid vehicle or is fueled by an alternative fuel.

(b) HYBRID VEHICLE DEFINED.—In this section, the term ''hybrid vehicle'' means a motor vehicle—

(1) which draws propulsion energy from onboard sources of stored energy which are both—

(A) an internal combustion or heat engine using combustible fuel; and

(B) a rechargeable energy storage system;

(2) which, in the case of a passenger automobile or light truck—

(A) for 2002 and later model vehicles, has received a certificate of conformity under section 206 of the Clean Air Act (42 U.S.C. 7525) and meets or exceeds the equivalent qualifying California low emission vehicle standard under section 243(e)(2) of the Clean Air Act (42 U.S.C. 7583(e)(2)) for that make and model year; and

(B) for 2004 and later model vehicles, has received a certificate that such vehicle meets the Tier II emission level established in regulations prescribed by the Administrator of the Environmental Protection Agency under section 202(i) of the Clean Air Act (42 U.S.C. 7521(i)) for that make and model year vehicle; and

(3) which is made by a manufacturer.

(c) ALTERNATIVE FUEL DEFINED.—In this section, the term ''alternative fuel'' has the meaning such term has under section 301(2) of the Energy Policy Act of 1992 (42 U.S.C. 13211(2)).

SEC. 152. RAILROAD EFFICIENCY.

(a) LOCOMOTIVE TECHNOLOGY DEMONSTRATION.—The Secretary of Energy shall establish a public-private research partnership with railroad carriers, locomotive manufacturers, and a world-class research and test center dedicated to the advancement of railroad technology, efficiency, and safety that is owned by the Federal Railroad Administration and operated in the private sector, for the development and demonstration of locomotive technologies that increase fuel economy and reduce emissions.

(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Energy $25,000,000 for fiscal year 2002, $30,000,000 for fiscal year 2003, and $35,000,000 for fiscal year 2004 for carrying out this section.

SEC. 153. BIODIESEL FUEL USE CREDITS.

Section 312(c) of the Energy Policy Act of 1992 (42 U.S.C. 13220(c)) is amended—

(1) by striking ''NOT'' in the subsection heading; and

(2) by striking ''not''.

SEC. 154. MOBILE TO STATIONARY SOURCE TRADING.

Within 90 days after the enactment of this section, the Administrator of the Environmental Protection Agency is directed to commence a review of the Agency's policies regarding the use of mobile to stationary source trading of emission credits under the Clean Air Act to determine whether such trading can provide both nonattainment and attainment areas with additional flexibility in achieving and maintaining healthy air quality and increasing use of alternative fuel and advanced technology vehicles, thereby reducing United States dependence on foreign oil.

Subtitle F—Other Provisions

SEC. 161. REVIEW OF REGULATIONS TO ELIMINATE BARRIERS TO EMERGING ENERGY TECHNOLOGY.

(a) IN GENERAL.—Each Federal agency shall carry out a review of its regulations and standards to determine those that act as a barrier to market entry for emerging energy-efficient technologies, including, but not limited to, fuel cells, combined heat and power, and distributed generation (including small-scale renewable energy).

(b) REPORT TO CONGRESS.—No later than 18 months after the date of enactment of this section, each agency shall provide a report to Congress and the President detailing all regulatory barriers to emerging energy-efficient technologies, along with actions the agency intends to take, or has taken, to remove such barriers.

(c) PERIODIC REVIEW.—Each agency shall subsequently review its regulations and standards in the manner specified in this section no less frequently than every 5 years, and report their findings to Congress and the President. Such reviews shall include a detailed analysis of all agency actions taken to remove existing barriers to emerging energy technologies.

SEC. 162. ADVANCED IDLE ELIMINATION SYSTEMS.

(a) DEFINITIONS.—

(1) ADVANCED IDLE ELIMINATION SYSTEM.—The term ''advanced idle elimination system'' means a device or system of devices that is installed at a truck stop or other location (for example, a loading, unloading, or transfer facility) where vehicles (such as trucks, trains, buses, boats, automobiles, and recreational vehicles) are parked and that is designed to provide to the vehicle the services (such as heat, air conditioning, and electricity) that would otherwise require the operation of the auxiliary or drive train engine or both while the vehicle is stationary and parked.

(2) EXTENDED IDLING.—The term ''extended idling'' means the idling of a motor vehicle for a period greater than 60 minutes.

(b) RECOGNITION OF BENEFITS OF ADVANCED IDLE ELIMINATION SYSTEMS.—Within 90 days after the date of enactment of this subsection, the Administrator of the Environmental Protection Agency is directed to commence a review of the Agency's mobile source air emissions models used under the Clean Air Act to determine whether such models accurately reflect the emissions resulting from extended idling of heavy-duty trucks and other vehicles and engines, and shall update those models as the Administrator deems appropriate. Additionally, within 90-days after the date of enactment of this subsection, the Administrator shall commence a review as to the appropriate emissions reductions credit that should be allotted under the Clean Air Act for the use of advanced idle elimination systems, and whether such credits should be subject to an emissions trading system, and shall revise Agency regulations and guidance as the Administrator deems appropriate.

SEC. 163. STUDY OF BENEFITS AND FEASIBILITY OF OIL BYPASS FILTRATION TECHNOLOGY.

(a) STUDY.—The Secretary of Energy and the Administrator of the Environmental Protection Agency shall jointly conduct a study of oil bypass filtration technology in motor vehicle engines. The study shall analyze and quantify the potential benefits of such technology in terms of reduced demand for oil and the potential environmental benefits of the technology in terms of reduced waste and air pollution. The Secretary and the Administrator shall also examine the feasibility of using such technology in the Federal motor vehicle fleet.

(b) REPORT.—Not later than 6 months after the enactment of this Act, the Secretary of Energy and the Administrator of the Environmental Protection Agency shall jointly submit a report containing the results of the study conducted under subsection (a) to the Committee on Energy and Commerce of the United States House of Representatives and to the Committee on Energy and Natural Resources of the United States Senate.

SEC. 164. GAS FLARE STUDY.

(a) STUDY.—The Secretary of Energy shall conduct a study of the economic feasibility of installing small cogeneration facilities utilizing excess gas flares at petrochemical facilities to provide reduced electricity costs to customers living within 3 miles of the petrochemical facilities. The Secretary shall solicit public comment to assist in preparing the report required under subsection (b).

(b) REPORT.—Not later than 18 months after the date of the enactment of this Act, the Secretary of Energy shall transmit a report to the Congress on the results of the study conducted under subsection (a).

SEC. 165. TELECOMMUTING STUDY.

(a) STUDY REQUIRED.—The Secretary, in consultation with Commission, and the NTIA, shall conduct a study of the energy conservation implications of the widespread adoption of telecommuting in the United States.

(b) REQUIRED SUBJECTS OF STUDY.—The study required by subsection (a) shall analyze the following subjects in relation to the energy saving potential of telecommuting:

(1) Reductions of energy use and energy costs in commuting and regular office heating, cooling, and other operations.

(2) Other energy reductions accomplished by telecommuting.

(3) Existing regulatory barriers that hamper telecommuting, including barriers to broadband telecommunications services deployment.

(4) Collateral benefits to the environment, family life, and other values.

(c) REPORT REQUIRED.—The Secretary shall submit to the President and the Congress a report on the study required by this section not later than 6 months after the date of enactment of this Act. Such report shall include a description of the results of the analysis of each of the subject described in subsection (b).

(d) DEFINITIONS.—As used in this section:

(1) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

(2) COMMISSION.—The term ''Commission'' means the Federal Communications Commission.

(3) NTIA.—The term ''NTIA'' means the National Telecommunications and Information Administration of the Department of Commerce.

(4) TELECOMMUTING.—The term ''telecommuting'' means the performance of work functions using communications technologies, thereby eliminating or substantially reducing the need to commute to and from traditional worksites.

TITLE II—AUTOMOBILE FUEL ECONOMY

SEC. 201. AVERAGE FUEL ECONOMY STANDARDS FOR NONPASSENGER AUTOMOBILES.

Section 32902(a) of title 49, United States Code, is amended—

(1) by inserting ''(1)'' after ''NONPASSENGER AUTOMOBILES.—''; and

(2) by adding at the end the following:

''(2) The Secretary shall prescribe under paragraph (1) average fuel economy standards for automobiles (except passenger automobiles) manufactured in model years 2004 through 2010 that are calculated to ensure that the aggregate amount of gasoline projected to be used in those model years by automobiles to which the standards apply is at least 5 billion gallons less than the aggregate amount of gasoline that would be used in those model years by such automobiles if they achieved only the fuel economy required under the average fuel economy standard that applies under this subsection to automobiles (except passenger automobiles) manufactured in model year 2002.''.

SEC. 202. CONSIDERATION OF PRESCRIBING DIFFERENT AVERAGE FUEL ECONOMY STANDARDS FOR NONPASSENGER AUTOMOBILES.

(a) IN GENERAL.—The Secretary of Transportation shall, in prescribing average fuel economy standards under section 32902(a) of title 49, United States Code, for automobiles (except passenger automobiles) manufactured in model year 2004, consider the potential benefits of—

(1) establishing a weight-based system for automobiles, that is based on the inertia weight, curb weight, gross vehicle weight rating, or another appropriate measure of such automobiles; and

(2) prescribing different fuel economy standards for automobiles that are subject to the weight-based system.

(b) SPECIFIC CONSIDERATIONS.—In implementing this section the Secretary—

(1) shall consider any recommendations made in the National Academy of Sciences study completed pursuant to the Department of Transportation and Related Agencies Appropriations Act, 2000 (Public Law 106–346; 114 Stat. 2763 et seq.); and

(2) shall evaluate the merits of any weight-based system in terms of motor vehicle safety, energy conservation, and competitiveness of and employment in the United States automotive sector, and if a weight-based system is established by the Secretary a manufacturer may trade credits between or among the automobiles (except passenger automobiles) manufactured by the manufacturer.

SEC. 203. DUAL FUELED AUTOMOBILES.

(a) PURPOSES.—The purposes of this section are—

(1) to extend the manufacturing incentives for dual fueled automobiles, as set forth in subsections (b) and (d) of section 32905 of title 49, United States Code, through the 2008 model year; and

(2) to similarly extend the limitation on the maximum average fuel economy increase for such automobiles, as set forth in subsection (a)(1) of section 32906 of title 49, United States Code.

(b) AMENDMENTS.—

(1) MANUFACTURING INCENTIVES.—Section 32905 of title 49, United States Code, is amended as follows:

(A) Subsections (b) and (d) are each amended by striking ''model years 1993–2004'' and inserting ''model years 1993–2008''.

(B) Subsection (f) is amended by striking ''Not later than December 31, 2001, the Secretary'' and inserting ''Not later than December 31, 2005, the Secretary''.

(C) Subsection (f)(1) is amended by striking ''model year 2004'' and inserting ''model year 2008''.

(D) Subsection (g) is amended by striking ''Not later than September 30, 2000'' and inserting ''Not later than September 30, 2004''.

(2) MAXIMUM FUEL ECONOMY INCREASE.—Subsection (a)(1) of section 32906 of title 49, United States Code, is amended as follows:

(A) Subparagraph (A) is amended by striking ''the model years 1993–2004'' and inserting ''model years 1993–2008''.

(B) Subparagraph (B) is amended by striking ''the model years 2005–2008'' and inserting ''model years 2009–2012''.

SEC. 204. FUEL ECONOMY OF THE FEDERAL FLEET OF AUTOMOBILES.

Section 32917 of title 49, United States Code, is amended to read as follows:

''§ 32917. Standards for executive agency automobiles

''(a) BASELINE AVERAGE FUEL ECONOMY.—The head of each executive agency shall determine, for all automobiles in the agency's fleet of automobiles that were leased or bought as a new vehicle in fiscal year 1999, the average fuel economy for such automobiles. For the purposes of this section, the average fuel economy so determined shall be the baseline average fuel economy for the agency's fleet of automobiles.

''(b) INCREASE OF AVERAGE FUEL ECONOMY.—The head of an executive agency shall manage the procurement of automobiles for that agency in such a manner that—

''(1) not later than September 30, 2003, the average fuel economy of the new automobiles in the agency's fleet of automobiles is not less than 1 mile per gallon higher than the baseline average fuel economy determined under subsection (a) for that fleet; and

''(2) not later than September 30, 2005, the average fuel economy of the new automobiles in the agency's fleet of automobiles is not less than 3 miles per gallon higher than the baseline average fuel economy determined under subsection (a) for that fleet.

''(c) CALCULATION OF AVERAGE FUEL ECONOMY.—Average fuel economy shall be calculated for the purposes of this section in accordance with guidance which the Secretary of Transportation shall prescribe for the implementation of this section.

''(d) DEFINITIONS.—In this section:

''(1) The term 'automobile' does not include any vehicle designed for combat-related missions, law enforcement work, or emergency rescue work.

''(2) The term 'executive agency' has the meaning given that term in section 105 of title 5.

''(3) The term 'new automobile', with respect to the fleet of automobiles of an executive agency, means an automobile that is leased for at least 60 consecutive days or bought, by or for the agency, after September 30, 1999.''.

SEC. 205. HYBRID VEHICLES AND ALTERNATIVE VEHICLES.

(a) IN GENERAL.—Section 303(b)(1) of the Energy Policy Act of 1992 is amended by adding the following at the end: ''Of the total number of vehicles acquired by a Federal fleet in fiscal years 2004 and 2005, at least 5 percent of the vehicles in addition to those covered by the preceding sentence shall be alternative fueled vehicles or hybrid vehicles and in fiscal year 2006 and thereafter at least 10 percent of the vehicles in addition to those covered by the preceding sentence shall be alternative fueled vehicles or hybrid vehicles.''.

(b) DEFINITION.—Section 301 of such Act is amended by striking ''and'' at the end of paragraph (13), by striking the period at the end of paragraph (14) and inserting ''; and'' and by adding at the end the following:

''(15) The term 'hybrid vehicle' means a motor vehicle which draws propulsion energy from onboard sources of stored energy which are both—

''(A) an internal combustion or heat engine using combustible fuel; and

''(B) a rechargeable energy storage system.''.

SEC. 206. FEDERAL FLEET PETROLEUM-BASED NONALTERNATIVE FUELS.

(a) IN GENERAL.—Title III of the Energy Policy Act of 1992 (42 U.S.C. 13212 et seq.) is amended as follows:

(1) By adding at the end thereof the following:

''SEC. 313. CONSERVATION OF PETROLEUM-BASED FUELS BY THE FEDERAL GOVERNMENT FOR LIGHT-DUTY MOTOR VEHICLES.

''(a) PURPOSES.—The purposes of this section are to complement and supplement the requirements of section 303 of this Act that Federal fleets, as that term is defined in section 303(b)(3), acquire in the aggregate a minimum percentage of alternative fuel vehicles, to encourage the manufacture and sale or lease of such vehicles nationwide, and to achieve, in the aggregate, a reduction in the amount of the petroleum-based fuels (other than the alternative fuels defined in this title) used by new light-duty motor vehicles acquired by the Federal Government in model years 2004 through 2010 and thereafter.

''(b) IMPLEMENTATION.—In furtherance of such purposes, such Federal fleets in the aggregate shall reduce the purchase of petroleum-based nonalternative fuels for such fleets beginning October 1, 2003, through September 30, 2009, from the amount purchased for such fleets over a comparable period since enactment of this Act, as determined by the Secretary, through the annual purchase, in accordance with section 304, and the use of alternative fuels for the light-duty motor vehicles of such Federal fleets, so as to achieve levels which reflect total reliance

by such fleets on the consumptive use of alternative fuels consistent with the provisions of section 303(b) of this Act. The Secretary shall, within 120 days after the enactment of this section, promulgate, in consultation with the Administrator of the General Services Administration and the Director of the Office of Management and Budget and such other heads of entities referenced in section 303 within the executive branch as such Director may designate, standards for the full and prompt implementation of this section by such entities. The Secretary shall monitor compliance with this section and such standards by all such fleets and shall report annually to the Congress, based on reports by the heads of such fleets, on the extent to which the requirements of this section and such standards are being achieved. The report shall include information on annual reductions achieved of petroleum-based fuels and the problems, if any, encountered in acquiring alternative fuels and in requiring their use.''.

(2) By amending section 304(b) of such Act to read as follows:

''(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary or, as appropriate, the head of each Federal fleet subject to the provisions of this section and section 313 of this Act, such sums as may be necessary to achieve the purposes of section 313(a) and the provisions of this section. Such sums shall remain available until expended.''.

(b) CLERICAL AMENDMENT.—The table of contents in section 1(b) of such Act is amended by adding at the end of the items relating to title III the following:

''Sec. 313. Conservation of petroleum-based fuels by the Federal Government for light-duty motor vehicles.''.

SEC. 207. STUDY OF FEASIBILITY AND EFFECTS OF REDUCING USE OF FUEL FOR AUTOMOBILES.

(a) IN GENERAL.—Not later than 30 days after the date of the enactment of this Act, the Secretary of Transportation shall enter into an arrangement with the National Academy of Sciences under which the Academy shall study the feasibility and effects of reducing by model year 2010, by a significant percentage, the use of fuel for automobiles.

(b) SUBJECTS OF STUDY.—The study under this section shall include—

(1) examination of, and recommendation of alternatives to, the policy under current Federal law of establishing average fuel economy standards for automobiles and requiring each automobile manufacturer to comply with average fuel economy standards that apply to the automobiles it manufactures;

(2) examination of how automobile manufacturers could contribute toward achieving the reduction referred to in subsection (a);

(3) examination of the potential of fuel cell technology in motor vehicles in order to determine the extent to which such technology may contribute to achieving the reduction referred to in subsection (a); and

(4) examination of the effects of the reduction referred to in subsection (a) on—

(A) gasoline supplies;

(B) the automobile industry, including sales of automobiles manufactured in the United States;

(C) motor vehicle safety; and

(D) air quality.

(c) REPORT.—The Secretary shall require the National Academy of Sciences to submit to the Secretary and the Congress a report on the findings, conclusion, and recommendations of the study under this section by not later than 1 year after the date of the enactment of this Act.

TITLE III—NUCLEAR ENERGY

SEC. 301. LICENSE PERIOD.

Section 103 c. of the Atomic Energy Act of 1954 (42 U.S.C. 2133(c)) is amended—

(1) by striking ''c. Each such'' and inserting the following:

''c. LICENSE PERIOD.—

''(1) IN GENERAL.—Each such''; and

(2) by adding at the end the following:

''(2) COMBINED LICENSES.—In the case of a combined construction and operating license issued under section 185 b., the initial duration of the license may not exceed 40 years from the date on which the Commission finds, before operation of the facility, that the acceptance criteria required by section 185 b. are met.''.

SEC. 302. COST RECOVERY FROM GOVERNMENT AGENCIES.

Section 161 w. of the Atomic Energy Act of 1954 (42 U.S.C. 2201(w)) is amended—

(1) by striking ''for or is issued'' and all that follows through ''1702'' and inserting ''to the Commission for, or is issued by the Commission, a license or certificate'';

(2) by striking ''483a'' and inserting ''9701''; and

(3) by striking '', of applicants for, or holders of, such licenses or certificates''.

SEC. 303. DEPLETED URANIUM HEXAFLUORIDE.

Section 1(b) of Public Law 105–204 is amended by striking ''fiscal year 2002'' and inserting ''fiscal year 2005''.

SEC. 304. NUCLEAR REGULATORY COMMISSION MEETINGS.

If a quorum of the Nuclear Regulatory Commission gathers to discuss official Commission business the discussions shall be recorded, and the Commission shall notify the public of such discussions within 15 days after they occur. The Commission shall promptly make a transcript of the recording available to the public on request, except to the extent that public disclosure is exempted or prohibited by law. This section shall not apply to a meeting, within the meaning of that term under section 552b(a)(2) of title 5, United States Code.

SEC. 305. COOPERATIVE RESEARCH AND DEVELOPMENT AND SPECIAL DEMONSTRATION PROJECTS FOR THE URANIUM MINING INDUSTRY.

(a) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary $10,000,000 for each of fiscal years 2002, 2003, and 2004 for—

(1) cooperative, cost-shared, agreements between the Department of Energy and domestic uranium producers to identify, test, and develop improved in situ leaching mining technologies, including low-cost environmental restoration technologies that may be applied to sites after completion of in situ leaching operations; and

(2) funding for competitively selected demonstration projects with domestic uranium producers relating to—

(A) enhanced production with minimal environmental impacts;

(B) restoration of well fields; and

(C) decommissioning and decontamination activities.

(b) DOMESTIC URANIUM PRODUCER.—For purposes of this section, the term ''domestic uranium producer'' has the meaning given that term in section 1018(4) of the Energy Policy Act of 1992 (42 U.S.C. 2296b–7(4)), except that the term shall not include any producer that has not produced uranium from domestic reserves on or after July 30, 1998.

SEC. 306. MAINTENANCE OF A VIABLE DOMESTIC URANIUM CONVERSION INDUSTRY.

There are authorized to be appropriated to the Secretary $800,000 for contracting with the Nation's sole remaining uranium converter for the purpose of performing research and development to improve the environmental and economic performance of United States uranium conversion operations.

SEC. 307. PADUCAH DECONTAMINATION AND DECOMMISSIONING PLAN.

The Secretary of Energy shall prepare and submit a plan to Congress within 180 days after the date of the enactment of this Act that establishes scope, cost, schedule, sequence of activities, and contracting strategy for—

(1) the decontamination and decommissioning of the Department of Energy's surplus buildings and facilities at the Paducah Gaseous Diffusion Plant that have no future anticipated reuse; and

(2) the remediation of Department of Energy Material Storage Areas at the Paducah Gaseous Diffusion Plant.

Such plan shall inventory all surplus facilities and buildings, and identify and rank health and safety risks associated with such facilities and buildings. Such plan shall inventory all Department of Energy Material Storage Areas, and identify and rank health and safety risks associated with such Department of Energy Material Storage Areas. The Department of Energy shall incorporate these risk factors in designing the sequence and schedule for the plan. Such plan shall identify funding requirements that are in addition to the expected outlays included in the Department of Energy's Environmental Management Plan for the Paducah Gaseous Diffusion Plan.

TITLE IV—HYDROELECTRIC ENERGY

SEC. 401. ALTERNATIVE CONDITIONS AND FISHWAYS.

(a) ALTERNATIVE MANDATORY CONDITIONS.—Section 4 of the Federal Power Act (16 U.S.C. 797) is amended by adding at the end the following:

''(h)(1) Whenever any person applies for a license for any project works within any reservation of the United States, and the Secretary of the department under whose supervision such reservation falls deems a condition to such license to be necessary under the first proviso of subsection (e), the license applicant or any other party to the licensing proceeding may propose an alternative condition.

''(2) Notwithstanding the first proviso of subsection (e), the Secretary of the department under whose supervision the reservation falls shall accept the proposed alternative condition referred to in paragraph (1), and the Commission shall include in the license such alternative condition, if the Secretary of the appropriate department determines, based on substantial evidence provided by the party proposing such alternative condition, that the alternative condition—

''(A) provides no less protection for the reservation than provided by the condition deemed necessary by the Secretary; and

''(B) will either—

''(i) cost less to implement, or

''(ii) result in improved operation of the project works for electricity production

as compared to the condition deemed necessary by the Secretary.

''(3) Within one year after the enactment of this subsection, each Secretary concerned shall, by rule, establish a process to expeditiously resolve conflicts arising under this subsection.''.

(b) ALTERNATIVE FISHWAYS.—Section 18 of the Federal Power Act (16 U.S.C. 811) is amended by—

(1) inserting ''(a)'' before the first sentence; and

(2) adding at the end the following:

''(b)(1) Whenever the Commission shall require a licensee to construct, maintain, or operate a fishway prescribed by the Secretary of the Interior or the Secretary of

Commerce under this section, the licensee or any other party to the proceeding may propose an alternative to such prescription to construct, maintain, or operate a fishway.

''(2) Notwithstanding subsection (a), the Secretary of the Interior or the Secretary of Commerce, as appropriate, shall accept and prescribe, and the Commission shall require, the proposed alternative referred to in paragraph (1), if the Secretary of the appropriate department determines, based on substantial evidence provided by the party proposing such alternative, that the alternative—

''(A) will be no less effective than the fishway initially prescribed by the Secretary, and

''(B) will either—

''(i) cost less to implement, or

''(ii) result in improved operation of the project works for electricity production

as compared to the fishway initially prescribed by the Secretary.

''(3) Within one year after the enactment of this subsection, the Secretary of the Interior and the Secretary of Commerce shall each, by rule, establish a process to expeditiously resolve conflicts arising under this subsection.''

SEC. 402. FERC DATA ON HYDROELECTRIC LICENSING.

(a) DATA COLLECTION PROCEDURES.—The Federal Energy Regulatory Commission shall revise its procedures regarding the collection of data in connection with the Commission's consideration of hydroelectric licenses under the Federal Power Act. Such revised data collection procedures shall be designed to provide the Commission with complete and accurate information concerning the time and costs to parties involved in the licensing process. Such data shall be available for each significant stage in the licensing process and shall be designed to identify projects with similar characteristics so that analyses can be made of the time and costs involved in licensing proceedings based upon the different characteristics of those proceedings.

(b) REPORTS.—Within 6 months after the date of enactment of this Act, the Commission shall notify the Committee on Energy and Commerce of the United States House of Representatives and the Committee on Energy and Natural Resources of the United States Senate of the progress made by the Commission under subsection (a), and within one year after such date of enactment, the Commission shall submit a report to such Committees specifying the measures taken by the Commission pursuant to subsection (a).

TITLE V—FUELS

SEC. 601. TANK DRAINING DURING TRANSITION TO SUMMERTIME RFG.

Not later than 60 days after the enactment of the Act, the Administrator of the Environmental Protection Agency shall commence a rulemaking to determine whether modifications to the regulations set forth in 40 C.F.R. Section 80.78 and any associated regulations regarding the transition to high ozone season reformulated gasoline are necessary to ensure that the transition to high ozone season reformulated gasoline is conducted in a manner that minimizes disruptions to the general availability and affordability of gasoline, and maximizes flexibility with regard to the draining and inventory management of gasoline storage tanks located at refineries, terminals, wholesale and retail outlets, consistent with the goals of the Clean Air Act. The Administrator shall propose and take final action in such rulemaking to ensure that any modifications are effective and implemented at least 60 days prior to the beginning of the high ozone season for the year 2002.

SEC. 602. GASOLINE BLENDSTOCK REQUIREMENTS.

Not later than 60 days after the enactment of this Act, the Administrator of the Environmental Protection Agency shall commence a rulemaking to determine whether modifications to product transfer documentation, accounting, compliance calculation, and other requirements contained in the regulations of the Administrator set forth in section 80.102 of title 40 of the Code of Federal Regulations relating to gasoline blendstocks are necessary to facilitate the movement of gasoline and gasoline feedstocks among different regions throughout the country and to improve the ability of petroleum refiners and importers to respond to regional gasoline shortages and prevent unreasonable short-term price increases. The Administrator shall take into consideration the extent to which such requirements have been, or will be, rendered unnecessary or inefficient by reason of subsequent environmental safeguards that were not in effect at the time the regulations in section 80.102 of title 40 of the Code of Federal Regulations were promulgated. The Administrator shall propose and take final action in such rulemaking to ensure that any modifications are effective and implemented at least 60 days prior to the beginning of the high ozone season for the year 2002.

SEC. 603. BOUTIQUE FUELS.

(a) JOINT STUDY.—The Administrator of the Environmental Protection Agency and the Secretary of Energy shall jointly conduct a study of all Federal, State, and local requirements regarding motor vehicle fuels, including requirements relating to reformulated gasoline, volatility (Reid Vapor Pressure), oxygenated fuel, diesel fuel and other requirements that vary from State to State, region to region, or locality to locality. The study shall analyze—

(1) the effect of the variety of such requirements on the price of motor vehicle fuels to the consumer;

(2) the availability and affordability of motor vehicle fuels in different States and localities;

(3) the effect of Federal, State, and local regulations, including multiple fuel requirements, on domestic refineries and the fuel distribution system;

(4) the effect of such requirements on local, regional, and national air quality requirements and goals;

(5) the effect of such requirements on vehicle emissions;

(6) the feasibility of developing national or regional fuel specifications for the contiguous United States that would—

(A) enhance flexibility in the fuel distribution infrastructure and improve fuel fungibility;

(B) reduce price volatility and costs to consumers and producers;

(C) meet local, regional, and national air quality requirements and goals; and

(D) provide increased gasoline market liquidity; and

(7) the extent to which the Environmental Protection Agency's Tier II requirements for conventional gasoline may achieve in future years the same or similar air quality results as State reformulated gasoline programs and State programs regarding gasoline volatility (RVP).

(b) REPORT.—By December 31, 2001, the Administrator of the Environmental Protection Agency and the Secretary of Energy shall submit a report to the Congress containing the results of the study conducted under subsection (a). Such report shall contain recommendations for legislative and administrative actions that may be taken to simplify the national distribution system for motor vehicle fuel, make such system more cost-effective, and reduce the costs and increase the availability of motor vehicle fuel to the end user while meeting the requirements of the Clean Air Act. Such recommendations shall take into account the need to provide lead time for refinery and fuel distribution system modifications necessary to assure adequate fuel supply for all States.

SEC. 604. FUNDING FOR MTBE CONTAMINATION.

Notwithstanding any other provision of law, there is authorized to be appropriated to the Administrator of the Environmental Protection Agency from the Leaking Underground Storage Trust Fund not more than $200,000,000 to be used for taking such action, limited to assessment, corrective action, inspection of underground storage tank systems, and groundwater monitoring in connection with MTBE contamination, as the Administrator deems necessary to protect human health and the environment from releases of methyl tertiary butyl ether (MTBE) from underground storage tanks.

TITLE VI—RENEWABLE ENERGY

SEC. 701. ASSESSMENT OF RENEWABLE ENERGY RESOURCES.

(a) RESOURCE ASSESSMENT.—Not later than one year after the date of enactment of this Act, and each year thereafter, the Secretary of Energy shall publish an assessment by the National Laboratories of all renewable energy resources available within the United States.

(b) CONTENTS OF REPORT.—The report published under subsection (a) shall contain each of the following:

(1) A detailed inventory describing the available amount and characteristics of solar, wind, biomass, geothermal, hydroelectric and other renewable energy sources.

(2) Such other information as the Secretary of Energy believes would be useful in developing such renewable energy resources, including descriptions of surrounding terrain, population and load centers, nearby energy infrastructure, location of energy and water resources, and available estimates of the costs needed to develop each resource.

SEC. 702. RENEWABLE ENERGY PRODUCTION INCENTIVE.

Section 1212 of the Energy Policy Act of 1992 (42 U.S.C. 13317) is amended as follows:

(1) In subsection (a) by striking ''and which satisfies'' and all that follows through ''Secretary shall establish.'' and inserting ''. The Secretary shall establish other procedures necessary for efficient administration of the program. The Secretary shall not establish any criteria or procedures that have the effect of assigning to proposals a higher or lower priority for eligibility or allocation of appropriated funds on the basis of the energy source proposed.''.

(2) In subsection (b)—

(A) by striking ''a State or any political'' and all that follows through ''nonprofit electrical cooperative'' and inserting ''an electricity-generating cooperative exempt from taxation under section 501(c)(12) or section 1381(a)(2)(C) of the Internal Revenue Code of 1986, a public utility described in section 115 of such Code, a State, Commonwealth, territory, or possession of the United States or the District of Columbia, or a political subdivision thereof, or an Indian tribal government or subdivision thereof,''; and

(B) By inserting ''landfill gas,'' after ''wind, biomass,''.

(3) In subsection (c) by striking ''during the 10-fiscal year period beginning with the first full fiscal year occurring after the enactment of this section'' and inserting ''before October 1, 2013''.

(4) In subsection (d) by inserting ''or in which the Secretary finds that all necessary Federal and State authorizations have been

obtained to begin construction of the facility'' after ''eligible for such payments''.

(5) In subsection (e)(1) by inserting ''landfill gas,'' after ''wind, biomass,''.

(6) In subsection (f) by striking ''the expiration of'' and all that follows through ''of this section'' and inserting ''September 30, 2023''.

(7) In subsection (g)—

(A) by striking ''1993, 1994, and 1995'' and inserting ''2003 through 2023''; and

(B) by inserting ''Funds may be appropriated pursuant to this subsection to remain available until expended.'' after ''purposes of this section.''.

TITLE VII—PIPELINES

SEC. 801. PROHIBITION ON CERTAIN PIPELINE ROUTE.

No license, permit, lease, right-of-way, authorization or other approval required under Federal law for the construction of any pipeline to transport natural gas from lands within the Prudhoe Bay oil and gas lease area may be granted for any pipeline that follows a route that traverses—

(1) the submerged lands (as defined by the Submerged Lands Act) beneath, or the adjacent shoreline of, the Beaufort Sea; and

(2) enters Canada at any point north of 68 degrees North latitude.

SEC. 802. HISTORIC PIPELINES.

Section 7 of the Natural Gas Act (15 U.S.C. 717f) is amended by adding at the end the following new subsection:

''(i) Notwithstanding the National Historic Preservation Act, a transportation facility shall not be eligible for inclusion on the National Register of Historic Places until the Commission has permitted the abandonment of the transportation facility pursuant to subsection (b) of this section.''.

TITLE VII—MISCELLANEOUS PROVISIONS

SEC. 901. WASTE REDUCTION AND USE OF ALTERNATIVES.

(a) GRANT AUTHORITY.—The Secretary of Energy is authorized to make a single grant to a qualified institution to examine and develop the feasibility of burning post-consumer carpet in cement kilns as an alternative energy source. The purposes of the grant shall include determining—

(1) how post-consumer carpet can be burned without disrupting kiln operations;

(2) the extent to which overall kiln emissions may be reduced; and

(3) how this process provides benefits to both cement kiln operations and carpet suppliers.

(b) QUALIFIED INSTITUTION.—For the purposes of subsection (a), a qualified institution is a research-intensive institution of higher learning with demonstrated expertise in the fields of fiber recycling and logistical modeling of carpet waste collection and preparation.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Energy for carrying out this section $275,000 for fiscal year 2002, to remain available until expended.

SEC. 902. ANNUAL REPORT ON UNITED STATES ENERGY INDEPENDENCE.

(a) REPORT.—The Secretary of Energy, in consultation with the heads of other relevant Federal agencies, shall include in each report under section 801(c) of the Department of Energy Organization Act a section which evaluates the progress the United States has made toward obtaining the goal of not more than 50 percent dependence on foreign oil sources by 2010.

(b) ALTERNATIVES.—The information required under this section to be included in the reports under section 801(c) of the Department of Energy Organization Act shall include a specification of what legislative or administrative actions must be implemented to meet this goal and set forth a range of options and alternatives with a cost/benefit analysis for each option or alternative together with an estimate of the contribution each option or alternative could make to reduce foreign oil imports. The Secretary shall solicit information from the public and request information from the Energy Information Agency and other agencies to develop the information required under this section. The information shall indicate, in detail, options and alternatives to—

(1) increase the use of renewable domestic energy sources, including conventional and nonconventional sources;

(2) conserve energy resources, including improving efficiencies and decreasing consumption; and

(3) increase domestic production and use of oil, natural gas, nuclear, and coal, including any actions necessary to provide access to, and transportation of, these energy resources.

SEC. 903. STUDY OF AIRCRAFT EMISSIONS.

The Secretary of Transportation and the Administrator of the Environmental Protection Agency shall jointly commence a study within 60 days after the enactment of this Act to investigate the impact of aircraft emissions on air quality in areas that are considered to be in nonattainment for the national ambient air quality standard for ozone. As part of this study, the Secretary and the Administrator shall focus on the impact of emissions by aircraft idling at airports and on the contribution of such emissions as a percentage of total emissions in the nonattainment area. Within 180 days of the commencement of the study, the Secretary and the Administrator shall submit a report to the Committees on Energy and Commerce and Transportation and Infrastructure of the United States House of Representatives and to the Committees on Environment and Public Works and Commerce, Science, and Transportation of the United States Senate containing the results of the study and recommendations with respect to a plan to maintain comprehensive data on aircraft emissions and methods by which such emissions may be reduced, without increasing individual aircraft noise, in order to assist in the attainment of the national ambient air quality standards.

DIVISION B

SEC. 2001. SHORT TITLE.

This division may be cited as the ''Comprehensive Energy Research and Technology Act of 2001''.

SEC. 2002. FINDINGS.

The Congress finds that—

(1) the Nation's prosperity and way of life are sustained by energy use;

(2) the growing imbalance between domestic energy production and consumption means that the Nation is becoming increasingly reliant on imported energy, which has the potential to undermine the Nation's economy, standard of living, and national security;

(3) energy conservation and energy efficiency help maximize the use of available energy resources, reduce energy shortages, lower the Nation's reliance on energy imports, mitigate the impacts of high energy prices, and help protect the environment and public health;

(4) development of a balanced portfolio of domestic energy supplies will ensure that future generations of Americans will have access to the energy they need;

(5) energy efficiency technologies, renewable and alternative energy technologies, and advanced energy systems technologies will help diversify the Nation's energy portfolio with few adverse environmental impacts and are vital to delivering clean energy to fuel the Nation's economic growth;

(6) development of reliable, affordable, and environmentally sound energy efficiency technologies, renewable and alternative energy technologies, and advanced energy systems technologies will require maintenance of a vibrant fundamental scientific knowledge base and continued scientific and technological innovations that can be accelerated by Federal funding, whereas commercial deployment of such systems and technologies are the responsibility of the private sector;

(7) Federal funding should focus on those programs, projects, and activities that are long-term, high-risk, noncommercial, and well-managed, and that provide the potential for scientific and technological advances; and

(8) public-private partnerships should be encouraged to leverage scarce taxpayer dollars.

SEC. 2003. PURPOSES.

The purposes of this division are to—

(1) protect and strengthen the Nation's economy, standard of living, and national security by reducing dependence on imported energy;

(2) meet future needs for energy services at the lowest total cost to the Nation, including environmental costs, giving balanced and comprehensive consideration to technologies that improve the efficiency of energy end uses and that enhance energy supply;

(3) reduce the air, water, and other environmental impacts (including emissions of greenhouse gases) of energy production, distribution, transportation, and use through the development of environmentally sustainable energy systems;

(4) consider the comparative environmental impacts of the energy saved or produced by specific programs, projects, or activities;

(5) maintain the technological competitiveness of the United States and stimulate economic growth through the development of advanced energy systems and technologies;

(6) foster international cooperation by developing international markets for domestically produced sustainable energy technologies, and by transferring environmentally sound, advanced energy systems and technologies to developing countries to promote sustainable development;

(7) provide sufficient funding of programs, projects, and activities that are performance-based and modeled as public-private partnerships, as appropriate; and

(8) enhance the contribution of a given program, project, or activity to fundamental scientific knowledge.

SEC. 2004. GOALS.

(a) IN GENERAL.—Subject to subsection (b), in order to achieve the purposes of this division under section 2003, the Secretary should conduct a balanced energy research, development, demonstration, and commercial application portfolio of programs guided by the following goals to meet the purposes of this division under section 2003.

(1) ENERGY CONSERVATION AND ENERGY EFFICIENCY.—

(A) For the Building Technology, State and Community Sector, the program should develop technologies, housing components, designs, and production methods that will, by 2010—

(i) reduce the monthly energy cost of new housing by 20 percent, compared to the cost as of the date of the enactment of this Act;

(ii) cut the environmental impact and energy use of new housing by 50 percent, compared to the impact and use as of the date of the enactment of this Act; and

(iii) improve durability and reduce maintenance costs by 50 percent compared to the durability and costs as of the date of the enactment of this Act.

(B) For the Industry Sector, the program should, in cooperation with the affected industries, improve the energy intensity of the major energy-consuming industries by at least 25 percent by 2010, compared to the energy intensity as of the date of the enactment of this Act.

(C) For Power Technologies, the program should, in cooperation with the affected industries—

(i) develop a microturbine (40 to 300 kilowatt) that is more than 40 percent more efficient by 2006, and more than 50 percent more efficient by 2010, compared to the efficiency as of the date of the enactment of this Act; and

(ii) develop advanced materials for combustion systems that reduce emissions of nitrogen oxides by 30 to 50 percent while increasing efficiency 5 to 10 percent by 2007, compared to such emissions as of the date of the enactment of this Act.

(D) For the Transportation Sector, the program should, in cooperation with affected industries—

(i) develop a production prototype passenger automobile that has fuel economy equivalent to 80 miles per gallon of gasoline by 2004;

(ii) develop class 7 and 8 heavy duty trucks and buses with ultra low emissions and the ability to use an alternative fuel that has an average fuel economy equivalent to—

(I) 10 miles per gallon of gasoline by 2007; and

(II) 13 miles per gallon of gasoline by 2010;

(iii) develop a production prototype of a passenger automobile with zero equivalent emissions that has an average fuel economy of 100 miles per gallon of gasoline by 2010; and

(iv) improve, by 2010, the average fuel economy of trucks—

(I) in classes 1 and 2 by 300 percent; and

(II) in classes 3 through 6 by 200 percent,

compared to the fuel economy as of the date of the enactment of this Act.

(2) RENEWABLE ENERGY.—

(A) For Hydrogen Research, to carry out the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990, as amended by subtitle A of title II of this division.

(B) For bioenergy:

(i) The program should reduce the cost of bioenergy relative to other energy sources to enable the United States to triple bioenergy use by 2010.

(ii) For biopower systems, the program should reduce the cost of such systems to enable commercialization of integrated power-generating technologies that employ gas turbines and fuel cells integrated with bioenergy gasifiers within five years after the date of the enactment of this Act.

(iii) For biofuels, the program should accelerate research, development, and demonstration on advanced enzymatic hydrolysis technology for making ethanol from cellulosic feedstock, with the goal that between 2010 and 2015 ethanol produced from energy crops would be fully competitive in terms of price with gasoline as a neat fuel, in either internal combustion engines or fuel cell vehicles.

(C) For Geothermal Technology Development, the program should focus on advanced concepts for the long term. The first priority should be high-grade enhanced geothermal systems; the second priority should be lower grade, hot dry rock, and geopressured systems; and the third priority should be support of field demonstrations of enhanced geothermal systems technology, including sites in lower grade areas to demonstrate the benefits of reservoir concepts to different conditions.

(D) For Hydropower, the program should provide a new generation of turbine technologies that will increase generating capacity and will be less damaging to fish and aquatic ecosystems.

(E) For Concentrating Solar Power, the program should strengthen ongoing research, development, and demonstration combining high-efficiency and high-temperature receivers with advanced thermal storage and power cycles, with the goal of making solar-only power (including baseload solar power) widely competitive with fossil fuel power by 2015. The program should limit or halt its research and development on power-tower and power-trough technologies because further refinements to these concepts will not further their deployment, and should assess the market prospects for solar dish/engine technologies to determine whether continued research and development is warranted.

(F) For Photovoltaic Energy Systems, the program should pursue research, development, and demonstration that will, by 2005, increase the efficiency of thin film modules from the current 7 percent to 11 percent in multi-million watt production; reduce the direct manufacturing cost of photovoltaic modules by 30 percent from the current $2.50 per watt to $1.75 per watt by 2005; and establish greater than a 20-year lifetime of photovoltaic systems by improving the reliability and lifetime of balance-of-system components and reducing recurring cost by 40 percent. The program's top priority should be the development of sound manufacturing technologies for thin-film modules, and the program should make a concerted effort to integrate fundamental research and basic engineering research.

(G) For Solar Building Technology Research, the program should complete research and development on new polymers and manufacturing processes to reduce the cost of solar water heating by 50 percent by 2004, compared to the cost as of the date of enactment of this Act.

(H) For Wind Energy Systems, the program should reduce the cost of wind energy to three cents per kilowatt-hour at Class 6 (15 miles-per-hour annual average) wind sites by 2004, and 4 cents per kilowatt-hour in Class 4 (13 miles-per-hour annual average) wind sites by 2015, and further if required so that wind power can be widely competitive with fossil-fuel-based electricity in a restructured electric industry. Program research on advanced wind turbine technology should focus on turbulent flow studies, durable materials to extend turbine life, blade efficiency, and higher efficiency operation in low quality wind regimes.

(I) For Electric Energy Systems and Storage, including High Temperature Superconducting Research and Development, Energy Storage Systems, and Transmission Reliability, the program should develop high capacity superconducting transmission lines and generators, highly reliable energy storage systems, and distributed generating systems to accommodate multiple types of energy sources under common interconnect standards.

(J) For the International Renewable Energy and Renewable Energy Production Incentive programs, and Renewable Program Support, the program should encourage the commercial application of renewable energy technologies by developed and developing countries, State and local governmental entities and nonprofit electric cooperatives, and by the competitive domestic market.

(3) NUCLEAR ENERGY.—

(A) For university nuclear science and engineering, the program should carry out the provisions of subtitle A of title III of this division.

(B) For fuel cycle research, development, and demonstration, the program should carry out the provisions of subtitle B of title III of this division.

(C) For the Nuclear Energy Research Initiative, the program should accomplish the objectives of section 2341(b) of this Act.

(D) For the Nuclear Energy Plant Optimization Program, the program should accomplish the objectives of section 2342(b) of this Act.

(E) For Nuclear Energy Technologies, the program should carry out the provisions of section 2343 of this Act.

(F) For Advanced Radioisotope Power Systems, the program should ensure that the United States has adequate capability to power future satellite and space missions.

(4) FOSSIL ENERGY.—

(A) For core fossil energy research and development, the program should achieve the goals outlined by the Department's Vision 21 Program. This research should address fuel-flexible gasification and turbines, fuel cells, advanced-combustion systems, advanced fuels and chemicals, advanced modeling and systems analysis, materials and heat exchangers, environmental control technologies, gas-stream purification, gas-separation technology, and sequestration research and development focused on cost-effective novel concepts for capturing, reusing or storing, or otherwise mitigating carbon and other greenhouse gas emissions.

(B) For offshore oil and natural gas resources, the program should investigate and develop technologies to—

(i) extract methane hydrates in coastal waters of the United States, in accordance with the provisions of the Methane Hydrate Research and Development Act of 2000; and

(ii) develop natural gas and oil reserves in the ultra-deepwater of the Central and Western Gulf of Mexico. Research and development on ultra-deepwater resource recovery shall focus on improving the safety and efficiency of such recovery and of sub-sea production technology used for such recovery, while lowering costs.

(C) For transportation fuels, the program should support a comprehensive transportation fuels strategy to increase the price elasticity of oil supply and demand by focusing research on reducing the cost of producing transportation fuels from natural gas and indirect liquefaction of coal.

(5) SCIENCE.—The Secretary, through the Office of Science, should—

(A) develop and maintain a robust portfolio of fundamental scientific and energy research, including High Energy and Nuclear Physics, Biological and Environmental Research, Basic Energy Sciences (including Materials Sciences, Chemical Sciences, Engineering and Geosciences, and Energy Biosciences), Advanced Scientific Computing, Energy Research and Analysis, Multiprogram Energy Laboratories-Facilities Support, Fusion Energy Sciences, and Facilities and Infrastructure;

(B) maintain, upgrade, and expand, as appropriate, and in accordance with the provisions of this division, the scientific user facilities maintained by the Office of Science, and ensure that they are an integral part of the Department's mission for exploring the frontiers of fundamental energy sciences; and

(C) ensure that its fundamental energy sciences programs, where appropriate, help inform the applied research and development programs of the Department.

(b) REVIEW AND ASSESSMENT.—The Secretary shall perform an assessment that establishes measurable cost and performance-based goals, or that modifies the goals under

subsection (a), as appropriate, for 2005, 2010, 2015, and 2020 for each of the programs authorized by this division that would enable each such program to meet the purposes of this division under section 2003. Such assessment shall be based on the latest scientific and technical knowledge, and shall also take into consideration, as appropriate, the comparative environmental impacts (including emissions of greenhouse gases) of the energy saved or produced by specific programs.

(c) CONSULTATION.—In establishing the measurable cost and performance-based goals under subsection (b), the Secretary shall consult with the private sector, institutions of higher learning, national laboratories, environmental organizations, professional and technical societies, and any other persons as the Secretary considers appropriate.

(d) SCHEDULE.—The Secretary shall—

(1) issue and publish in the Federal Register a set of draft measurable cost and performance-based goals for the programs authorized by this division for public comment—

(A) in the case of a program established before the date of the enactment of this Act, not later than 120 days after the date of the enactment of this Act; and

(B) in the case of a program not established before the date of the enactment of this Act, not later than 120 days after the date of establishment of the program;

(2) not later than 60 days after the date of publication under paragraph (1), after taking into consideration any public comments received, transmit to the Congress and publish in the Federal Register the final measurable cost and performance-based goals; and

(3) update all such cost and performance-based goals on a biennial basis.

SEC. 2005. DEFINITIONS.

For purposes of this division, except as otherwise provided—

(1) the term ''Administrator'' means the Administrator of the Environmental Protection Agency;

(2) the term ''appropriate congressional committees'' means—

(A) the Committee on Science and the Committee on Appropriations of the House of Representatives; and

(B) the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate;

(3) the term ''Department'' means the Department of Energy; and

(4) the term ''Secretary'' means the Secretary of Energy.

SEC. 2006. AUTHORIZATIONS.

Authorizations of appropriations under this division are for environmental research and development, scientific and energy research, development, and demonstration, and commercial application of energy technology programs, projects, and activities.

SEC. 2007. BALANCE OF FUNDING PRIORITIES.

(a) SENSE OF CONGRESS.—It is the sense of the Congress that the funding of the various programs authorized by titles I through IV of this division should remain in the same proportion to each other as provided in this division, regardless of the total amount of funding made available for those programs.

(b) REPORT TO CONGRESS.—If for fiscal year 2002, 2003, or 2004 the amounts appropriated in general appropriations Acts for the programs authorized in titles I through IV of this division are not in the same proportion to one another as are the authorizations for such programs in this division, the Secretary and the Administrator shall, within 60 days after the date of the enactment of the last general appropriations Act appropriating amounts for such programs, transmit to the appropriate congressional committees a report describing the programs, projects, and activities that would have been funded if the proportions provided for in this division had been maintained in the appropriations. The amount appropriated for the program receiving the highest percentage of its authorized funding for a fiscal year shall be used as the baseline for calculating the proportional deficiencies of appropriations for other programs in that fiscal year.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle A—Alternative Fuel Vehicles

SEC. 2101. SHORT TITLE.

This subtitle may be cited as the ''Alternative Fuel Vehicle Acceleration Act of 2001''.

SEC. 2102. DEFINITIONS.

For the purposes of this subtitle, the following definitions apply:

(1) ALTERNATIVE FUEL VEHICLE.—

(A) IN GENERAL.—Except as provided in subparagraph (B), the term ''alternative fuel vehicle'' means a motor vehicle that is powered—

(i) in whole or in part by electricity, including electricity supplied by a fuel cell;

(ii) by liquefied natural gas;

(iii) by compressed natural gas;

(iv) by liquefied petroleum gas;

(v) by hydrogen;

(vi) by methanol or ethanol at no less than 85 percent by volume; or

(vii) by propane.

(B) EXCLUSIONS.—The term ''alternative fuel vehicle'' does not include—

(i) any vehicle designed to operate solely on gasoline or diesel derived from fossil fuels, regardless of whether it can also be operated on an alternative fuel; or

(ii) any vehicle that the Secretary determines, by rule, does not yield substantial environmental benefits over a vehicle operating solely on gasoline or diesel derived from fossil fuels.

(2) PILOT PROGRAM.—The term ''pilot program'' means the competitive grant program established under section 2103.

(3) ULTRA-LOW SULFUR DIESEL VEHICLE.—The term ''ultra-low sulfur diesel vehicle'' means a vehicle powered by a heavy-duty diesel engine that—

(A) is fueled by diesel fuel which contains sulfur at not more than 15 parts per million; and

(B) emits not more than the lesser of—

(i) for vehicles manufactured in—

(I) model years 2001 through 2003, 3.0 grams per brake horsepower-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter; and

(II) model years 2004 through 2006, 2.5 grams per brake horsepower-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter; or

(ii) the emissions of nonmethane hydrocarbons, oxides of nitrogen, and particulate matter of the best performing technology of ultra-low sulfur diesel vehicles of the same type that are commercially available.

SEC. 2103. PILOT PROGRAM.

(a) ESTABLISHMENT.—The Secretary shall establish a competitive grant pilot program to provide not more than 15 grants to State governments, local governments, or metropolitan transportation authorities to carry out a project or projects for the purposes described in subsection (b).

(b) GRANT PURPOSES.—Grants under this section may be used for the following purposes:

(1) The acquisition of alternative fuel vehicles, including—

(A) passenger vehicles;

(B) buses used for public transportation or transportation to and from schools;

(C) delivery vehicles for goods or services;

(D) ground support vehicles at public airports, including vehicles to carry baggage or push airplanes away from terminal gates; and

(E) motorized two-wheel bicycles, scooters, or other vehicles for use by law enforcement personnel or other State or local government or metropolitan transportation authority employees.

(2) The acquisition of ultra-low sulfur diesel vehicles.

(3) Infrastructure necessary to directly support an alternative fuel vehicle project funded by the grant, including fueling and other support equipment.

(4) Operation and maintenance of vehicles, infrastructure, and equipment acquired as part of a project funded by the grant.

(c) APPLICATIONS.—

(1) REQUIREMENTS.—The Secretary shall issue requirements for applying for grants under the pilot program. At a minimum, the Secretary shall require that applications be submitted by the head of a State or local government or a metropolitan transportation authority, or any combination thereof, and shall include—

(A) at least one project to enable passengers or goods to be transferred directly from one alternative fuel vehicle or ultra-low sulfur diesel vehicle to another in a linked transportation system;

(B) a description of the projects proposed in the application, including how they meet the requirements of this subtitle;

(C) an estimate of the ridership or degree of use of the projects proposed in the application;

(D) an estimate of the air pollution emissions reduced and fossil fuel displaced as a result of the projects proposed in the application, and a plan to collect and disseminate environmental data, related to the projects to be funded under the grant, over the life of the projects;

(E) a description of how the projects proposed in the application will be sustainable without Federal assistance after the completion of the term of the grant;

(F) a complete description of the costs of each project proposed in the application, including acquisition, construction, operation, and maintenance costs over the expected life of the project;

(G) a description of which costs of the projects proposed in the application will be supported by Federal assistance under this subtitle; and

(H) documentation to the satisfaction of the Secretary that diesel fuel containing sulfur at not more than 15 parts per million is available for carrying out the projects, and a commitment by the applicant to use such fuel in carrying out the projects.

(2) PARTNERS.—An applicant under paragraph (1) may carry out projects under the pilot program in partnership with public and private entities.

(d) SELECTION CRITERIA.—In evaluating applications under the pilot program, the Secretary shall consider each applicant's previous experience with similar projects and shall give priority consideration to applications that—

(1) are most likely to maximize protection of the environment;

(2) demonstrate the greatest commitment on the part of the applicant to ensure funding for the proposed projects and the greatest likelihood that each project proposed in the application will be maintained or expanded after Federal assistance under this subtitle is completed; and

(3) exceed the minimum requirements of subsection (c)(1)(A).

(e) PILOT PROJECT REQUIREMENTS.—

(1) MAXIMUM AMOUNT.—The Secretary shall not provide more than $20,000,000 in Federal assistance under the pilot program to any applicant.

(2) COST SHARING.—The Secretary shall not provide more than 50 percent of the cost, incurred during the period of the grant, of any project under the pilot program.

(3) MAXIMUM PERIOD OF GRANTS.—The Secretary shall not fund any applicant under the pilot program for more than 5 years.

(4) DEPLOYMENT AND DISTRIBUTION.—The Secretary shall seek to the maximum extent practicable to achieve nationwide deployment of alternative fuel vehicles through the pilot program, and shall ensure a broad geographic distribution of project sites.

(5) TRANSFER OF INFORMATION AND KNOWLEDGE.—The Secretary shall establish mechanisms to ensure that the information and knowledge gained by participants in the pilot program are transferred among the pilot program participants and to other interested parties, including other applicants that submitted applications.

(f) SCHEDULE.—

(1) PUBLICATION.—Not later than 3 months after the date of enactment of this Act, the Secretary shall publish in the Federal Register, Commerce Business Daily, and elsewhere as appropriate, a request for applications to undertake projects under the pilot program. Applications shall be due within 6 months of the publication of the notice.

(2) SELECTION.—Not later than 6 months after the date by which applications for grants are due, the Secretary shall select by competitive, peer review all applications for projects to be awarded a grant under the pilot program.

(g) LIMIT ON FUNDING.—The Secretary shall provide not less than 20 percent and not more than 25 percent of the grant funding made available under this section for the acquisition of ultra-low sulfur diesel vehicles.

SEC. 2104. REPORTS TO CONGRESS.

(a) INITIAL REPORT.—Not later than 2 months after the date grants are awarded under this subtitle, the Secretary shall transmit to the appropriate congressional committees a report containing—

(1) an identification of the grant recipients and a description of the projects to be funded;

(2) an identification of other applicants that submitted applications for the pilot program; and

(3) a description of the mechanisms used by the Secretary to ensure that the information and knowledge gained by participants in the pilot program are transferred among the pilot program participants and to other interested parties, including other applicants that submitted applications.

(b) EVALUATION.—Not later than 3 years after the date of enactment of this Act, and annually thereafter until the pilot program ends, the Secretary shall transmit to the appropriate congressional committees a report containing an evaluation of the effectiveness of the pilot program, including an assessment of the benefits to the environment derived from the projects included in the pilot program as well as an estimate of the potential benefits to the environment to be derived from widespread application of alternative fuel vehicles and ultra-low sulfur diesel vehicles.

SEC. 2105. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Secretary $200,000,000 to carry out this subtitle, to remain available until expended.

Subtitle B—Distributed Power Hybrid Energy Systems

SEC. 2121. FINDINGS.

The Congress makes the following findings:

(1) Our ability to take advantage of our renewable, indigenous resources in a cost-effective manner can be greatly advanced through systems that compensate for the intermittent nature of these resources through distributed power hybrid systems.

(2) Distributed power hybrid systems can—

(A) shelter consumers from temporary energy price volatility created by supply and demand mismatches;

(B) increase the reliability of energy supply; and

(C) address significant local differences in power and economic development needs and resource availability that exist throughout the United States.

(3) Realizing these benefits will require a concerted and integrated effort to remove market barriers to adopting distributed power hybrid systems by—

(A) developing the technological foundation that enables designing, testing, certifying, and operating distributed power hybrid systems; and

(B) providing the policy framework that reduces such barriers.

(4) While many of the individual distributed power hybrid systems components are either available or under development in existing private and public sector programs, the capabilities to integrate these components into workable distributed power hybrid systems that maximize benefits to consumers in a safe manner often are not coherently being addressed.

SEC. 2122. DEFINITIONS.

For purposes of this subtitle—

(1) the term ''distributed power hybrid system'' means a system using 2 or more distributed power sources, operated together with associated supporting equipment, including storage equipment, and software necessary to provide electric power onsite and to an electric distribution system; and

(2) the term ''distributed power source'' means an independent electric energy source of usually 10 megawatts or less located close to a residential, commercial, or industrial load center, including—

(A) reciprocating engines;

(B) turbines;

(C) microturbines;

(D) fuel cells;

(E) solar electric systems;

(F) wind energy systems;

(G) biopower systems;

(H) geothermal power systems; or

(I) combined heat and power systems.

SEC. 2123. STRATEGY.

(a) REQUIREMENT.—Not later than 1 year after the date of the enactment of this Act, the Secretary shall develop and transmit to the Congress a distributed power hybrid systems strategy showing—

(1) needs best met with distributed power hybrid systems configurations, especially systems including one or more solar or renewable power sources; and

(2) technology gaps and barriers (including barriers to efficient connection with the power grid) that hamper the use of distributed power hybrid systems.

(b) ELEMENTS.—The strategy shall provide for development of—

(1) system integration tools (including databases, computer models, software, sensors, and controls) needed to plan, design, build, and operate distributed power hybrid systems for maximum benefits;

(2) tests of distributed power hybrid systems, power parks, and microgrids, including field tests and cost-shared demonstrations with industry;

(3) design tools to characterize the benefits of distributed power hybrid systems for consumers, to reduce testing needs, to speed commercialization, and to generate data characterizing grid operations, including interconnection requirements;

(4) precise resource assessment tools to map local resources for distributed power hybrid systems; and

(5) a comprehensive research, development, demonstration, and commercial application program to ensure the reliability, efficiency, and environmental integrity of distributed energy resources, focused on filling gaps in distributed power hybrid systems technologies identified under subsection (a)(2), which may include—

(A) integration of a wide variety of advanced technologies into distributed power hybrid systems;

(B) energy storage devices;

(C) environmental control technologies;

(D) interconnection standards, protocols, and equipment; and

(E) ancillary equipment for dispatch and control.

(c) IMPLEMENTATION AND INTEGRATION.—The Secretary shall implement the strategy transmitted under subsection (a) and the research program under subsection (b)(5). Activities pursuant to the strategy shall be integrated with other activities of the Department's Office of Power Technologies.

SEC. 2124. HIGH POWER DENSITY INDUSTRY PROGRAM.

(a) IN GENERAL.—The Secretary shall develop and implement a comprehensive research, development, demonstration, and commercial application program to improve energy efficiency, reliability, and environmental responsibility in high power density industries, such as data centers, server farms, telecommunications facilities, and heavy industry.

(b) AREAS.—In carrying out this section, the Secretary shall consider technologies that provide—

(1) significant improvement in efficiency of high power density facilities, and in data and telecommunications centers, using advanced thermal control technologies;

(2) significant improvements in air-conditioning efficiency in facilities such as data centers and telecommunications facilities;

(3) significant advances in peak load reduction; and

(4) advanced real time metering and load management and control devices.

(c) IMPLEMENTATION AND INTEGRATION.—Activities pursuant to this program shall be integrated with other activities of the Department's Office of Power Technologies.

SEC. 2125. MICRO-COGENERATION ENERGY TECHNOLOGY.

The Secretary shall make competitive, merit-based grants to consortia of private sector entities for the development of micro-cogeneration energy technology. The consortia shall explore the creation of small-scale combined heat and power through the use of residential heating appliances. There are authorized to be appropriated to the Secretary $20,000,000 to carry out this section, to remain available until expended.

SEC. 2126. PROGRAM PLAN.

Within 4 months after the date of enactment of this Act, the Secretary, in consultation with other appropriate Federal agencies, shall prepare and transmit to the Congress a 5-year program plan to guide activities under this subtitle. In preparing the program plan, the Secretary shall consult with appropriate representatives of the distributed energy resources, power transmission, and high power density industries to prioritize appropriate program areas. The Secretary shall also seek the advice of utilities, energy services providers, manufacturers, institutions of higher learning, other appropriate State and local agencies, environmental organizations, professional and technical societies, and any other persons the Secretary considers appropriate.

SEC. 2127. REPORT.

Two years after date of enactment of this Act and at two year intervals thereafter, the Secretary, jointly with other appropriate Federal agencies, shall transmit a report to Congress describing the progress made to achieve the purposes of this subtitle.

SEC. 2128. VOLUNTARY CONSENSUS STANDARDS.

Not later than 2 years after the date of enactment of this Act, the Secretary, in consultation with the National Institute of Standards and Technology, shall work with the Institute of Electrical and Electronic Engineers and other standards development organizations toward the development of voluntary consensus standards for distributed energy systems for use in manufacturing and using equipment and systems for connection with electric distribution systems, for obtaining electricity from, or providing electricity to, such systems.

Subtitle C—Secondary Electric Vehicle Battery Use

SEC. 2131. DEFINITIONS.

For purposes of this subtitle, the term—

(1) ''battery'' means an energy storage device that previously has been used to provide motive power in a vehicle powered in whole or in part by electricity; and

(2) ''associated equipment'' means equipment located at the location where the batteries will be used that is necessary to enable the use of the energy stored in the batteries.

SEC. 2132. ESTABLISHMENT OF SECONDARY ELECTRIC VEHICLE BATTERY USE PROGRAM.

(a) PROGRAM.—The Secretary shall establish and conduct a research, development, and demonstration program for the secondary use of batteries where the original use of such batteries was in transportation applications. Such program shall be—

(1) designed to demonstrate the use of batteries in secondary application, including utility and commercial power storage and power quality;

(2) structured to evaluate the performance, including longevity of useful service life and costs, of such batteries in field operations, and evaluate the necessary supporting infrastructure, including disposal and reuse of batteries; and

(3) coordinated with ongoing secondary battery use programs underway at the national laboratories and in industry.

(b) SOLICITATION.—(1) Not later than 6 months after the date of the enactment of this Act, the Secretary shall solicit proposals to demonstrate the secondary use of batteries and associated equipment and supporting infrastructure in geographic locations throughout the United States. The Secretary may make additional solicitations for proposals if the Secretary determines that such solicitations are necessary to carry out this section.

(2)(A) Proposals submitted in response to a solicitation under this section shall include—

(i) a description of the project, including the batteries to be used in the project, the proposed locations and applications for the batteries, the number of batteries to be demonstrated, and the type, characteristics, and estimated life-cycle costs of the batteries compared to other energy storage devices currently used;

(ii) the contribution, if any, of State or local governments and other persons to the demonstration project;

(iii) the type of associated equipment to be demonstrated and the type of supporting infrastructure to be demonstrated; and

(iv) any other information the Secretary considers appropriate.

(B) If the proposal includes a lease arrangement, the proposal shall indicate the terms of such lease arrangement for the batteries and associated equipment.

(c) SELECTION OF PROPOSALS.—(1)(A) The Secretary shall, not later than 3 months after the closing date established by the Secretary for receipt of proposals under subsection (b), select at least 5 proposals to receive financial assistance under this section.

(B) No one project selected under this section shall receive more than 25 percent of the funds authorized under this section. No more than 3 projects selected under this section shall demonstrate the same battery type.

(2) In selecting a proposal under this section, the Secretary shall consider—

(A) the ability of the proposer to acquire the batteries and associated equipment and to successfully manage and conduct the demonstration project, including the reporting requirements set forth in paragraph (3)(B);

(B) the geographic and climatic diversity of the projects selected;

(C) the long-term technical and competitive viability of the batteries to be used in the project and of the original manufacturer of such batteries;

(D) the suitability of the batteries for their intended uses;

(E) the technical performance of the battery, including the expected additional useful life and the battery's ability to retain energy;

(F) the environmental effects of the use of and disposal of the batteries proposed to be used in the project selected;

(G) the extent of involvement of State or local government and other persons in the demonstration project and whether such involvement will—

(i) permit a reduction of the Federal cost share per project; or

(ii) otherwise be used to allow the Federal contribution to be provided to demonstrate a greater number of batteries; and

(H) such other criteria as the Secretary considers appropriate.

(3) CONDITIONS.—The Secretary shall require that—

(A) as a part of a demonstration project, the users of the batteries provide to the proposer information regarding the operation, maintenance, performance, and use of the batteries, and the proposer provide such information to the battery manufacturer, for 3 years after the beginning of the demonstration project;

(B) the proposer provide to the Secretary such information regarding the operation, maintenance, performance, and use of the batteries as the Secretary may request during the period of the demonstration project; and

(C) the proposer provide at least 50 percent of the costs associated with the proposal.

SEC. 2133. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Secretary, from amounts authorized under section 2161(a), for purposes of this subtitle—

(1) $1,000,000 for fiscal year 2002;

(2) $7,000,000 for fiscal year 2003; and

(3) $7,000,000 for fiscal year 2004.

Such appropriations may remain available until expended.

Subtitle D—Green School Buses

SEC. 2141. SHORT TITLE.

This subtitle may be cited as the ''Clean Green School Bus Act of 2001''.

SEC. 2142. ESTABLISHMENT OF PILOT PROGRAM.

(a) ESTABLISHMENT.—The Secretary shall establish a pilot program for awarding grants on a competitive basis to eligible entities for the demonstration and commercial application of alternative fuel school buses and ultra-low sulfur diesel school buses.

(b) REQUIREMENTS.—Not later than 3 months after the date of the enactment of this Act, the Secretary shall establish and publish in the Federal register grant requirements on eligibility for assistance, and on implementation of the program established under subsection (a), including certification requirements to ensure compliance with this subtitle.

(c) SOLICITATION.—Not later than 6 months after the date of the enactment of this Act, the Secretary shall solicit proposals for grants under this section.

(d) ELIGIBLE RECIPIENTS.—A grant shall be awarded under this section only—

(1) to a local governmental entity responsible for providing school bus service for one or more public school systems; or

(2) jointly to an entity described in paragraph (1) and a contracting entity that provides school bus service to the public school system or systems.

(e) TYPES OF GRANTS.—

(1) IN GENERAL.—Grants under this section shall be for the demonstration and commercial application of technologies to facilitate the use of alternative fuel school buses and ultra-low sulfur diesel school buses in lieu of buses manufactured before model year 1977 and diesel-powered buses manufactured before model year 1991.

(2) NO ECONOMIC BENEFIT.—Other than the receipt of the grant, a recipient of a grant under this section may not receive any economic benefit in connection with the receipt of the grant.

(3) PRIORITY OF GRANT APPLICATIONS.—The Secretary shall give priority to awarding grants to applicants who can demonstrate the use of alternative fuel buses and ultra-low sulfur diesel school buses in lieu of buses manufactured before model year 1977.

(f) CONDITIONS OF GRANT.—A grant provided under this section shall include the following conditions:

(1) All buses acquired with funds provided under the grant shall be operated as part of the school bus fleet for which the grant was made for a minimum of 5 years.

(2) Funds provided under the grant may only be used—

(A) to pay the cost, except as provided in paragraph (3), of new alternative fuel school buses or ultra-low sulfur diesel school buses, including State taxes and contract fees; and

(B) to provide—

(i) up to 10 percent of the price of the alternative fuel buses acquired, for necessary alternative fuel infrastructure if the infrastructure will only be available to the grant recipient; and

(ii) up to 15 percent of the price of the alternative fuel buses acquired, for necessary alternative fuel infrastructure if the infrastructure will be available to the grant recipient and to other bus fleets.

(3) The grant recipient shall be required to provide at least the lesser of 15 percent of the total cost of each bus received or $15,000 per bus.

(4) In the case of a grant recipient receiving a grant to demonstrate ultra-low sulfur diesel school buses, the grant recipient shall be required to provide documentation to the satisfaction of the Secretary that diesel fuel containing sulfur at not more than 15 parts per million is available for carrying out the purposes of the grant, and a commitment by the applicant to use such fuel in carrying out the purposes of the grant.

(g) BUSES.—Funding under a grant made under this section may be used to demonstrate the use only of new alternative fuel school buses or ultra-low sulfur diesel school buses—

(1) with a gross vehicle weight of greater than 14,000 pounds;

(2) that are powered by a heavy duty engine;

(3) that, in the case of alternative fuel school buses, emit not more than—

(A) for buses manufactured in model years 2001 and 2002, 2.5 grams per brake horsepower-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter; and

(B) for buses manufactured in model years 2003 through 2006, 1.8 grams per brake horsepower-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter; and

(4) that, in the case of ultra-low sulfur diesel school buses, emit not more than—

(A) for buses manufactured in model years 2001 through 2003, 3.0 grams per brake horsepower-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter; and

(B) for buses manufactured in model years 2004 through 2006, 2.5 grams per brake horsepower-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter,

except that under no circumstances shall buses be acquired under this section that emit nonmethane hydrocarbons, oxides of nitrogen, or particulate matter at a rate greater than the best performing technology of ultra-low sulfur diesel school buses commercially available at the time the grant is made.

(h) DEPLOYMENT AND DISTRIBUTION.—The Secretary shall seek to the maximum extent practicable to achieve nationwide deployment of alternative fuel school buses through the program under this section, and shall ensure a broad geographic distribution of grant awards, with a goal of no State receiving more than 10 percent of the grant funding made available under this section for a fiscal year.

(i) LIMIT ON FUNDING.—The Secretary shall provide not less than 20 percent and not more than 25 percent of the grant funding made available under this section for any fiscal year for the acquisition of ultra-low sulfur diesel school buses.

(j) DEFINITIONS.—For purposes of this section—

(1) the term ''alternative fuel school bus'' means a bus powered substantially by electricity (including electricity supplied by a fuel cell), or by liquefied natural gas, compressed natural gas, liquefied petroleum gas, hydrogen, propane, or methanol or ethanol at no less than 85 percent by volume; and

(2) the term ''ultra-low sulfur diesel school bus'' means a school bus powered by diesel fuel which contains sulfur at not more than 15 parts per million.

SEC. 2143. FUEL CELL BUS DEVELOPMENT AND DEMONSTRATION PROGRAM.

(a) ESTABLISHMENT OF PROGRAM.—The Secretary shall establish a program for entering into cooperative agreements with private sector fuel cell bus developers for the development of fuel cell-powered school buses, and subsequently with not less than 2 units of local government using natural gas-powered school buses and such private sector fuel cell bus developers to demonstrate the use of fuel cell-powered school buses.

(b) COST SHARING.—The non-Federal contribution for activities funded under this section shall be not less than—

(1) 20 percent for fuel infrastructure development activities; and

(2) 50 percent for demonstration activities and for development activities not described in paragraph (1).

(c) FUNDING.—No more than $25,000,000 of the amounts authorized under section 2144 may be used for carrying out this section for the period encompassing fiscal years 2002 through 2006.

(d) REPORTS TO CONGRESS.—Not later than 3 years after the date of the enactment of this Act, and not later than October 1, 2006, the Secretary shall transmit to the appropriate congressional committees a report that—

(1) evaluates the process of converting natural gas infrastructure to accommodate fuel cell-powered school buses; and

(2) assesses the results of the development and demonstration program under this section.

SEC. 2144. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Secretary for carrying out this subtitle, to remain available until expended—

(1) $40,000,000 for fiscal year 2002;
(2) $50,000,000 for fiscal year 2003;
(3) $60,000,000 for fiscal year 2004;
(4) $70,000,000 for fiscal year 2005; and
(5) $80,000,000 for fiscal year 2006.

Subtitle E—Next Generation Lighting Initiative

SEC. 2151. SHORT TITLE.

This subtitle may be cited as ''Next Generation Lighting Initiative Act''.

SEC. 2152. DEFINITION.

In this subtitle, the term ''Lighting Initiative'' means the ''Next Generation Lighting Initiative'' established under section 2153(a).

SEC. 2153. NEXT GENERATION LIGHTING INITIATIVE.

(a) ESTABLISHMENT.—The Secretary is authorized to establish a lighting initiative to be known as the ''Next Generation Lighting Initiative'' to research, develop, and conduct demonstration activities on advanced lighting technologies, including white light emitting diodes.

(b) RESEARCH OBJECTIVES.—The research objectives of the Lighting Initiative shall be to develop, by 2011, advanced lighting technologies that, compared to incandescent and fluorescent lighting technologies as of the date of the enactment of this Act, are—

(1) longer lasting;
(2) more energy-efficient; and
(3) cost-competitive.

SEC. 2154. STUDY.

(a) IN GENERAL.—Not later than 6 months after the date of enactment of this Act, the Secretary, in consultation with other Federal agencies, as appropriate, shall complete a study on strategies for the development and commercial application of advanced lighting technologies. The Secretary shall request a review by the National Academies of Sciences and Engineering of the study under this subsection, and shall transmit the results of the study to the appropriate congressional committees.

(b) REQUIREMENTS.—The study shall—

(1) develop a comprehensive strategy to implement the Lighting Initiative; and

(2) identify the research and development, manufacturing, deployment, and marketing barriers that must be overcome to achieve a goal of a 25 percent market penetration by advanced lighting technologies into the incandescent and fluorescent lighting market by the year 2012.

(c) IMPLEMENTATION.—As soon as practicable after the review of the study under subsection (a) is transmitted to the Secretary by the National Academies of Sciences and Engineering, the Secretary shall adapt the implementation of the Lighting Initiative taking into consideration the recommendations of the National Academies of Sciences and Engineering.

SEC. 2155. GRANT PROGRAM.

(a) IN GENERAL.—Subject to section 2603 of this Act, the Secretary may make merit-based competitive grants to firms and research organizations that conduct research, development, and demonstration projects related to advanced lighting technologies.

(b) ANNUAL REVIEW.—

(1) IN GENERAL.—An annual independent review of the grant-related activities of firms and research organizations receiving a grant under this section shall be conducted by a committee appointed by the Secretary under the Federal Advisory Committee Act (5 U.S.C. App.), or, at the request of the Secretary, a committee appointed by the National Academies of Sciences and Engineering.

(2) REQUIREMENTS.—Using clearly defined standards established by the Secretary, the review shall assess technology advances and progress toward commercialization of the grant-related activities of firms or research organizations during each fiscal year of the grant program.

(c) TECHNICAL AND FINANCIAL ASSISTANCE.—The national laboratories and other Federal agencies, as appropriate, shall cooperate with and provide technical and financial assistance to firms and research organizations conducting research, development, and demonstration projects carried out under this subtitle.

Subtitle F—Department of Energy Authorization of Appropriations

SEC. 2161. AUTHORIZATION OF APPROPRIATIONS.

(a) OPERATION AND MAINTENANCE.—In addition to amounts authorized to be appropriated under section 2105, section 2125, and section 2144, there are authorized to be appropriated to the Secretary for subtitle B, subtitle C, subtitle E, and for Energy Conservation operation and maintenance (including Building Technology, State and Community Sector (Nongrants), Industry Sector, Transportation Sector, Power Technologies, and Policy and Management) $625,000,000 for fiscal year 2002, $700,000,000 for fiscal year 2003, and $800,000,000 for fiscal year 2004, to remain available until expended.

(b) LIMITS ON USE OF FUNDS.—None of the funds authorized to be appropriated in subsection (a) may be used for—

(1) Building Technology, State and Community Sector—

(A) Residential Building Energy Codes;
(B) Commercial Building Energy Codes;
(C) Lighting and Appliance Standards;
(D) Weatherization Assistance Program; or
(E) State Energy Program; or

(2) Federal Energy Management Program.

Subtitle G—Environmental Protection Agency Office of Air and Radiation Authorization of Appropriations

SEC. 2171. SHORT TITLE.

This subtitle may be cited as the ''Environmental Protection Agency Office of Air and Radiation Authorization Act of 2001''.

SEC. 2172. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Administrator for Office of Air and Radiation Climate Change Protection Programs $121,942,000 for fiscal year 2002, $126,800,000 for fiscal year 2003, and $131,800,000 for fiscal year 2004 to remain available until expended, of which—

(1) $52,731,000 for fiscal year 2002, $54,800,000 for fiscal year 2003, and $57,000,000 for fiscal year 2004 shall be for Buildings;

(2) $32,441,000 for fiscal year 2002, $33,700,000 for fiscal year 2003, and $35,000,000 for fiscal year 2004 shall be for Transportation;

(3) $27,295,000 for fiscal year 2002, $28,400,000 for fiscal year 2003, and $29,500,000 for fiscal year 2004 shall be for Industry;

(4) $1,700,000 for fiscal year 2002, $1,800,000 for fiscal year 2003, and $1,900,000 for fiscal year 2004 shall be for Carbon Removal;

(5) $2,500,000 for fiscal year 2002, $2,600,000 for fiscal year 2003, and $2,700,000 for fiscal year 2004 shall be for State and Local Climate; and

(6) $5,275,000 for fiscal year 2002, $5,500,000 for fiscal year 2003, and $5,700,000 for fiscal

year 2004 shall be for International Capacity Building.

SEC. 2173. LIMITS ON USE OF FUNDS.

(a) PRODUCTION OR PROVISION OF ARTICLES OR SERVICES.—None of the funds authorized to be appropriated by this subtitle may be used to produce or provide articles or services for the purpose of selling the articles or services to a person outside the Federal Government, unless the Administrator determines that comparable articles or services are not available from a commercial source in the United States.

(b) REQUESTS FOR PROPOSALS.—None of the funds authorized to be appropriated by this subtitle may be used by the Environmental Protection Agency to prepare or initiate Requests for Proposals for a program if the program has not been authorized by Congress.

SEC. 2174. COST SHARING.

(a) RESEARCH AND DEVELOPMENT.—Except as otherwise provided in this subtitle, for research and development programs carried out under this subtitle, the Administrator shall require a commitment from non-Federal sources of at least 20 percent of the cost of the project. The Administrator may reduce or eliminate the non-Federal requirement under this subsection if the Administrator determines that the research and development is of a basic or fundamental nature.

(b) DEMONSTRATION AND COMMERCIAL APPLICATION.—Except as otherwise provided in this subtitle, the Administrator shall require at least 50 percent of the costs directly and specifically related to any demonstration or commercial application project under this subtitle to be provided from non-Federal sources. The Administrator may reduce the non-Federal requirement under this subsection if the Administrator determines that the reduction is necessary and appropriate considering the technological risks involved in the project and is necessary to meet the objectives of this subtitle.

(c) CALCULATION OF AMOUNT.—In calculating the amount of the non-Federal commitment under subsection (a) or (b), the Administrator may include personnel, services, equipment, and other resources.

SEC. 2175. LIMITATION ON DEMONSTRATION AND COMMERCIAL APPLICATIONS OF ENERGY TECHNOLOGY.

The Administrator shall provide funding for scientific or energy demonstration or commercial application of energy technology programs, projects, or activities of the Office of Air and Radiation only for technologies or processes that can be reasonably expected to yield new, measurable benefits to the cost, efficiency, or performance of the technology or process.

SEC. 2176. REPROGRAMMING.

(a) AUTHORITY.—The Administrator may use amounts appropriated under this subtitle for a program, project, or activity other than the program, project, or activity for which such amounts were appropriated only if—

(1) the Administrator has transmitted to the appropriate congressional committees a report described in subsection (b) and a period of 30 days has elapsed after such committees receive the report;

(2) amounts used for the program, project, or activity do not exceed—

(A) 105 percent of the amount authorized for the program, project, or activity; or

(B) $250,000 more than the amount authorized for the program, project, or activity,

whichever is less; and

(3) the program, project, or activity has been presented to, or requested of, the Congress by the Administrator.

(b) REPORT.—(1) The report referred to in subsection (a) is a report containing a full and complete statement of the action proposed to be taken and the facts and circumstances relied upon in support of the proposed action.

(2) In the computation of the 30-day period under subsection (a), there shall be excluded any day on which either House of Congress is not in session because of an adjournment of more than 3 days to a day certain.

(c) LIMITATIONS.—(1) In no event may the total amount of funds obligated pursuant to this subtitle exceed the total amount authorized to be appropriated by this subtitle.

(2) Funds appropriated pursuant to this subtitle may not be used for an item for which Congress has declined to authorize funds.

SEC. 2177. BUDGET REQUEST FORMAT.

The Administrator shall provide to the appropriate congressional committees, to be transmitted at the same time as the Environmental Protection Agency's annual budget request submission, a detailed justification for budget authorization for the programs, projects, and activities for which funds are authorized by this subtitle. Each such document shall include, for the fiscal year for which funding is being requested and for the 2 previous fiscal years—

(1) a description of, and funding requested or allocated for, each such program, project, or activity;

(2) an identification of all recipients of funds to conduct such programs, projects, and activities; and

(3) an estimate of the amounts to be expended by each recipient of funds identified under paragraph (2).

SEC. 2178. OTHER PROVISIONS.

(a) ANNUAL OPERATING PLAN AND REPORTS.—The Administrator shall provide simultaneously to the Committee on Science of the House of Representatives—

(1) any annual operating plan or other operational funding document, including any additions or amendments thereto; and

(2) any report relating to the environmental research or development, scientific or energy research, development, or demonstration, or commercial application of energy technology programs, projects, or activities of the Environmental Protection Agency,

provided to any committee of Congress.

(b) NOTICE OF REORGANIZATION.—The Administrator shall provide notice to the appropriate congressional committees not later than 15 days before any reorganization of any environmental research or development, scientific or energy research, development, or demonstration, or commercial application of energy technology program, project, or activity of the Office of Air and Radiation.

Subtitle H—National Building Performance Initiative

SEC. 2181. NATIONAL BUILDING PERFORMANCE INITIATIVE.

(a) INTERAGENCY GROUP.—Not later than 3 months after the date of the enactment of this Act, the Director of the Office of Science and Technology Policy shall establish an Interagency Group responsible for the development and implementation of a National Building Performance Initiative to address energy conservation and research and development and related issues. The National Institute of Standards and Technology shall provide necessary administrative support for the Interagency Group.

(b) PLAN.—Not later than 9 months after the date of the enactment of this Act, the Interagency Group shall transmit to the Congress a multiyear implementation plan describing the Federal role in reducing the costs, including energy costs, of using, owning, and operating commercial, institutional, residential, and industrial buildings by 30 percent by 2020. The plan shall include—

(1) research, development, and demonstration of systems and materials for new construction and retrofit, on the building envelope and components; and

(2) the collection and dissemination in a usable form of research results and other pertinent information to the design and construction industry, government officials, and the general public.

(c) NATIONAL BUILDING PERFORMANCE ADVISORY COMMITTEE.—A National Building Performance Advisory Committee shall be established to advise on creation of the plan, review progress made under the plan, advise on any improvements that should be made to the plan, and report to the Congress on actions that have been taken to advance the Nation's capability in furtherance of the plan. The members shall include representatives of a broad cross-section of interests such as the research, technology transfer, architectural, engineering, and financial communities; materials and systems suppliers; State, county, and local governments; the residential, multifamily, and commercial sectors of the construction industry; and the insurance industry.

(d) REPORT.—The Interagency Group shall, within 90 days after the end of each fiscal year, transmit a report to the Congress describing progress achieved during the preceding fiscal year by government at all levels and by the private sector, toward implementing the plan developed under subsection (b), and including any amendments to the plan.

TITLE II—RENEWABLE ENERGY

Subtitle A—Hydrogen

SEC. 2201. SHORT TITLE.

This subtitle may be cited as the ''Robert S. Walker and George E. Brown, Jr. Hydrogen Energy Act of 2001''.

SEC. 2202. PURPOSES.

Section 102(b) of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended to read as follows:

''(b) PURPOSES.—The purposes of this Act are—

''(1) to direct the Secretary to conduct research, development, and demonstration activities leading to the production, storage, transportation, and use of hydrogen for industrial, commercial, residential, transportation, and utility applications;

''(2) to direct the Secretary to develop a program of technology assessment, information dissemination, and education in which Federal, State, and local agencies, members of the energy, transportation, and other industries, and other entities may participate; and

''(3) to develop methods of hydrogen production that minimize adverse environmental impacts, with emphasis on efficient and cost-effective production from renewable energy resources.''.

SEC. 2203. DEFINITIONS.

Section 102(c) of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended—

(1) by redesignating paragraphs (1) through (3) as paragraphs (2) through (4), respectively; and

(2) by inserting before paragraph (2), as so redesignated by paragraph (1) of this section, the following new paragraph:

''(1) 'advisory committee' means the advisory committee established under section 108;''.

SEC. 2204. REPORTS TO CONGRESS.

Section 103 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended to read as follows:

"SEC. 103. REPORTS TO CONGRESS.

''(a) REQUIREMENT.—Not later than 1 year after the date of the enactment of the Robert S. Walker and George E. Brown, Jr. Hydrogen Energy Act of 2001, and biennially thereafter, the Secretary shall transmit to Congress a detailed report on the status and progress of the programs and activities authorized under this Act.

''(b) CONTENTS.—A report under subsection (a) shall include, in addition to any views and recommendations of the Secretary—

''(1) an assessment of the extent to which the program is meeting the purposes specified in section 102(b);

''(2) a determination of the effectiveness of the technology assessment, information dissemination, and education program established under section 106;

''(3) an analysis of Federal, State, local, and private sector hydrogen-related research, development, and demonstration activities to identify productive areas for increased intergovernmental and private-public sector collaboration; and

''(4) recommendations of the advisory committee for any improvements needed in the programs and activities authorized by this Act.''.

SEC. 2205. HYDROGEN RESEARCH AND DEVELOPMENT.

Section 104 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended to read as follows:

"SEC. 104. HYDROGEN RESEARCH AND DEVELOPMENT.

''(a) ESTABLISHMENT OF PROGRAM.—The Secretary shall conduct a hydrogen research and development program relating to production, storage, transportation, and use of hydrogen, with the goal of enabling the private sector to demonstrate the technical feasibility of using hydrogen for industrial, commercial, residential, transportation, and utility applications.

''(b) ELEMENTS.—In conducting the program authorized by this section, the Secretary shall—

''(1) give particular attention to developing an understanding and resolution of critical technical issues preventing the introduction of hydrogen as an energy carrier into the marketplace;

''(2) initiate or accelerate existing research and development in critical technical issues that will contribute to the development of more economical hydrogen production, storage, transportation, and use, including critical technical issues with respect to production (giving priority to those production techniques that use renewable energy resources as their primary source of energy for hydrogen production), liquefaction, transmission, distribution, storage, and use (including use of hydrogen in surface transportation); and

''(3) survey private sector and public sector hydrogen research and development activities worldwide, and take steps to ensure that research and development activities under this section do not—

''(A) duplicate any available research and development results; or

''(B) displace or compete with the privately funded hydrogen research and development activities of United States industry.

''(c) EVALUATION OF TECHNOLOGIES.—The Secretary shall evaluate, for the purpose of determining whether to undertake or fund research and development activities under this section, any reasonable new or improved technology that could lead or contribute to the development of economical hydrogen production, storage, transportation, and use.

''(d) RESEARCH AND DEVELOPMENT SUPPORT.—The Secretary is authorized to arrange for tests and demonstrations and to disseminate to researchers and developers information, data, and other materials necessary to support the research and development activities authorized under this section and other efforts authorized under this Act, consistent with section 106 of this Act.

''(e) COMPETITIVE PEER REVIEW.—The Secretary shall carry out or fund research and development activities under this section only on a competitive basis using peer review.

''(f) COST SHARING.—For research and development programs carried out under this section, the Secretary shall require a commitment from non-Federal sources of at least 20 percent of the cost of the project. The Secretary may reduce or eliminate the non-Federal requirement under this subsection if the Secretary determines that the research and development is of a basic or fundamental nature.''.

SEC. 2206. DEMONSTRATIONS.

Section 105 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended—

(1) in subsection (a), by striking '', preferably in self-contained locations,'';

(2) in subsection (b), by striking ''at self-contained sites'' and inserting '', which shall include a fuel cell bus demonstration program to address hydrogen production, storage, and use in transit bus applications''; and

(3) in subsection (c), by inserting ''NON-FEDERAL FUNDING REQUIREMENT.—'' after ''(c)''.

SEC. 2207. TECHNOLOGY TRANSFER.

Section 106 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended to read as follows:

"SEC. 106. TECHNOLOGY ASSESSMENT, INFORMATION DISSEMINATION, AND EDUCATION PROGRAM.

''(a) PROGRAM.—The Secretary shall, in consultation with the advisory committee, conduct a program designed to accelerate wider application of hydrogen production, storage, transportation, and use technologies, including application in foreign countries to increase the global market for the technologies and foster global economic development without harmful environmental effects.

''(b) INFORMATION.—The Secretary, in carrying out the program authorized by subsection (a), shall—

''(1) undertake an update of the inventory and assessment, required under section 106(b)(1) of this Act as in effect before the date of the enactment of the Robert S. Walker and George E. Brown, Jr. Hydrogen Energy Act of 2001, of hydrogen technologies and their commercial capability to economically produce, store, transport, or use hydrogen in industrial, commercial, residential, transportation, and utility sector; and

''(2) develop, with other Federal agencies as appropriate and industry, an information exchange program to improve technology transfer for hydrogen production, storage, transportation, and use, which may consist of workshops, publications, conferences, and a database for the use by the public and private sectors.''.

SEC. 2208. COORDINATION AND CONSULTATION.

Section 107 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended—

(1) by amending paragraph (1) of subsection (a) to read as follows:

''(1) shall establish a central point for the coordination of all hydrogen research, development, and demonstration activities of the Department; and''; and

(2) by amending subsection (c) to read as follows:

''(c) CONSULTATION.—The Secretary shall consult with other Federal agencies as appropriate, and the advisory committee, in carrying out the Secretary's authorities pursuant to this Act.''.

SEC. 2209. ADVISORY COMMITTEE.

Section 108 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended to read as follows:

"SEC. 108. ADVISORY COMMITTEE.

''(a) ESTABLISHMENT.—The Secretary shall enter into appropriate arrangements with the National Academies of Sciences and Engineering to establish an advisory committee consisting of experts drawn from domestic industry, academia, Governmental laboratories, and financial, environmental, and other organizations, as appropriate, to review and advise on the progress made through the programs and activities authorized under this Act.

''(b) COOPERATION.—The heads of Federal agencies shall cooperate with the advisory committee in carrying out this section and shall furnish to the advisory committee such information as the advisory committee reasonably deems necessary to carry out this section.

''(c) REVIEW.—The advisory committee shall review and make any necessary recommendations to the Secretary on—

''(1) the implementation and conduct of programs and activities authorized under this Act; and

''(2) the economic, technological, and environmental consequences of the deployment of hydrogen production, storage, transportation, and use systems.

''(d) RESPONSIBILITIES OF THE SECRETARY.—The Secretary shall consider, but need not adopt, any recommendations of the advisory committee under subsection (c). The Secretary shall provide an explanation of the reasons that any such recommendations will not be implemented and include such explanation in the report to Congress under section 103(a) of this Act.''.

SEC. 2210. AUTHORIZATION OF APPROPRIATIONS.

Section 109 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended to read as follows:

"SEC. 109. AUTHORIZATION OF APPROPRIATIONS.

''(a) RESEARCH AND DEVELOPMENT; ADVISORY COMMITTEE.—There are authorized to be appropriated to the Secretary to carry out sections 104 and 108—

''(1) $40,000,000 for fiscal year 2002;

''(2) $45,000,000 for fiscal year 2003;

''(3) $50,000,000 for fiscal year 2004;

''(4) $55,000,000 for fiscal year 2005; and

''(5) $60,000,000 for fiscal year 2006.

''(b) DEMONSTRATION.—There are authorized to be appropriated to the Secretary to carry out section 105—

''(1) $20,000,000 for fiscal year 2002;

''(2) $25,000,000 for fiscal year 2003;

''(3) $30,000,000 for fiscal year 2004;

''(4) $35,000,000 for fiscal year 2005; and

''(5) $40,000,000 for fiscal year 2006.''.

SEC. 2211. REPEAL.

(a) REPEAL.—Title II of the Hydrogen Future Act of 1996 is repealed.

(b) CONFORMING AMENDMENT.—Section 2 of the Hydrogen Future Act of 1996 is amended by striking ''titles II and III'' and inserting ''title III''.

Subtitle B—Bioenergy

SEC. 2221. SHORT TITLE.

This subtitle may be cited as the ''Bioenergy Act of 2001''.

SEC. 2222. FINDINGS.

Congress finds that bioenergy has potential to help—

(1) meet the Nation's energy needs;

(2) reduce reliance on imported fuels;

(3) promote rural economic development;

(4) provide for productive utilization of agricultural residues and waste materials, and forestry residues and byproducts; and

(5) protect the environment.

SEC. 2223. DEFINITIONS.

For purposes of this subtitle—

(1) the term ''bioenergy'' means energy derived from any organic matter that is available on a renewable or recurring basis, including agricultural crops and trees, wood and wood wastes and residues, plants (including aquatic plants), grasses, residues, fibers, and animal and other organic wastes;

(2) the term ''biofuels'' includes liquid or gaseous fuels, industrial chemicals, or both;

(3) the term ''biopower'' includes the generation of electricity or process steam or both; and

(4) the term ''integrated bioenergy research and development'' includes biopower and biofuels applications.

SEC. 2224. AUTHORIZATION.

The Secretary is authorized to conduct environmental research and development, scientific and energy research, development, and demonstration, and commercial application of energy technology programs, projects, and activities related to bioenergy, including biopower energy systems, biofuels energy systems, and integrated bioenergy research and development.

SEC. 2225. AUTHORIZATION OF APPROPRIATIONS.

(a) BIOPOWER ENERGY SYSTEMS.—There are authorized to be appropriated to the Secretary for Biopower Energy Systems programs, projects, and activities—

(1) $45,700,000 for fiscal year 2002;

(2) $52,500,000 for fiscal year 2003;

(3) $60,300,000 for fiscal year 2004;

(4) $69,300,000 for fiscal year 2005; and

(5) $79,600,000 for fiscal year 2006.

(b) BIOFUELS ENERGY SYSTEMS.—There are authorized to be appropriated to the Secretary for biofuels energy systems programs, projects, and activities—

(1) $53,500,000 for fiscal year 2002;

(2) $61,400,000 for fiscal year 2003;

(3) $70,600,000 for fiscal year 2004;

(4) $81,100,000 for fiscal year 2005; and

(5) $93,200,000 for fiscal year 2006.

(c) INTEGRATED BIOENERGY RESEARCH AND DEVELOPMENT.—There are authorized to be appropriated to the Secretary for integrated bioenergy research and development programs, projects, and activities, $49,000,000 for each of the fiscal years 2002 through 2006. Activities funded under this subsection shall be coordinated with ongoing related programs of other Federal agencies, including the Plant Genome Program of the National Science Foundation.

(d) INTEGRATED APPLICATIONS.—Amounts authorized to be appropriated under this subtitle may be used to assist in the planning, design, and implementation of projects to convert rice straw and barley grain into biopower or biofuels.

Subtitle C—Transmission Infrastructure Systems

SEC. 2241. TRANSMISSION INFRASTRUCTURE SYSTEMS RESEARCH, DEVELOPMENT, DEMONSTRATION, AND COMMERCIAL APPLICATION.

(a) IN GENERAL.—The Secretary shall develop and implement a comprehensive research, development, demonstration, and commercial application program to ensure the reliability, efficiency, and environmental integrity of electrical transmission systems. Such program shall include advanced energy technologies and systems, high capacity superconducting transmission lines and generators, advanced grid reliability and efficiency technologies development, technologies contributing to significant load reductions, advanced metering, load management and control technologies, and technology transfer and education.

(b) TECHNOLOGY.—In carrying out this subtitle, the Secretary may include research, development, and demonstration on and commercial application of improved transmission technologies including the integration of the following technologies into improved transmission systems:

(1) High temperature superconductivity.

(2) Advanced transmission materials.

(3) Self-adjusting equipment, processes, or software for survivability, security, and failure containment.

(4) Enhancements of energy transfer over existing lines.

(5) Any other infrastructure technologies, as appropriate.

SEC. 2242. PROGRAM PLAN.

Within 4 months after the date of the enactment of this Act, the Secretary, in consultation with other appropriate Federal agencies, shall prepare and transmit to Congress a 5-year program plan to guide activities under this subtitle. In preparing the program plan, the Secretary shall consult with appropriate representatives of the transmission infrastructure systems industry to select and prioritize appropriate program areas. The Secretary shall also seek the advice of utilities, energy services providers, manufacturers, institutions of higher learning, other appropriate State and local agencies, environmental organizations, professional and technical societies, and any other persons as the Secretary considers appropriate.

SEC. 2243. REPORT.

Two years after the date of the enactment of this Act, and at two year intervals thereafter, the Secretary, in consultation with other appropriate Federal agencies, shall transmit a report to Congress describing the progress made to achieve the purposes of this subtitle and identifying any additional resources needed to continue the development and commercial application of transmission infrastructure technologies.

Subtitle D—Department of Energy Authorization of Appropriations

SEC. 2261. AUTHORIZATION OF APPROPRIATIONS.

(a) OPERATION AND MAINTENANCE.—There are authorized to be appropriated to the Secretary for Renewable Energy operation and maintenance, including activities under subtitle C, Geothermal Technology Development, Hydropower, Concentrating Solar Power, Photovoltaic Energy Systems, Solar Building Technology Research, Wind Energy Systems, High Temperature Superconducting Research and Development, Energy Storage Systems, Transmission Reliability, International Renewable Energy Program, Renewable Energy Production Incentive Program, Renewable Program Support, National Renewable Energy Laboratory, and Program Direction, and including amounts authorized under the amendment made by section 2210 and amounts authorized under section 2225, $535,000,000 for fiscal year 2002, $639,000,000 for fiscal year 2003, and $683,000,000 for fiscal year 2004, to remain available until expended.

(b) WAVE POWERED ELECTRIC GENERATION.—Within the amounts authorized to be appropriated to the Secretary under subsection (a), the Secretary shall carry out a research program, in conjunction with other appropriate Federal agencies, on wave powered electric generation.

(c) ASSESSMENT OF RENEWABLE ENERGY RESOURCES.—

(1) IN GENERAL.—Using funds authorized in subsection (a), of this section, the Secretary shall transmit to the Congress, within one year after the date of the enactment of this Act, an assessment of all renewable energy resources available within the United States.

(2) RESOURCE ASSESSMENT.—Such report shall include a detailed inventory describing the available amount and characteristics of solar, wind, biomass, geothermal, hydroelectric, and other renewable energy sources, and an estimate of the costs needed to develop each resource. The report shall also include such other information as the Secretary believes would be useful in siting renewable energy generation, such as appropriate terrain, population and load centers, nearby energy infrastructure, and location of energy resources.

(3) AVAILABILITY.—The information and cost estimates in this report shall be updated annually and made available to the public, along with the data used to create the report.

(4) SUNSET.—This subsection shall expire at the end of fiscal year 2004.

(d) LIMITS ON USE OF FUNDS.—None of the funds authorized to be appropriated in subsection (a) may be used for—

(1) Departmental Energy Management Program; or

(2) Renewable Indian Energy Resources.

TITLE III—NUCLEAR ENERGY

Subtitle A—University Nuclear Science and Engineering

SEC. 2301. SHORT TITLE.

This subtitle may be cited as ''Department of Energy University Nuclear Science and Engineering Act''.

SEC. 2302. FINDINGS.

The Congress finds the following:

(1) United States university nuclear science and engineering programs are in a state of serious decline, with nuclear engineering enrollment at a 35-year low. Since 1980, the number of nuclear engineering university programs has declined nearly 40 percent, and over two-thirds of the faculty in these programs are 45 years of age or older. Also, since 1980, the number of university research and training reactors in the United States has declined by over 50 percent. Most of these reactors were built in the late 1950s and 1960s with 30-year to 40-year operating licenses, and many will require relicensing in the next several years.

(2) A decline in a competent nuclear workforce, and the lack of adequately trained nuclear scientists and engineers, will affect the ability of the United States to solve future nuclear waste storage issues, operate existing and design future fission reactors in the United States, respond to future nuclear events worldwide, help stem the proliferation of nuclear weapons, and design and operate naval nuclear reactors.

(3) The Department of Energy's Office of Nuclear Energy, Science and Technology, a principal Federal agency for civilian research in nuclear science and engineering, is well suited to help maintain tomorrow's human resource and training investment in the nuclear sciences and engineering.

SEC. 2303. DEPARTMENT OF ENERGY PROGRAM.

(a) ESTABLISHMENT.—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall support a program to maintain the Nation's human resource investment and infrastructure in the nuclear sciences and engineering consistent with the Department's statutory authorities related to civilian nuclear research, development, and demonstration and commercial application of energy technology.

(b) DUTIES OF THE OFFICE OF NUCLEAR ENERGY, SCIENCE AND TECHNOLOGY.—In carrying out the program under this subtitle, the Director of the Office of Nuclear Energy, Science and Technology shall—

(1) develop a robust graduate and undergraduate fellowship program to attract new and talented students;

(2) assist universities in recruiting and retaining new faculty in the nuclear sciences and engineering through a Junior Faculty Research Initiation Grant Program;

(3) maintain a robust investment in the fundamental nuclear sciences and engineering through the Nuclear Engineering Education Research Program;

(4) encourage collaborative nuclear research among industry, national laboratories, and universities through the Nuclear Energy Research Initiative;

(5) assist universities in maintaining reactor infrastructure; and

(6) support communication and outreach related to nuclear science and engineering.

(c) MAINTAINING UNIVERSITY RESEARCH AND TRAINING REACTORS AND ASSOCIATED INFRASTRUCTURE.—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall provide for the following university research and training reactor infrastructure maintenance and research activities:

(1) Refueling of university research reactors with low enriched fuels, upgrade of operational instrumentation, and sharing of reactors among universities.

(2) In collaboration with the United States nuclear industry, assistance, where necessary, in relicensing and upgrading university training reactors as part of a student training program.

(3) A university reactor research and training award program that provides for reactor improvements as part of a focused effort that emphasizes research, training, and education.

(d) UNIVERSITY-DOE LABORATORY INTERACTIONS.—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall develop—

(1) a sabbatical fellowship program for university faculty to spend extended periods of time at Department of Energy laboratories in the areas of nuclear science and technology; and

(2) a visiting scientist program in which laboratory staff can spend time in academic nuclear science and engineering departments.

The Secretary may under subsection (b)(1) provide for fellowships for students to spend time at Department of Energy laboratories in the areas of nuclear science and technology under the mentorship of laboratory staff.

(e) OPERATIONS AND MAINTENANCE.—To the extent that the use of a university research reactor is funded under this subtitle, funds authorized under this subtitle may be used to supplement operation of the research reactor during the investigator's proposed effort. The host institution shall provide at least 50 percent of the cost of the reactor's operation.

(f) MERIT REVIEW REQUIRED.—All grants, contracts, cooperative agreements, or other financial assistance awards under this subtitle shall be made only after independent merit review.

(g) REPORT.—Not later than 6 months after the date of the enactment of this Act, the Secretary shall prepare and transmit to the appropriate congressional committees a 5-year plan on how the programs authorized in this subtitle will be implemented. The plan shall include a review of the projected personnel needs in the fields of nuclear science and engineering and of the scope of nuclear science and engineering education programs at the Department and other Federal agencies.

SEC. 2304. AUTHORIZATION OF APPROPRIATIONS.

(a) TOTAL AUTHORIZATION.—The following sums are authorized to be appropriated to the Secretary, to remain available until expended, for the purposes of carrying out this subtitle:

(1) $30,200,000 for fiscal year 2002.
(2) $41,000,000 for fiscal year 2003.
(3) $47,900,000 for fiscal year 2004.
(4) $55,600,000 for fiscal year 2005.
(5) $64,100,000 for fiscal year 2006.

(b) GRADUATE AND UNDERGRADUATE FELLOWSHIPS.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(b)(1):

(1) $3,000,000 for fiscal year 2002.
(2) $3,100,000 for fiscal year 2003.
(3) $3,200,000 for fiscal year 2004.
(4) $3,200,000 for fiscal year 2005.
(5) $3,200,000 for fiscal year 2006.

(c) JUNIOR FACULTY RESEARCH INITIATION GRANT PROGRAM.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(b)(2):

(1) $5,000,000 for fiscal year 2002.
(2) $7,000,000 for fiscal year 2003.
(3) $8,000,000 for fiscal year 2004.
(4) $9,000,000 for fiscal year 2005.
(5) $10,000,000 for fiscal year 2006.

(d) NUCLEAR ENGINEERING EDUCATION RESEARCH PROGRAM.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(b)(3):

(1) $8,000,000 for fiscal year 2002.
(2) $12,000,000 for fiscal year 2003.
(3) $13,000,000 for fiscal year 2004.
(4) $15,000,000 for fiscal year 2005.
(5) $20,000,000 for fiscal year 2006.

(e) COMMUNICATION AND OUTREACH RELATED TO NUCLEAR SCIENCE AND ENGINEERING.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(b)(5):

(1) $200,000 for fiscal year 2002.
(2) $200,000 for fiscal year 2003.
(3) $300,000 for fiscal year 2004.
(4) $300,000 for fiscal year 2005.
(5) $300,000 for fiscal year 2006.

(f) REFUELING OF UNIVERSITY RESEARCH REACTORS AND INSTRUMENTATION UPGRADES.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(c)(1):

(1) $6,000,000 for fiscal year 2002.
(2) $6,500,000 for fiscal year 2003.
(3) $7,000,000 for fiscal year 2004.
(4) $7,500,000 for fiscal year 2005.
(5) $8,000,000 for fiscal year 2006.

(g) RELICENSING ASSISTANCE.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(c)(2):

(1) $1,000,000 for fiscal year 2002.
(2) $1,100,000 for fiscal year 2003.
(3) $1,200,000 for fiscal year 2004.
(4) $1,300,000 for fiscal year 2005.
(5) $1,300,000 for fiscal year 2006.

(h) REACTOR RESEARCH AND TRAINING AWARD PROGRAM.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(c)(3):

(1) $6,000,000 for fiscal year 2002.
(2) $10,000,000 for fiscal year 2003.
(3) $14,000,000 for fiscal year 2004.
(4) $18,000,000 for fiscal year 2005.
(5) $20,000,000 for fiscal year 2006.

(i) UNIVERSITY-DOE LABORATORY INTERACTIONS.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(d):

(1) $1,000,000 for fiscal year 2002.
(2) $1,100,000 for fiscal year 2003.
(3) $1,200,000 for fiscal year 2004.
(4) $1,300,000 for fiscal year 2005.
(5) $1,300,000 for fiscal year 2006.

Subtitle B—Advanced Fuel Recycling Technology Research and Development Program

SEC. 2321. PROGRAM.

(a) IN GENERAL.—The Secretary, through the Director of the Office of Nuclear Energy, Science and Technology, shall conduct an advanced fuel recycling technology research and development program to further the availability of proliferation-resistant fuel recycling technologies as an alternative to aqueous reprocessing in support of evaluation of alternative national strategies for spent nuclear fuel and the Generation IV advanced reactor concepts, subject to annual review by the Secretary's Nuclear Energy Research Advisory Committee or other independent entity, as appropriate.

(b) REPORTS.—The Secretary shall report on the activities of the advanced fuel recycling technology research and development program, as part of the Department's annual budget submission.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section—

(1) $10,000,000 for fiscal year 2002; and

(2) such sums as are necessary for fiscal year 2003 and fiscal year 2004.

Subtitle C—Department of Energy Authorization of Appropriations

SEC. 2341. NUCLEAR ENERGY RESEARCH INITIATIVE.

(a) PROGRAM.—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall conduct a Nuclear Energy Research Initiative for grants to be competitively awarded and subject to peer review for research relating to nuclear energy.

(b) OBJECTIVES.—The program shall be directed toward accomplishing the objectives of—

(1) developing advanced concepts and scientific breakthroughs in nuclear fission and reactor technology to address and overcome the principal technical and scientific obstacles to the expanded use of nuclear energy in the United States;

(2) advancing the state of nuclear technology to maintain a competitive position in foreign markets and a future domestic market;

(3) promoting and maintaining a United States nuclear science and engineering infrastructure to meet future technical challenges;

(4) providing an effective means to collaborate on a cost-shared basis with international agencies and research organizations to address and influence nuclear technology development worldwide; and

(5) promoting United States leadership and partnerships in bilateral and multilateral nuclear energy research.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section—

(1) $60,000,000 for fiscal year 2002; and

(2) such sums as are necessary for fiscal year 2003 and fiscal year 2004.

SEC. 2342. NUCLEAR ENERGY PLANT OPTIMIZATION PROGRAM.

(a) PROGRAM.—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall conduct a Nuclear Energy Plant Optimization research and development program jointly with industry and cost-shared by industry by at least 50 percent and subject to annual review by the Secretary's Nuclear Energy Research Advisory Committee or other independent entity, as appropriate.

(b) OBJECTIVES.—The program shall be directed toward accomplishing the objectives of—

(1) managing long-term effects of component aging; and

(2) improving the efficiency and productivity of existing nuclear power stations.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section—

(1) $15,000,000 for fiscal year 2002; and

(2) such sums as are necessary for fiscal years 2003 and 2004.

SEC. 2343. NUCLEAR ENERGY TECHNOLOGIES.

(a) IN GENERAL.—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall conduct a study of Generation IV nuclear energy systems, including development of a technology roadmap and performance of research and development necessary to make an informed technical decision regarding the most promising candidates for commercial application.

(b) REACTOR CHARACTERISTICS.—To the extent practicable, in conducting the study under subsection (a), the Secretary shall study nuclear energy systems that offer the highest probability of achieving the goals for Generation IV nuclear energy systems, including—

(1) economics competitive with any other generators;

(2) enhanced safety features, including passive safety features;

(3) substantially reduced production of high-level waste, as compared with the quantity of waste produced by reactors in operation on the date of enactment of this Act;

(4) highly proliferation-resistant fuel and waste;

(5) sustainable energy generation including optimized fuel utilization; and

(6) substantially improved thermal efficiency, as compared with the thermal efficiency of reactors in operation on the date of enactment of this Act.

(c) CONSULTATION.—In conducting the study under subsection (a), the Secretary shall consult with appropriate representatives of industry, institutions of higher education, Federal agencies, and international, professional, and technical organizations.

(d) REPORT.—

(1) IN GENERAL.—Not later than December 31, 2002, the Secretary shall transmit to the appropriate congressional committees a report describing the activities of the Secretary under this section, and plans for research and development leading to a public/private cooperative demonstration of one or more Generation IV nuclear energy systems.

(2) CONTENTS.—The report shall contain—

(A) an assessment of all available technologies;

(B) a summary of actions needed for the most promising candidates to be considered as viable commercial options within the five to ten years after the date of the report, with consideration of regulatory, economic, and technical issues;

(C) a recommendation of not more than three promising Generation IV nuclear energy system concepts for further development;

(D) an evaluation of opportunities for public/private partnerships;

(E) a recommendation for structure of a public/private partnership to share in development and construction costs;

(F) a plan leading to the selection and conceptual design, by September 30, 2004, of at least one Generation IV nuclear energy system concept recommended under subparagraph (C) for demonstration through a public/private partnership;

(G) an evaluation of opportunities for siting demonstration facilities on Department of Energy land; and

(H) a recommendation for appropriate involvement of other Federal agencies.

(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section and to carry out the recommendations in the report transmitted under subsection (d)—

(1) $20,000,000 for fiscal year 2002; and

(2) such sums as are necessary for fiscal year 2003 and fiscal year 2004.

SEC. 2344. AUTHORIZATION OF APPROPRIATIONS.

(a) OPERATION AND MAINTENANCE.—There are authorized to be appropriated to the Secretary to carry out activities authorized under this title for nuclear energy operation and maintenance, including amounts authorized under sections 2304(a), 2321(c), 2341(c), 2342(c), and 2343(e), and including Advanced Radioisotope Power Systems, Test Reactor Landlord, and Program Direction, $191,200,000 for fiscal year 2002, $199,000,000 for fiscal year 2003, and $207,000,000 for fiscal year 2004, to remain available until expended.

(b) CONSTRUCTION.—There are authorized to be appropriated to the Secretary—

(1) $950,000 for fiscal year 2002, $2,200,000 for fiscal year 2003, $1,246,000 for fiscal year 2004, and $1,699,000 for fiscal year 2005 for completion of construction of Project 99-E-200, Test Reactor Area Electric Utility Upgrade, Idaho National Engineering and Environmental Laboratory; and

(2) $500,000 for fiscal year 2002, $500,000 for fiscal year 2003, $500,000 for fiscal year 2004, and $500,000 for fiscal year 2005, for completion of construction of Project 95-E-201, Test Reactor Area Fire and Life Safety Improvements, Idaho National Engineering and Environmental Laboratory.

(c) LIMITS ON USE OF FUNDS.—None of the funds authorized to be appropriated in subsection (a) may be used for—

(1) Nuclear Energy Isotope Support and Production;

(2) Argonne National Laboratory-West Operations;

(3) Fast Flux Test Facility; or

(4) Nuclear Facilities Management.

TITLE IV—FOSSIL ENERGY

Subtitle A—Coal

SEC. 2401. COAL AND RELATED TECHNOLOGIES PROGRAMS.

(a) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary $172,000,000 for fiscal year 2002, $179,000,000 for fiscal year 2003, and $186,000,000 for fiscal year 2004, to remain available until expended, for other coal and related technologies research and development programs, which shall include—

(1) Innovations for Existing Plants;

(2) Integrated Gasification Combined Cycle;

(3) advanced combustion systems;

(4) Turbines;

(5) Sequestration Research and Development;

(6) innovative technologies for demonstration;

(7) Transportation Fuels and Chemicals;

(8) Solid Fuels and Feedstocks;

(9) Advanced Fuels Research; and

(10) Advanced Research.

(b) LIMIT ON USE OF FUNDS.—Notwithstanding subsection (a), no funds may be used to carry out the activities authorized by this section after September 30, 2002, unless the Secretary has transmitted to the Congress the report required by this subsection and 1 month has elapsed since that transmission. The report shall include a plan containing—

(1) a detailed description of how proposals will be solicited and evaluated, including a list of all activities expected to be undertaken;

(2) a detailed list of technical milestones for each coal and related technology that will be pursued;

(3) a description of how the programs authorized in this subsection will be carried out so as to complement and not duplicate activities authorized under division E.

Subtitle B—Oil and Gas

SEC. 2421. PETROLEUM-OIL TECHNOLOGY.

The Secretary shall conduct a program of research, development, demonstration, and commercial application on petroleum-oil technology. The program shall address—

(1) Exploration and Production Supporting Research;

(2) Oil Technology Reservoir Management/Extension; and

(3) Effective Environmental Protection.

SEC. 2422. GAS.

The Secretary shall conduct a program of research, development, demonstration, and commercial application on natural gas technologies. The program shall address—

(1) Exploration and Production;

(2) Infrastructure; and

(3) Effective Environmental Protection.

Subtitle C—Ultra-Deepwater and Unconventional Drilling

SEC. 2441. SHORT TITLE.

This subtitle may be cited as the ''Natural Gas and Other Petroleum Research, Development, and Demonstration Act of 2001''.

SEC. 2442. DEFINITIONS.

For purposes of this subtitle—

(1) the term ''deepwater'' means water depths greater than 200 meters but less than 1,500 meters;

(2) the term ''Fund'' means the Ultra-Deepwater and Unconventional Gas Research Fund established under section 2450;

(3) the term ''institution of higher education'' has the meaning given that term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001);

(4) the term ''Research Organization'' means the Research Organization created pursuant to section 2446(a);

(5) the term ''ultra-deepwater'' means water depths greater than 1,500 meters; and

(6) the term ''unconventional'' means located in heretofore inaccessible or uneconomic formations on land.

SEC. 2443. ULTRA-DEEPWATER PROGRAM.

The Secretary shall establish a program of research, development, and demonstration of ultra-deepwater natural gas and other petroleum exploration and production technologies, in areas currently available for Outer Continental Shelf leasing. The program shall be carried out by the Research Organization as provided in this subtitle.

SEC. 2444. NATIONAL ENERGY TECHNOLOGY LABORATORY.

The National Energy Technology Laboratory and the United States Geological Survey, when appropriate, shall carry out programs of long-term research into new natural gas and other petroleum exploration and production technologies and environmental mitigation technologies for production from unconventional and ultra-deepwater resources, including methane hydrates. Such Laboratory shall also conduct a program of research, development, and demonstration of new technologies for the reduction of greenhouse gas emissions from unconventional and ultra-deepwater natural gas or other petroleum exploration and production activities, including sub-sea floor carbon sequestration technologies.

SEC. 2445. ADVISORY COMMITTEE.

(a) ESTABLISHMENT.—The Secretary shall, within 3 months after the date of the enactment of this Act, establish an Advisory Committee consisting of 7 members, each having extensive operational knowledge of and experience in the natural gas and other petroleum exploration and production industry who are not Federal Government employees or contractors. A minimum of 4 members

shall have extensive knowledge of ultra-deepwater natural gas or other petroleum exploration and production technologies, a minimum of 2 members shall have extensive knowledge of unconventional natural gas or other petroleum exploration and production technologies, and at least 1 member shall have extensive knowledge of greenhouse gas emission reduction technologies, including carbon sequestration.

(b) FUNCTION.—The Advisory Committee shall advise the Secretary on the selection of an organization to create the Research Organization and on the implementation of this subtitle.

(c) COMPENSATION.—Members of the Advisory Committee shall serve without compensation but shall receive travel expenses, including per diem in lieu of subsistence, in accordance with applicable provisions under subchapter I of chapter 57 of title 5, United States Code.

(d) ADMINISTRATIVE COSTS.—The costs of activities carried out by the Secretary and the Advisory Committee under this subtitle shall be paid or reimbursed from the Fund.

(e) DURATION OF ADVISORY COMMITTEE.—Section 14 of the Federal Advisory Committee Act shall not apply to the Advisory Committee.

SEC. 2446. RESEARCH ORGANIZATION.

(a) SELECTION OF RESEARCH ORGANIZATION.—The Secretary, within 6 months after the date of the enactment of this Act, shall solicit proposals from eligible entities for the creation of the Research Organization, and within 3 months after such solicitation, shall select an entity to create the Research Organization.

(b) ELIGIBLE ENTITIES.—Entities eligible to create the Research Organization shall—

(1) have been in existence as of the date of the enactment of this Act;

(2) be entities exempt from tax under section 501(c)(3) of the Internal Revenue Code of 1986; and

(3) be experienced in planning and managing programs in natural gas or other petroleum exploration and production research, development, and demonstration.

(c) PROPOSALS.—A proposal from an entity seeking to create the Research Organization shall include a detailed description of the proposed membership and structure of the Research Organization.

(d) FUNCTIONS.—The Research Organization shall—

(1) award grants on a competitive basis to qualified—

(A) research institutions;

(B) institutions of higher education;

(C) companies; and

(D) consortia formed among institutions and companies described in subparagraphs (A) through (C) for the purpose of conducting research, development, and demonstration of unconventional and ultra-deepwater natural gas or other petroleum exploration and production technologies; and

(2) review activities under those grants to ensure that they comply with the requirements of this subtitle and serve the purposes for which the grant was made.

SEC. 2447. GRANTS.

(a) TYPES OF GRANTS.—

(1) UNCONVENTIONAL.—The Research Organization shall award grants for research, development, and demonstration of technologies to maximize the value of the Government's natural gas and other petroleum resources in unconventional reservoirs, and to develop technologies to increase the supply of natural gas and other petroleum resources by lowering the cost and improving the efficiency of exploration and production of unconventional reservoirs, while improving safety and minimizing environmental impacts.

(2) ULTRA-DEEPWATER.—The Research Organization shall award grants for research, development, and demonstration of natural gas or other petroleum exploration and production technologies to—

(A) maximize the value of the Federal Government's natural gas and other petroleum resources in the ultra-deepwater areas;

(B) increase the supply of natural gas and other petroleum resources by lowering the cost and improving the efficiency of exploration and production of ultra-deepwater reservoirs; and

(C) improve safety and minimize the environmental impacts of ultra-deepwater developments.

(3) ULTRA-DEEPWATER ARCHITECTURE.—The Research Organization shall award a grant to one or more consortia described in section 2446(d)(1)(D) for the purpose of developing and demonstrating the next generation architecture for ultra-deepwater production of natural gas and other petroleum in furtherance of the purposes stated in paragraph (2)(A) through (C).

(b) CONDITIONS FOR GRANTS.—Grants provided under this section shall contain the following conditions:

(1) If the grant recipient consists of more than one entity, the recipient shall provide a signed contract agreed to by all participating members clearly defining all rights to intellectual property for existing technology and for future inventions conceived and developed using funds provided under the grant, in a manner that is consistent with applicable laws.

(2) There shall be a repayment schedule for Federal dollars provided for demonstration projects under the grant in the event of a successful commercialization of the demonstrated technology. Such repayment schedule shall provide that the payments are made to the Secretary with the express intent that these payments not impede the adoption of the demonstrated technology in the marketplace. In the event that such impedance occurs due to market forces or other factors, the Research Organization shall renegotiate the grant agreement so that the acceptance of the technology in the marketplace is enabled.

(3) Applications for grants for demonstration projects shall clearly state the intended commercial applications of the technology demonstrated.

(4) The total amount of funds made available under a grant provided under subsection (a)(3) shall not exceed 50 percent of the total cost of the activities for which the grant is provided.

(5) The total amount of funds made available under a grant provided under subsection (a)(1) or (2) shall not exceed 50 percent of the total cost of the activities covered by the grant, except that the Research Organization may elect to provide grants covering a higher percentage, not to exceed 90 percent, of total project costs in the case of grants made solely to independent producers.

(6) An appropriate amount of funds provided under a grant shall be used for the broad dissemination of technologies developed under the grant to interested institutions of higher education, industry, and appropriate Federal and State technology entities to ensure the greatest possible benefits for the public and use of government resources.

(7) Demonstrations of ultra-deepwater technologies for which funds are provided under a grant may be conducted in ultra-deepwater or deepwater locations.

(c) ALLOCATION OF FUNDS.—Funds available for grants under this subtitle shall be allocated as follows:

(1) 15 percent shall be for grants under subsection (a)(1).

(2) 15 percent shall be for grants under subsection (a)(2).

(3) 60 percent shall be for grants under subsection (a)(3).

(4) 10 percent shall be for carrying out section 2444.

SEC. 2448. PLAN AND FUNDING.

(a) TRANSMITTAL TO SECRETARY.—The Research Organization shall transmit to the Secretary an annual plan proposing projects and funding of activities under each paragraph of section 2447(a).

(b) REVIEW.—The Secretary shall have 1 month to review the annual plan, and shall approve the plan, if it is consistent with this subtitle. If the Secretary approves the plan, the Secretary shall provide funding as proposed in the plan.

(c) DISAPPROVAL.—If the Secretary does not approve the plan, the Secretary shall notify the Research Organization of the reasons for disapproval and shall withhold funding until a new plan is submitted which the Secretary approves. Within 1 month after notifying the Research Organization of a disapproval, the Secretary shall notify the appropriate congressional committees of the disapproval.

SEC. 2449. AUDIT.

The Secretary shall retain an independent, commercial auditor to determine the extent to which the funds authorized by this subtitle have been expended in a manner consistent with the purposes of this subtitle. The auditor shall transmit a report annually to the Secretary, who shall transmit the report to the appropriate congressional committees, along with a plan to remedy any deficiencies cited in the report.

SEC. 2450. FUND.

(a) ESTABLISHMENT.—There is established in the Treasury of the United States a fund to be known as the ''Ultra-Deepwater and Unconventional Gas Research Fund'' which shall be available for obligation to the extent provided in advance in appropriations Acts for allocation under section 2447(c).

(b) FUNDING SOURCES.—

(1) LOANS FROM TREASURY.—There are authorized to be appropriated to the Secretary $900,000,000 for the period encompassing fiscal years 2002 through 2009. Such amounts shall be deposited by the Secretary in the Fund, and shall be considered loans from the Treasury. Income received by the United States in connection with any ultra-deepwater oil and gas leases shall be deposited in the Treasury and considered as repayment for the loans under this paragraph.

(2) ADDITIONAL APPROPRIATIONS.—There are authorized to be appropriated to the Secretary such sums as may be necessary for the fiscal years 2002 through 2009, to be deposited in the Fund.

(3) OIL AND GAS LEASE INCOME.—To the extent provided in advance in appropriations Acts, not more than 7.5 percent of the income of the United States from Federal oil and gas leases may be deposited in the Fund for fiscal years 2002 through 2009.

SEC. 2451. SUNSET.

No funds are authorized to be appropriated for carrying out this subtitle after fiscal year 2009. The Research Organization shall be terminated when it has expended all funds made available pursuant to this subtitle.

Subtitle D—Fuel Cells

SEC. 2461. FUEL CELLS.

(a) IN GENERAL.—The Secretary shall conduct a program of research, development, demonstration, and commercial application on fuel cells. The program shall address—

(1) Advanced Research;

(2) Systems Development;

(3) Vision 21-Hybrids; and

(4) Innovative Concepts.

(b) MANUFACTURING PRODUCTION AND PROCESSES.—In addition to the program under subsection (a), the Secretary, in consultation other Federal agencies, as appropriate, shall establish a program for the demonstration of fuel cell technologies, including fuel cell proton exchange membrane technology, for commercial, residential, and transportation applications. The program shall specifically focus on promoting the application of and improved manufacturing production and processes for fuel cell technologies.

(c) AUTHORIZATION OF APPROPRIATIONS.—Within the amounts authorized to be appropriated under section 2481(a), there are authorized to be appropriated to the Secretary for the purpose of carrying out subsection (b), $28,000,000 for each of fiscal years 2002 through 2004.

Subtitle E—Department of Energy Authorization of Appropriations

SEC. 2481. AUTHORIZATION OF APPROPRIATIONS.

(a) OPERATION AND MAINTENANCE.—There are authorized to be appropriated to the Secretary for operation and maintenance for subtitle B and subtitle D, and for Fossil Energy Research and Development Headquarters Program Direction, Field Program Direction, Plant and Capital Equipment, Cooperative Research and Development, Import/Export Authorization, and Advanced Metallurgical Processes $282,000,000 for fiscal year 2002, $293,000,000 for fiscal year 2003, and $305,000,000 for fiscal year 2004, to remain available until expended.

(b) LIMITS ON USE OF FUNDS.—None of the funds authorized to be appropriated in subsection (a) may be used for—

(1) Gas Hydrates.

(2) Fossil Energy Environmental Restoration; or

(3) research, development, demonstration, and commercial application on coal and related technologies, including activities under subtitle A.

TITLE V—SCIENCE

Subtitle A—Fusion Energy Sciences

SEC. 2501. SHORT TITLE.

This subtitle may be cited as the ''Fusion Energy Sciences Act of 2001''.

SEC. 2502. FINDINGS.

The Congress finds that—

(1) economic prosperity is closely linked to an affordable and ample energy supply;

(2) environmental quality is closely linked to energy production and use;

(3) population, worldwide economic development, energy consumption, and stress on the environment are all expected to increase substantially in the coming decades;

(4) the few energy options with the potential to meet economic and environmental needs for the long-term future should be pursued as part of a balanced national energy plan;

(5) fusion energy is an attractive long-term energy source because of the virtually inexhaustible supply of fuel, and the promise of minimal adverse environmental impact and inherent safety;

(6) the National Research Council, the President's Committee of Advisers on Science and Technology, and the Secretary of Energy Advisory Board have each recently reviewed the Fusion Energy Sciences Program and each strongly supports the fundamental science and creative innovation of the program, and has confirmed that progress toward the goal of producing practical fusion energy has been excellent, although much scientific and engineering work remains to be done;

(7) each of these reviews stressed the need for a magnetic fusion burning plasma experiment to address key scientific issues and as a necessary step in the development of fusion energy;

(8) the National Research Council has also called for a broadening of the Fusion Energy Sciences Program research base as a means to more fully integrate the fusion science community into the broader scientific community; and

(9) the Fusion Energy Sciences Program budget is inadequate to support the necessary science and innovation for the present generation of experiments, and cannot accommodate the cost of a burning plasma experiment constructed by the United States, or even the cost of key participation by the United States in an international effort.

SEC. 2503. PLAN FOR FUSION EXPERIMENT.

(a) PLAN FOR UNITED STATES FUSION EXPERIMENT.—The Secretary, on the basis of full consultation with the Fusion Energy Sciences Advisory Committee and the Secretary of Energy Advisory Board, as appropriate, shall develop a plan for United States construction of a magnetic fusion burning plasma experiment for the purpose of accelerating scientific understanding of fusion plasmas. The Secretary shall request a review of the plan by the National Academy of Sciences, and shall transmit the plan and the review to the Congress by July 1, 2004.

(b) REQUIREMENTS OF PLAN.—The plan described in subsection (a) shall—

(1) address key burning plasma physics issues; and

(2) include specific information on the scientific capabilities of the proposed experiment, the relevance of these capabilities to the goal of practical fusion energy, and the overall design of the experiment including its estimated cost and potential construction sites.

(c) UNITED STATES PARTICIPATION IN AN INTERNATIONAL EXPERIMENT.—In addition to the plan described in subsection (a), the Secretary, on the basis of full consultation with the Fusion Energy Sciences Advisory Committee and the Secretary of Energy Advisory Board, as appropriate, may also develop a plan for United States participation in an international burning plasma experiment for the same purpose, whose construction is found by the Secretary to be highly likely and where United States participation is cost effective relative to the cost and scientific benefits of a domestic experiment described in subsection (a). If the Secretary elects to develop a plan under this subsection, he shall include the information described in subsection (b), and an estimate of the cost of United States participation in such an international experiment. The Secretary shall request a review by the National Academies of Sciences and Engineering of a plan developed under this subsection, and shall transmit the plan and the review to the Congress not later than July 1, 2004.

(d) AUTHORIZATION OF RESEARCH AND DEVELOPMENT.—The Secretary, through the Fusion Energy Sciences Program, may conduct any research and development necessary to fully develop the plans described in this section.

SEC. 2504. PLAN FOR FUSION ENERGY SCIENCES PROGRAM.

Not later than 6 months after the date of the enactment of this Act, the Secretary, in full consultation with FESAC, shall develop and transmit to the Congress a plan for the purpose of ensuring a strong scientific base for the Fusion Energy Sciences Program and to enable the experiments described in section 2503. Such plan shall include as its objectives—

(1) to ensure that existing fusion research facilities and equipment are more fully utilized with appropriate measurements and control tools;

(2) to ensure a strengthened fusion science theory and computational base;

(3) to ensure that the selection of and funding for new magnetic and inertial fusion research facilities is based on scientific innovation and cost effectiveness;

(4) to improve the communication of scientific results and methods between the fusion science community and the wider scientific community;

(5) to ensure that adequate support is provided to optimize the design of the magnetic fusion burning plasma experiments referred to in section 2503;

(6) to ensure that inertial confinement fusion facilities are utilized to the extent practicable for the purpose of inertial fusion energy research and development;

(7) to develop a roadmap for a fusion-based energy source that shows the important scientific questions, the evolution of confinement configurations, the relation between these two features, and their relation to the fusion energy goal;

(8) to establish several new centers of excellence, selected through a competitive peer-review process and devoted to exploring the frontiers of fusion science;

(9) to ensure that the National Science Foundation, and other agencies, as appropriate, play a role in extending the reach of fusion science and in sponsoring general plasma science; and

(10) to ensure that there be continuing broad assessments of the outlook for fusion energy and periodic external reviews of fusion energy sciences.

SEC. 2505. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Secretary for the development and review, but not for implementation, of the plans described in this subtitle and for activities of the Fusion Energy Sciences Program $320,000,000 for fiscal year 2002 and $335,000,000 for fiscal year 2003, of which up to $15,000,000 for each of fiscal year 2002 and fiscal year 2003 may be used to establish several new centers of excellence, selected through a competitive peer-review process and devoted to exploring the frontiers of fusion science.

Subtitle B—Spallation Neutron Source

SEC. 2521. DEFINITION.

For the purposes of this subtitle, the term ''Spallation Neutron Source'' means Department Project 99–E–334, Oak Ridge National Laboratory, Oak Ridge, Tennessee.

SEC. 2522. AUTHORIZATION OF APPROPRIATIONS.

(a) AUTHORIZATION OF CONSTRUCTION FUNDING.—There are authorized to be appropriated to the Secretary for construction of the Spallation Neutron Source—

(1) $276,300,000 for fiscal year 2002;

(2) $210,571,000 for fiscal year 2003;

(3) $124,600,000 for fiscal year 2004;

(4) $79,800,000 for fiscal year 2005; and

(5) $41,100,000 for fiscal year 2006 for completion of construction.

(b) AUTHORIZATION OF OTHER PROJECT FUNDING.—There are authorized to be appropriated to the Secretary for other project costs (including research and development necessary to complete the project, preoperations costs, and capital equipment not related to construction) of the Spallation Neutron Source $15,353,000 for fiscal year 2002 and $103,279,000 for the period encompassing fiscal years 2003 through 2006, to remain available until expended through September 30, 2006.

SEC. 2523. REPORT.

The Secretary shall report on the Spallation Neutron Source as part of the Department's annual budget submission, including a description of the achievement of milestones, a comparison of actual costs to estimated costs, and any changes in estimated project costs or schedule.

SEC. 2524. LIMITATIONS.

The total amount obligated by the Department, including prior year appropriations,

for the Spallation Neutron Source may not exceed—

(1) $1,192,700,000 for costs of construction;

(2) $219,000,000 for other project costs; and

(3) $1,411,700,000 for total project cost.

Subtitle C—Facilities, Infrastructure, and User Facilities

SEC. 2541. DEFINITION.

For purposes of this subtitle—

(1) the term ''nonmilitary energy laboratory'' means—

(A) Ames Laboratory;

(B) Argonne National Laboratory;

(C) Brookhaven National Laboratory;

(D) Fermi National Accelerator Laboratory;

(E) Lawrence Berkeley National Laboratory;

(F) Oak Ridge National Laboratory;

(G) Pacific Northwest National Laboratory;

(H) Princeton Plasma Physics Laboratory;

(I) Stanford Linear Accelerator Center;

(J) Thomas Jefferson National Accelerator Facility; or

(K) any other facility of the Department that the Secretary, in consultation with the Director, Office of Science and the appropriate congressional committees, determines to be consistent with the mission of the Office of Science; and

(2) the term ''user facility'' means—

(A) an Office of Science facility at a nonmilitary energy laboratory that provides special scientific and research capabilities, including technical expertise and support as appropriate, to serve the research needs of the Nation's universities, industry, private laboratories, Federal laboratories, and others, including research institutions or individuals from other nations where reciprocal accommodations are provided to United States research institutions and individuals or where the Secretary considers such accommodation to be in the national interest; and

(B) any other Office of Science funded facility designated by the Secretary as a user facility.

SEC. 2542. FACILITY AND INFRASTRUCTURE SUPPORT FOR NONMILITARY ENERGY LABORATORIES.

(a) FACILITY POLICY.—The Secretary shall develop and implement a least-cost nonmilitary energy laboratory facility and infrastructure strategy for—

(1) maintaining existing facilities and infrastructure, as needed;

(2) closing unneeded facilities;

(3) making facility modifications; and

(4) building new facilities.

(b) PLAN.—The Secretary shall prepare a comprehensive 10-year plan for conducting future facility maintenance, making repairs, modifications, and new additions, and constructing new facilities at each nonmilitary energy laboratory. Such plan shall provide for facilities work in accordance with the following priorities:

(1) Providing for the safety and health of employees, visitors, and the general public with regard to correcting existing structural, mechanical, electrical, and environmental deficiencies.

(2) Providing for the repair and rehabilitation of existing facilities to keep them in use and prevent deterioration, if feasible.

(3) Providing engineering design and construction services for those facilities that require modification or additions in order to meet the needs of new or expanded programs.

(c) REPORT.—

(1) TRANSMITTAL.—Within 1 year after the date of the enactment of this Act, the Secretary shall prepare and transmit to the appropriate congressional committees a report containing the plan prepared under subsection (b).

(2) CONTENTS.—For each nonmilitary energy laboratory, such report shall contain—

(A) the current priority list of proposed facilities and infrastructure projects, including cost and schedule requirements;

(B) a current ten-year plan that demonstrates the reconfiguration of its facilities and infrastructure to meet its missions and to address its long-term operational costs and return on investment;

(C) the total current budget for all facilities and infrastructure funding; and

(D) the current status of each facilities and infrastructure project compared to the original baseline cost, schedule, and scope.

(3) ADDITIONAL ELEMENTS.—The report shall also—

(A) include a plan for new facilities and facility modifications at each nonmilitary energy laboratory that will be required to meet the Department's changing missions of the twenty-first century, including schedules and estimates for implementation, and including a section outlining long-term funding requirements consistent with anticipated budgets and annual authorization of appropriations;

(B) address the coordination of modernization and consolidation of facilities among the nonmilitary energy laboratories in order to meet changing mission requirements; and

(C) provide for annual reports to the appropriate congressional committees on accomplishments, conformance to schedules, commitments, and expenditures.

SEC. 2543. USER FACILITIES.

(a) NOTICE REQUIREMENT.—When the Department makes a user facility available to universities and other potential users, or seeks input from universities and other potential users regarding significant characteristics or equipment in a user facility or a proposed user facility, the Department shall ensure broad public notice of such availability or such need for input to universities and other potential users.

(b) COMPETITION REQUIREMENT.—When the Department considers the participation of a university or other potential user in the establishment or operation of a user facility, the Department shall employ full and open competition in selecting such a participant.

(c) PROHIBITION.—The Department may not redesignate a user facility, as defined by section 2541(b) as something other than a user facility for avoid the requirements of subsections (a) and (b).

Subtitle D—Advisory Panel on Office of Science

SEC. 2561. ESTABLISHMENT.

The Director of the Office of Science and Technology Policy, in consultation with the Secretary, shall establish an Advisory Panel on the Office of Science comprised of knowledgeable individuals to—

(1) address concerns about the current status and the future of scientific research supported by the Office;

(2) examine alternatives to the current organizational structure of the Office within the Department, taking into consideration existing structures for the support of scientific research in other Federal agencies and the private sector; and

(3) suggest actions to strengthen the scientific research supported by the Office that might be taken jointly by the Department and Congress.

SEC. 2562. REPORT.

Within 6 months after the date of the enactment of this Act, the Advisory Panel shall transmit its findings and recommendations in a report to the Director of the Office of Science and Technology Policy and the Secretary. The Director and the Secretary shall jointly—

(1) consider each of the Panel's findings and recommendations, and comment on each as they consider appropriate; and

(2) transmit the Panel's report and the comments of the Director and the Secretary on the report to the appropriate congressional committees within 9 months after the date of the enactment of this Act.

Subtitle E—Department of Energy Authorization of Appropriations

SEC. 2581. AUTHORIZATION OF APPROPRIATIONS.

(a) OPERATION AND MAINTENANCE.—Including the amounts authorized to be appropriated for fiscal year 2002 under section 2505 for Fusion Energy Sciences and under section 2522(b) for the Spallation Neutron Source, there are authorized to be appropriated to the Secretary for the Office of Science (also including subtitle C, High Energy Physics, Nuclear Physics, Biological and Environmental Research, Basic Energy Sciences (except for the Spallation Neutron Source), Advanced Scientific Computing Research, Energy Research Analysis, Multiprogram Energy Laboratories-Facilities Support, Facilities and Infrastructure, Safeguards and Security, and Program Direction) operation and maintenance $3,299,558,000 for fiscal year 2002, to remain available until expended.

(b) RESEARCH REGARDING PRECIOUS METAL CATALYSIS.—Within the amounts authorized to be appropriated to the Secretary under subsection (a), $5,000,000 for fiscal year 2002 may be used to carry out research in the use of precious metals (excluding platinum, palladium, and rhodium) in catalysis, either directly though national laboratories, or through the award of grants, cooperative agreements, or contracts with public or nonprofit entities.

(c) CONSTRUCTION.—In addition to the amounts authorized to be appropriated under section 2522(a) for construction of the Spallation Neutron Source, there are authorized to be appropriated to the Secretary for Science—

(1) $11,400,000 for fiscal year 2002 for completion of construction of Project 98-G-304, Neutrinos at the Main Injector, Fermi National Accelerator Laboratory;

(2) $11,405,000 for fiscal year 2002 for completion of construction of Project 01-E-300, Laboratory for Comparative and Functional Genomics, Oak Ridge National Laboratory;

(3) $4,000,000 for fiscal year 2002, $8,000,000 for fiscal year 2003, and $2,000,000 for fiscal year 2004 for completion of construction of Project 02-SC-002, Project Engineering Design (PED), Various Locations;

(4) $3,183,000 for fiscal year 2002 for completion of construction of Project 02-SC-002, Multiprogram Energy Laboratories Infrastructure Project Engineering Design (PED), Various Locations; and

(5) $18,633,000 for fiscal year 2002 and $13,029,000 for fiscal year 2003 for completion of construction of Project MEL-001, Multiprogram Energy Laboratories, Infrastructure, Various Locations.

(d) LIMITS ON USE OF FUNDS.—None of the funds authorized to be appropriated in subsection (c) may be used for construction at any national security laboratory as defined in section 3281(1) of the National Defense Authorization Act for Fiscal Year 2000 (50 U.S.C. 2471(1)) or at any nuclear weapons production facility as defined in section 3281(2) of the National Defense Authorization Act for Fiscal Year 2000 (50 U.S.C. 2471(2)).

TITLE VI—MISCELLANEOUS

Subtitle A—General Provisions for the Department of Energy

SEC. 2601. RESEARCH, DEVELOPMENT, DEMONSTRATION, AND COMMERCIAL APPLICATION OF ENERGY TECHNOLOGY PROGRAMS, PROJECTS, AND ACTIVITIES.

(a) AUTHORIZED ACTIVITIES.—Except as otherwise provided in this division, research, development, demonstration, and commercial application programs, projects, and activities for which appropriations are authorized under this division may be carried out under the procedures of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5901 et seq.), the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.), or any other Act under which the Secretary is authorized to carry out such programs, projects, and activities, but only to the extent the Secretary is authorized to carry out such activities under each such Act.

(b) AUTHORIZED AGREEMENTS.—Except as otherwise provided in this division, in carrying out research, development, demonstration, and commercial application programs, projects, and activities for which appropriations are authorized under this division, the Secretary may use, to the extent authorized under applicable provisions of law, contracts, cooperative agreements, cooperative research and development agreements under the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.), grants, joint ventures, and any other form of agreement available to the Secretary.

(c) DEFINITION.—For purposes of this section, the term ''joint venture'' has the meaning given that term under section 2 of the National Cooperative Research and Production Act of 1993 (15 U.S.C. 4301), except that such term may apply under this section to research, development, demonstration, and commercial application of energy technology joint ventures.

(d) PROTECTION OF INFORMATION.—Section 12(c)(7) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(c)(7)), relating to the protection of information, shall apply to research, development, demonstration, and commercial application of energy technology programs, projects, and activities for which appropriations are authorized under this division.

(e) INVENTIONS.—An invention conceived and developed by any person using funds provided through a grant under this division shall be considered a subject invention for the purposes of chapter 18 of title 35, United States Code (commonly referred to as the Bayh-Dole Act).

(f) OUTREACH.—The Secretary shall ensure that each program authorized by this division includes an outreach component to provide information, as appropriate, to manufacturers, consumers, engineers, architects, builders, energy service companies, universities, facility planners and managers, State and local governments, and other entities.

(g) GUIDELINES AND PROCEDURES.—The Secretary shall provide guidelines and procedures for the transition, where appropriate, of energy technologies from research through development and demonstration to commercial application of energy technology. Nothing in this section shall preclude the Secretary from—

(1) entering into a contract, cooperative agreement, cooperative research and development agreement under the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.), grant, joint venture, or any other form of agreement available to the Secretary under this section that relates to research, development, demonstration, and commercial application of energy technology; or

(2) extending a contract, cooperative agreement, cooperative research and development agreement under the Stevenson-Wydler Technology Innovation Act of 1980, grant, joint venture, or any other form of agreement available to the Secretary that relates to research, development, and demonstration to cover commercial application of energy technology.

(h) APPLICATION OF SECTION.—This section shall not apply to any contract, cooperative agreement, cooperative research and development agreement under the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.), grant, joint venture, or any other form of agreement available to the Secretary that is in effect as of the date of enactment of this Act.

SEC. 2602. LIMITS ON USE OF FUNDS.

(a) MANAGEMENT AND OPERATING CONTRACTS.—

(1) COMPETITIVE PROCEDURE REQUIREMENT.—None of the funds authorized to be appropriated to the Secretary by this division may be used to award a management and operating contract for a federally owned or operated nonmilitary energy laboratory of the Department unless such contract is awarded using competitive procedures or the Secretary grants, on a case-by-case basis, a waiver to allow for such a deviation. The Secretary may not delegate the authority to grant such a waiver.

(2) CONGRESSIONAL NOTICE.—At least 2 months before a contract award, amendment, or modification for which the Secretary intends to grant such a waiver, the Secretary shall submit to the appropriate congressional committees a report notifying the committees of the waiver and setting forth the reasons for the waiver.

(b) PRODUCTION OR PROVISION OF ARTICLES OR SERVICES.—None of the funds authorized to be appropriated to the Secretary by this division may be used to produce or provide articles or services for the purpose of selling the articles or services to a person outside the Federal Government, unless the Secretary determines that comparable articles or services are not available from a commercial source in the United States.

(c) REQUESTS FOR PROPOSALS.—None of the funds authorized to be appropriated to the Secretary by this division may be used by the Department to prepare or initiate Requests for Proposals for a program if the program has not been authorized by Congress.

SEC. 2603. COST SHARING.

(a) RESEARCH AND DEVELOPMENT.—Except as otherwise provided in this division, for research and development programs carried out under this division, the Secretary shall require a commitment from non-Federal sources of at least 20 percent of the cost of the project. The Secretary may reduce or eliminate the non-Federal requirement under this subsection if the Secretary determines that the research and development is of a basic or fundamental nature.

(b) DEMONSTRATION AND COMMERCIAL APPLICATION.—Except as otherwise provided in this division, the Secretary shall require at least 50 percent of the costs directly and specifically related to any demonstration or commercial application project under this division to be provided from non-Federal sources. The Secretary may reduce the non-Federal requirement under this subsection if the Secretary determines that the reduction is necessary and appropriate considering the technological risks involved in the project and is necessary to meet the objectives of this division.

(c) CALCULATION OF AMOUNT.—In calculating the amount of the non-Federal commitment under subsection (a) or (b), the Secretary may include personnel, services, equipment, and other resources.

SEC. 2604. LIMITATION ON DEMONSTRATION AND COMMERCIAL APPLICATION OF ENERGY TECHNOLOGY.

Except as otherwise provided in this division, the Secretary shall provide funding for scientific or energy demonstration and commercial application of energy technology programs, projects, or activities only for technologies or processes that can be reasonably expected to yield new, measurable benefits to the cost, efficiency, or performance of the technology or process.

SEC. 2605. REPROGRAMMING.

(a) AUTHORITY.—The Secretary may use amounts appropriated under this division for a program, project, or activity other than the program, project, or activity for which such amounts were appropriated only if—

(1) the Secretary has transmitted to the appropriate congressional committees a report described in subsection (b) and a period of 30 days has elapsed after such committees receive the report;

(2) amounts used for the program, project, or activity do not exceed—

(A) 105 percent of the amount authorized for the program, project, or activity; or

(B) $250,000 more than the amount authorized for the program, project, or activity, whichever is less; and

(3) the program, project, or activity has been presented to, or requested of, the Congress by the Secretary.

(b) REPORT.—(1) The report referred to in subsection (a) is a report containing a full and complete statement of the action proposed to be taken and the facts and circumstances relied upon in support of the proposed action.

(2) In the computation of the 30-day period under subsection (a), there shall be excluded any day on which either House of Congress is not in session because of an adjournment of more than 3 days to a day certain.

(c) LIMITATIONS.—(1) In no event may the total amount of funds obligated by the Secretary pursuant to this division exceed the total amount authorized to be appropriated to the Secretary by this division.

(2) Funds appropriated to the Secretary pursuant to this division may not be used for an item for which Congress has declined to authorize funds.

Subtitle B—Other Miscellaneous Provisions

SEC. 2611. NOTICE OF REORGANIZATION.

The Secretary shall provide notice to the appropriate congressional committees not later than 15 days before any reorganization of any environmental research or development, scientific or energy research, development, or demonstration, or commercial application of energy technology program, project, or activity of the Department.

SEC. 2612. LIMITS ON GENERAL PLANT PROJECTS.

If, at any time during the construction of a civilian environmental research and development, scientific or energy research, development, or demonstration, or commercial application of energy technology project of the Department for which no specific funding level is provided by law, the estimated cost (including any revision thereof) of the project exceeds $5,000,000, the Secretary may not continue such construction unless the Secretary has furnished a complete report to the appropriate congressional committees explaining the project and the reasons for the estimate or revision.

SEC. 2613. LIMITS ON CONSTRUCTION PROJECTS.

(a) LIMITATION.—Except as provided in subsection (b), construction on a civilian environmental research and development, scientific or energy research, development, or demonstration, or commercial application of energy technology project of the Department for which funding has been specifically provided by law may not be started, and additional obligations may not be incurred in

connection with the project above the authorized funding amount, whenever the current estimated cost of the construction project exceeds by more than 10 percent the higher of—

(1) the amount authorized for the project, if the entire project has been funded by the Congress; or

(2) the amount of the total estimated cost for the project as shown in the most recent budget justification data submitted to Congress.

(b) NOTICE.—An action described in subsection (a) may be taken if—

(1) the Secretary has submitted to the appropriate congressional committees a report on the proposed actions and the circumstances making such actions necessary; and

(2) a period of 30 days has elapsed after the date on which the report is received by the committees.

(c) EXCLUSION.—In the computation of the 30-day period described in subsection (b)(2), there shall be excluded any day on which either House of Congress is not in session because of an adjournment of more than 3 days to a day certain.

(d) EXCEPTION.—Subsections (a) and (b) shall not apply to any construction project that has a current estimated cost of less than $5,000,000.

SEC. 2614. AUTHORITY FOR CONCEPTUAL AND CONSTRUCTION DESIGN.

(a) REQUIREMENT FOR CONCEPTUAL DESIGN.—(1) Subject to paragraph (2) and except as provided in paragraph (3), before submitting to Congress a request for funds for a construction project that is in support of a civilian environmental research and development, scientific or energy research, development, or demonstration, or commercial application of energy technology program, project, or activity of the Department, the Secretary shall complete a conceptual design for that project.

(2) If the estimated cost of completing a conceptual design for a construction project exceeds $750,000, the Secretary shall submit to Congress a request for funds for the conceptual design before submitting a request for funds for the construction project.

(3) The requirement in paragraph (1) does not apply to a request for funds for a construction project, the total estimated cost of which is less than $5,000,000.

(b) AUTHORITY FOR CONSTRUCTION DESIGN.—(1) The Secretary may carry out construction design (including architectural and engineering services) in connection with any proposed construction project that is in support of a civilian environmental research and development, scientific or energy research, development, and demonstration, or commercial application of energy technology program, project, or activity of the Department if the total estimated cost for such design does not exceed $250,000.

(2) If the total estimated cost for construction design in connection with any construction project described in paragraph (1) exceeds $250,000, funds for such design must be specifically authorized by law.

SEC. 2615. NATIONAL ENERGY POLICY DEVELOPMENT GROUP MANDATED REPORTS.

(a) THE SECRETARY'S REVIEW OF ENERGY EFFICIENCY RENEWABLE ENERGY, AND ALTERNATIVE ENERGY RESEARCH AND DEVELOPMENT.—Upon completion of the Secretary's review of current funding and historic performance of the Department's energy efficiency, renewable energy, and alternative energy research and development programs in response to the recommendations of the May 16, 2001, Report of the National Energy Policy Development Group, the Secretary shall transmit a report containing the results of such review to the appropriate congressional committees.

(b) REVIEW AND RECOMMENDATIONS ON USING THE NATION'S ENERGY RESOURCES MORE EFFICIENTLY.—Upon completion of the Office of Science and Technology Policy and the President's Council of Advisors on Science and Technology reviewing and making recommendations on using the Nation's energy resources more efficiently, in response to the recommendation of the May 16, 2001, Report of the National Energy Policy Development Group, the Director of the Office of Science and Technology Policy shall transmit a report containing the results of such review and recommendations to the appropriate congressional committees.

SEC. 2616. PERIODIC REVIEWS AND ASSESSMENTS.

The Secretary shall enter into appropriate arrangements with the National Academies of Sciences and Engineering to ensure that there be periodic reviews and assessments of the programs authorized by this division, as well as the measurable cost and performance-based goals for such programs as established under section 2004, and the progress on meeting such goals. Such reviews and assessments shall be conducted at least every 5 years, or more often as the Secretary considers necessary, and the Secretary shall transmit to the appropriate congressional committees reports containing the results of such reviews and assessments.

DIVISION C

SEC. 3001. SHORT TITLE.

(a) SHORT TITLE.—This division may be cited as the ''Energy Tax Policy Act of 2001''.

(b) AMENDMENT OF 1986 CODE.—Except as otherwise expressly provided, whenever in this division an amendment or repeal is expressed in terms of an amendment to, or repeal of, a section or other provision, the reference shall be considered to be made to a section or other provision of the Internal Revenue Code of 1986.

TITLE I—CONSERVATION

SEC. 3101. CREDIT FOR RESIDENTIAL SOLAR ENERGY PROPERTY.

(a) IN GENERAL.—Subpart A of part IV of subchapter A of chapter 1 (relating to nonrefundable personal credits) is amended by inserting after section 25B the following new section:

''SEC. 25C. RESIDENTIAL SOLAR ENERGY PROPERTY.

''(a) ALLOWANCE OF CREDIT.—In the case of an individual, there shall be allowed as a credit against the tax imposed by this chapter for the taxable year an amount equal to the sum of—

''(1) 15 percent of the qualified photovoltaic property expenditures made by the taxpayer during such year, and

''(2) 15 percent of the qualified solar water heating property expenditures made by the taxpayer during the taxable year.

''(b) LIMITATIONS.—

''(1) MAXIMUM CREDIT.—The credit allowed under subsection (a) shall not exceed—

''(A) $2,000 for each system of property described in subsection (c)(1), and

''(B) $2,000 for each system of property described in subsection (c)(2).

''(2) SAFETY CERTIFICATIONS.—No credit shall be allowed under this section for an item of property unless—

''(A) in the case of solar water heating equipment, such equipment is certified for performance and safety by the non-profit Solar Rating Certification Corporation or a comparable entity endorsed by the government of the State in which such property is installed, and

''(B) in the case of a photovoltaic system, such system meets appropriate fire and electric code requirements.

''(3) LIMITATION BASED ON AMOUNT OF TAX.—The credit allowed under subsection (a) for the taxable year shall not exceed the excess of—

''(A) the sum of the regular tax liability (as defined in section 26(b)) plus the tax imposed by section 55, over

''(B) the sum of the credits allowable under this subpart (other than this section and sections 23, 25D, and 25E) and section 27 for the taxable year.

''(c) DEFINITIONS.—For purposes of this section—

''(1) QUALIFIED SOLAR WATER HEATING PROPERTY EXPENDITURE.—The term 'qualified solar water heating property expenditure' means an expenditure for property to heat water for use in a dwelling unit located in the United States and used as a residence if at least half of the energy used by such property for such purpose is derived from the sun.

''(2) QUALIFIED PHOTOVOLTAIC PROPERTY EXPENDITURE.—The term 'qualified photovoltaic property expenditure' means an expenditure for property that uses solar energy to generate electricity for use in a dwelling unit.

''(3) SOLAR PANELS.—No expenditure relating to a solar panel or other property installed as a roof (or portion thereof) shall fail to be treated as property described in paragraph (1) or (2) solely because it constitutes a structural component of the structure on which it is installed.

''(4) LABOR COSTS.—Expenditures for labor costs properly allocable to the onsite preparation, assembly, or original installation of the property described in paragraph (1) or (2) and for piping or wiring to interconnect such property to the dwelling unit shall be taken into account for purposes of this section.

''(5) SWIMMING POOLS, ETC., USED AS STORAGE MEDIUM.—Expenditures which are properly allocable to a swimming pool, hot tub, or any other energy storage medium which has a function other than the function of such storage shall not be taken into account for purposes of this section.

''(d) SPECIAL RULES.—

''(1) DOLLAR AMOUNTS IN CASE OF JOINT OCCUPANCY.—In the case of any dwelling unit which is jointly occupied and used during any calendar year as a residence by 2 or more individuals the following shall apply:

''(A) The amount of the credit allowable under subsection (a) by reason of expenditures (as the case may be) made during such calendar year by any of such individuals with respect to such dwelling unit shall be determined by treating all of such individuals as 1 taxpayer whose taxable year is such calendar year.

''(B) There shall be allowable with respect to such expenditures to each of such individuals, a credit under subsection (a) for the taxable year in which such calendar year ends in an amount which bears the same ratio to the amount determined under subparagraph (A) as the amount of such expenditures made by such individual during such calendar year bears to the aggregate of such expenditures made by all of such individuals during such calendar year.

''(2) TENANT-STOCKHOLDER IN COOPERATIVE HOUSING CORPORATION.—In the case of an individual who is a tenant-stockholder (as defined in section 216) in a cooperative housing corporation (as defined in such section), such individual shall be treated as having made his tenant-stockholder's proportionate share (as defined in section 216(b)(3)) of any expenditures of such corporation.

''(3) CONDOMINIUMS.—

''(A) IN GENERAL.—In the case of an individual who is a member of a condominium management association with respect to a condominium which he owns, such individual

shall be treated as having made his proportionate share of any expenditures of such association.

''(B) CONDOMINIUM MANAGEMENT ASSOCIATION.—For purposes of this paragraph, the term 'condominium management association' means an organization which meets the requirements of paragraph (1) of section 528(c) (other than subparagraph (E) thereof) with respect to a condominium project substantially all of the units of which are used as residences.

''(4) ALLOCATION IN CERTAIN CASES.—If less than 80 percent of the use of an item is for nonbusiness purposes, only that portion of the expenditures for such item which is properly allocable to use for nonbusiness purposes shall be taken into account.

''(5) WHEN EXPENDITURE MADE; AMOUNT OF EXPENDITURE.—

''(A) IN GENERAL.—Except as provided in subparagraph (B), an expenditure with respect to an item shall be treated as made when the original installation of the item is completed.

''(B) EXPENDITURES PART OF BUILDING CONSTRUCTION.—In the case of an expenditure in connection with the construction or reconstruction of a structure, such expenditure shall be treated as made when the original use of the constructed or reconstructed structure by the taxpayer begins.

''(C) AMOUNT.—The amount of any expenditure shall be the cost thereof.

''(6) PROPERTY FINANCED BY SUBSIDIZED ENERGY FINANCING.—For purposes of determining the amount of expenditures made by any individual with respect to any dwelling unit, there shall not be taken in to account expenditures which are made from subsidized energy financing (as defined in section 48(a)(4)(A)).

''(e) BASIS ADJUSTMENTS.—For purposes of this subtitle, if a credit is allowed under this section for any expenditure with respect to any property, the increase in the basis of such property which would (but for this subsection) result from such expenditure shall be reduced by the amount of the credit so allowed.

''(f) TERMINATION.—The credit allowed under this section shall not apply to taxable years beginning after December 31, 2006 (December 31, 2008, with respect to qualified photovoltaic property expenditures).''.

(b) CONFORMING AMENDMENTS.—

(1) Subsection (a) of section 1016 is amended by striking ''and'' at the end of paragraph (27), by striking the period at the end of paragraph (28) and inserting '', and'', and by adding at the end the following new paragraph:

''(29) to the extent provided in section 25C(e), in the case of amounts with respect to which a credit has been allowed under section 25C.''.

(2) The table of sections for subpart A of part IV of subchapter A of chapter 1 is amended by inserting after the item relating to section 25B the following new item:

''Sec. 25C. Residential solar energy property.''.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years ending after December 31, 2001.

SEC. 3102. EXTENSION AND EXPANSION OF CREDIT FOR ELECTRICITY PRODUCED FROM RENEWABLE RESOURCES.

(a) EXTENSION OF CREDIT FOR WIND AND CLOSED-LOOP BIOMASS FACILITIES.—Subparagraphs (A) and (B) of section 45(c)(3) are each amended by striking ''2002'' and inserting ''2007''.

(b) EXPANSION OF CREDIT FOR OPEN-LOOP BIOMASS AND LANDFILL GAS FACILITIES.—Paragraph (3) of section 45(c) is amended by adding at the end the following new subparagraphs:

''(D) OPEN-LOOP BIOMASS FACILITIES.—In the case of a facility using open-loop biomass to produce electricity, the term 'qualified facility' means any facility owned by the taxpayer which is originally placed in service before January 1, 2007.

''(E) LANDFILL GAS FACILITIES.—In the case of a facility producing electricity from gas derived from the biodegradation of municipal solid waste, the term 'qualified facility' means any facility owned by the taxpayer which is originally placed in service before January 1, 2007.''.

(c) DEFINITION AND SPECIAL RULES.—Subsection (c) of section 45 is amended by adding at the end the following new paragraphs:

''(5) OPEN-LOOP BIOMASS.—The term 'open-loop biomass' means any solid, nonhazardous, cellulosic waste material which is segregated from other waste materials and which is derived from—

''(A) any of the following forest-related resources: mill residues, precommercial thinnings, slash, and brush, but not including old-growth timber,

''(B) solid wood waste materials, including waste pallets, crates, dunnage, manufacturing and construction wood wastes (other than pressure-treated, chemically-treated, or painted wood wastes), and landscape or right-of-way tree trimmings, but not including municipal solid waste (garbage), gas derived from the biodegradation of solid waste, or paper that is commonly recycled, or

''(C) agriculture sources, including orchard tree crops, vineyard, grain, legumes, sugar, and other crop by-products or residues.

Such term shall not include closed-loop biomass.

''(6) REDUCED CREDIT FOR CERTAIN PREEFFECTIVE DATE FACILITIES.—In the case of any facility described in subparagraph (D) or (E) of paragraph (3) which is placed in service before the date of the enactment of this subparagraph—

''(A) subsection (a)(1) shall be applied by substituting '1.0 cents' for '1.5 cents', and

''(B) the 5-year period beginning on the date of the enactment of this paragraph shall be substituted in lieu of the 10-year period in subsection (a)(2)(A)(ii).

''(7) LIMIT ON REDUCTIONS FOR GRANTS, ETC., FOR OPEN-LOOP BIOMASS FACILITIES.—If the amount of the credit determined under subsection (a) with respect to any open-loop biomass facility is required to be reduced under paragraph (3) of subsection (b), the fraction under such paragraph shall in no event be greater than ⅘.

''(8) COORDINATION WITH SECTION 29.—The term 'qualified facility' shall not include any facility the production from which is allowed as a credit under section 29 for the taxable year or any prior taxable year.''.

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to electricity sold after the date of the enactment of this Act.

SEC. 3103. CREDIT FOR QUALIFIED STATIONARY FUEL CELL POWERPLANTS.

(a) BUSINESS PROPERTY.—

(1) IN GENERAL.—Subparagraph (A) of section 48(a)(3) (defining energy property) is amended by striking ''or'' at the end of clause (i), by adding ''or'' at the end of clause (ii), and by inserting after clause (ii) the following new clause:

''(iii) equipment which is part of a qualified stationary fuel cell powerplant,''.

(2) QUALIFIED STATIONARY FUEL CELL POWERPLANT.—Subsection (a) of section 48 is amended by redesignating paragraphs (4) and (5) as paragraphs (5) and (6), respectively, and by inserting after paragraph (3) the following new paragraph:

''(4) QUALIFIED STATIONARY FUEL CELL POWERPLANT.—For purposes of this subsection—

''(A) IN GENERAL.—The term 'qualified stationary fuel cell powerplant' means a stationary fuel cell power plant that has an electricity-only generation efficiency greater than 30 percent.

''(B) LIMITATION.—In the case of qualified stationary fuel cell powerplant placed in service during the taxable year, the credit under subsection (a) for such year may not exceed $1,000 for each kilowatt of capacity.

''(C) STATIONARY FUEL CELL POWER PLANT.—The term 'stationary fuel cell power plant' means an integrated system comprised of a fuel cell stack assembly and associated balance of plant components that converts a fuel into electricity using electrochemical means.

''(D) TERMINATION.—Such term shall not include any property placed in service after December 31, 2006.''

(3) EFFECTIVE DATE.—The amendments made by this subsection shall apply to property placed in service after December 31, 2001, under rules similar to the rules of section 48(m) of the Internal Revenue Code of 1986 (as in effect on the day before the date of the enactment of the Revenue Reconciliation Act of 1990).

(b) NONBUSINESS PROPERTY.—

(1) IN GENERAL.—Subpart A of part IV of subchapter A of chapter 1 (relating to nonrefundable personal credits) is amended by inserting after section 25C the following new section:

''SEC. 25D. NONBUSINESS QUALIFIED STATIONARY FUEL CELL POWERPLANT.

''(a) IN GENERAL.—In the case of an individual, there shall be allowed as a credit against the tax imposed by this chapter for the taxable year an amount equal to 10 percent of the qualified stationary fuel cell powerplant expenditures which are paid or incurred during such year.

''(b) LIMITATIONS.—

''(1) IN GENERAL.—The credit allowed under subsection (a) for the taxable year and all prior taxable years shall not exceed $1,000 for each kilowatt of capacity.

''(2) LIMITATION BASED ON AMOUNT OF TAX.—The credit allowed under subsection (a) for the taxable year shall not exceed the excess of—

''(A) the sum of the regular tax liability (as defined in section 26(b)) plus the tax imposed by section 55, over

''(B) the sum of the credits allowable under this subpart (other than this section and sections 23 and 25E) and section 27 for the taxable year.

''(c) QUALIFIED STATIONARY FUEL CELL POWERPLANT EXPENDITURES.—For purposes of this section, the term 'qualified stationary fuel cell powerplant expenditures' means expenditures by the taxpayer for any qualified stationary fuel cell powerplant (as defined in section 48(a)(4))—

''(1) which meets the requirements of subparagraphs (B) and (D) of section 48(a)(3), and

''(2) which is installed on or in connection with a dwelling unit—

''(A) which is located in the United States, and

''(B) which is used by the taxpayer as a residence.

Such term includes expenditures for labor costs properly allocable to the onsite preparation, assembly, or original installation of the property.

''(d) SPECIAL RULES.—For purposes of this section, rules similar to the rules of section 25C(d) shall apply.

''(e) BASIS ADJUSTMENTS.—For purposes of this subtitle, if a credit is allowed under this section for any expenditure with respect to any property, the increase in the basis of such property which would (but for this subsection) result from such expenditure shall be reduced by the amount of the credit so allowed.

''(f) TERMINATION.—This section shall not apply to any expenditure made after December 31, 2006.''.

(2) CONFORMING AMENDMENTS.—

(A) Subsection (a) of section 1016 is amended by striking ''and'' at the end of paragraph (28), by striking the period at the end of paragraph (29) and inserting '', and'', and by adding at the end the following new paragraph:

''(30) to the extent provided in section 25D(e), in the case of amounts with respect to which a credit has been allowed under section 25D.''.

(B) The table of sections for subpart A of part IV of subchapter A of chapter 1 is amended by inserting after the item relating to section 25C the following new item:

''Sec. 25D. Nonbusiness qualified stationary fuel cell powerplant.''.

(3) EFFECTIVE DATE.—The amendments made by this subsection shall apply to expenditures paid or incurred after December 31, 2001.

SEC. 3104. ALTERNATIVE MOTOR VEHICLE CREDIT.

(a) IN GENERAL.—Subpart B of part IV of subchapter A of chapter 1 (relating to foreign tax credit, etc.) is amended by adding at the end the following:

''SEC. 30B. ALTERNATIVE MOTOR VEHICLE CREDIT.

''(a) ALLOWANCE OF CREDIT.—There shall be allowed as a credit against the tax imposed by this chapter for the taxable year an amount equal to the sum of—

''(1) the new qualified fuel cell motor vehicle credit determined under subsection (b),

''(2) the new qualified hybrid motor vehicle credit determined under subsection (c),

''(3) the new qualified alternative fuel motor vehicle credit determined under subsection (d), and

''(4) the advanced lean burn technology motor vehicle credit determined under subsection (e).

''(b) NEW QUALIFIED FUEL CELL MOTOR VEHICLE CREDIT.—

''(1) IN GENERAL.—For purposes of subsection (a), the new qualified fuel cell motor vehicle credit determined under this subsection with respect to a new qualified fuel cell motor vehicle placed in service by the taxpayer during the taxable year is—

''(A) $4,000, if such vehicle has a gross vehicle weight rating of not more than 8,500 pounds,

''(B) $10,000, if such vehicle has a gross vehicle weight rating of more than 8,500 pounds but not more than 14,000 pounds,

''(C) $20,000, if such vehicle has a gross vehicle weight rating of more than 14,000 pounds but not more than 26,000 pounds, and

''(D) $40,000, if such vehicle has a gross vehicle weight rating of more than 26,000 pounds.

''(2) INCREASE FOR FUEL EFFICIENCY.—

''(A) IN GENERAL.—The amount determined under paragraph (1)(A) with respect to a new qualified fuel cell motor vehicle which is a passenger automobile or light truck shall be increased by—

''(i) $1,000, if such vehicle achieves at least 150 percent but less than 175 percent of the 2000 model year city fuel economy,

''(ii) $1,500, if such vehicle achieves at least 175 percent but less than 200 percent of the 2000 model year city fuel economy,

''(iii) $2,000, if such vehicle achieves at least 200 percent but less than 225 percent of the 2000 model year city fuel economy,

''(iv) $2,500, if such vehicle achieves at least 225 percent but less than 250 percent of the 2000 model year city fuel economy,

''(v) $3,000, if such vehicle achieves at least 250 percent but less than 275 percent of the 2000 model year city fuel economy,

''(vi) $3,500, if such vehicle achieves at least 275 percent but less than 300 percent of the 2000 model year city fuel economy, and

''(vii) $4,000, if such vehicle achieves at least 300 percent of the 2000 model year city fuel economy.

''(B) 2000 MODEL YEAR CITY FUEL ECONOMY.—For purposes of subparagraph (A), the 2000 model year city fuel economy with respect to a vehicle shall be determined in accordance with the following tables:

''(i) In the case of a passenger automobile:

''If vehicle inertia weight class is:	**The 2000 model year city fuel economy is:**
1,500 or 1,750 lbs	43.7 mpg
2,000 lbs	38.3 mpg
2,250 lbs	34.1 mpg
2,500 lbs	30.7 mpg
2,750 lbs	27.9 mpg
3,000 lbs	25.6 mpg
3,500 lbs	22.0 mpg
4,000 lbs	19.3 mpg
4,500 lbs	17.2 mpg
5,000 lbs	15.5 mpg
5,500 lbs	14.1 mpg
6,000 lbs	12.9 mpg
6,500 lbs	11.9 mpg
7,000 or 8,500 lbs	11.1 mpg.

''(ii) In the case of a light truck:

''If vehicle inertia weight class is:	**The 2000 model year city fuel economy is:**
1,500 or 1,750 lbs	37.6 mpg
2,000 lbs	33.7 mpg
2,250 lbs	30.6 mpg
2,500 lbs	28.0 mpg
2,750 lbs	25.9 mpg
3,000 lbs	24.1 mpg
3,500 lbs	21.3 mpg
4,000 lbs	19.0 mpg
4,500 lbs	17.3 mpg
5,000 lbs	15.8 mpg
5,500 lbs	14.6 mpg
6,000 lbs	13.6 mpg
6,500 lbs	12.8 mpg
7,000 or 8,500 lbs	12.0 mpg.

''(C) VEHICLE INERTIA WEIGHT CLASS.—For purposes of subparagraph (B), the term 'vehicle inertia weight class' has the same meaning as when defined in regulations prescribed by the Administrator of the Environmental Protection Agency for purposes of the administration of title II of the Clean Air Act (42 U.S.C. 7521 et seq.).

''(3) NEW QUALIFIED FUEL CELL MOTOR VEHICLE.—For purposes of this subsection, the term 'new qualified fuel cell motor vehicle' means a motor vehicle—

''(A) which is propelled by power derived from one or more cells which convert chemical energy directly into electricity by combining oxygen with hydrogen fuel which is stored on board the vehicle in any form and may or may not require reformation prior to use,

''(B) which, in the case of a passenger automobile or light truck—

''(i) for 2002 and later model vehicles, has received a certificate of conformity under the Clean Air Act and meets or exceeds the equivalent qualifying California low emission vehicle standard under section 243(e)(2) of the Clean Air Act for that make and model year, and

''(ii) for 2004 and later model vehicles, has received a certificate that such vehicle meets or exceeds the Tier II emission level established in regulations prescribed by the Administrator of the Environmental Protection Agency under section 202(i) of the Clean Air Act for that make and model year vehicle,

''(C) the original use of which commences with the taxpayer,

''(D) which is acquired for use or lease by the taxpayer and not for resale, and

''(E) which is made by a manufacturer.

''(c) NEW QUALIFIED HYBRID MOTOR VEHICLE CREDIT.—

''(1) IN GENERAL.—For purposes of subsection (a), the new qualified hybrid motor vehicle credit determined under this subsection with respect to a new qualified hybrid motor vehicle placed in service by the taxpayer during the taxable year is the credit amount determined under paragraph (2).

''(2) CREDIT AMOUNT.—

''(A) IN GENERAL.—The credit amount determined under this paragraph shall be determined in accordance with the following tables:

''(i) In the case of a new qualified hybrid motor vehicle which is a passenger automobile or light truck and which provides the following percentage of the maximum available power:

''If percentage of the maximum available power is:	**The credit amount is:**
At least 2.5 percent but less than 10 percent.	$250
At least 10 percent but less than 20 percent.	$500
At least 20 percent but less than 30 percent.	$750
At least 30 percent	$1,000.

''(ii) In the case of a new qualified hybrid motor vehicle which is a heavy duty hybrid motor vehicle and which provides the following percentage of the maximum available power:

''(I) If such vehicle has a gross vehicle weight rating of not more than 14,000 pounds:

''If percentage of the maximum available power is:	**The credit amount is:**
At least 20 percent but less than 30 percent.	$1,500
At least 30 percent but less than 40 percent.	$1,750
At least 40 percent but less than 50 percent.	$2,000
At least 50 percent but less than 60 percent.	$2,250
At least 60 percent	$2,500.

''(II) If such vehicle has a gross vehicle weight rating of more than 14,000 but not more than 26,000 pounds:

''If percentage of the maximum available power is:	**The credit amount is:**
At least 20 percent but less than 30 percent.	$4,000
At least 30 percent but less than 40 percent.	$4,500

"If percentage of the maximum available power is:	The credit amount is:
At least 40 percent but less than 50 percent.	$5,000
At least 50 percent but less than 60 percent.	$5,500
At least 60 percent	$6,000.

''(III) If such vehicle has a gross vehicle weight rating of more than 26,000 pounds:

"If percentage of the maximum available power is:	The credit amount is:
At least 20 percent but less than 30 percent.	$6,000
At least 30 percent but less than 40 percent.	$7,000
At least 40 percent but less than 50 percent.	$8,000
At least 50 percent but less than 60 percent.	$9,000
At least 60 percent	$10,000.

''(B) INCREASE FOR FUEL EFFICIENCY.—

''(i) AMOUNT.—The amount determined under subparagraph (A)(i) with respect to a passenger automobile or light truck shall be increased by—

''(I) $1,000, if such vehicle achieves at least 125 percent but less than 150 percent of the 2000 model year city fuel economy,

''(II) $1,500, if such vehicle achieves at least 150 percent but less than 175 percent of the 2000 model year city fuel economy,

''(III) $2,000, if such vehicle achieves at least 175 percent but less than 200 percent of the 2000 model year city fuel economy,

''(IV) $2,500, if such vehicle achieves at least 200 percent but less than 225 percent of the 2000 model year city fuel economy,

''(V) $3,000, if such vehicle achieves at least 225 percent but less than 250 percent of the 2000 model year city fuel economy, and

''(VI) $3,500, if such vehicle achieves at least 250 percent of the 2000 model year city fuel economy.

''(ii) 2000 MODEL YEAR CITY FUEL ECONOMY.—For purposes of clause (i), the 2000 model year city fuel economy with respect to a vehicle shall be determined using the tables provided in subsection (b)(2)(B) with respect to such vehicle.

''(iii) OPTION TO USE LIKE VEHICLE.—For purposes of clause (i), at the option of the vehicle manufacturer, the increase for fuel efficiency may be calculated by comparing the new qualified hybrid motor vehicle to a 'like vehicle'.

''(C) INCREASE FOR ACCELERATED EMISSIONS PERFORMANCE.—The amount determined under subparagraph (A)(ii) with respect to an applicable heavy duty hybrid motor vehicle shall be increased by the increase credit amount determined in accordance with the following tables:

''(i) In the case of a vehicle which has a gross vehicle weight rating of not more than 14,000 pounds:

"If the model year is:	The increase credit amount is:
2002	$3,500
2003	$3,000
2004	$2,500
2005	$2,000
2006	$1,500.

''(ii) In the case of a vehicle which has a gross vehicle weight rating of more than 14,000 pounds but not more than 26,000 pounds:

"If the model year is:	The increase credit amount is:
2002	$9,000
2003	$7,750
2004	$6,500
2005	$5,250
2006	$4,000.

''(iii) In the case of a vehicle which has a gross vehicle weight rating of more than 26,000 pounds:

"If the model year is:	The increase credit amount is:
2002	$14,000
2003	$12,000
2004	$10,000
2005	$8,000
2006	$6,000.

''(D) CONSERVATION CREDIT.—

''(i) AMOUNT.—The amount determined under subparagraph (A)(i) with respect to a passenger automobile or light truck shall be increased by—

''(I) $250, if such vehicle achieves a lifetime fuel savings of at least 1,500 gallons of gasoline, and

''(II) $500, if such vehicle achieves a lifetime fuel savings of at least 2,500 gallons of gasoline.

''(ii) LIFETIME FUEL SAVINGS FOR LIKE VEHICLE.—For purposes of clause (i), at the option of the vehicle manufacturer, the lifetime fuel savings fuel may be calculated by comparing the new qualified hybrid motor vehicle to a 'like vehicle'.

''(E) DEFINITIONS.—

''(i) APPLICABLE HEAVY DUTY HYBRID MOTOR VEHICLE.—For purposes of subparagraph (C), the term 'applicable heavy duty hybrid motor vehicle' means a heavy duty hybrid motor vehicle which is powered by an internal combustion or heat engine which is certified as meeting the emission standards set in the regulations prescribed by the Administrator of the Environmental Protection Agency for 2007 and later model year diesel heavy duty engines or 2008 and later model year ottocycle heavy duty engines, as applicable.

''(ii) HEAVY DUTY HYBRID MOTOR VEHICLE.—For purposes of this paragraph, the term 'heavy duty hybrid motor vehicle' means a new qualified hybrid motor vehicle which has a gross vehicle weight rating of more than 10,000 pounds and draws propulsion energy from both of the following onboard sources of stored energy:

''(I) An internal combustion or heat engine using consumable fuel which, for 2002 and later model vehicles, has received a certificate of conformity under the Clean Air Act and meets or exceeds a level of not greater than 3.0 grams per brake horsepower-hour of oxides of nitrogen and 0.01 per brake horsepower-hour of particulate matter.

''(II) A rechargeable energy storage system.

''(iii) MAXIMUM AVAILABLE POWER.—

''(I) PASSENGER AUTOMOBILE OR LIGHT TRUCK.—For purposes of subparagraph (A)(i), the term 'maximum available power' means the maximum power available from the battery or other electrical storage device, during a standard 10 second pulse power test, divided by the sum of the battery or other electrical storage device and the SAE net power of the heat engine.

''(II) HEAVY DUTY HYBRID MOTOR VEHICLE.—For purposes of subparagraph (A)(ii), the term 'maximum available power' means the maximum power available from the battery or other electrical storage device, during a standard 10 second pulse power test, divided by the vehicle's total traction power. The term 'total traction power' means the sum of the electric motor peak power and the heat engine peak power of the vehicle, except that if the electric motor is the sole means by which the vehicle can be driven, the total traction power is the peak electric motor power.

''(iv) LIKE VEHICLE.—For purposes of subparagraph (B)(iii), the term 'like vehicle' for a new qualified hybrid motor vehicle derived from a conventional production vehicle produced in the same model year means a model that is equivalent in the following areas:

''(I) Body style (2-door or 4-door).

''(II) Transmission (automatic or manual).

''(III) Acceleration performance (± 0.05 seconds).

''(IV) Drivetrain (2-wheel drive or 4-wheel drive).

''(V) Certification by the Administrator of the Environmental Protection Agency.

''(v) LIFETIME FUEL SAVINGS.—For purposes of subsection (c)(2)(D), the term 'lifetime fuel savings' shall be calculated by dividing 120,000 by the difference between the 2000 model year city fuel economy for the vehicle inertia weight class and the city fuel economy for the new qualified hybrid motor vehicle.

''(3) NEW QUALIFIED HYBRID MOTOR VEHICLE.—For purposes of this subsection, the term 'new qualified hybrid motor vehicle' means a motor vehicle—

''(A) which draws propulsion energy from onboard sources of stored energy which are both—

''(i) an internal combustion or heat engine using combustible fuel, and

''(ii) a rechargeable energy storage system,

''(B) which, in the case of a passenger automobile or light truck, for 2002 and later model vehicles, has received a certificate of conformity under the Clean Air Act and meets or exceeds the equivalent qualifying California low emission vehicle standard under section 243(e)(2) of the Clean Air Act for that make and model year,

''(C) the original use of which commences with the taxpayer,

''(D) which is acquired for use or lease by the taxpayer and not for resale, and

''(E) which is made by a manufacturer.

''(d) NEW QUALIFIED ALTERNATIVE FUEL MOTOR VEHICLE CREDIT.—

''(1) ALLOWANCE OF CREDIT.—Except as provided in paragraph (5), the credit determined under this subsection is an amount equal to the applicable percentage of the incremental cost of any new qualified alternative fuel motor vehicle placed in service by the taxpayer during the taxable year.

''(2) APPLICABLE PERCENTAGE.—For purposes of paragraph (1), the applicable percentage with respect to any new qualified alternative fuel motor vehicle is—

''(A) 50 percent, plus

''(B) 30 percent, if such vehicle—

''(i) has received a certificate of conformity under the Clean Air Act and meets or exceeds the most stringent standard available for certification under the Clean Air Act for that make and model year vehicle (other than a zero emission standard), or

''(ii) has received an order from an applicable State certifying the vehicle for sale or lease in California and meets or exceeds the most stringent standard available for certification under the State laws of California (enacted in accordance with a waiver granted under section 209(b) of the Clean Air Act) for that make and model year vehicle (other than a zero emission standard).

''(3) INCREMENTAL COST.—For purposes of this subsection, the incremental cost of any new qualified alternative fuel motor vehicle is equal to the amount of the excess of the manufacturer's suggested retail price for such vehicle over such price for a gasoline or diesel fuel motor vehicle of the same model, to the extent such amount does not exceed—

''(A) $5,000, if such vehicle has a gross vehicle weight rating of not more than 8,500 pounds,

''(B) $10,000, if such vehicle has a gross vehicle weight rating of more than 8,500 pounds but not more than 14,000 pounds,

''(C) $25,000, if such vehicle has a gross vehicle weight rating of more than 14,000 pounds but not more than 26,000 pounds, and

''(D) $40,000, if such vehicle has a gross vehicle weight rating of more than 26,000 pounds.

''(4) QUALIFIED ALTERNATIVE FUEL MOTOR VEHICLE DEFINED.—For purposes of this subsection—

''(A) IN GENERAL.—The term 'qualified alternative fuel motor vehicle' means any motor vehicle—

''(i) which is only capable of operating on an alternative fuel,

''(ii) the original use of which commences with the taxpayer,

''(iii) which is acquired by the taxpayer for use or lease, but not for resale, and

''(iv) which is made by a manufacturer.

''(B) ALTERNATIVE FUEL.—The term 'alternative fuel' means compressed natural gas, liquefied natural gas, liquefied petroleum gas, hydrogen, and any liquid at least 85 percent of the volume of which consists of methanol.

''(5) CREDIT FOR MIXED-FUEL VEHICLES.—

''(A) IN GENERAL.—In the case of a mixed-fuel vehicle placed in service by the taxpayer during the taxable year, the credit determined under this subsection is an amount equal to—

''(i) in the case of a 75/25 mixed-fuel vehicle, 70 percent of the credit which would have been allowed under this subsection if such vehicle was a qualified alternative fuel motor vehicle, and

''(ii) in the case of a 95/5 mixed-fuel vehicle, 95 percent of the credit which would have been allowed under this subsection if such vehicle was a qualified alternative fuel motor vehicle.

''(B) MIXED-FUEL VEHICLE.—For purposes of this subsection, the term 'mixed-fuel vehicle' means any motor vehicle described in subparagraph (C) or (D) of paragraph (3), which—

''(i) is certified by the manufacturer as being able to perform efficiently in normal operation on a combination of an alternative fuel and a petroleum-based fuel,

''(ii) either—

''(I) has received a certificate of conformity under the Clean Air Act, or

''(II) has received an order from an applicable State certifying the vehicle for sale or lease in California and meets or exceeds the low emission vehicle standard under section 88.105–94 of title 40, Code of Federal Regulations, for that make and model year vehicle,

''(iii) the original use of which commences with the taxpayer,

''(iv) which is acquired by the taxpayer for use or lease, but not for resale, and

''(v) which is made by a manufacturer.

''(C) 75/25 MIXED-FUEL VEHICLE.—For purposes of this subsection, the term '75/25 mixed-fuel vehicle' means a mixed-fuel vehicle which operates using at least 75 percent alternative fuel and not more than 25 percent petroleum-based fuel.

''(D) 95/5 MIXED-FUEL VEHICLE.—For purposes of this subsection, the term '95/5 mixed-fuel vehicle' means a mixed-fuel vehicle which operates using at least 95 percent alternative fuel and not more than 5 percent petroleum-based fuel.

''(e) ADVANCED LEAN BURN TECHNOLOGY MOTOR VEHICLE CREDIT.—

''(1) IN GENERAL.—For purposes of subsection (a), the advanced lean burn technology motor vehicle credit determined under this subsection with respect to a new qualified advanced lean burn technology motor vehicle placed in service by the taxpayer during the taxable year is the credit amount determined under paragraph (2).

''(2) CREDIT AMOUNT.—

''(A) INCREASE FOR FUEL EFFICIENCY.—The credit amount determined under this paragraph shall be—

''(i) $1,000, if such vehicle achieves at least 125 percent but less than 150 percent of the 2000 model year city fuel economy,

''(ii) $1,500, if such vehicle achieves at least 150 percent but less than 175 percent of the 2000 model year city fuel economy,

''(iii) $2,000, if such vehicle achieves at least 175 percent but less than 200 percent of the 2000 model year city fuel economy,

''(iv) $2,500, if such vehicle achieves at least 200 percent but less than 225 percent of the 2000 model year city fuel economy,

''(v) $3,000, if such vehicle achieves at least 225 percent but less than 250 percent of the 2000 model year city fuel economy, and

''(vi) $3,500, if such vehicle achieves at least 250 percent of the 2000 model year city fuel economy.

For purposes of clause (i), the 2000 model year city fuel economy with respect to a vehicle shall be determined using the tables provided in subsection (b)(2)(B) with respect to such vehicle.

''(B) CONSERVATION CREDIT.—The amount determined under subparagraph (A) with respect to an advanced lean burn technology motor vehicle shall be increased by—

''(i) $250, if such vehicle achieves a lifetime fuel savings of at least 1,500 gallons of gasoline, and

''(ii) $500, if such vehicle achieves a lifetime fuel savings of at least 2,500 gallons of gasoline.

''(C) OPTION TO USE LIKE VEHICLE.—At the option of the vehicle manufacturer, the increase for fuel efficiency and conservation credit may be calculated by comparing the new advanced lean-burn technology motor vehicle to a like vehicle.

''(3) DEFINITIONS.—For purposes of this subsection.—

''(A) ADVANCED LEAN BURN TECHNOLOGY MOTOR VEHICLE.—The term 'advanced lean burn technology motor vehicle' means a motor vehicle with an internal combustion engine that—

''(i) is designed to operate primarily using more air than is necessary for complete combustion of the fuel,

''(ii) incorporates direct injection,

''(iii) achieves at least 125 percent of the 2000 model year city fuel economy, and

''(iv) for 2004 and later model vehicles, has received a certificate that such vehicle meets or exceeds the Bin 5, Tier 2 emission levels (for passenger vehicles) or Bin 8, Tier 2 emission levels (for light trucks) established in regulations prescribed by the Administrator of the Environmental Protection Agency under section 202(i) of the Clean Air Act for that make and model year vehicle.

''(B) LIKE VEHICLE.—The term 'like vehicle' for an advanced lean burn technology motor vehicle derived from a conventional production vehicle produced in the same model year means a model that is equivalent in the following areas:

''(i) Body style (2-door or 4-door),

''(ii) Transmission (automatic or manual),

''(iii) Acceleration performance (± 0.05 seconds).

''(iv) Drivetrain (2-wheel drive or 4-wheel drive).

''(v) Certification by the Administrator of the Environmental Protection Agency.

''(C) LIFETIME FUEL SAVINGS.—The term 'lifetime fuel savings' shall be calculated by dividing 120,000 by the difference between the 2000 model year city fuel economy for the vehicle inertia weight class and the city fuel economy for the new qualified hybrid motor vehicle.

''(f) LIMITATION BASED ON AMOUNT OF TAX.—The credit allowed under subsection (a) for the taxable year shall not exceed the excess of—

''(1) the sum of the regular tax liability (as defined in section 26(b)) plus the tax imposed by section 55, over

''(2) the sum of the credits allowable under subpart A and sections 27, 29, and 30A for the taxable year.

''(g) OTHER DEFINITIONS AND SPECIAL RULES.—For purposes of this section—

''(1) CONSUMABLE FUEL.—The term 'consumable fuel' means any solid, liquid, or gaseous matter which releases energy when consumed by an auxiliary power unit.

''(2) MOTOR VEHICLE.—The term 'motor vehicle' has the meaning given such term by section 30(c)(2).

''(3) 2000 MODEL YEAR CITY FUEL ECONOMY.—The 2000 model year city fuel economy with respect to any vehicle shall be measured under rules similar to the rules under section 4064(c).

''(4) OTHER TERMS.—The terms 'automobile', 'passenger automobile', 'light truck', and 'manufacturer' have the meanings given such terms in regulations prescribed by the Administrator of the Environmental Protection Agency for purposes of the administration of title II of the Clean Air Act (42 U.S.C. 7521 et seq.).

''(5) REDUCTION IN BASIS.—For purposes of this subtitle, the basis of any property for which a credit is allowable under subsection (a) shall be reduced by the amount of such credit so allowed.

''(6) NO DOUBLE BENEFIT.—The amount of any deduction or credit allowable under this chapter (other than the credit allowable under this section)—

''(A) for any incremental cost taken into account in computing the amount of the credit determined under subsection (d) shall be reduced by the amount of such credit attributable to such cost, and

''(B) with respect to a vehicle described under subsection (b) or (c), shall be reduced by the amount of credit allowed under subsection (a) for such vehicle for the taxable year.

''(7) PROPERTY USED BY TAX-EXEMPT ENTITIES.—In the case of a credit amount which is allowable with respect to a motor vehicle which is acquired by an entity exempt from tax under this chapter, the person which sells or leases such vehicle to the entity shall be treated as the taxpayer with respect to the vehicle for purposes of this section and the credit shall be allowed to such person, but only if the person clearly discloses to the entity in any sale or lease document the specific amount of any credit otherwise allowable to the entity under this section and reduces the sale or lease price of such vehicle by an equivalent amount of such credit.

''(8) RECAPTURE.—The Secretary shall, by regulations, provide for recapturing the benefit of any credit allowable under subsection (a) with respect to any property which ceases to be property eligible for such credit (including recapture in the case of a lease period of less than the economic life of a vehicle).

''(9) PROPERTY USED OUTSIDE UNITED STATES, ETC., NOT QUALIFIED.—No credit shall be allowed under subsection (a) with respect to any property referred to in section 50(b) or with respect to the portion of the cost of any property taken into account under section 179.

''(10) ELECTION TO NOT TAKE CREDIT.—No credit shall be allowed under subsection (a) for any vehicle if the taxpayer elects to not have this section apply to such vehicle.

''(11) CARRYFORWARD ALLOWED.—

''(A) IN GENERAL.—If the credit amount allowable under subsection (a) for a taxable year exceeds the amount of the limitation under subsection (f) for such taxable year (referred to as the 'unused credit year' in this paragraph), such excess shall be allowed as a credit carryforward for each of the 20 taxable years following the unused credit year.

''(B) RULES.—Rules similar to the rules of section 39 shall apply with respect to the credit carryforward under subparagraph (A).

''(12) INTERACTION WITH AIR QUALITY AND MOTOR VEHICLE SAFETY STANDARDS.—Unless

otherwise provided in this section, a motor vehicle shall not be considered eligible for a credit under this section unless such vehicle is in compliance with—

''(A) the applicable provisions of the Clean Air Act for the applicable make and model year of the vehicle (or applicable air quality provisions of State law in the case of a State which has adopted such provision under a waiver under section 209(b) of the Clean Air Act), and

''(B) the motor vehicle safety provisions of sections 30101 through 30169 of title 49, United States Code.

''(h) REGULATIONS.—

''(1) IN GENERAL.—The Secretary shall promulgate such regulations as necessary to carry out the provisions of this section.

''(2) ADMINISTRATOR OF ENVIRONMENTAL PROTECTION AGENCY.—The Administrator of the Environmental Protection Agency, in coordination with the Secretary of Transportation and the Secretary of the Treasury, shall prescribe such regulations as necessary to determine whether a motor vehicle meets the requirements to be eligible for a credit under this section.

''(i) TERMINATION.—This section shall not apply to any property placed in service after—

''(1) in the case of a new qualified fuel cell motor vehicle (as described in subsection (b)), December 31, 2011, and

''(2) in the case of any other property, December 31, 2007.''.

(b) CONFORMING AMENDMENTS.—

(1) Section 1016(a) is amended by striking ''and'' at the end of paragraph (29), by striking the period at the end of paragraph (30) and inserting '', and'', and by adding at the end the following:

''(31) to the extent provided in section 30B(g)(5).''.

(2) Section 6501(m) is amended by inserting ''30B(g)(10),'' after ''30(d)(4),''.

(3) The table of sections for subpart B of part IV of subchapter A of chapter 1 is amended by inserting after the item relating to section 30A the following:

''Sec. 30B. Alternative motor vehicle credit.''.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after December 31, 2001, in taxable years ending after such date.

SEC. 3105. EXTENSION OF DEDUCTION FOR CERTAIN REFUELING PROPERTY.

(a) IN GENERAL.—Section 179A(f) (relating to termination) is amended by striking ''2004'' and inserting ''2007''.

(b) MODIFICATION OF PHASEOUT.—Subparagraph (B) of section 179A(b)(1) is amended—

(1) in clause (i), by striking ''2002'' and inserting ''2005'',

(2) in clause (ii), by striking ''2003'' and inserting ''2006'', and

(3) in clause (iii), by striking ''2004'' and inserting ''2007''.

SEC. 3106. MODIFICATION OF CREDIT FOR QUALIFIED ELECTRIC VEHICLES.

(a) AMOUNT OF CREDIT.—

(1) IN GENERAL.—Section 30(a) (relating to allowance of credit) is amended by striking ''10 percent of''.

(2) LIMITATION OF CREDIT ACCORDING TO TYPE OF VEHICLE.—Section 30(b) (relating to limitations) is amended—

(A) by striking paragraphs (1) and (2) and inserting the following:

''(1) LIMITATION ACCORDING TO TYPE OF VEHICLE.—The amount of the credit allowed under subsection (a) for any vehicle shall not exceed the greatest of the following amounts applicable to such vehicle:

''(A) In the case of a vehicle which conforms to the Motor Vehicle Safety Standard 500 prescribed by the Secretary of Transportation, the lesser of—

''(i) 10 percent of the manufacturer's suggested retail price of the vehicle, or

''(ii) $4,000.

''(B) In the case of a vehicle not described in subparagraph (A) with a gross vehicle weight rating not exceeding 8,500 pounds—

''(i) $4,000, or

''(ii) $5,000, if such vehicle is—

''(I) capable of a driving range of at least 70 miles on a single charge of the vehicle's rechargeable batteries and measured pursuant to the urban dynamometer schedules under appendix I to part 86 of title 40, Code of Federal Regulations, or

''(II) capable of a payload capacity of at least 1,000 pounds.

''(C) In the case of a vehicle with a gross vehicle weight rating exceeding 8,500 pounds but not exceeding 14,000 pounds, $10,000.

''(D) In the case of a vehicle with a gross vehicle weight rating exceeding 14,000 pounds but not exceeding 26,000 pounds, $20,000.

''(E) In the case of a vehicle with a gross vehicle weight rating exceeding 26,000 pounds, $40,000.'', and

(B) by redesignating paragraph (3) as paragraph (2).

(3) CONFORMING AMENDMENTS.—

(A) Section 53(d)(1)(B)(iii) is amended by striking ''section 30(b)(3)(B)'' and inserting ''section 30(b)(2)(B)''.

(B) Section 55(c)(2) is amended by striking ''30(b)(3)'' and inserting ''30(b)(2)''.

(b) QUALIFIED BATTERY ELECTRIC VEHICLE.—

(1) IN GENERAL.—Section 30(c)(1)(A) (defining qualified electric vehicle) is amended to read as follows:

''(A) which is—

''(i) operated solely by use of a battery or battery pack, or

''(ii) powered primarily through the use of an electric battery or battery pack using a flywheel or capacitor which stores energy produced by an electric motor through regenerative braking to assist in vehicle operation,''.

(2) LEASED VEHICLES.—Section 30(c)(1)(C) is amended by inserting ''or lease'' after ''use''.

(3) CONFORMING AMENDMENTS.—

(A) Subsections (a), and (c) of section 30 are each amended by inserting ''battery'' after ''qualified'' each place it appears.

(B) The heading of subsection (c) of section 30 is amended by inserting ''BATTERY'' after ''QUALIFIED''.

(C) The heading of section 30 is amended by inserting ''battery'' after ''qualified''.

(D) The item relating to section 30 in the table of sections for subpart B of part IV of subchapter A of chapter 1 is amended by inserting ''battery'' after ''qualified''.

(E) Section 179A(c)(3) is amended by inserting ''battery'' before ''electric''.

(F) The heading of paragraph (3) of section 179A(c) is amended by inserting ''BATTERY'' before ''ELECTRIC''.

(c) ADDITIONAL SPECIAL RULES.—Section 30(d) (relating to special rules) is amended by adding at the end the following:

''(5) NO DOUBLE BENEFIT.—The amount of any deduction or credit allowable under this chapter for any cost taken into account in computing the amount of the credit determined under subsection (a) shall be reduced by the amount of such credit attributable to such cost.

''(6) PROPERTY USED BY TAX-EXEMPT ENTITIES.—In the case of a credit amount which is allowable with respect to a vehicle which is acquired by an entity exempt from tax under this chapter, the person which sells or leases such vehicle to the entity shall be treated as the taxpayer with respect to the vehicle for purposes of this section and the credit shall be allowed to such person, but only if the person clearly discloses to the entity in any sale or lease contract the specific amount of any credit otherwise allowable to the entity under this section and reduces the sale or lease price of such vehicle by an equivalent amount of such credit.

''(7) CARRYFORWARD ALLOWED.—

''(A) IN GENERAL.—If the credit amount allowable under subsection (a) for a taxable year exceeds the amount of the limitation under subsection (b)(3) for such taxable year, such excess shall be allowed as a credit carryforward for each of the 20 taxable years following such taxable year.

''(B) RULES.—Rules similar to the rules of section 39 shall apply with respect to the credit carryforward under subparagraph (A).''

(d) EXTENSION.—Section 30(e) (relating to termination) is amended by striking ''2004'' and inserting ''2007''.

(e) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after December 31, 2001, in taxable years ending after such date.

SEC. 3107. TAX CREDIT FOR ENERGY EFFICIENT APPLIANCES.

(a) IN GENERAL.—Subpart D of part IV of subchapter A of chapter 1 (relating to business-related credits) is amended by adding at the end the following new section:

''SEC. 45G. ENERGY EFFICIENT APPLIANCE CREDIT.

''(a) GENERAL RULE.—For purposes of section 38, the energy efficient appliance credit determined under this section for the taxable year is an amount equal to the applicable amount determined under subsection (b) with respect to the eligible production of qualified energy efficient appliances produced by the taxpayer during the calendar year ending with or within the taxable year.

''(b) APPLICABLE AMOUNT; ELIGIBLE PRODUCTION.—For purposes of subsection (a)—

''(1) APPLICABLE AMOUNT.—The applicable amount is—

''(A) $50 in the case of an energy efficient clothes washer described in subsection (d)(2)(A) or an energy efficient refrigerator described in subsection (d)(3)(B)(i), and

''(B) $100 in the case of any other energy efficient clothes washer or energy efficient refrigerator.

''(2) ELIGIBLE PRODUCTION.—

''(A) IN GENERAL.—The eligible production of each category of qualified energy efficient appliances is the excess of—

''(i) the number of appliances in such category which are produced by the taxpayer during such calendar year, over

''(ii) the average number of appliances in such category which were produced by the taxpayer during calendar years 1998, 1999, and 2000.

''(B) CATEGORIES.—For purposes of subparagraph (A), the categories are—

''(i) energy efficient clothes washers described in subsection (d)(2)(A),

''(ii) energy efficient clothes washers described in subsection (d)(2)(B),

''(iii) energy efficient refrigerators described in subsection (d)(3)(B)(i), and

''(iv) energy efficient refrigerators described in subsection (d)(3)(B)(ii).

''(C) SPECIAL RULE FOR 2001 PRODUCTION.—For purposes of determining eligible production for calendar year 2001—

''(i) only production after the date of the enactment of this section shall be taken into account under subparagraph (A)(i), and

''(ii) the amount taken into account under subparagraph (A)(ii) shall be an amount which bears the same ratio to the amount which would (but for this subparagraph) be taken into account under subparagraph (A)(ii) as—

''(I) the number of days in calendar year 2001 after the date of the enactment of this section, bears to

''(II) 365.

''(c) LIMITATION ON MAXIMUM CREDIT.—

''(1) IN GENERAL.—The maximum amount of credit allowed under subsection (a) with respect to a taxpayer for all taxable years shall be—

''(A) $30,000,000 with respect to the credit determined under subsection (b)(1)(A), and

''(B) $30,000,000 with respect to the credit determined under subsection (b)(1)(B).

''(2) LIMITATION BASED ON GROSS RECEIPTS.—The credit allowed under subsection (a) with respect to a taxpayer for the taxable year shall not exceed an amount equal to 2 percent of the average annual gross receipts of the taxpayer for the 3 taxable years preceding the taxable year in which the credit is determined.

''(3) GROSS RECEIPTS.—For purposes of this subsection, the rules of paragraphs (2) and (3) of section 448(c) shall apply.

''(d) QUALIFIED ENERGY EFFICIENT APPLIANCE.—For purposes of this section:

''(1) IN GENERAL.—The term 'qualified energy efficient appliance' means—

''(A) an energy efficient clothes washer, or

''(B) an energy efficient refrigerator.

''(2) ENERGY EFFICIENT CLOTHES WASHER.—The term 'energy efficient clothes washer' means a residential clothes washer, including a residential style coin operated washer, which is manufactured with—

''(A) a 1.26 MEF or greater, or

''(B) a 1.42 MEF (1.5 MEF for washers produced after 2004) or greater.

''(3) ENERGY EFFICIENT REFRIGERATOR.—The term 'energy efficient refrigerator' means an automatic defrost refrigerator-freezer which—

''(A) has an internal volume of at least 16.5 cubic feet, and

''(B) consumes—

''(i) 10 percent less kw/hr/yr than the energy conservation standards promulgated by the Department of Energy for refrigerators produced during 2001, and

''(ii) 15 percent less kw/hr/yr than such energy conservation standards for refrigerators produced after 2001.

''(4) MEF.—The term 'MEF' means Modified Energy Factor (as determined by the Secretary of Energy).

''(e) SPECIAL RULES.—

''(1) IN GENERAL.—Rules similar to the rules of subsections (c), (d), and (e) of section 52 shall apply for purposes of this section.

''(2) AGGREGATION RULES.—All persons treated as a single employer under subsection (a) or (b) of section 52 or subsection (m) or (o) of section 414 shall be treated as 1 person for purposes of subsection (a).

''(f) VERIFICATION.—The taxpayer shall submit such information or certification as the Secretary, in consultation with the Secretary of Energy, determines necessary to claim the credit amount under subsection (a).

''(g) TERMINATION.—This section shall not apply—

''(1) with respect to energy efficient refrigerators described in subsection (d)(3)(B)(i) produced after 2004, and

''(2) with respect to all other qualified energy efficient appliances produced after 2006.''.

(b) LIMITATION ON CARRYBACK.—Section 39(d) (relating to transition rules) is amended by adding at the end the following new paragraph:

''(11) NO CARRYBACK OF ENERGY EFFICIENT APPLIANCE CREDIT BEFORE EFFECTIVE DATE.—No portion of the unused business credit for any taxable year which is attributable to the energy efficient appliance credit determined under section 45G may be carried to a taxable year ending before the date of the enactment of section 45G.''.

(c) CONFORMING AMENDMENT.—Section 38(b) (relating to general business credit) is amended by striking ''plus'' at the end of paragraph (14), by striking the period at the end of paragraph (15) and inserting '', plus'', and by adding at the end the following new paragraph:

''(16) the energy efficient appliance credit determined under section 45G(a).''.

(d) CLERICAL AMENDMENT.—The table of sections for subpart D of part IV of subchapter A of chapter 1 is amended by inserting after the item relating to section 45F the following new item:

''Sec. 45G. Energy efficient appliance credit.''.

(e) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years ending after the date of the enactment of this Act.

SEC. 3108. CREDIT FOR ENERGY EFFICIENCY IMPROVEMENTS TO EXISTING HOMES.

(a) IN GENERAL.—Subpart A of part IV of subchapter A of chapter 1 (relating to nonrefundable personal credits) is amended by inserting after section 25D the following new section:

''SEC. 25E. ENERGY EFFICIENCY IMPROVEMENTS TO EXISTING HOMES.

''(a) ALLOWANCE OF CREDIT.—In the case of an individual, there shall be allowed as a credit against the tax imposed by this chapter for the taxable year an amount equal to 20 percent of the amount paid or incurred by the taxpayer for qualified energy efficiency improvements installed during such taxable year.

''(b) LIMITATIONS.—

''(1) MAXIMUM CREDIT.—The credit allowed by this section with respect to a dwelling shall not exceed $2,000.

''(2) PRIOR CREDIT AMOUNTS FOR TAXPAYER ON SAME DWELLING TAKEN INTO ACCOUNT.—If a credit was allowed to the taxpayer under subsection (a) with respect to a dwelling in 1 or more prior taxable years, the amount of the credit otherwise allowable for the taxable year with respect to that dwelling shall not exceed the amount of $2,000 reduced by the sum of the credits allowed under subsection (a) to the taxpayer with respect to the dwelling for all prior taxable years.

''(3) LIMITATION BASED ON AMOUNT OF TAX.—The credit allowed under subsection (a) for the taxable year shall not exceed the excess of—

''(A) the sum of the regular tax liability (as defined in section 26(b)) plus the tax imposed by section 55, over

''(B) the sum of the credits allowable under this subpart (other than this section and section 23) and section 27 for the taxable year.

''(c) CARRYFORWARD OF UNUSED CREDIT.—If the credit allowable under subsection (a) exceeds the limitation imposed by subsection (b)(3) for such taxable year, such excess shall be carried to the succeeding taxable year and added to the credit allowable under subsection (a) for such succeeding taxable year.

''(d) QUALIFIED ENERGY EFFICIENCY IMPROVEMENTS.—For purposes of this section, the term 'qualified energy efficiency improvements' means any energy efficient building envelope component which meets the prescriptive criteria for such component established by the 1998 International Energy Conservation Code, if—

''(1) such component is installed in or on a dwelling—

''(A) located in the United States, and

''(B) owned and used by the taxpayer as the taxpayer's principal residence (within the meaning of section 121),

''(2) the original use of such component commences with the taxpayer, and

''(3) such component reasonably can be expected to remain in use for at least 5 years. If the aggregate cost of such components with respect to any dwelling exceeds $1,000, such components shall be treated as qualified energy efficiency improvements only if such components are also certified in accordance with subsection (e) as meeting such criteria.

''(e) CERTIFICATION.—The certification described in subsection (d) shall be—

''(1) determined on the basis of the technical specifications or applicable ratings (including product labeling requirements) for the measurement of energy efficiency, based upon energy use or building envelope component performance, for the energy efficient building envelope component,

''(2) provided by a local building regulatory authority, a utility, a manufactured home production inspection primary inspection agency (IPIA), or an accredited home energy rating system provider who is accredited by or otherwise authorized to use approved energy performance measurement methods by the Home Energy Ratings Systems Council or the National Association of State Energy Officials, and

''(3) made in writing in a manner that specifies in readily verifiable fashion the energy efficient building envelope components installed and their respective energy efficiency levels.

''(f) DEFINITIONS AND SPECIAL RULES.—

''(1) TENANT-STOCKHOLDER IN COOPERATIVE HOUSING CORPORATION.—In the case of an individual who is a tenant-stockholder (as defined in section 216) in a cooperative housing corporation (as defined in such section), such individual shall be treated as having paid his tenant-stockholder's proportionate share (as defined in section 216(b)(3)) of the cost of qualified energy efficiency improvements made by such corporation.

''(2) CONDOMINIUMS.—

''(A) IN GENERAL.—In the case of an individual who is a member of a condominium management association with respect to a condominium which he owns, such individual shall be treated as having paid his proportionate share of the cost of qualified energy efficiency improvements made by such association.

''(B) CONDOMINIUM MANAGEMENT ASSOCIATION.—For purposes of this paragraph, the term 'condominium management association' means an organization which meets the requirements of paragraph (1) of section 528(c) (other than subparagraph (E) thereof) with respect to a condominium project substantially all of the units of which are used as residences.

''(3) BUILDING ENVELOPE COMPONENT.—The term 'building envelope component' means insulation material or system which is specifically and primarily designed to reduce the heat loss or gain of a dwelling when installed in or on such dwelling, exterior windows (including skylights) and doors, and metal roofs with appropriate pigmented coatings which are specifically and primarily designed to reduce the heat gain of a dwelling when installed in or on such dwelling.

''(4) MANUFACTURED HOMES INCLUDED.—For purposes of this section, the term 'dwelling' includes a manufactured home which conforms to Federal Manufactured Home Construction and Safety Standards (24 C.F.R. 3280).

''(g) BASIS ADJUSTMENT.—For purposes of this subtitle, if a credit is allowed under this section for any expenditure with respect to any property, the increase in the basis of such property which would (but for this subsection) result from such expenditure shall be reduced by the amount of the credit so allowed.

''(h) APPLICATION OF SECTION.—This section shall apply to qualified energy efficiency improvements installed after December 31, 2001 and before January 1, 2007.''.

(b) CONFORMING AMENDMENTS.—

(1) Subsection (a) of section 1016 is amended by striking ''and'' at the end of paragraph (30), by striking the period at the end of paragraph (31) and inserting '', and'', and by adding at the end the following new paragraph:

''(32) to the extent provided in section 25E(g), in the case of amounts with respect to which a credit has been allowed under section 25E.''.

(2) The table of sections for subpart A of part IV of subchapter A of chapter 1 is amended by inserting after the item relating to section 25D the following new item:

''Sec. 25E. Energy efficiency improvements to existing homes.''.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years ending after December 31, 2001.

SEC. 3109. BUSINESS CREDIT FOR CONSTRUCTION OF NEW ENERGY EFFICIENT HOME.

(a) IN GENERAL.—Subpart D of part IV of subchapter A of chapter 1 (relating to business related credits) is amended by inserting after section 45G the following new section:

''SEC. 45H. NEW ENERGY EFFICIENT HOME CREDIT.

''(a) IN GENERAL.—For purposes of section 38, in the case of an eligible contractor, the credit determined under this section for the taxable year is an amount equal to the aggregate adjusted bases of all energy efficient property installed in a qualified new energy efficient home during construction of such home.

''(b) LIMITATIONS.—

''(1) MAXIMUM CREDIT.—

''(A) IN GENERAL.—The credit allowed by this section with respect to a dwelling shall not exceed $2,000.

''(B) PRIOR CREDIT AMOUNTS ON SAME DWELLING TAKEN INTO ACCOUNT.—If a credit was allowed under subsection (a) with respect to a dwelling in 1 or more prior taxable years, the amount of the credit otherwise allowable for the taxable year with respect to that dwelling shall not exceed the amount of $2,000 reduced by the sum of the credits allowed under subsection (a) with respect to the dwelling for all prior taxable years.

''(2) COORDINATION WITH REHABILITATION AND ENERGY CREDITS.—For purposes of this section—

''(A) the basis of any property referred to in subsection (a) shall be reduced by that portion of the basis of any property which is attributable to qualified rehabilitation expenditures (as defined in section 47(c)(2)) or to the energy percentage of energy property (as determined under section 48(a)), and

''(B) expenditures taken into account under either section 47 or 48(a) shall not be taken into account under this section.

''(c) DEFINITIONS.—For purposes of this section—

''(1) ELIGIBLE CONTRACTOR.—The term 'eligible contractor' means the person who constructed the new energy efficient home, or in the case of a manufactured home which conforms to Federal Manufactured Home Construction and Safety Standards (24 C.F.R. 3280), the manufactured home producer of such home.

''(2) ENERGY EFFICIENT PROPERTY.—The term 'energy efficient property' means any energy efficient building envelope component, and any energy efficient heating or cooling appliance.

''(3) QUALIFIED NEW ENERGY EFFICIENT HOME.—The term 'qualified new energy efficient home' means a dwelling—

''(A) located in the United States,

''(B) the construction of which is substantially completed after December 31, 2001,

''(C) the original use of which is as a principal residence (within the meaning of section 121) which commences with the person who acquires such dwelling from the eligible contractor, and

''(D) which is certified to have a level of annual heating and cooling energy consumption that is at least 30 percent below the annual level of heating and cooling energy consumption of a comparable dwelling constructed in accordance with the standards of the 1998 International Energy Conservation Code.

''(4) CONSTRUCTION.—The term 'construction' includes reconstruction and rehabilitation.

''(5) ACQUIRE.—The term 'acquire' includes purchase and, in the case of reconstruction and rehabilitation, such term includes a binding written contract for such reconstruction or rehabilitation.

''(6) BUILDING ENVELOPE COMPONENT.—The term 'building envelope component' means insulation material or system which is specifically and primarily designed to reduce the heat loss or gain of a dwelling when installed in or on such dwelling, exterior windows (including skylights) and doors, and metal roofs with appropriate pigmented coatings which are specifically and primarily designed to reduce the heat gain of a dwelling when installed in or on such dwelling.

''(7) MANUFACTURED HOME INCLUDED.—The term 'dwelling' includes a manufactured home conforming to Federal Manufactured Home Construction and Safety Standards (24 C.F.R. 3280).

''(d) CERTIFICATION.—

''(1) METHOD.—A certification described in subsection (c)(3)(D) shall be determined on the basis of one of the following methods:

''(A) The technical specifications or applicable ratings (including product labeling requirements) for the measurement of energy efficiency for the energy efficient building envelope component or energy efficient heating or cooling appliance, based upon energy use or building envelope component performance.

''(B) An energy performance measurement method that utilizes computer software approved by organizations designated by the Secretary.

''(2) PROVIDER.—Such certification shall be provided by—

''(A) in the case of a method described in paragraph (1)(A), a local building regulatory authority, a utility, a manufactured home production inspection primary inspection agency (IPIA), or an accredited home energy rating systems provider who is accredited by, or otherwise authorized to use, approved energy performance measurement methods by the Home Energy Ratings Systems Council or the National Association of State Energy Officials, or

''(B) in the case of a method described in paragraph (1)(B), an individual recognized by an organization designated by the Secretary for such purposes.

''(3) FORM.—Such certification shall be made in writing in a manner that specifies in readily verifiable fashion the energy efficient building envelope components and energy efficient heating or cooling appliances installed and their respective energy efficiency levels, and in the case of a method described in subparagraph (B) of paragraph (1), accompanied by written analysis documenting the proper application of a permissible energy performance measurement method to the specific circumstances of such dwelling.

''(4) REGULATIONS.—

''(A) IN GENERAL.—In prescribing regulations under this subsection for energy performance measurement methods, the Secretary shall prescribe procedures for calculating annual energy costs for heating and cooling and cost savings and for the reporting of the results. Such regulations shall—

''(i) be based on the National Home Energy Rating Technical Guidelines of the National Association of State Energy Officials, the Home Energy Rating Guidelines of the Home Energy Rating Systems Council, or the modified 1998 California Residential ACM manual,

''(ii) provide that any calculation procedures be developed such that the same energy efficiency measures allow a home to qualify for the credit under this section regardless of whether the house uses a gas or oil furnace or boiler or an electric heat pump, and

''(iii) require that any computer software allow for the printing of the Federal tax forms necessary for the credit under this section and explanations for the homebuyer of the energy efficient features that were used to comply with the requirements of this section.

''(B) PROVIDERS.—For purposes of paragraph (2)(B), the Secretary shall establish requirements for the designation of individuals based on the requirements for energy consultants and home energy raters specified by the National Association of State Energy Officials.

''(e) BASIS ADJUSTMENT.—For purposes of this subtitle, if a credit is allowed under this section for any expenditure with respect to any property, the increase in the basis of such property which would (but for this subsection) result from such expenditure shall be reduced by the amount of the credit so allowed.

''(f) APPLICATION OF SECTION.—Subsection (a) shall apply to dwellings purchased during the period beginning on January 1, 2002, and ending on December 31, 2006.''.

(b) CREDIT MADE PART OF GENERAL BUSINESS CREDIT.—Subsection (b) of section 38 (relating to current year business credit) is amended by striking ''plus'' at the end of paragraph (15), by striking the period at the end of paragraph (16) and inserting '', plus'', and by adding at the end thereof the following new paragraph:

''(17) the new energy efficient home credit determined under section 45H.''.

(c) DENIAL OF DOUBLE BENEFIT.—Section 280C (relating to certain expenses for which credits are allowable) is amended by adding at the end thereof the following new subsection:

''(d) NEW ENERGY EFFICIENT HOME EXPENSES.—No deduction shall be allowed for that portion of expenses for a new energy efficient home otherwise allowable as a deduction for the taxable year which is equal to the amount of the credit determined for such taxable year under section 45H.''.

(d) LIMITATION ON CARRYBACK.—Subsection (d) of section 39 is amended by adding at the end the following new paragraph:

''(12) NO CARRYBACK OF NEW ENERGY EFFICIENT HOME CREDIT BEFORE EFFECTIVE DATE.—No portion of the unused business credit for any taxable year which is attributable to the credit determined under section 45H may be carried back to any taxable year ending before January 1, 2002.''.

(e) DEDUCTION FOR CERTAIN UNUSED BUSINESS CREDITS.—Subsection (c) of section 196 is amended by striking ''and'' at the end of paragraph (9), by striking the period at the end of paragraph (10) and inserting '', and'', and by adding after paragraph (10) the following new paragraph:

''(11) the new energy efficient home credit determined under section 45H.''.

(f) CLERICAL AMENDMENT.—The table of sections for subpart D of part IV of subchapter A of chapter 1 is amended by inserting after the item relating to section 45G the following new item:

''Sec. 45H. New energy efficient home credit.''.

(g) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years ending after December 31, 2001.

SEC. 3110. ALLOWANCE OF DEDUCTION FOR ENERGY EFFICIENT COMMERCIAL BUILDING PROPERTY.

(a) IN GENERAL.—Part VI of subchapter B of chapter 1 (relating to itemized deductions for individuals and corporations) is amended by inserting after section 179A the following new section:

''SEC. 179B. DEDUCTION FOR ENERGY EFFICIENT COMMERCIAL BUILDING PROPERTY.

''(a) ALLOWANCE OF DEDUCTION.—

''(1) IN GENERAL.—There shall be allowed as a deduction an amount equal to energy efficient commercial building property expenditures made by a taxpayer for the taxable year.

''(2) MAXIMUM AMOUNT OF DEDUCTION.—The amount of energy efficient commercial building property expenditures taken into account under paragraph (1) shall not exceed an amount equal to the product of—

''(A) $2.25, and

''(B) the square footage of the building with respect to which the expenditures are made.

''(3) YEAR DEDUCTION ALLOWED.—The deduction under paragraph (1) shall be allowed for the taxable year in which the building is placed in service.

''(b) ENERGY EFFICIENT COMMERCIAL BUILDING PROPERTY EXPENDITURES.—For purposes of this section, the term 'energy efficient commercial building property expenditures' means an amount paid or incurred for energy efficient commercial building property installed on or in connection with new construction or reconstruction of property—

''(1) for which depreciation is allowable under section 167,

''(2) which is located in the United States, and

''(3) the construction or erection of which is completed by the taxpayer.

Such property includes all residential rental property, including low-rise multifamily structures and single family housing property which is not within the scope of Standard 90.1–1999 (described in subsection (c)). Such term includes expenditures for labor costs properly allocable to the onsite preparation, assembly, or original installation of the property.

''(c) ENERGY EFFICIENT COMMERCIAL BUILDING PROPERTY.—For purposes of subsection (b)—

''(1) IN GENERAL.—The term 'energy efficient commercial building property' means any property which reduces total annual energy and power costs with respect to the lighting, heating, cooling, ventilation, and hot water supply systems of the building by 50 percent or more in comparison to a reference building which meets the requirements of Standard 90.1–1999 of the American Society of Heating, Refrigerating, and Air Conditioning Engineers and the Illuminating Engineering Society of North America using methods of calculation under paragraph (2) and certified by qualified professionals as provided under subsection (f).

''(2) METHODS OF CALCULATION.—The Secretary, in consultation with the Secretary of Energy, shall promulgate regulations which describe in detail methods for calculating and verifying energy and power consumption and cost, taking into consideration the provisions of the 1998 California Nonresidential ACM Manual. These procedures shall meet the following requirements:

''(A) In calculating tradeoffs and energy performance, the regulations shall prescribe the costs per unit of energy and power, such as kilowatt hour, kilowatt, gallon of fuel oil, and cubic foot or Btu of natural gas, which may be dependent on time of usage.

''(B) The calculational methodology shall require that compliance be demonstrated for a whole building. If some systems of the building, such as lighting, are designed later than other systems of the building, the method shall provide that either—

''(i) the expenses taken into account under subsection (a) shall not occur until the date designs for all energy-using systems of the building are completed,

''(ii) the energy performance of all systems and components not yet designed shall be assumed to comply minimally with the requirements of such Standard 90.1–1999, or

''(iii) the expenses taken into account under subsection (a) shall be a fraction of such expenses based on the performance of less than all energy-using systems in accordance with subparagraph (C).

''(C) The expenditures in connection with the design of subsystems in the building, such as the envelope, the heating, ventilation, air conditioning and water heating system, and the lighting system shall be allocated to the appropriate building subsystem based on system-specific energy cost savings targets in regulations promulgated by the Secretary of Energy which are equivalent, using the calculation methodology, to the whole building requirement of 50 percent savings.

''(D) The calculational methods under this subparagraph need not comply fully with section 11 of such Standard 90.1–1999.

''(E) The calculational methods shall be fuel neutral, such that the same energy efficiency features shall qualify a building for the deduction under this subsection regardless of whether the heating source is a gas or oil furnace or an electric heat pump.

''(F) The calculational methods shall provide appropriate calculated energy savings for design methods and technologies not otherwise credited in either such Standard 90.1–1999 or in the 1998 California Nonresidential ACM Manual, including the following:

''(i) Natural ventilation.

''(ii) Evaporative cooling.

''(iii) Automatic lighting controls such as occupancy sensors, photocells, and timeclocks.

''(iv) Daylighting.

''(v) Designs utilizing semi-conditioned spaces that maintain adequate comfort conditions without air conditioning or without heating.

''(vi) Improved fan system efficiency, including reductions in static pressure.

''(vii) Advanced unloading mechanisms for mechanical cooling, such as multiple or variable speed compressors.

''(viii) The calculational methods may take into account the extent of commissioning in the building, and allow the taxpayer to take into account measured performance that exceeds typical performance.

''(3) COMPUTER SOFTWARE.—

''(A) IN GENERAL.—Any calculation under this subsection shall be prepared by qualified computer software.

''(B) QUALIFIED COMPUTER SOFTWARE.—For purposes of this paragraph, the term 'qualified computer software' means software—

''(i) for which the software designer has certified that the software meets all procedures and detailed methods for calculating energy and power consumption and costs as required by the Secretary,

''(ii) which provides such forms as required to be filed by the Secretary in connection with energy efficiency of property and the deduction allowed under this section, and

''(iii) which provides a notice form which summarizes the energy efficiency features of the building and its projected annual energy costs.

''(d) ALLOCATION OF DEDUCTION FOR PUBLIC PROPERTY.—In the case of energy efficient commercial building property installed on or in public property, the Secretary shall promulgate a regulation to allow the allocation of the deduction to the person primarily responsible for designing the property in lieu of the public entity which is the owner of such property. Such person shall be treated as the taxpayer for purposes of this section.

''(e) NOTICE TO OWNER.—The qualified individual shall provide an explanation to the owner of the building regarding the energy efficiency features of the building and its projected annual energy costs as provided in the notice under subsection (c)(3)(B)(iii).

''(f) CERTIFICATION.—The Secretary, in consultation with the Secretary of Energy, shall establish requirements for certification and compliance procedures similar to the procedures under section 45H(d).

''(g) BASIS REDUCTION.—For purposes of this title, the basis of any property shall be reduced by the amount of the deduction with respect to such property which is allowed by subsection (a).

''(h) TERMINATION.—This section shall not apply to property placed in service after December 31, 2006.''.

(b) CONFORMING AMENDMENTS.—

(1) Section 1016(a) is amended by striking ''and'' at the end of paragraph (31), by striking the period at the end of paragraph (32) and inserting '', and'', and by inserting the following new paragraph:

''(33) to the extent provided in section 179B(g).''.

(2) Section 1245(a) is amended by inserting ''179B,'' after ''179A,'' both places it appears in paragraphs (2)(C) and (3)(C).

(3) Section 1250(b)(3) is amended by inserting before the period at the end of the first sentence ''or by section 179B''.

(4) Section 263(a)(1) is amended by striking ''or'' at the end of subparagraph (G), by striking the period at the end of subparagraph (H) and inserting '', or'', and by inserting after subparagraph (H) the following new subparagraph:

''(I) expenditures for which a deduction is allowed under section 179B.''.

(5) Section 312(k)(3)(B) is amended by striking ''or 179A'' each place it appears in the heading and text and inserting '', 179A, or 179B''.

(c) CLERICAL AMENDMENT.—The table of sections for part VI of subchapter B of chapter 1 is amended by adding after section 179A the following new item:

''Sec. 179B. Deduction for energy efficient commercial building property.''.

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years beginning after December 31, 2001.

SEC. 3111. ALLOWANCE OF DEDUCTION FOR QUALIFIED ENERGY MANAGEMENT DEVICES AND RETROFITTED QUALIFIED METERS.

(a) IN GENERAL.—Part VI of subchapter B of chapter 1 (relating to itemized deductions for individuals and corporations) is amended by inserting after section 179B the following new section:

''SEC. 179C. DEDUCTION FOR QUALIFIED ENERGY MANAGEMENT DEVICES AND RETROFITTED METERS.

''(a) ALLOWANCE OF DEDUCTION.—In the case of a taxpayer who is a supplier of electric energy or natural gas or a provider of electric energy or natural gas services, there shall be allowed as a deduction an amount equal to the cost of each qualified energy management device placed in service during the taxable year.

''(b) MAXIMUM DEDUCTION.—The deduction allowed by this section with respect to each qualified energy management device shall not exceed $30.

''(c) QUALIFIED ENERGY MANAGEMENT DEVICE.—The term 'qualified energy management device' means any tangible property to which section 168 applies if such property is a meter or metering device—

''(1) which is acquired and used by the taxpayer to enable consumers to manage their purchase or use of electricity or natural gas in response to energy price and usage signals, and

''(2) which permits reading of energy price and usage signals on at least a daily basis.

''(d) PROPERTY USED OUTSIDE THE UNITED STATES NOT QUALIFIED.—No deduction shall be allowed under subsection (a) with respect to property which is used predominantly outside the United States or with respect to the portion of the cost of any property taken into account under section 179.

''(e) BASIS REDUCTION.—

''(1) IN GENERAL.—For purposes of this title, the basis of any property shall be reduced by the amount of the deduction with respect to such property which is allowed by subsection (a).

''(2) ORDINARY INCOME RECAPTURE.—For purposes of section 1245, the amount of the deduction allowable under subsection (a) with respect to any property that is of a character subject to the allowance for depreciation shall be treated as a deduction allowed for depreciation under section 167.''.

(b) CONFORMING AMENDMENTS.—

(1) Section 263(a)(1) is amended by striking ''or'' at the end of subparagraph (H), by striking the period at the end of subparagraph (I) and inserting '', or'', and by inserting after subparagraph (I) the following new subparagraph:

''(J) expenditures for which a deduction is allowed under section 179C.''.

(2) Section 312(k)(3)(B) is amended by striking ''or 179B'' each place it appears in the heading and text and inserting '', 179B, or 179C''.

(3) Section 1016(a) is amended by striking ''and'' at the end of paragraph (32), by striking the period at the end of paragraph (33) and inserting '', and'', and by inserting after paragraph (33) the following new paragraph:

''(34) to the extent provided in section 179C(e)(1).''.

(4) Section 1245(a) is amended by inserting ''179C,'' after ''179B,'' both places it appears in paragraphs (2)(C) and (3)(C).

(5) The table of contents for subpart B of part IV of subchapter A of chapter 1 is amended by inserting after the item relating to section 179B the following new item:

''Sec. 179C. Deduction for qualified energy management devices and retrofitted meters.''.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to qualified energy management devices placed in service after the date of the enactment of this Act.

SEC. 3112. 3-YEAR APPLICABLE RECOVERY PERIOD FOR DEPRECIATION OF QUALIFIED ENERGY MANAGEMENT DEVICES.

(a) IN GENERAL.—Subparagraph (A) of section 168(e)(3) (relating to classification of property) is amended by striking ''and'' at the end of clause (ii), by striking the period at the end of clause (iii) and inserting '', and'', and by adding at the end the following new clause:

''(iv) any qualified energy management device.''.

(b) DEFINITION OF QUALIFIED ENERGY MANAGEMENT DEVICE.—Section 168(i) (relating to definitions and special rules) is amended by inserting at the end the following new paragraph:

''(15) QUALIFIED ENERGY MANAGEMENT DEVICE.—The term 'qualified energy management device' means any qualified energy management device as defined in section 179C(c) which is placed in service by a taxpayer who is a supplier of electric energy or natural gas or a provider of electric energy or natural gas services.''.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after the date of the enactment of this Act.

SEC. 3113. ENERGY CREDIT FOR COMBINED HEAT AND POWER SYSTEM PROPERTY.

(a) IN GENERAL.—Subparagraph (A) of section 48(a)(3) (defining energy property) is amended by striking ''or'' at the end of clause (ii), by adding ''or'' at the end of clause (iii), and by inserting after clause (iii) the following new clause:

''(iv) combined heat and power system property,''.

(b) COMBINED HEAT AND POWER SYSTEM PROPERTY.—Subsection (a) of section 48 is amended by redesignating paragraphs (5) and (6) as paragraphs (6) and (7), respectively, and by inserting after paragraph (4) the following new paragraph:

''(5) COMBINED HEAT AND POWER SYSTEM PROPERTY.—For purposes of this subsection—

''(A) COMBINED HEAT AND POWER SYSTEM PROPERTY.—The term 'combined heat and power system property' means property comprising a system—

''(i) which uses the same energy source for the simultaneous or sequential generation of electrical power, mechanical shaft power, or both, in combination with the generation of steam or other forms of useful thermal energy (including heating and cooling applications),

''(ii) which has an electrical capacity of more than 50 kilowatts or a mechanical energy capacity of more than 67 horsepower or an equivalent combination of electrical and mechanical energy capacities,

''(iii) which produces—

''(I) at least 20 percent of its total useful energy in the form of thermal energy, and

''(II) at least 20 percent of its total useful energy in the form of electrical or mechanical power (or combination thereof),

''(iv) the energy efficiency percentage of which exceeds 60 percent (70 percent in the case of a system with an electrical capacity in excess of 50 megawatts or a mechanical energy capacity in excess of 67,000 horsepower, or an equivalent combination of electrical and mechanical energy capacities), and

''(v) which is placed in service after December 31, 2001, and before January 1, 2007.

''(B) SPECIAL RULES.—

''(i) ENERGY EFFICIENCY PERCENTAGE.—For purposes of subparagraph (A)(iv), the energy efficiency percentage of a system is the fraction—

''(I) the numerator of which is the total useful electrical, thermal, and mechanical power produced by the system at normal operating rates, and

''(II) the denominator of which is the lower heating value of the primary fuel source for the system.

''(ii) DETERMINATIONS MADE ON BTU BASIS.—The energy efficiency percentage and the percentages under subparagraph (A)(iii) shall be determined on a Btu basis.

''(iii) INPUT AND OUTPUT PROPERTY NOT INCLUDED.—The term 'combined heat and power system property' does not include property used to transport the energy source to the facility or to distribute energy produced by the facility.

''(iv) PUBLIC UTILITY PROPERTY.—

''(I) ACCOUNTING RULE FOR PUBLIC UTILITY PROPERTY.—If the combined heat and power system property is public utility property (as defined in section 168(i)(1)), the taxpayer may only claim the credit under the subsection if, with respect to such property, the taxpayer uses a normalization method of accounting.

''(II) CERTAIN EXCEPTION NOT TO APPLY.—The matter in paragraph (3) which follows subparagraph (D) shall not apply to combined heat and power system property.

''(C) EXTENSION OF DEPRECIATION RECOVERY PERIOD.—If a taxpayer is allowed credit under this section for combined heat and power system property and such property would (but for this subparagraph) have a class life of 15 years or less under section 168, such property shall be treated as having a 22-year class life for purposes of section 168.''.

(c) NO CARRYBACK OF ENERGY CREDIT BEFORE EFFECTIVE DATE.—Subsection (d) of section 39 is amended by adding at the end the following new paragraph:

''(13) NO CARRYBACK OF ENERGY CREDIT BEFORE EFFECTIVE DATE.—No portion of the unused business credit for any taxable year which is attributable to the energy credit with respect to property described in section 48(a)(5) may be carried back to a taxable year ending before January 1, 2002.''.

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after December 31, 2001.

SEC. 3114. NEW NONREFUNDABLE PERSONAL CREDITS ALLOWED AGAINST REGULAR AND MINIMUM TAXES.

(a) IN GENERAL.—Paragraph (1) of section 26(a) is amended by striking ''and 25B'' and inserting ''25B, 25C, 25D, and 25E''.

(b) CONFORMING AMENDMENTS.—

(1) Section 24(b)(3)(B) is amended by striking ''and 25B'' and inserting '', 25B, 25C, 25D, and 25E''.

(2) Section 25(e)(1)(C) is amended by inserting ''25C, 25D, and 25E'' after ''25B,''.

(3) Section 25B(g)(2) is amended by striking ''section 23'' and inserting ''sections 23, 25C, 25D, and 25E''.

(4) Section 904(h) is amended by striking ''and 25B'' and inserting ''25B, 25C, 25D, and 25E''.

(5) Section 1400C(d) is amended by striking ''and 25B'' and inserting ''25B, 25C, 25D, and 25E''.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years beginning after December 31, 2001.

SEC. 3115. PHASEOUT OF 4.3-CENT MOTOR FUEL EXCISE TAXES ON RAILROADS AND INLAND WATERWAY TRANSPORTATION WHICH REMAIN IN GENERAL FUND.

(a) TAXES ON TRAINS.—

(1) IN GENERAL.—Clause (ii) of section 4041(a)(1)(C) is amended by striking subclauses (I), (II), and (III) and inserting the following new subclauses:

''(I) 3.3 cents per gallon after September 30, 2001, and before January 1, 2005,

''(II) 2.3 cents per gallon after December 31, 2004, and before January 1, 2007,

''(III) 1.3 cents per gallon after December 31, 2006, and before January 1, 2009,

''(IV) 0.3 cent per gallon after December 31, 2008, and before January 1, 2010, and

''(V) 0 after December 31, 2009.''.

(2) CONFORMING AMENDMENTS.—

(A) Subsection (d) of section 4041 is amended by redesignating paragraph (3) as paragraph (4) and by inserting after paragraph (2) the following new paragraph:

''(3) DIESEL FUEL USED IN TRAINS.—In the case of any sale for use (or use) after September 30, 2010, there is hereby imposed a tax of 0.1 cent per gallon on any liquid other than gasoline (as defined in section 4083)—

''(A) sold by any person to an owner, lessee, or other operator of a diesel-powered train for use as a fuel in such train, or

''(B) used by any person as a fuel in a diesel-powered train unless there was a taxable sale of such fuel under subparagraph (A).

No tax shall be imposed by this paragraph on the sale or use of any liquid if tax was imposed on such liquid under section 4081.''

(B) Subsection (f) of section 4082 is amended by striking ''section 4041(a)(1)'' and inserting ''subsections (a)(1) and (d)(3) of section 4041''.

(C) Subparagraph (B) of section 6421(f)(3) is amended to read as follows:

''(B) so much of the rate specified in section 4081(a)(2)(A) as does not exceed the rate applicable under section 4041(a)(1)(C)(ii).''.

(D) Subparagraph (B) of section 6427(l)(3) is amended to read as follows:

''(B) so much of the rate specified in section 4081(a)(2)(A) as does not exceed the rate applicable under section 4041(a)(1)(C)(ii).''.

(b) FUEL USED ON INLAND WATERWAYS.—Subparagraph (C) of section 4042(b)(2) is amended to read as follows:

''(C) The deficit reduction rate is—

''(i) 3.3 cents per gallon after September 30, 2001, and before January 1, 2005,

''(ii) 2.3 cents per gallon after December 31, 2004, and before January 1, 2007,

''(iii) 1.3 cents per gallon after December 31, 2006, and before January 1, 2009,

''(iv) 0.3 cent per gallon after December 31, 2008, and before January 1, 2010, and

''(v) 0 after December 31, 2009.''.

(c) EFFECTIVE DATE.—The amendments made by this section shall take effect on October 1, 2001.

SEC. 3116. REDUCED MOTOR FUEL EXCISE TAX ON CERTAIN MIXTURES OF DIESEL FUEL.

(a) IN GENERAL.—Clause (iii) of section 4081(a)(2)(A) is amended by inserting before the period ''(19.7 cents per gallon in the case of a diesel-water fuel emulsion at least 14 percent of which is water)''.

(b) REFUNDS FOR TAX-PAID PURCHASES.—

(1) IN GENERAL.—Section 6427 is amended by redesignating subsections (m) through (p) as subsections (n) through (q), respectively, and by inserting after subsection (l) the following new subsection:

''(m) DIESEL FUEL USED TO PRODUCE EMULSION.—

''(1) IN GENERAL.—Except as provided in subsection (k), if any diesel fuel on which tax was imposed by section 4081 at the regular tax rate is used by any person in producing an emulsion described in section 4081(a)(2)(A) which is sold or used in such person's trade or business, the Secretary shall pay (without interest) to such person an amount equal to the excess of the regular tax rate over the incentive tax rate with respect to such fuel.

''(2) DEFINITIONS.—For purposes of paragraph (1)—

''(A) REGULAR TAX RATE.—The term 'regular tax rate' means the aggregate rate of tax imposed by section 4081 determined without regard to the parenthetical in section 4081(a)(2)(A).

''(B) INCENTIVE TAX RATE.—The term 'incentive tax rate' means the aggregate rate of tax imposed by section 4081 determined with regard to the parenthetical in section 4081(a)(2)(A).''

(c) EFFECTIVE DATE.—The amendments made by this section shall take effect on October 1, 2001.

SEC. 3117. CREDIT FOR INVESTMENT IN QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY.

(a) ALLOWANCE OF QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY FACILITY CREDIT.—Section 46 (relating to amount of credit) is amended by striking ''and'' at the end of paragraph (2), by striking the period at the end of paragraph (3) and inserting '', and'', and by adding at the end the following:

''(4) the qualifying advanced clean coal technology facility credit.''.

(b) AMOUNT OF QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY FACILITY CREDIT.—Subpart E of part IV of subchapter A of chapter 1 (relating to rules for computing investment credit) is amended by inserting after section 48 the following:

''SEC. 48A. QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY FACILITY CREDIT.

''(a) IN GENERAL.—For purposes of section 46, the qualifying advanced clean coal technology facility credit for any taxable year is an amount equal to 10 percent of the qualified investment in a qualifying advanced clean coal technology facility for such taxable year.

''(b) QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY FACILITY.—

''(1) IN GENERAL.—For purposes of subsection (a), the term 'qualifying advanced clean coal technology facility' means a facility of the taxpayer which—

''(A)(i)(I) original use of which commences with the taxpayer, or

''(II) is a retrofitted or repowered conventional technology facility, the retrofitting or repowering of which is completed by the taxpayer (but only with respect to that portion of the basis which is properly attributable to such retrofitting or repowering), or

''(ii) is acquired through purchase (as defined by section 179(d)(2)),

''(B) is depreciable under section 167,

''(C) has a useful life of not less than 4 years,

''(D) is located in the United States, and

''(E) uses qualifying advanced clean coal technology.

''(2) SPECIAL RULE FOR SALE-LEASEBACKS.—For purposes of subparagraph (A) of paragraph (1), in the case of a facility which—

''(A) is originally placed in service by a person, and

''(B) is sold and leased back by such person, or is leased to such person, within 3 months after the date such facility was originally placed in service, for a period of not less than 12 years,

such facility shall be treated as originally placed in service not earlier than the date on which such property is used under the leaseback (or lease) referred to in subparagraph (B). The preceding sentence shall not apply to any property if the lessee and lessor of such property make an election under this sentence. Such an election, once made, may be revoked only with the consent of the Secretary.

''(c) QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY.—For purposes of this section—

''(1) IN GENERAL.—The term 'qualifying advanced clean coal technology' means, with respect to clean coal technology—

''(A) which has—

''(i) multiple applications, with a combined capacity of not more than 5,000 megawatts (4,000 megawatts before 2009), of advanced pulverized coal or atmospheric fluidized bed combustion technology—

''(I) installed as a new, retrofit, or repowering application,

''(II) operated between 2000 and 2012, and

''(III) having a design net heat rate of not more than 9,500 Btu per kilowatt hour when the design coal has a heat content of more than 9,000 Btu per pound, or a design net heat rate of not more than 9,900 Btu per kilowatt hour when the design coal has a heat content of 9,000 Btu per pound or less,

''(ii) multiple applications, with a combined capacity of not more than 1,000 megawatts (500 megawatts before 2009 and 750 megawatts before 2013), of pressurized fluidized bed combustion technology—

''(I) installed as a new, retrofit, or repowering application,

''(II) operated between 2000 and 2016, and

''(III) having a design net heat rate of not more than 8,400 Btu per kilowatt hour when the design coal has a heat content of more than 9,000 Btu per pound, or a design net heat rate of not more than 9,900 Btu's per kilowatt hour when the design coal has a heat content of 9,000 Btu per pound or less, and

''(iii) multiple applications, with a combined capacity of not more than 2,000 megawatts (1,000 megawatts before 2009 and 1,500 megawatts before 2013), of integrated gasification combined cycle technology, with or without fuel or chemical co-production—

''(I) installed as a new, retrofit, or repowering application,

''(II) operated between 2000 and 2016,

''(III) having a design net heat rate of not more than 8,550 Btu per kilowatt hour when the design coal has a heat content of more than 9,000 Btu per pound, or a design net heat rate of not more than 9,900 Btu per kilowatt hour when the design coal has a heat content of 9,000 Btu per pound or less, and

''(IV) having a net thermal efficiency on any fuel or chemical co-production of not less than 39 percent (higher heating value), or

''(iv) multiple applications, with a combined capacity of not more than 2,000 megawatts (1,000 megawatts before 2009 and 1,500 megawatts before 2013) of technology for the production of electricity—

''(I) installed as a new, retrofit, or repowering application,

''(II) operated between 2000 and 2016, and

''(III) having a carbon emission rate which is not more than 85 percent of conventional technology, and

''(B) which reduces the discharge into the atmosphere of 1 or more of the following pollutants to not more than—

''(i) 5 percent of the potential combustion concentration sulfur dioxide emissions for a coal with a potential combustion concentration sulfur emission of 1.2 lb/million btu of heat input or greater,

''(ii) 15 percent of the potential combustion concentration sulfur dioxide emissions for a coal with a potential combustion concentration sulfur emission of less than 1.2 lb/million btu of heat input,

''(iii) nitrogen oxide emissions of 0.1 lb per million btu of heat input from other than cyclone-fired boilers,

''(iv) 15 percent of the uncontrolled nitrogen oxide emissions from cyclone-fired boilers,

''(v) particulate emissions of 0.02 lb per million btu of heat input, and

''(vi) the emission levels specified in the new source performance standards of the Clean Air Act (42 U.S.C. 7411) in effect at the time of retrofitting, repowering, or replacement of the qualifying clean coal technology unit for the category of source if such level is lower than the levels specified in clause (i), (ii), (iii), (iv), or (v).

''(2) EXCEPTIONS.—Such term shall not include any projects receiving or scheduled to receive funding under the Clean Coal Technology Program, or the Power Plant Improvement administered by the Secretary of the Department of Energy.

''(d) CLEAN COAL TECHNOLOGY.—For purposes of this section, the term 'clean coal technology' means advanced technology which uses coal to produce 75 percent or more of its thermal output as electricity including advanced pulverized coal or atmospheric fluidized bed combustion, pressurized fluidized bed combustion, integrated gasification combined cycle with or without fuel or chemical co-production, and any other technology for the production of electricity which exceeds the performance of conventional technology.

''(e) CONVENTIONAL TECHNOLOGY.—The term 'conventional technology' means—

''(1) coal-fired combustion technology with a design net heat rate of not less than 9,500 Btu per kilowatt hour (HHV) and a carbon equivalents emission rate of not more than 0.54 pounds of carbon per kilowatt hour when the design coal has a heat content of more than 9,000 Btu per pound,

''(2) coal-fired combustion technology with a design net heat rate of not less than 10,500 Btu per kilowatt hour (HHV) and a carbon equivalents emission rate of not more than 0.60 pounds of carbon per kilowatt hour when the design coal has a heat content of 9,000 Btu per pound or less, or

''(3) natural gas-fired combustion technology with a design net heat rate of not less than 7,500 Btu per kilowatt hour (HHV) and a carbon equivalents emission rate of not more than 0.24 pounds of carbon per kilowatt hour.

''(f) DESIGN NET HEAT RATE.—The design net heat rate shall be based on the design annual heat input to and the design annual net electrical output from the qualifying advanced clean coal technology (determined without regard to such technology's co-generation of steam).

''(g) SELECTION CRITERIA.—Selection criteria for qualifying advanced clean coal technology facilities—

''(1) shall be established by the Secretary of Energy as part of a competitive solicitation,

''(2) shall include primary criteria of minimum design net heat rate, maximum design thermal efficiency, environmental performance, and lowest cost to the government, and

''(3) shall include supplemental criteria as determined appropriate by the Secretary of Energy.

''(h) QUALIFIED INVESTMENT.—For purposes of subsection (a), the term 'qualified investment' means, with respect to any taxable year, the basis of a qualifying advanced clean coal technology facility placed in service by the taxpayer during such taxable year.

''(i) QUALIFIED PROGRESS EXPENDITURES.—

''(1) INCREASE IN QUALIFIED INVESTMENT.—In the case of a taxpayer who has made an election under paragraph (5), the amount of the qualified investment of such taxpayer for the taxable year (determined under subsection (c) without regard to this section) shall be increased by an amount equal to the aggregate of each qualified progress expenditure for the taxable year with respect to progress expenditure property.

''(2) PROGRESS EXPENDITURE PROPERTY DEFINED.—For purposes of this subsection, the term 'progress expenditure property' means any property being constructed by or for the taxpayer and which it is reasonable to believe will qualify as a qualifying advanced clean coal technology facility which is being constructed by or for the taxpayer when it is placed in service.

''(3) QUALIFIED PROGRESS EXPENDITURES DEFINED.—For purposes of this subsection—

''(A) SELF-CONSTRUCTED PROPERTY.—In the case of any self-constructed property, the term 'qualified progress expenditures' means the amount which, for purposes of this subpart, is properly chargeable (during such taxable year) to capital account with respect to such property.

''(B) NONSELF-CONSTRUCTED PROPERTY.—In the case of nonself-constructed property, the term 'qualified progress expenditures' means the amount paid during the taxable year to another person for the construction of such property.

''(4) OTHER DEFINITIONS.—For purposes of this subsection—

''(A) SELF-CONSTRUCTED PROPERTY.—The term 'self-constructed property' means property for which it is reasonable to believe that more than half of the construction expenditures will be made directly by the taxpayer.

''(B) NONSELF-CONSTRUCTED PROPERTY.—The term 'nonself-constructed property' means property which is not self-constructed property.

''(C) CONSTRUCTION, ETC.—The term 'construction' includes reconstruction and erection, and the term 'constructed' includes reconstructed and erected.

''(D) ONLY CONSTRUCTION OF QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY FACILITY TO BE TAKEN INTO ACCOUNT.—Construction shall be taken into account only if, for purposes of this subpart, expenditures therefor are properly chargeable to capital account with respect to the property.

''(5) ELECTION.—An election under this subsection may be made at such time and in such manner as the Secretary may by regulations prescribe. Such an election shall apply to the taxable year for which made and to all subsequent taxable years. Such an election, once made, may not be revoked except with the consent of the Secretary.

''(j) COORDINATION WITH OTHER CREDITS.—This section shall not apply to any property with respect to which the rehabilitation credit under section 47 or the energy credit under section 48 is allowed unless the taxpayer elects to waive the application of such credit to such property.

''(k) TERMINATION.—This section shall not apply with respect to any qualified investment made after December 31, 2011.

''(l) NATIONAL LIMITATION.—

''(1) IN GENERAL.—Notwithstanding any other provision of this section, the term 'qualifying advanced clean coal technology facility' shall include such a facility only to the extent that such facility is allocated a portion of the national megawatt limitation under this subsection.

''(2) NATIONAL MEGAWATT LIMITATION.—The national megawatt limitation under this subsection is 7,500 megawatts.

''(3) ALLOCATION OF LIMITATION.—The national megawatt limitation shall be allocated by the Secretary under rules prescribed by the Secretary. Not later than 6 months after the date of enactment of this subsection, the Secretary shall prescribe such regulations as may be necessary or appropriate to carry out the purposes of this section, including regulations—

''(A) to limit which facility qualifies as 'qualified advanced clean coal technology' in subsection (c) to particular facilities, a portion of particular facilities, or a portion of the production from particular facilities, so that when all such facilities (or portions thereof) are placed in service over the ten year period in section (k), the combination of facilities approved for tax credits (and/or portions of facilities approved for tax credits) will not exceed a combined capacity of 7,500 megawatts;

''(B) to provide a certification process in consultation with the Secretary of Energy under subsection (g) that will approve and allocate the 7,500 megawatts of available tax credits authority—

''(i) to encourage that facilities with the highest thermal efficiencies and environmental performance be placed in service as soon as possible;

''(ii) to allocate credits to taxpayers that have a definite and credible plan for placing into commercial operation a qualifying advanced clean coal technology facility, including—

''(I) a site,

''(II) contractual commitments for procurement and construction,

''(III) filings for all necessary preconstruction approvals,

''(IV) a demonstrated record of having successfully completed comparable projects on a timely basis, and

''(V) such other factors that the Secretary shall determine are appropriate;

''(iii) to allocate credits to a portion of a facility (or a portion of the production from a facility) if the Secretary determines that such an allocation should maximize the amount of efficient production encouraged with the available tax credits;

''(C) to set progress requirements and conditional approvals so that credits for approved projects that become unlikely to meet the necessary conditions that can be reallocated by the Secretary to other projects;

''(D) to reallocate credits that are not allocated to 1 technology described in clauses (i) through (iv) of subsection (c)(1)(A) because an insufficient number of qualifying facilities requested credits for one technology, to another technology described in another subparagraph of subsection (c) in order to maximize the amount of energy efficient production encouraged with the available tax credits; and

''(E) to provide taxpayers with opportunities to correct administrative errors and omissions with respect to allocations and recordkeeping within a reasonable period after their discovery, taking into account the availability of regulations and other administrative guidance from the Secretary.''.

(c) RECAPTURE.—Section 50(a) (relating to other special rules) is amended by adding at the end the following:

''(6) SPECIAL RULES RELATING TO QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY FACILITY.—For purposes of applying this subsection in the case of any credit allowable by reason of section 48A, the following shall apply:

''(A) GENERAL RULE.—In lieu of the amount of the increase in tax under paragraph (1), the increase in tax shall be an amount equal to the investment tax credit allowed under section 38 for all prior taxable years with respect to a qualifying advanced clean coal technology facility (as defined by section 48A(b)(1)) multiplied by a fraction whose numerator is the number of years remaining to fully depreciate under this title the qualifying advanced clean coal technology facility disposed of, and whose denominator is the total number of years over which such facility would otherwise have been subject to depreciation. For purposes of the preceding sentence, the year of disposition of the qualifying advanced clean coal technology facility property shall be treated as a year of remaining depreciation.

''(B) PROPERTY CEASES TO QUALIFY FOR PROGRESS EXPENDITURES.—Rules similar to the rules of paragraph (2) shall apply in the case of qualified progress expenditures for a qualifying advanced clean coal technology facility under section 48A, except that the amount of the increase in tax under subparagraph (A) of this paragraph shall be substituted in lieu of the amount described in such paragraph (2).

''(C) APPLICATION OF PARAGRAPH.—This paragraph shall be applied separately with respect to the credit allowed under section 38 regarding a qualifying advanced clean coal technology facility.''.

(d) TRANSITIONAL RULE.—Section 39(d) (relating to transitional rules) is amended by adding at the end the following:

''(14) NO CARRYBACK OF SECTION 48A CREDIT BEFORE EFFECTIVE DATE.—No portion of the unused business credit for any taxable year which is attributable to the qualifying advanced clean coal technology facility credit determined under section 48A may be carried back to a taxable year ending before January 1, 2002.''.

(e) TECHNICAL AMENDMENTS.—

(1) Section 49(a)(1)(C) is amended by striking ''and'' at the end of clause (ii), by striking the period at the end of clause (iii) and inserting '', and'', and by adding at the end the following:

''(iv) the portion of the basis of any qualifying advanced clean coal technology facility attributable to any qualified investment (as defined by section 48A(c)).''

(2) Section 50(a)(4) is amended by striking ''and (2)'' and inserting '', (2), and (6)''.

(3) Section 50(c) is amended by adding at the end the following new paragraph:

''(6) SPECIAL RULE FOR QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY FACILITIES.—Paragraphs (1) and (2) shall not apply to any property with respect to the credit determined under section 48A.''

(4) The table of sections for subpart E of part IV of subchapter A of chapter 1 is amended by inserting after the item relating to section 48 the following:

''Sec. 48A. Qualifying advanced clean coal technology facility credit.''.

(f) EFFECTIVE DATE.—The amendments made by this section shall apply to periods after December 31, 2001, under rules similar to the rules of section 48(m) of the Internal Revenue Code of 1986 (as in effect on the day before the date of enactment of the Revenue Reconciliation Act of 1990).

SEC. 3118. CREDIT FOR PRODUCTION FROM QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY.

(a) CREDIT FOR PRODUCTION FROM QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY.—Subpart D of part IV of subchapter A of chapter 1 (relating to business related credits) is amended by adding after section 45J the following:

''SEC. 45K. CREDIT FOR PRODUCTION FROM QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY.

''(a) GENERAL RULE.—For purposes of section 38, the qualifying advanced clean coal technology production credit of any taxpayer for any taxable year is equal to—

''(1) the applicable amount of advanced clean coal technology production credit, multiplied by

''(2) the sum of—

''(A) the kilowatt hours of electricity, plus

''(B) each 3,413 Btu of fuels or chemicals,

produced by the taxpayer during such taxable year at a qualifying advanced clean coal technology facility during the 10-year period beginning on the date the facility was originally placed in service.

''(b) APPLICABLE AMOUNT.—For purposes of this section, the applicable amount of advanced clean coal technology production credit with respect to production from a qualifying advanced clean coal technology facility shall be determined as follows:

''(1) Where the design coal has a heat content of more than 9,000 Btu per pound:

''(A) In the case of a facility originally placed in service before 2009, if—

''The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 8,400	$.0060	$.0038
More than 8,400 but not more than 8,550	$.0025	$.0010
More than 8,550 but not more than 8,750	$.0010	$.0010.

''(B) In the case of a facility originally placed in service after 2008 and before 2013, if—

''The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 7,770	$.0105	$.0090
More than 7,770 but not more than 8,125	$.0085	$.0068
More than 8,125 but not more than 8,350	$.0075	$.0055.

''(C) In the case of a facility originally placed in service after 2012 and before 2017, if—

''The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 7,380	$.0140	$.01
More than 7,380 but not more than 7,720	$.0120	$.0090.

''(2) Where the design coal has a heat content of not more than 9,000 Btu per pound:

''(A) In the case of a facility originally placed in service before 2009, if—

''The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 8,500	$.0060	$.0038
More than 8,500 but not more than 8,650	$.0025	$.0010
More than 8,650 but not more than 8,750	$.0010	$.0010.

''(B) In the case of a facility originally placed in service after 2008 and before 2013, if—

''The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is: For 1st 5 years of such service	For 2d 5 years of such service
Not more than 8,000	$.0105	$.009
More than 8,000 but not more than 8,250	$.0085	$.0068
More than 8,250 but not more than 8,400	$.0075	$.0055.

''(C) In the case of a facility originally placed in service after 2012 and before 2017, if—

''The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is: For 1st 5 years of such service	For 2d 5 years of such service
Not more than 7,800	$.0140	$.0115
More than 7,800 but not more than 7,950	$.0120	$.0090.

''(3) Where the clean coal technology facility is producing fuel or chemicals:

''(A) In the case of a facility originally placed in service before 2009, if—

''The facility design net thermal efficiency (HHV) is equal to:	The applicable amount is: For 1st 5 years of such service	For 2d 5 years of such service
Not less than 40.6 percent	$.0060	$.0038
Less than 40.6 but not less than 40 percent	$.0025	$.0010
Less than 40 but not less than 39 percent	$.0010	$.0010.

''(B) In the case of a facility originally placed in service after 2008 and before 2013, if—

''The facility design net thermal efficiency (HHV) is equal to:	The applicable amount is: For 1st 5 years of such service	For 2d 5 years of such service
Not less than 43.9 percent	$.0105	$.009
Less than 43.9 but not less than 42 percent	$.0085	$.0068
Less than 42 but not less than 40.9 percent	$.0075	$.0055.

''(C) In the case of a facility originally placed in service after 2012 and before 2017, if—

''The facility design net thermal efficiency (HHV) is equal to:	The applicable amount is: For 1st 5 years of such service	For 2d 5 years of such service
Not less than 44.2 percent	$.0140	$.0115
Less than 44.2 but not less than 43.6 percent	$.0120	$.0090.

''(c) INFLATION ADJUSTMENT FACTOR.—For calendar years after 2001, each amount in paragraphs (1), (2), and (3) shall be adjusted by multiplying such amount by the inflation adjustment factor for the calendar year in which the amount is applied. If any amount as increased under the preceding sentence is not a multiple of 0.01 cent, such amount shall be rounded to the nearest multiple of 0.01 cent.

''(d) DEFINITIONS AND SPECIAL RULES.—For purposes of this section—

''(1) IN GENERAL.—Any term used in this section which is also used in section 48A shall have the meaning given such term in section 48A.

''(2) APPLICABLE RULES.—The rules of paragraphs (3), (4), and (5) of section 45 shall apply.

''(3) INFLATION ADJUSTMENT FACTOR.—The term 'inflation adjustment factor' means, with respect to a calendar year, a fraction the numerator of which is the GDP implicit price deflator for the preceding calendar year and the denominator of which is the GDP implicit price deflator for the calendar year 2001.

''(4) GDP IMPLICIT PRICE DEFLATOR.—The term 'GDP implicit price deflator' means the most recent revision of the implicit price deflator for the gross domestic product as computed by the Department of Commerce before March 15 of the calendar year.''.

(b) CREDIT TREATED AS BUSINESS CREDIT.—Section 38(b) is amended by striking ''plus'' at the end of paragraph (18), by striking the period at the end of paragraph (19) and inserting '', plus'', and by adding at the end the following:

''(20) the qualifying advanced clean coal technology production credit determined under section 45K(a).''.

(c) TRANSITIONAL RULE.—Section 39(d) (relating to transitional rules) is amended by adding after paragraph (14) the following:

''(15) NO CARRYBACK OF SECTION 45K CREDIT BEFORE EFFECTIVE DATE.—No portion of the unused business credit for any taxable year which is attributable to the qualifying advanced clean coal technology production

credit determined under section 45K may be carried back to a taxable year ending before the date of enactment of section 45K.''.

(d) CLERICAL AMENDMENT.—The table of sections for subpart D of part IV of subchapter A of chapter 1 is amended by adding at the end the following:

''Sec. 45K. Credit for production from qualifying advanced clean coal technology.''.

(e) EFFECTIVE DATE.—The amendments made by this section shall apply to production after the date of enactment of this Act.

TITLE II—RELIABILITY

SEC. 3201. NATURAL GAS GATHERING LINES TREATED AS 7-YEAR PROPERTY.

(a) IN GENERAL.—Subparagraph (C) of section 168(e)(3) (relating to classification of certain property) is amended by striking ''and'' at the end of clause (i), by redesignating clause (ii) as clause (iii), and by inserting after clause (i) the following new clause:

''(ii) any natural gas gathering line, and''.

(b) NATURAL GAS GATHERING LINE.—Subsection (i) of section 168 is amended by adding after paragraph (15) the following new paragraph:

''(16) NATURAL GAS GATHERING LINE.—The term 'natural gas gathering line' means—

''(A) the pipe, equipment, and appurtenances determined to be a gathering line by the Federal Energy Regulatory Commission, or

''(B) the pipe, equipment, and appurtenances used to deliver natural gas from the wellhead or a commonpoint to the point at which such gas first reaches—

''(i) a gas processing plant,

''(ii) an interconnection with a transmission pipeline certificated by the Federal Energy Regulatory Commission as an interstate transmission pipeline,

''(iii) an interconnection with an intrastate transmission pipeline, or

''(iv) a direct interconnection with a local distribution company, a gas storage facility, or an industrial consumer.''.

(c) ALTERNATIVE SYSTEM.—The table contained in section 168(g)(3)(B) is amended by inserting after the item relating to subparagraph (C)(i) the following:

''(C)(ii) ..... 10''.

(d) ALTERNATIVE MINIMUM TAX EXCEPTION.—Subparagraph (B) of section 56(a)(1) is amended by inserting before the period the following: ''or in clause (ii) of section 168(e)(3)(C)''.

(e) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after the date of the enactment of this Act.

SEC. 3202. NATURAL GAS DISTRIBUTION LINES TREATED AS 10-YEAR PROPERTY.

(a) IN GENERAL.—Subparagraph (D) of section 168(e)(3) (relating to classification of certain property) is amended by striking ''and'' at the end of clause (i), by striking the period at the end of clause (ii) and by inserting '', and'', and by adding at the end the following new clause:

''(iii) any natural gas distribution line.''

(b) ALTERNATIVE SYSTEM.—The table contained in section 168(g)(3)(B) is amended by inserting after the item relating to subparagraph (D)(ii) the following:

''(D)(iii) ..... 20''.

(c) ALTERNATIVE MINIMUM TAX EXCEPTION.—Subparagraph (B) of section 56(a)(1) is amended by inserting before the period the following: ''or in clause (iii) of section 168(e)(3)(D)''.

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after the date of the enactment of this Act.

SEC. 3203. PETROLEUM REFINING PROPERTY TREATED AS 7-YEAR PROPERTY.

(a) IN GENERAL.—Subparagraph (C) of section 168(e)(3) (relating to classification of certain property), as amended by section 3201, is amended by striking ''and'' at the end of clause (ii), by redesignating clause (iii) as clause (iv), and by inserting after clause (ii) the following new clause:

''(iii) any property used for the distillation, fractionation, and catalytic cracking of crude petroleum into gasoline and its other components, and''.

(b) ALTERNATIVE SYSTEM.—The table contained in section 168(g)(3)(B), as amended by section 3201, is amended by inserting after the item relating to subparagraph (C)(ii) the following:

''(C)(iii) ..... 10''.

(c) ALTERNATIVE MINIMUM TAX EXCEPTION.—Subparagraph (B) of section 56(a)(1), as amended by section 3201, is amended by inserting ''or (iii)'' after ''clause (ii)''.

(d) EFFECTIVE DATE.—The amendment made by this section shall apply to property placed in service after the date of the enactment of this Act.

SEC. 3204. EXPENSING OF CAPITAL COSTS INCURRED IN COMPLYING WITH ENVIRONMENTAL PROTECTION AGENCY SULFUR REGULATIONS.

(a) IN GENERAL.—Section 179(b) (relating to election to expense certain depreciable business assets) is amended by adding at the end the following new paragraph:

''(5) LIMITATION FOR SMALL BUSINESS REFINERS.—

''(A) IN GENERAL.—In the case of a small business refiner electing to expense qualified costs, in lieu of the dollar limitations in paragraph (1), the limitation on the aggregate costs which may be taken into account under subsection (a) for any taxable year shall not exceed 75 percent of the qualified costs.

''(B) QUALIFIED COSTS.—For purposes of this paragraph, the term 'qualified costs' means costs paid or incurred by a small business refiner for the purpose of complying with the Highway Diesel Fuel Sulfur Control Requirements of the Environmental Protection Agency.

''(C) SMALL BUSINESS REFINER.—For purposes of this paragraph, the term 'small business refiner' means, with respect to any taxable year, a refiner which, within the refining operations of the business, employs not more than 1,500 employees on business days during such taxable year performing services in the refining operations of such businesses and has an average total capacity of 155,000 barrels per day or less.''.

(b) EFFECTIVE DATE.—The amendment made by this section shall apply to expenses paid or incurred after the date of the enactment of this Act.

SEC. 3205. ENVIRONMENTAL TAX CREDIT.

(a) IN GENERAL.—Subpart D of part IV of subchapter A of chapter 1 (relating to business-related credits) is amended by adding at the end the following new section:

''SEC. 45I. ENVIRONMENTAL TAX CREDIT.

''(a) IN GENERAL.—For purposes of section 38, the amount of the environmental tax credit determined under this section with respect to any small business refiner for any taxable year is an amount equal to 5 cents for every gallon of 15 parts per million or less sulfur diesel produced at a facility by such small business refiner.

''(b) MAXIMUM CREDIT.—For any small business refiner, the aggregate amount allowable as a credit under subsection (a) for any taxable year with respect to any facility shall not exceed 25 percent of the qualified capital costs incurred by such small business refiner with respect to such facility not taken into account in determining the credit under subsection (a) for any preceding taxable year.

''(c) DEFINITIONS.—For purposes of this section—

''(1) SMALL BUSINESS REFINER.—The term 'small business refiner' means, with respect to any taxable year, a refiner which, within the refining operations of the business, employs not more than 1,500 employees on business days during such taxable year performing services in the refining operations of such businesses and has an average total capacity of 155,000 barrels per day or less.

''(2) QUALIFIED CAPITAL COSTS.—The term 'qualified capital costs' means, with respect to any facility, those costs paid or incurred during the applicable period for compliance with the applicable EPA regulations with respect to such facility, including expenditures for the construction of new process operation units or the dismantling and reconstruction of existing process units to be used in the production of 15 parts per million or less sulfur diesel fuel, associated adjacent or offsite equipment (including tankage, catalyst, and power supply), engineering, construction period interest, and sitework.

''(3) APPLICABLE EPA REGULATIONS.—The term 'applicable EPA regulations' means the Highway Diesel Fuel Sulfur Control Requirements of the Environmental Protection Agency.

''(4) APPLICABLE PERIOD.—The term 'applicable period' means, with respect to any facility, the period beginning on the day after the date of the enactment of this section and ending with the date which is one year after the date on which the taxpayer must comply with the applicable EPA regulations with respect to such facility.

''(d) REDUCTION IN BASIS.—For purposes of this subtitle, if a credit is determined under this section with respect to any property by reason of qualified capital costs, the basis of such property shall be reduced by the amount of the credit so determined.

''(e) CERTIFICATION.—

''(1) REQUIRED.—Not later than the date which is 30 months after the first day of the first taxable year in which the environmental tax credit is allowed with respect to a facility, the small business refiner must obtain certification from the Secretary, in consultation with the Administrator of the Environmental Protection Agency, that the taxpayer's qualified capital costs with respect to such facility will result in compliance with the applicable EPA regulations.

''(2) CONTENTS OF APPLICATION.—An application for certification shall include relevant information regarding unit capacities and operating characteristics sufficient for the Secretary, in consultation with the Administrator of the Environmental Protection Agency, to determine that such qualified capital costs are necessary for compliance with the applicable EPA regulations.

''(3) REVIEW PERIOD.—Any application shall be reviewed and notice of certification, if applicable, shall be made within 60 days of receipt of such application.

''(4) RECAPTURE.—Notwithstanding subsection (f), failure to obtain certification under paragraph (1) constitutes a recapture event under subsection (f) with an applicable percentage of 100 percent.

''(f) RECAPTURE OF ENVIRONMENTAL TAX CREDIT.—

''(1) IN GENERAL.—Except as provided in subsection (e), if, as of the close of any taxable year, there is a recapture event with respect to any facility of the small business refiner, then the tax of such refiner under this chapter for such taxable year shall be increased by an amount equal to the product of—

''(A) the applicable recapture percentage, and

''(B) the aggregate decrease in the credits allowed under section 38 for all prior taxable years which would have resulted if the qualified capital costs of the taxpayer described in subsection (c)(2) with respect to such facility had been zero.

''(2) APPLICABLE RECAPTURE PERCENTAGE.—

''(A) IN GENERAL.—For purposes of this subsection, the applicable recapture percentage shall be determined from the following table:

"If the recapture event occurs in:	The applicable recapture percentage is:
Year 1	100
Year 2	80
Year 3	60
Year 4	40
Year 5	20
Years 6 and thereafter	0.

''(B) YEARS.—For purposes of subparagraph (A), year 1 shall begin on the first day of the taxable year in which the qualified capital costs with respect to a facility described in subsection (c)(2) are paid or incurred by the taxpayer.

''(3) RECAPTURE EVENT DEFINED.—For purposes of this subsection, the term 'recapture event' means—

''(A) FAILURE TO COMPLY.—The failure by the small business refiner to meet the applicable EPA regulations within the applicable period with respect to the facility.

''(B) CESSATION OF OPERATION.—The cessation of the operation of the facility as a facility which produces 15 parts per million or less sulfur diesel after the applicable period.

''(C) CHANGE IN OWNERSHIP.—

''(i) IN GENERAL.—Except as provided in clause (ii), the disposition of a small business refiner's interest in the facility with respect to which the credit described in subsection (a) was allowable.

''(ii) AGREEMENT TO ASSUME RECAPTURE LIABILITY.—Clause (i) shall not apply if the person acquiring such interest in the facility agrees in writing to assume the recapture liability of the person disposing of such interest in effect immediately before such disposition. In the event of such an assumption, the person acquiring the interest in the facility shall be treated as the taxpayer for purposes of assessing any recapture liability (computed as if there had been no change in ownership).

''(4) SPECIAL RULES.—

''(A) TAX BENEFIT RULE.—The tax for the taxable year shall be increased under paragraph (1) only with respect to credits allowed by reason of this section which were used to reduce tax liability. In the case of credits not so used to reduce tax liability, the carryforwards and carrybacks under section 39 shall be appropriately adjusted.

''(B) NO CREDITS AGAINST TAX.—Any increase in tax under this subsection shall not be treated as a tax imposed by this chapter for purposes of determining the amount of any credit under this chapter or for purposes of section 55.

''(C) NO RECAPTURE BY REASON OF CASUALTY LOSS.—The increase in tax under this subsection shall not apply to a cessation of operation of the facility by reason of a casualty loss to the extent such loss is restored by reconstruction or replacement within a reasonable period established by the Secretary.

''(g) CONTROLLED GROUPS.—For purposes of this section, all persons treated as a single employer under subsection (b), (c), (m), or (o) of section 414 shall be treated as a single employer.''.

(b) CREDIT MADE PART OF GENERAL BUSINESS CREDIT.—Subsection (b) of section 38 (relating to general business credit) is amended by striking ''plus'' at the end of paragraph (16), by striking the period at the end of paragraph (17) and inserting '', plus'', and by adding at the end the following new paragraph:

''(18) in the case of a small business refiner, the environmental tax credit determined under section 45I(a).''.

(c) DENIAL OF DOUBLE BENEFIT.—Section 280C (relating to certain expenses for which credits are allowable) is amended by adding after subsection (d) the following new subsection:

''(e) ENVIRONMENTAL TAX CREDIT.—No deduction shall be allowed for that portion of the expenses otherwise allowable as a deduction for the taxable year which is equal to the amount of the credit determined for the taxable year under section 45I(a).''.

(d) BASIS ADJUSTMENT.—Section 1016(a) (relating to adjustments to basis) is amended by striking ''and'' at the end of paragraph (33), by striking the period at the end of paragraph (34) and inserting '', and'', and by adding at the end the following new paragraph:

''(35) in the case of a facility with respect to which a credit was allowed under section 45I, to the extent provided in section 45I(d).''.

(e) CLERICAL AMENDMENT.—The table of sections for subpart D of part IV of subchapter A of chapter 1 is amended by adding at the end the following new item:

''Sec. 45I. Environmental tax credit.''.

(f) EFFECTIVE DATE.—The amendments made by this section shall apply to expenses paid or incurred after the date of the enactment of this Act.

SEC. 3206. DETERMINATION OF SMALL REFINER EXCEPTION TO OIL DEPLETION DEDUCTION.

(a) IN GENERAL.—Paragraph (4) of section 613A(d) (relating to certain refiners excluded) is amended to read as follows:

''(4) CERTAIN REFINERS EXCLUDED.—If the taxpayer or a related person engages in the refining of crude oil, subsection (c) shall not apply to the taxpayer for a taxable year if the average daily refinery runs of the taxpayer and the related person for the taxable year exceed 75,000 barrels. For purposes of this paragraph, the average daily refinery runs for any taxable year shall be determined by dividing the aggregate refinery runs for the taxable year by the number of days in the taxable year.''.

(b) EFFECTIVE DATE.—The amendment made by this section shall apply to taxable years beginning after December 31, 2001.

SEC. 3207. TAX-EXEMPT BOND FINANCING OF CERTAIN ELECTRIC FACILITIES.

(a) IN GENERAL.—Subpart A of part IV of subchapter B of chapter 1 (relating to tax exemption requirements for State and local bonds) is amended by inserting after section 141 the following new section:

"SEC. 141A. TREATMENT OF GOVERNMENT-OWNED ELECTRIC OUTPUT FACILITIES.

''(a) EXCEPTIONS FROM PRIVATE BUSINESS USE LIMITATIONS WHERE OPEN ACCESS REQUIREMENTS MET.—

''(1) GENERAL RULE.—For purposes of this part, the term 'private business use' shall not include—

''(A) any permitted open access activity by a governmental unit with respect to an electric output facility owned by such unit, or

''(B) any permitted sale of electricity by a governmental unit which is generated at an existing generation facility owned by such unit.

''(2) PERMITTED OPEN ACCESS ACTIVITY.—For purposes of this section—

''(A) IN GENERAL.—The term 'permitted open access activity' means any activity meeting the open access requirements of any of the following clauses with respect to such electric output facility:

''(i) TRANSMISSION AND ANCILLARY FACILITY.—In the case of a transmission facility or a facility providing ancillary services, the provision of transmission service and ancillary services meets the open access requirements of this clause only if such services are provided on a nondiscriminatory open access basis—

''(I) pursuant to an open access transmission tariff filed with and approved by FERC, including an acceptable reciprocity tariff, or

''(II) under a regional transmission organization agreement approved by FERC.

''(ii) DISTRIBUTION FACILITIES.—In the case of a distribution facility, the delivery of electric energy meets the open access requirements of this clause only if such delivery is made on a nondiscriminatory open access basis.

''(iii) GENERATION FACILITIES.—In the case of a generation facility, the delivery of electric energy generated by such facility meets the open access requirements of this clause only if—

''(I) such facility is directly connected to distribution facilities owned by the governmental unit which owns the generation facility, and

''(II) such distribution facilities meet the open access requirements of clause (ii).

''(B) SPECIAL RULES.—

''(i) VOLUNTARILY FILED TARIFFS.—Subparagraph (A)(i)(I) shall apply in the case of a voluntarily filed tariff only if the governmental unit files a report with FERC within 90 days after the date of the enactment of this section relating to whether or not such governmental unit will join a regional transmission organization.

''(ii) CONTROL OF TRANSMISSION FACILITIES BY REGIONAL TRANSMISSION ORGANIZATION.—A governmental unit shall be treated as meeting the open access requirements of subparagraph (A)(i) if a regional transmission organization controls the transmission facilities.

''(iii) ERCOT UTILITY.—References to FERC in subparagraph (A) shall be treated as references to the Public Utility Commission of Texas with respect to any ERCOT utility (as defined in section 212(k)(2)(B) of the Federal Power Act (16 U.S.C. 824k(k)(2)(B))).

''(3) PERMITTED SALE.—For purposes of this subsection—

''(A) IN GENERAL.—The term 'permitted sale' means—

''(i) any sale of electricity to an on-system purchaser if the seller meets the open access requirements of paragraph (2) with respect to all distribution and transmission facilities (if any) owned by such seller, and

''(ii) subject to subparagraphs (B) and (C), any sale of electricity to a wholesale native load purchaser, and any load loss sale, if—

''(I) the seller meets the open access requirements of paragraph (2) with respect to all transmission facilities (if any) owned by such seller, or

''(II) in any case in which the seller does not own any transmission facilities, all persons providing transmission services to the seller's wholesale native load purchasers meet the open access requirements of paragraph (2) with respect to all transmission facilities owned by such persons.

''(B) LIMITATION ON SALES TO WHOLESALE NATIVE LOAD PURCHASERS.—A sale to a wholesale native load purchaser shall be treated as a permitted sale only to the extent that—

''(i) such purchaser resells the electricity directly at retail to persons within the purchaser's distribution area, or

''(ii) such electricity is resold by such purchaser through one or more wholesale purchasers (each of whom as of June 30, 2000,

was a party to a requirements contract or a firm power contract described in paragraph (5)(B)(ii)) to retail purchasers in the ultimate wholesale purchaser's distribution area.

''(C) LOAD LOSS SALES.—

''(i) IN GENERAL.—The term 'load loss sale' means any sale at wholesale to the extent that—

''(I) the aggregate sales at wholesale during the recovery period does not exceed the load loss mitigation sales limit for such period, and

''(II) the aggregate sales at wholesale during the first calendar year after the recovery period does not exceed the excess carried under clause (iv) to such year.

''(ii) LOAD LOSS MITIGATION SALES LIMIT.—For purposes of clause (i), the load loss mitigation sales limit for the recovery period is the sum of the annual load losses for each year of such period.

''(iii) ANNUAL LOAD LOSS.—A governmental unit's annual load loss for each year of the recovery period is the amount (if any) by which—

''(I) the megawatt hours of electric energy sold during such year to wholesale native load purchasers which do not constitute private business use are less than

''(III) the megawatt hours of electric energy sold during the base year to wholesale native load purchasers which do not constitute private business use.

The annual load loss for any year shall not exceed the portion of the amount determined under the preceding sentence which is attributable to open access requirements.

''(iv) CARRYOVERS.—If the limitation under clause (i) for the recovery period exceeds the aggregate sales during such period which are taken into account under clause (i), such excess (but not more than 10 percent of such limitation) may be carried over to the first calendar year following the recovery period.

''(v) RECOVERY PERIOD.—The recovery period is the 7-year period beginning with the start-up year.

''(vi) START-UP YEAR.—The start-up year is the calendar year which includes the date of the enactment of this section or, if later, at the election of the governmental unit—

''(I) the first year that the governmental unit offers nondiscriminatory open transmission access, or

''(II) the first year in which at least 10 percent of the governmental unit's wholesale customers' aggregate retail native load is open to retail competition.

''(4) ON-SYSTEM PURCHASER.—For purposes of this section, the term 'on-system purchaser' means any person whose electric equipment is directly connected with any transmission or distribution facility owned by the governmental unit owning the existing generation facility if—

''(A) such person—

''(i) purchases electric energy from such governmental unit at retail, and

''(ii)(I) was within such unit's distribution area at the close of the base year or

''(II) is a person as to whom the governmental unit has a statutory service obligation, or

''(B) is a wholesale native load purchaser from such governmental unit.

''(5) WHOLESALE NATIVE LOAD PURCHASER.—For purposes of this section—

''(A) IN GENERAL.—The term 'wholesale native load purchaser' means a wholesale purchaser as to whom the governmental unit had—

''(i) a statutory service obligation at wholesale at the close of the base year, or

''(ii) an obligation at the close of the base year under a requirements or firm sales contract if, as of June 30, 2000, such contract had been in effect for (or had an initial term of) at least 10 years.

''(B) PERMITTED SALES UNDER EXISTING CONTRACTS.—A private business use sale during any year to a wholesale native load purchaser (other than a person to whom the governmental unit had a statutory service obligation) under a contract shall be treated as a permitted sale by reason of being a load loss sale only to the extent that the private business use sales under the contract during such year exceed the lesser of—

''(i) the private business use sales under the contract during the base year, or

''(ii) the maximum private business use sales which would (but for this section) be permitted without causing the bonds to be private activity bonds.

This subparagraph shall only apply to the extent that the sale is allocable to bonds issued before the date of the enactment of this section (or bonds issued to refund such bonds).

''(6) SPECIAL RULES.—

''(A) TIME OF SALE RULE.—For purposes of paragraphs (3)(C)(iii) and (5)(B), the determination of whether a sale after the date of the enactment of this section is a private business use shall be made with regard to this section.

''(B) JOINT ACTION AGENCIES.—To the extent provided in regulations, a joint action agency, or a member of (or a wholesale native load purchaser from) a joint action agency, which is entitled to make a sale described in subparagraph (A) or (B) in a year, may transfer the entitlement to make that sale to the member (or purchaser), or the joint action agency, respectively.

''(b) CERTAIN BONDS FOR TRANSMISSION AND DISTRIBUTION FACILITIES NOT TAX EXEMPT.—

''(1) IN GENERAL.—Section 103 shall not apply to any bond issued on or after the date of the enactment of this section if any portion of the proceeds of the issue of which such bond is a part is used (directly or indirectly) to finance—

''(A) any electric transmission facility, or

''(B) any start-up electric utility distribution facility.

''(2) EXCEPTIONS RELATING TO TRANSMISSION FACILITIES.—Paragraph (1)(A) shall not apply to any bond issued to finance—

''(A) any repair of a transmission facility in service on the date of the enactment of this section, so long as the repair does not—

''(i) increase the voltage level of such facility over its level at the close of the base year, or

''(ii) increase the thermal load limit of such facility by more than 3 percent over such limit at the close of the base year,

''(B) any qualifying upgrade of an electric transmission facility in service on the date of the enactment of this section, or

''(C) any transmission facility necessary to comply with an obligation under a shared or reciprocal transmission agreement in effect on such date.

''(3) EXCEPTION FOR LOCAL ELECTRIC TRANSMISSION FACILITY.—For purposes of this subsection—

''(A) IN GENERAL.—In the case of a governmental unit which owns distribution facilities, paragraph (1)(A) shall not apply to any bond issued to finance an electric transmission facility owned by such governmental unit and located within such governmental unit's distribution area, but only to the extent such facility is, or will be, necessary to supply electricity to serve the retail native load, or wholesale native load, of such governmental unit or of 1 or more other governmental units owning distribution facilities which are directly connected to such electric transmission facility.

''(B) RETAIL LOAD.—The term 'retail load' means, with respect to a governmental unit, the electric load of end-users in the distribution area of the governmental unit.

''(C) WHOLESALE NATIVE LOAD.—The term 'wholesale native load' means—

''(i) the retail load of such unit's wholesale native load purchasers (or of an ultimate wholesale purchaser described in subsection (a)(3)(B)(ii)), and

''(ii) the electric load of purchasers (not described in clause (i)) under wholesale requirements contracts which—

''(I) do not constitute private business use (determined without regard to this section), and

''(II) were in effect in the base year.

''(D) NECESSARY TO SERVE LOAD.—For purposes of determining whether a transmission facility is, or will be, necessary to supply electricity to retail native load or wholesale native load—

''(i) the governmental unit's available transmission rights shall be taken into account,

''(ii) electric reliability standards or requirements of national or regional reliability organizations, regional transmission organizations and the Electric Reliability Council of Texas shall be taken into account, and

''(iii) transmission, siting and construction decisions of regional transmission organizations and State and Federal regulatory and siting agencies, after a proceeding that provides for public input, shall be presumptive evidence regarding whether transmission facilities are necessary to serve native load.

''(E) QUALIFYING UPGRADE.—The term 'qualifying upgrade' means an improvement or addition to transmission facilities of the governmental unit in service on the date of the enactment of this section which—

''(i) is ordered or approved by a regional transmission organization or by a State regulatory or siting agency, after a proceeding that provides for public input, and

''(ii) is, or will be, necessary to supply electricity to serve the retail native load, or wholesale native load, of such governmental unit or of one or more governmental units owning distribution facilities which are directly connected to such transmission facility.

''(4) START-UP ELECTRIC UTILITY DISTRIBUTION FACILITY DEFINED.—For purposes of this subsection, the term 'start-up electric utility distribution facility' means any distribution facility to provide electric service for sale to the public if such facility is placed in service—

''(A) by a governmental unit that did not operate an electric utility on the date of the enactment of this section, and

''(B) during the first 10 years after the date such governmental unit begins operating an electric utility.

A governmental unit is treated as having operated an electric utility on the date of the enactment of this section if it operates electric output facilities which were (on such date) operated by another governmental unit to provide electric service for sale to the public.

''(5) EXCEPTION FOR REFUNDING BONDS.—

''(A) IN GENERAL.—Paragraph (1) shall not apply to any eligible refunding bond.

''(B) ELIGIBLE REFUNDING BOND.—For purposes of subparagraph (A), the term 'eligible refunding bond' means any bond (or series of bonds) issued to refund any bond issued before the date of the enactment of this section if the average maturity date of the issue of which the refunding bond is a part is not later than the average maturity date of the bonds to be refunded by such issue.

''(c) DEFINITIONS; SPECIAL RULES.—For purposes of this section—

''(1) BASE YEAR.—The term 'base year' means—

''(A) the calendar year preceding the start-up year, or

''(B) at the election of the governmental unit, the second or third calendar years preceding the start-up year.

''(2) DISTRIBUTION AREA.—The term 'distribution area' means the area in which a governmental unit owns distribution facilities.

''(3) ELECTRIC OUTPUT FACILITY.—The term 'electric output facility' means an output facility that is an electric generation, transmission, or distribution facility.

''(4) DISTRIBUTION FACILITY.—The term 'distribution facility' means an electric output facility that is not a generation or transmission facility.

''(5) TRANSMISSION FACILITY.—The term 'transmission facility' means an electric output facility (other than a generation facility) that operates at an electric voltage of 69 kV or greater. To the extent provided in regulations, such term includes any output facility that FERC determines is a transmission facility under standards applied by FERC under the Federal Power Act (as in effect on the date of the enactment of this section).

''(6) EXISTING GENERATION FACILITY.—

''(A) IN GENERAL.—The term 'existing generation facility' means any electric generation facility if—

''(i) such facility is originally placed in service on or before the date of enactment of this Act and is owned by any governmental unit on such date, or

''(ii) such facility is originally placed in service after such date if the construction of the facility commenced before June 1, 2000, and such facility is owned by any governmental unit when it is placed in service.

''(B) DENIAL OF TREATMENT TO EXPANSIONS.—Such term shall not include any facility to the extent the generating capacity of such facility as of any date is 3 percent above the greater of its nameplate or rated capacity as of the date of the enactment of this section (or, in the case of a facility described in subparagraph (A)(ii), the date that the facility is placed in service).

''(7) REGIONAL TRANSMISSION ORGANIZATION.—The term 'regional transmission organization' includes an independent system operator.

''(8) FERC.—The term 'FERC' means the Federal Energy Regulatory Commission.

''(9) GOVERNMENT-OWNED FACILITY.—An electric transmission facility shall be treated as owned by a governmental unit as of any date to the extent that—

''(A) such unit acquired (before the base year) long-term firm transmission capacity (as determined under regulations) of such facility for the purposes of serving customers to which such unit had at the close of the base year—

''(i) a statutory service obligation, or

''(ii) an obligation under a requirements contract, and

''(B) such unit holds such capacity as of such date.

''(10) STATUTORY SERVICE OBLIGATION.—The term 'statutory service obligation' means an obligation under State or Federal law (exclusive of an obligation arising solely under a contract entered into with a person) to provide electric distribution services or electric sales services, as provided in such law.

''(11) CONTRACT MODIFICATIONS.—A material modification of a contract shall be treated as a new contract.

''(d) ELECTION TO TERMINATE TAX-EXEMPT BOND FINANCING FOR CERTAIN ELECTRIC OUTPUT FACILITIES.—

''(1) IN GENERAL.—At the election of a governmental unit, section 103(a) shall not apply to any bond issued by or on behalf of such unit after the date of such election if any portion of the proceeds of the issue of which such bond is a part are used to provide any electric output facilities. Such an election, once made, shall be irrevocable.

''(2) OTHER EFFECTS OF ELECTION.—During the period that the election under paragraph (1) is in effect with respect to a governmental unit, the term 'private activity bond' shall not include—

''(A) any bond issued by such unit before the date of the enactment of this section to provide an electric output facility if, as of the date of the election, such bond was not a private activity bond, and

''(B) any bond to which paragraph (1) does not apply by reason of paragraph (3).

''(3) EXCEPTIONS FOR CERTAIN PROPERTY.—

''(A) IN GENERAL.—Paragraph (1) shall not apply to any bond issued to provide property owned by a governmental unit if such property is—

''(i) any qualifying transmission facility,

''(ii) any qualifying distribution facility,

''(iii) any facility necessary to meet Federal or State environmental requirements applicable to an existing generation facility owned by the governmental unit as of the date of the election,

''(iv) any property to repair any existing generation facility owned by the governmental unit as of the date of the election,

''(v) any qualified facility (as defined in section 45(c)(3)) producing electricity from any qualified energy resource (as defined in section 45(c)(1)), and

''(vi) any energy property (as defined in section 48(a)(3)) placed in service during a period that the energy percentage under section 48(a) is greater than zero.

''(B) LIMITATION ON USE BY NONGOVERNMENTAL PERSONS.—Subparagraph (A) shall not apply to any property constructed, acquired or financed for a principal purpose of providing the facility (or the output thereof) to nongovernmental persons.

''(4) DEFINITIONS.—For purposes of this subsection—

''(A) QUALIFYING DISTRIBUTION FACILITY.—The term 'qualifying distribution facility' means a distribution facility meeting the open access requirements of subsection (a)(2)(A)(ii).

''(B) QUALIFYING TRANSMISSION FACILITY.—The term 'qualifying transmission facility' means a local transmission facility (as defined in subsection (b)(3)) meeting the open access requirements of subsection (a)(2)(A)(i).

''(5) EFFECT OF ELECTION.—

''(A) IN GENERAL.—An election under paragraph (1) shall be binding on any successor in interest to, or any related party with respect to, the electing governmental unit. For purposes of this paragraph, a governmental unit shall be treated as related to another governmental unit if it is a member of the same controlled group (as determined under regulations).

''(B) TREATMENT OF ELECTING GOVERNMENTAL UNIT.—A governmental unit which makes an election under paragraph (1) shall be treated for purposes of section 141 as a person—

''(i) which is not a governmental unit, and

''(ii) which is engaged in a trade or business,

with respect to its purchase of electricity generated by an electric output facility placed in service after the date of such election if such purchase is under a contract executed after such date.''

(b) WAIVER OF CERTAIN LIMITATIONS NOT TO APPLY TO DISTRIBUTION FACILITIES.—Section 141(d)(5) is amended by inserting ''(except in the case of an electric output facility that is a distribution facility)'' after ''this subsection''.

(c) CLERICAL AMENDMENT.—The table of sections for subpart A of part IV of subchapter B of chapter 1 is amended by inserting after the item relating to section 141 the following new item:

''Sec. 141A. Treatment of government-owned electric output facilities.''

(d) EFFECTIVE DATE.—

(1) IN GENERAL.—The amendments made by this section shall take effect on the date of the enactment of this Act, except that a governmental unit may elect to have section 141A(a)(1) of the Internal Revenue Code of 1986, as added by subsection (a), take effect on April 14, 1996.

(2) BINDING CONTRACTS.—The amendment made by subsection (b) (relating to waiver of certain limitations not to apply to distribution facilities) shall not apply to facilities acquired pursuant to a contract which was entered into before the date of the enactment of this Act and which was binding on such date and at all times thereafter before such acquisition.

(3) COMPARABLE TREATMENT TO BONDS UNDER 1954 CODE RULES.—References in the amendments made by this Act to sections of the Internal Revenue Code of 1986 shall be deemed to include references to comparable sections of the Internal Revenue Code of 1954.

SEC. 3208. SALES OR DISPOSITIONS TO IMPLEMENT FEDERAL ENERGY REGULATORY COMMISSION OR STATE ELECTRIC RESTRUCTURING POLICY.

(a) IN GENERAL.—Section 1033 (relating to involuntary conversions) is amended by redesignating subsection (k) as subsection (l) and by inserting after subsection (j) the following new subsection:

''(k) SALES OR DISPOSITIONS TO IMPLEMENT FEDERAL ENERGY REGULATORY COMMISSION OR STATE ELECTRIC RESTRUCTURING POLICY.—

''(1) IN GENERAL.—For purposes of this subtitle, if a taxpayer elects the application of this subsection to a qualifying electric transmission transaction—

''(A) such transaction shall be treated as an involuntary conversion to which this section applies, and

''(B) exempt utility property shall be treated as property which is similar or related in service or use to the property disposed of in such transaction.

''(2) EXTENSION OF REPLACEMENT PERIOD.—In the case of any involuntary conversion described in paragraph (1), subsection (a)(2)(B) shall be applied by substituting '4 years' for '2 years' in clause (i) thereof.

''(3) QUALIFYING ELECTRIC TRANSMISSION TRANSACTION.—For purposes of this subsection, the term 'qualifying electric transmission transaction' means any sale or other disposition before January 1, 2009, of—

''(A) property used in the trade or business of providing electric transmission services, or

''(B) any stock or partnership interest in a corporation or partnership, as the case may be, whose principal trade or business consists of providing electric transmission services,

but only if such sale or disposition is to an independent transmission company.

''(4) INDEPENDENT TRANSMISSION COMPANY.—For purposes of this subsection, the term 'independent transmission company' means—

''(A) a regional transmission organization approved by the Federal Energy Regulatory Commission,

''(B) a person—

''(i) who the Federal Energy Regulatory Commission determines in its authorization of the transaction under section 203 of the Federal Power Act (16 U.S.C. 823b) is not a market participant within the meaning of such Commission's rules applicable to regional transmission organizations, and

''(ii) whose transmission facilities to which the election under this subsection applies are under the operational control of a Federal Energy Regulatory Commission-approved regional transmission organization before the close of the period specified in such authorization, but not later than the close of the period applicable under subsection (a)(2)(B) as extended under paragraph (2), or

''(C) in the case of facilities subject to the exclusive jurisdiction of the Public Utility Commission of Texas, a person which is approved by that Commission as consistent with Texas State law regarding an independent transmission organization.

''(5) EXEMPT UTILITY PROPERTY.—For purposes of this subsection—

''(A) IN GENERAL.—The term 'exempt utility property' means property used in the trade or business of—

''(i) generating, transmitting, distributing, or selling electricity, or

''(ii) producing, transmitting, distributing, or selling natural gas.

''(B) NONRECOGNITION OF GAIN BY REASON OF ACQUISITION OF STOCK.—Acquisition of control of a corporation shall be taken into account under this section with respect to a qualifying electric transmission transaction only if the principal trade or business of such corporation is a trade or business referred to in subparagraph (A).

''(6) SPECIAL RULE FOR CONSOLIDATED GROUPS.—In the case of a corporation which is a member of an affiliated group filing a consolidated return, such corporation shall be treated as satisfying the purchase requirement of subsection (a)(2) with respect to any qualifying electric transmission transaction engaged in by such corporation to the extent such requirement is satisfied by another member of such group.

''(7) ELECTION.—An election under paragraph (1), once made, shall be irrevocable.''

(b) EXCEPTION FROM GAIN RECOGNITION UNDER SECTION 1245.—Subsection (b) of section 1245 is amended by adding at the end the following new paragraph:

''(9) DISPOSITIONS TO IMPLEMENT FEDERAL ENERGY REGULATORY COMMISSION OR STATE ELECTRIC RESTRUCTURING POLICY.—At the election of the taxpayer, the amount of gain which would (but for this paragraph) be recognized under this section on any qualified electric transmission transaction (as defined in section 1033(k)) for which an election under section 1033 is made shall be reduced by the aggregate reduction in the basis of section 1245 property held by the taxpayer or, if insufficient, by a member of an affiliated group which includes the taxpayer at any time during the taxable year in which such transaction occurred. The manner and amount of such reduction shall be determined under regulations prescribed by the Secretary.''

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to transactions occurring after the date of the enactment of this Act.

SEC. 3209. DISTRIBUTIONS OF STOCK TO IMPLEMENT FEDERAL ENERGY REGULATORY COMMISSION OR STATE ELECTRIC RESTRUCTURING POLICY.

(a) IN GENERAL.—Subparagraph (A) of section 355(e)(3) (relating to special rules relating to acquisitions) is amended by inserting after clause (iv) the following new clause:

''(v) The acquisition of stock in any controlled corporation in a qualifying electric transmission transaction (as defined in section 1033(k)).''.

(b) EFFECTIVE DATE.—The amendment made by subsection (a) shall apply to distributions after the date of the enactment of this Act.

SEC. 3210. MODIFICATIONS TO SPECIAL RULES FOR NUCLEAR DECOMMISSIONING COSTS.

(a) REPEAL OF LIMITATION ON DEPOSITS INTO FUND BASED ON COST OF SERVICE; CONTRIBUTIONS AFTER FUNDING PERIOD.—Subsection (b) of section 468A is amended to read as follows:

''(b) LIMITATION ON AMOUNTS PAID INTO FUND.—

''(1) IN GENERAL.—The amount which a taxpayer may pay into the Fund for any taxable year shall not exceed the ruling amount applicable to such taxable year.

''(2) CONTRIBUTIONS AFTER FUNDING PERIOD.—Notwithstanding any other provision of this section, a taxpayer may pay into the Fund in any taxable year after the last taxable year to which the ruling amount applies. Payments may not be made under the preceding sentence to the extent such payments would cause the assets of the Fund to exceed the nuclear decommissioning costs allocable to the taxpayer's current or former interest in the nuclear powerplant to which the Fund relates. The limitation under the preceding sentence shall be determined by taking into account a reasonable rate of inflation for the nuclear decommissioning costs and a reasonable after-tax rate of return on the assets of the Fund until such assets are anticipated to be expended.''.

(b) CLARIFICATION OF TREATMENT OF FUND TRANSFERS.—Subsection (e) of section 468A is amended by adding at the end the following new paragraph:

''(8) TREATMENT OF FUND TRANSFERS.—If, in connection with the transfer of the taxpayer's interest in a nuclear powerplant, the taxpayer transfers the Fund with respect to such powerplant to the transferee of such interest and the transferee elects to continue the application of this section to such Fund—

''(A) the transfer of such Fund shall not cause such Fund to be disqualified from the application of this section, and

''(B) no amount shall be treated as distributed from such Fund, or be includible in gross income, by reason of such transfer.''.

(c) TREATMENT OF CERTAIN DECOMMISSIONING COSTS.—

(1) IN GENERAL.—Section 468A is amended by redesignating subsections (f) and (g) as subsections (g) and (h), respectively, and by inserting after subsection (e) the following new subsection:

''(f) TRANSFERS INTO QUALIFIED FUNDS.—

''(1) IN GENERAL.—Notwithstanding subsection (b), any taxpayer maintaining a Fund to which this section applies with respect to a nuclear powerplant may transfer into such Fund up to an amount equal to the excess of the total nuclear decommissioning costs with respect to such nuclear powerplant over the portion of such costs taken into account in determining the ruling amount in effect immediately before the transfer.

''(2) DEDUCTION FOR AMOUNTS TRANSFERRED.—

''(A) IN GENERAL.—The deduction allowed by subsection (a) for any transfer permitted by this subsection shall be allowed ratably over the remaining estimated useful life (within the meaning of subsection (d)(2)(A)) of the nuclear powerplant beginning with the taxable year during which the transfer is made.

''(B) DENIAL OF DEDUCTION FOR PREVIOUSLY DEDUCTED AMOUNTS.—No deduction shall be allowed for any transfer under this subsection of an amount for which a deduction was previously allowed or a corresponding amount was not included in gross income. For purposes of the preceding sentence, a ratable portion of each transfer shall be treated as being from previously deducted or excluded amounts to the extent thereof.

''(C) TRANSFERS OF QUALIFIED FUNDS.—If—

''(i) any transfer permitted by this subsection is made to any Fund to which this section applies, and

''(ii) such Fund is transferred thereafter,

any deduction under this subsection for taxable years ending after the date that such Fund is transferred shall be allowed to the transferee and not to the transferor. The preceding sentence shall not apply if the transferor is an organization exempt from tax imposed by this chapter.

''(D) SPECIAL RULES.—

''(i) GAIN OR LOSS NOT RECOGNIZED.—No gain or loss shall be recognized on any transfer permitted by this subsection.

''(ii) TRANSFERS OF APPRECIATED PROPERTY.—If appreciated property is transferred in a transfer permitted by this subsection, the amount of the deduction shall be the adjusted basis of such property.

''(3) NEW RULING AMOUNT REQUIRED.—Paragraph (1) shall not apply to any transfer unless the taxpayer requests from the Secretary a new schedule of ruling amounts in connection with such transfer.

''(4) NO BASIS IN QUALIFIED FUNDS.—Notwithstanding any other provision of law, the taxpayer's basis in any Fund to which this section applies shall not be increased by reason of any transfer permitted by this subsection.''.

(2) NEW RULING AMOUNT TO TAKE INTO ACCOUNT TOTAL COSTS.—Subparagraph (A) of section 468A(d)(2) is amended to read as follows:

''(A) fund the total nuclear decommissioning costs with respect to such powerplant over the estimated useful life of such powerplant, and''.

(d) DEDUCTION FOR NUCLEAR DECOMMISSIONING COSTS WHEN PAID.—Paragraph (2) of section 468A(c) is amended to read as follows:

''(2) DEDUCTION OF NUCLEAR DECOMMISSIONING COSTS.—In addition to any deduction under subsection (a), nuclear decommissioning costs paid or incurred by the taxpayer during any taxable year shall constitute ordinary and necessary expenses in carrying on a trade or business under section 162.''.

(e) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years beginning after December 31, 2001.

SEC. 3211. TREATMENT OF CERTAIN INCOME OF COOPERATIVES.

(a) INCOME FROM OPEN ACCESS AND NUCLEAR DECOMMISSIONING TRANSACTIONS.—

(1) IN GENERAL.—Subparagraph (C) of section 501(c)(12) is amended by striking ''or'' at the end of clause (i), by striking the period at the end of clause (ii) and inserting a comma, and by adding at the end the following new clauses:

''(iii) from any open access transaction (other than income received or accrued directly or indirectly from a member), or

''(iv) from any nuclear decommissioning transaction.''

(2) DEFINITIONS.—Paragraph (12) of section 501(c) is amended by adding at the end the following new subparagraph:

''(E) For purposes of subparagraph (C)—

''(i) The term 'open access transaction' means any activity which would be a permitted open access activity (as defined in section 141A(a)(2)) if the cooperative were a governmental unit.

''(ii) The term 'nuclear decommissioning transaction' means—

''(I) any transfer into a trust, fund, or instrument established to pay any nuclear decommissioning costs if the transfer is in connection with the transfer of the cooperative's interest in a nuclear powerplant or nuclear powerplant unit,

''(II) any distribution from such a trust, fund, or instrument, or

''(III) any earnings from such a trust, fund, or instrument.''

(b) INCOME FROM LOAD LOSS TRANSACTIONS TREATED AS MEMBER INCOME.—Paragraph (12) of section 501(c) is amended by adding after subparagraph (E) the following new subparagraph:

''(F)(i) In the case of a mutual or cooperative electric company, income received or accrued from a load loss transaction shall be treated as an amount collected from members for the sole purpose of meeting losses and expenses.

''(ii) For purposes of clause (i), the term 'load loss transaction' means any sale (whether at wholesale or at retail) which would be a load loss sale under rules similar to the rules of section 141A(a)(3)(C).

''(iii) A company shall not fail to be treated as a mutual cooperative company for purposes of this paragraph by reason of the treatment under clause (i).

''(iv) A rule similar to the rule of this subparagraph shall apply to an organization to which section 1381 does not apply by reason of section 1381(a)(2)(C).''

(c) EXCEPTION FROM UNRELATED BUSINESS TAXABLE INCOME.—Subsection (b) of section 512 (relating to modifications) is amended by adding at the end the following new paragraph:

''(18) TREATMENT OF LOAD LOSS SALES OF MUTUAL OR COOPERATIVE ELECTRIC COMPANIES.—In the case of a mutual or cooperative electric company described in section 501(c)(12), there shall be excluded income which is treated as member income under subparagraph (F) thereof.''

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years beginning after the date of the enactment of this Act.

SEC. 3212. REPEAL OF REQUIREMENT OF CERTAIN APPROVED TERMINALS TO OFFER DYED DIESEL FUEL AND KEROSENE FOR NONTAXABLE PURPOSES.

Section 4101 (relating to certain approved terminals of registered persons required to offer dyed diesel fuel and kerosene for nontaxable purposes) is amended by striking subsection (e).

SEC. 3213. ARBITRAGE RULES NOT TO APPLY TO PREPAYMENTS FOR NATURAL GAS.

(a) IN GENERAL.—Subsection (b) of section 148 (defining higher yielding investments) is amended by adding at the end the following new paragraph:

''(4) EXCEPTION FOR CERTAIN PREPAYMENTS TO ENSURE NATURAL GAS SUPPLY.—The term 'investment property' shall not include any prepayment for the purpose of obtaining a supply of a natural gas—

''(A) at least 85 percent of which is to be used in the State in which the issuer is located, and

''(B) which is to be used in a business of one or more utilities each of which is owned and operated by a State or local government, any political subdivision or instrumentality thereof, or any governmental unit acting for or on behalf of such a utility.''.

(b) PRIVATE LOAN FINANCING TEST NOT TO APPLY TO PREPAYMENTS FOR NATURAL GAS.—Paragraph (2) of section 141(c) (providing exceptions to the private loan financing test) is amended by striking ''or'' at the end of subparagraph (A), by striking the period at the end of subparagraph (B) and inserting '', or'', and by adding at the end the following new subparagraph:

''(C) arises from a transaction described in section 148(b)(4).''.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to obligations issued after October 22, 1986; except that section 148(b)(4)(A) of the Internal Revenue Code of 1986, as added by this section, shall apply only to obligations issued after the date of the enactment of this Act.

TITLE III—PRODUCTION

SEC. 3301. OIL AND GAS FROM MARGINAL WELLS.

(a) IN GENERAL.—Subpart D of part IV of subchapter A of chapter 1 (relating to business credits) is amended by adding at the end the following:

''SEC. 45J. CREDIT FOR PRODUCING OIL AND GAS FROM MARGINAL WELLS.

''(a) GENERAL RULE.—For purposes of section 38, the marginal well production credit for any taxable year is an amount equal to the product of—

''(1) the credit amount, and

''(2) the qualified credit oil production and the qualified natural gas production which is attributable to the taxpayer.

''(b) CREDIT AMOUNT.—For purposes of this section—

''(1) IN GENERAL.—The credit amount is—

''(A) $3 per barrel of qualified crude oil production, and

''(B) 50 cents per 1,000 cubic feet of qualified natural gas production.

''(2) REDUCTION AS OIL AND GAS PRICES INCREASE.—

''(A) IN GENERAL.—The $3 and 50 cents amounts under paragraph (1) shall each be reduced (but not below zero) by an amount which bears the same ratio to such amount (determined without regard to this paragraph) as—

''(i) the excess (if any) of the applicable reference price over $15 ($1.67 for qualified natural gas production), bears to

''(ii) $3 ($0.33 for qualified natural gas production).

The applicable reference price for a taxable year is the reference price of the calendar year preceding the calendar year in which the taxable year begins.

''(B) INFLATION ADJUSTMENT.—In the case of any taxable year beginning in a calendar year after 2001, each of the dollar amounts contained in subparagraph (A) shall be increased to an amount equal to such dollar amount multiplied by the inflation adjustment factor for such calendar year (determined under section 43(b)(3)(B) by substituting '2000' for '1990').

''(C) REFERENCE PRICE.—For purposes of this paragraph, the term 'reference price' means, with respect to any calendar year—

''(i) in the case of qualified crude oil production, the reference price determined under section 29(d)(2)(C), and

''(ii) in the case of qualified natural gas production, the Secretary's estimate of the annual average wellhead price per 1,000 cubic feet for all domestic natural gas.

''(c) QUALIFIED CRUDE OIL AND NATURAL GAS PRODUCTION.—For purposes of this section—

''(1) IN GENERAL.—The terms 'qualified crude oil production' and 'qualified natural gas production' mean domestic crude oil or natural gas which is produced from a qualified marginal well.

''(2) LIMITATION ON AMOUNT OF PRODUCTION WHICH MAY QUALIFY.—

''(A) IN GENERAL.—Crude oil or natural gas produced during any taxable year from any well shall not be treated or qualified crude oil production or qualified natural gas production to the extent production from the well during the taxable year exceeds 1,095 barrels or barrel equivalents.

''(B) PROPORTIONATE REDUCTIONS.—

''(i) SHORT TAXABLE YEARS.—In the case of a short taxable year, the limitations under this paragraph shall be proportionately reduced to reflect the ratio which the number of days in such taxable year bears to 365.

''(ii) WELLS NOT IN PRODUCTION ENTIRE YEAR.—In the case of a well which is not capable of production during each day of a taxable year, the limitations under this paragraph applicable to the well shall be proportionately reduced to reflect the ratio which the number of days of production bears to the total number of days in the taxable year.

''(3) DEFINITIONS.—

''(A) QUALIFIED MARGINAL WELL.—The term 'qualified marginal well' means a domestic well—

''(i) the production from which during the taxable year is treated as marginal production under section 613A(c)(6), or

''(ii) which, during the taxable year—

''(I) has average daily production of not more than 25 barrel equivalents, and

''(II) produces water at a rate not less than 95 percent of total well effluent.

''(B) CRUDE OIL, ETC.—The terms 'crude oil', 'natural gas', 'domestic', and 'barrel' have the meanings given such terms by section 613A(e).

''(C) BARREL EQUIVALENT.—The term 'barrel equivalent' means, with respect to natural gas, a conversation ratio of 6,000 cubic feet of natural gas to 1 barrel of crude oil.

''(d) OTHER RULES.—

''(1) PRODUCTION ATTRIBUTABLE TO THE TAXPAYER.—In the case of a qualified marginal well in which there is more than one owner of operating interests in the well and the crude oil or natural gas production exceeds the limitation under subsection (c)(2), qualifying crude oil production or qualifying natural gas production attributable to the taxpayer shall be determined on the basis of the ratio which taxpayer's revenue interest in the production bears to the aggregate of the revenue interests of all operating interest owners in the production.

''(2) OPERATING INTEREST REQUIRED.—Any credit under this section may be claimed only on production which is attributable to the holder of an operating interest.

''(3) PRODUCTION FROM NONCONVENTIONAL SOURCES EXCLUDED.—In the case of production from a qualified marginal well which is eligible for the credit allowed under section 29 for the taxable year, no credit shall be allowable under this section unless the taxpayer elects not to claim the credit under section 29 with respect to the well.

''(4) NONCOMPLIANCE WITH POLLUTION LAWS.—For purposes of subsection (c)(3)(A), a marginal well which is not in compliance with the applicable State and Federal pollution prevention, control, and permit requirements for any period of time shall not be considered to be a qualified marginal well during such period.''.

(b) CREDIT TREATED AS BUSINESS CREDIT.—Section 38(b) is amended by striking ''plus'' at the end of paragraph (17), by striking the period at the end of paragraph (18) and inserting '', plus'', and by adding at the end the following:

''(19) the marginal oil and gas well production credit determined under section 45J(a).''.

(c) CARRYBACK.—Subsection (a) of section 39 (relating to carryback and carryforward of unused credits generally) is amended by adding at the end the following:

''(3) 10-YEAR CARRYBACK FOR MARGINAL OIL AND GAS WELL PRODUCTION CREDIT.—In the case of the marginal oil and gas well production credit—

''(A) this section shall be applied separately from the business credit (other than the marginal oil and gas well production credit),

''(B) paragraph (1) shall be applied by substituting '10 taxable years' for '1 taxable years' in subparagraph (A) thereof, and

''(C) paragraph (2) shall be applied—

''(i) by substituting '31 taxable years' for '21 taxable years' in subparagraph (A) thereof, and

''(ii) by substituting '30 taxable years' for '20 taxable years' in subparagraph (A) thereof.''.

(d) COORDINATION WITH SECTION 29.—Section 29(a) is amended by striking ''There'' and inserting ''At the election of the taxpayer, there''.

(e) CLERICAL AMENDMENT.—The table of sections for subpart D of part IV of subchapter A of chapter I is amended by adding at the end the following:

''Sec. 45J. Credit for producing oil and gas from marginal wells.''.

(f) EFFECTIVE DATE.—The amendments made by this section shall apply to production in taxable years beginning after December 31, 2001.

SEC. 3302. TEMPORARY SUSPENSION OF LIMITATION BASED ON 65 PERCENT OF TAXABLE INCOME AND EXTENSION OF SUSPENSION OF TAXABLE INCOME LIMIT WITH RESPECT TO MARGINAL PRODUCTION.

(a) LIMITATION BASED ON 65 PERCENT OF TAXABLE INCOME.—Subsection (d) of section 613A (relating to limitation on percentage depletion in case of oil and gas wells) is amended by adding at the end the following new paragraph:

''(6) TEMPORARY SUSPENSION OF TAXABLE INCOME LIMIT.—Paragraph (1) shall not apply to taxable years beginning after December 31, 2001, and before January 1, 2007, including with respect to amounts carried under the second sentence of paragraph (1) to such taxable years.''.

(b) EXTENSION OF SUSPENSION OF TAXABLE INCOME LIMIT WITH RESPECT TO MARGINAL PRODUCTION.—Subparagraph (H) of section 613A(c)(6) (relating to temporary suspension of taxable income limit with respect to marginal production) is amended by striking ''2002'' and inserting ''2007''.

(c) EFFECTIVE DATE.—The amendment made by subsection (a) shall apply to taxable years beginning after December 31, 2001.

SEC. 3303. DEDUCTION FOR DELAY RENTAL PAYMENTS.

(a) IN GENERAL.—Section 263 (relating to capital expenditures) is amended by adding after subsection (i) the following:

''(j) DELAY RENTAL PAYMENTS FOR DOMESTIC OIL AND GAS WELLS.—

''(1) IN GENERAL.—Notwithstanding subsection (a), a taxpayer may elect to treat delay rental payments incurred in connection with the development of oil or gas within the United States (as defined in section 638) as payments which are not chargeable to capital account. Any payments so treated shall be allowed as a deduction in the taxable year in which paid or incurred.

''(2) DELAY RENTAL PAYMENTS.—For purposes of paragraph (1), the term 'delay rental payment' means an amount paid for the privilege of deferring development of an oil or gas well under an oil or gas lease.''.

(b) CONFORMING AMENDMENT.—Section 263A(c)(3) is amended by inserting ''263(j),'' after '263(i),'.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to amounts paid or incurred in taxable years beginning after December 31, 2001.

SEC. 3304. ELECTION TO EXPENSE GEOLOGICAL AND GEOPHYSICAL EXPENDITURES.

(a) IN GENERAL.—Section 263 (relating to capital expenditures) is amended by adding after subsection (j) the following:

''(k) GEOLOGICAL AND GEOPHYSICAL EXPENDITURES FOR DOMESTIC OIL AND GAS WELLS.—Notwithstanding subsection (a), a taxpayer may elect to treat geological and geophysical expenses incurred in connection with the exploration for, or development of, oil or gas within the United States (as defined in section 638) as expenses which are not chargeable to capital account. Any expenses so treated shall be allowed as a deduction in the taxable year in which paid or incurred.''.

(b) CONFORMING AMENDMENT.—Section 263A(c)(3), as amended by section 3303(b), is amended by inserting ''263(k),'' after ''263(j),''.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to costs paid or incurred in taxable years beginning after December 31, 2001.

SEC. 3305. 5-YEAR NET OPERATING LOSS CARRYBACK FOR LOSSES ATTRIBUTABLE TO OPERATING MINERAL INTERESTS OF OIL AND GAS PRODUCERS.

(a) IN GENERAL.—Paragraph (1) of section 172(b) (relating to years to which loss may be carried) is amended by adding at the end the following new subparagraph:

''(H) LOSSES ON OPERATING MINERAL INTERESTS OF OIL AND GAS PRODUCERS.—In the case of a taxpayer which has an eligible oil and gas loss (as defined in subsection (j)) for a taxable year, such eligible oil and gas loss shall be a net operating loss carryback to each of the 5 taxable years preceding the taxable year of such loss.''.

(b) ELIGIBLE OIL AND GAS LOSS.—Section 172 is amended by redesignating subsection (j) as subsection (k) and by inserting after subsection (i) the following new subsection:

''(j) ELIGIBLE OIL AND GAS LOSS.—For purposes of this section—

''(1) IN GENERAL.—The term 'eligible oil and gas loss' means the lesser of—

''(A) the amount which would be the net operating loss for the taxable year if only income and deductions attributable to operating mineral interests (as defined in section 614(d)) in oil and gas wells are taken into account, or

''(B) the amount of the net operating loss for such taxable year.

''(2) COORDINATION WITH SUBSECTION (b)(2).—For purposes of applying subsection (b)(2), an eligible oil and gas loss for any taxable year shall be treated in a manner similar to the manner in which a specified liability loss is treated.

''(3) ELECTION.—Any taxpayer entitled to a 5-year carryback under subsection (b)(1)(H) from any loss year may elect to have the carryback period with respect to such loss year determined without regard to subsection (b)(1)(H).''.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to net operating losses for taxable years beginning after December 31, 2001.

SEC. 3306. EXTENSION AND MODIFICATION OF CREDIT FOR PRODUCING FUEL FROM A NONCONVENTIONAL SOURCE.

(a) IN GENERAL.—Section 29 is amended by adding at the end the following new subsection:

''(h) EXTENSION FOR OTHER FACILITIES.—

''(1) EXTENSION FOR OIL AND CERTAIN GAS.—In the case of a well for producing qualified fuels described in subparagraph (A) or (B)(i) of subsection (c)(1)—

''(A) APPLICATION OF CREDIT FOR NEW WELLS.—Notwithstanding subsection (f), this section shall apply with respect to such fuels—

''(i) which are produced from a well drilled after the date of the enactment of this subsection and before January 1, 2007, and

''(ii) which are sold not later than the close of the 4-year period beginning on the date that such well is drilled, or, if earlier, January 1, 2010.

''(B) EXTENSION OF CREDIT FOR OLD WELLS.—Subsection (f)(2) shall be applied by substituting '2007' for '2003' with respect to wells described in subsection (f)(1)(A) with respect to such fuels.

''(2) EXTENSION FOR FACILITIES PRODUCING QUALIFIED FUEL FROM LANDFILL GAS.—

''(A) IN GENERAL.—In the case of a facility for producing qualified fuel from landfill gas which was placed in service after June 30, 1998, and before January 1, 2007, this section shall apply to fuel produced at such facility during the 5-year period beginning on the later of—

''(i) the date such facility was placed in service, or

''(ii) the date of the enactment of this subsection.

''(B) REDUCTION OF CREDIT FOR CERTAIN LANDFILL FACILITIES.—In the case of a facility to which paragraph (1) applies and which is subject to the 1996 New Source Performance Standards/Emmissions Guidelines of the Environmental Protection Agency, subsection (a)(1) shall be applied by substituting '$2' for '$3'.

''(3) SPECIAL RULES.—In determining the amount of credit allowable under this section solely by reason of this subsection—

''(A) DAILY LIMIT.—The amount of qualified fuels sold during any taxable year which may be taken into account by reason of this subsection with respect to any project shall not exceed an average barrel-of-oil equivalent of 200,000 cubic feet of natural gas per day. Days before the date the project is placed in service shall not be taken into account in determining such average.

''(B) EXTENSION PERIOD TO COMMENCE WITH UNADJUSTED CREDIT AMOUNT.—In the case of fuels sold during 2001 and 2002, the dollar amount applicable under subsection (a)(1) shall be $3 (without regard to subsection (b)(2)). In the case of fuels sold after 2002, subparagraph (B) of subsection (d)(2) shall be applied by substituting '2002' for '1979'.''.

(b) EFFECTIVE DATE.—The amendment made by this section shall apply to fuel sold after the date of the enactment of this Act.

SEC. 3307. BUSINESS RELATED ENERGY CREDITS ALLOWED AGAINST REGULAR AND MINIMUM TAX.

(a) IN GENERAL.—Subsection (c) of section 38 (relating to limitation based on amount of tax) is amended by redesignating paragraph (3) as paragraph (4) and by inserting after paragraph (2) the following new paragraph:

''(3) SPECIAL RULES FOR SPECIFIED ENERGY CREDITS.—

''(A) IN GENERAL.—In the case of specified energy credits—

''(i) this section and section 39 shall be applied separately with respect to such credits, and

''(ii) in applying paragraph (1) to such credits—

''(I) the tentative minimum tax shall be treated as being zero, and

''(II) the limitation under paragraph (1) (as modified by subclause (I)) shall be reduced by the credit allowed under subsection (a) for the taxable year (other than the specified energy credits).

''(B) SPECIFIED ENERGY CREDITS.—For purposes of this subsection, the term 'specified energy credits' means the credits determined under sections 45G, 45H, 45I, 45J, and 45K.''.

(b) CONFORMING AMENDMENT.—Subclause (II) of section 38(c)(2)(A)(ii) is amended by inserting ''or the specified energy credits'' after ''employment credit''.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years ending after the date of enactment of this Act.

SEC. 3308. TEMPORARY REPEAL OF ALTERNATIVE MINIMUM TAX PREFERENCE FOR INTANGIBLE DRILLING COSTS.

(a) IN GENERAL.—Clause (ii) of section 57(a)(2)(E) is amended by adding at the end the following new sentence: ''The preceding sentence shall not apply to taxable years beginning after December 31, 2001, and before January 1, 2005.''.

(b) EFFECTIVE DATES.—The amendment made by this section shall apply to taxable years beginning after December 31, 2001.

SEC. 3309. ALLOWANCE OF ENHANCED RECOVERY CREDIT AGAINST THE ALTERNATIVE MINIMUM TAX.

(a) IN GENERAL.—Subparagraph (B) of section 38(c)(3), as amended by section 3307, is amended by adding at the end the following new sentence: ''For taxable years beginning before January 1, 2005, such term includes the credit determined under section 43.''

(b) EFFECTIVE DATE.—The amendment made by this section shall apply to taxable years beginning after December 31, 2001.

SEC. 3310. EXTENSION OF CERTAIN BENEFITS FOR ENERGY-RELATED BUSINESSES ON INDIAN RESERVATIONS.

(a) DEPRECIATION FOR PROPERTY ON INDIAN RESERVATIONS.—Paragraph (8) of section 168(j) (relating to termination) is amended by adding at the end the following new sentence: ''The preceding sentence shall be applied by substituting 'December 31, 2006' for 'December 31, 2003' in the case of property placed in service as part of a facility for—

''(A) the generation or transmission of electricity (including from any qualified energy resource, as defined in section 45(c)),

''(B) an oil or gas well,

''(C) the transmission or refining of oil or gas, or

''(D) the production of any qualified fuel (as defined in section 29(c)).''

(b) EMPLOYMENT OF INDIANS.—Subsection (f) of section 45A (relating to termination) is amended by adding at the end the following new sentence: ''The preceding sentence shall be applied by substituting 'December 31, 2006' for 'December 31, 2003' in the case of wages paid for services performed at a facility described in section 168(j)(8).''

DIVISION D

SEC. 4101. CAPACITY BUILDING FOR ENERGY-EFFICIENT, AFFORDABLE HOUSING.

Section 4(b) of the HUD Demonstration Act of 1993 (42 U.S.C. 9816 note) is amended—

(1) in paragraph (1), by inserting before the semicolon at the end the following: '', including capabilities regarding the provision of energy efficient, affordable housing and residential energy conservation measures''; and

(2) in paragraph (2), by inserting before the semicolon the following: '', including such activities relating to the provision of energy efficient, affordable housing and residential energy conservation measures that benefit low-income families''.

SEC. 4102. INCREASE OF CDBG PUBLIC SERVICES CAP FOR ENERGY CONSERVATION AND EFFICIENCY ACTIVITIES.

Section 105(a)(8) of the Housing and Community Development Act of 1974 (42 U.S.C. 5305(a)(8)) is amended—

(1) by inserting ''or efficiency'' after ''energy conservation'';

(2) by striking '', and except that'' and inserting ''; except that''; and

(3) by inserting before the period at the end the following: ''; and except that each percentage limitation under this paragraph on the amount of assistance provided under this title that may be used for the provision of public services is hereby increased by 10 percent, but such percentage increase may be used only for the provision of public services concerning energy conservation or efficiency''.

SEC. 4103. FHA MORTGAGE INSURANCE INCENTIVES FOR ENERGY EFFICIENT HOUSING.

(a) SINGLE FAMILY HOUSING MORTGAGE INSURANCE.—Section 203(b)(2) of the National Housing Act (12 U.S.C. 1709(b)(2)) is amended, in the first undesignated paragraph beginning after subparagraph (B)(iii) (relating to solar energy systems)—

(1) by inserting ''or paragraph (10)''; and

(2) by striking ''20 percent'' and inserting ''30 percent''.

(b) MULTIFAMILY HOUSING MORTGAGE INSURANCE.—Section 207(c) of the National Housing Act (12 U.S.C. 1713(c)) is amended, in the second undesignated paragraph beginning after paragraph (3) (relating to solar energy systems and residential energy conservation measures), by striking ''20 percent'' and inserting ''30 percent''.

(c) COOPERATIVE HOUSING MORTGAGE INSURANCE.—Section 213(p) of the National Housing Act (12 U.S.C. 1715e(p)) is amended by striking ''20 per centum'' and inserting ''30 percent''.

(d) REHABILITATION AND NEIGHBORHOOD CONSERVATION HOUSING MORTGAGE INSURANCE.—Section 220(d)(3)(B)(iii) of the National Housing Act (12 U.S.C. 1715k(d)(3)(B)(iii)) is amended by striking ''20 per centum'' and inserting ''30 percent''.

(e) LOW-INCOME MULTIFAMILY HOUSING MORTGAGE INSURANCE.—Section 221(k) of the National Housing Act (12 U.S.C. 1715l(k)) is amended by striking ''20 per centum'' and inserting ''30 percent''.

(f) ELDERLY HOUSING MORTGAGE INSURANCE.—The proviso at the end of section 213(c)(2) of the National Housing Act (12 U.S.C. 1715v(c)(2)) is amended by striking ''20 per centum'' and inserting ''30 percent''.

(g) CONDOMINIUM HOUSING MORTGAGE INSURANCE.—Section 234(j) of the National Housing Act (12 U.S.C. 1715y(j)) is amended by striking ''20 per centum'' and inserting ''30 percent''.

SEC. 4104. PUBLIC HOUSING CAPITAL FUND.

Section 9(d)(1) of the United States Housing Act of 1937 (42 U.S.C. 1437g(d)(1)) is amended—

(1) in subparagraph (I), by striking ''and'' at the end;

(2) in subparagraph (K), by striking the period at the end and inserting ''; and''; and

(3) by adding at the end the following new subparagraph:

''(L) improvement of energy and water-use efficiency by installing fixtures and fittings that conform to the American Society of Mechanical Engineers/American National Standards Institute standards A112.19.2-1998 and A112.18.1-2000, or any revision thereto, applicable at the time of installation, and by increasing energy efficiency and water conservation by such other means as the Secretary determines are appropriate.''.

SEC. 4105. GRANTS FOR ENERGY-CONSERVING IMPROVEMENTS FOR ASSISTED HOUSING.

Section 251(b)(1) of the National Energy Conservation Policy Act (42 U.S.C. 8231(1)) is amended—

(1) by striking ''financed with loans'' and inserting ''assisted'';

(2) by inserting after ''1959,'' the following: ''which are eligible multifamily housing projects (as such term is defined in section 512 of the Multifamily Assisted Housing Reform and Affordability Act of 1997 (42 U.S.C. 1437f note)) and are subject to a mortgage restructuring and rental assistance sufficiency plans under such Act,''; and

(3) by inserting after the period at the end of the first sentence the following new sentence: ''Such improvements may also include the installation of energy and water conserving fixtures and fittings that conform to the American Society of Mechanical Engineers/American National Standards Institute standards A112.19.2-1998 and A112.18.1-2000, or any revision thereto, applicable at the time of installation.''.

SEC. 4106. NORTH AMERICAN DEVELOPMENT BANK.

Part 2 of subtitle D of title V of the North American Free Trade Agreement Implementation Act (22 U.S.C. 290m–290m-3) is amended by adding at the end the following:

''SEC. 545. SUPPORT FOR CERTAIN ENERGY POLICIES.

''Consistent with the focus of the Bank's Charter on environmental infrastructure projects, the Board members representing the United States should use their voice and vote to encourage the Bank to finance projects related to clean and efficient energy, including energy conservation, that prevent, control, or reduce environmental pollutants or contaminants.''.

DIVISION E

SEC. 5000. SHORT TITLE.

This division may be cited as the ''Clean Coal Power Initiative Act of 2001''.

SEC. 5001. FINDINGS.

Congress finds that—

(1) reliable, affordable, increasingly clean electricity will continue to power the growing United States economy;

(2) an increasing use of electrotechnologies, the desire for continuous environmental improvement, a more competitive electricity market, and concerns about rising energy prices add importance to the need for reliable, affordable, increasingly clean electricity;

(3) coal, which, as of the date of enactment of this Act, accounts for more than ½ of all electricity generated in the United States, is the most abundant fossil energy resource of the United States;

(4) coal comprises more than 85 percent of all fossil resources in the United States and exists in quantities sufficient to supply the United States for 250 years at current usage rates;

(5) investments in electricity generating facility emissions control technology over the past 30 years have reduced the aggregate emissions of pollutants from coal-based generating facilities by 21 percent, even as coal use for electricity generation has nearly tripled;

(6) continuous improvement in efficiency and environmental performance from electricity generating facilities would allow continued use of coal and preserve less abundant energy resources for other energy uses;

(7) new ways to convert coal into electricity can effectively eliminate health-threatening emissions and improve efficiency by as much as 50 percent, but initial deployment of new coal generation methods and equipment entails significant risk that generators may be unable to accept in a newly competitive electricity market; and

(8) continued environmental improvement in coal-based generation and increasing the production and supply of power generation facilities with less air emissions, with the ultimate goal of near-zero emissions, is important and desirable.

SEC. 5002. DEFINITIONS.

In this division:

(1) COST AND PERFORMANCE GOALS.—The term ''cost and performance goals'' means the cost and performance goals established under section 5004.

(2) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

SEC. 5003. CLEAN COAL POWER INITIATIVE.

(a) IN GENERAL.—The Secretary shall carry out a program under—

(1) this division;

(2) the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5901 et seq.);

(3) the Energy Reorganization Act of 1974 (42 U.S.C. 5801 et seq.); and

(4) title XIII of the Energy Policy Act of 1992 (42 U.S.C. 13331 et seq.),

to achieve cost and performance goals established by the Secretary under section 5004.

SEC. 5004. COST AND PERFORMANCE GOALS.

(a) REVIEW AND ASSESSMENT.—The Secretary shall perform an assessment that establishes measurable cost and performance goals for 2005, 2010, 2015, and 2020 for the programs authorized by this division. Such assessment shall be based on the latest scientific, economic, and technical knowledge.

(b) CONSULTATION.—In establishing the cost and performance goals, the Secretary shall consult with representatives of—

(1) the United States coal industry;

(2) State coal development agencies;

(3) the electric utility industry;

(4) railroads and other transportation industries;

(5) manufacturers of advanced coal-based equipment;

(6) institutions of higher learning, national laboratories, and professional and technical societies;

(7) organizations representing workers;

(8) organizations formed to—

(A) promote the use of coal;

(B) further the goals of environmental protection; and

(C) promote the production and generation of coal-based power from advanced facilities; and

(9) other appropriate Federal and State agencies.

(c) TIMING.—The Secretary shall—

(1) not later than 120 days after the date of enactment of this Act, issue a set of draft cost and performance goals for public comment; and

(2) not later than 180 days after the date of enactment of this Act, after taking into consideration any public comments received, submit to the Committee on Energy and Commerce and the Committee on Science of the House of Representatives, and to the Senate, the final cost and performance goals.

SEC. 5005. AUTHORIZATION OF APPROPRIATIONS.

(a) CLEAN COAL POWER INITIATIVE.—Except as provided in subsection (c), there are authorized to be appropriated to the Secretary to carry out the Clean Coal Power Initiative under section 5003 $200,000,000 for each of the fiscal years 2002 through 2011, to remain available until expended.

(b) LIMIT ON USE OF FUNDS.—Notwithstanding subsection (a), no funds may be used to carry out the activities authorized by this Act after September 30, 2002, unless the Secretary has transmitted to the Committee on Energy and Commerce and the Committee on Science of the House of Representatives, and to the Senate, the report required by this subsection and 1 month has elapsed since that transmission. The report shall include, with respect to subsection (a), a 10-year plan containing—

(1) a detailed assessment of whether the aggregate funding levels provided under subsection (a) are the appropriate funding levels for that program;

(2) a detailed description of how proposals will be solicited and evaluated, including a list of all activities expected to be undertaken;

(3) a detailed list of technical milestones for each coal and related technology that will be pursued;

(4) recommendations for a mechanism for recoupment of Federal funding for successful commercial projects; and

(5) a detailed description of how the program will avoid problems enumerated in General Accounting Office reports on the Clean Coal Technology Program, including problems that have resulted in unspent funds and projects that failed either financially or scientifically.

(c) APPLICABILITY.—Subsection (b) shall not apply to any project begun before September 30, 2002.

SEC. 5006. PROJECT CRITERIA.

(a) IN GENERAL.—The Secretary shall not provide funding under this division for any project that does not advance efficiency, environmental performance, and cost competitiveness well beyond the level of technologies that are in operation or have been demonstrated as of the date of the enactment of this Act.

(b) TECHNICAL CRITERIA FOR CLEAN COAL POWER INITIATIVE.—

(1) GASIFICATION.—(A) In allocating the funds authorized under section 5005(a), the Secretary shall ensure that at least 80 percent of the funds are used only for projects on coal-based gasification technologies, including gasification combined cycle, gasification fuel cells, gasification coproduction and hybrid gasification/combustion.

(B) The Secretary shall set technical milestones specifying emissions levels that coal gasification projects must be designed to and reasonably expected to achieve. The milestones shall get more restrictive through the life of the program. The milestones shall be designed to achieve by 2020 coal gasification projects able—

(i) to remove 99 percent of sulfur dioxide;

(ii) to emit no more than .05 lbs of NOx per million BTU;

(iii) to achieve substantial reductions in mercury emissions; and

(iv) to achieve a thermal efficiency of 60 percent (higher heating value).

(2) OTHER PROJECTS.—For projects not described in paragraph (1), the Secretary shall set technical milestones specifying emissions levels that the projects must be designed to and reasonably expected to achieve. The milestones shall get more restrictive through the life of the program. The milestones shall be designed to achieve by 2010 projects able—

(A) to remove 97 percent of sulfur dioxide;

(B) to emit no more than .08 lbs of NOx per million BTU;

(C) to achieve substantial reductions in mercury emissions; and

(D) to achieve a thermal efficiency of 45 percent (higher heating value).

(c) FINANCIAL CRITERIA.—The Secretary shall not provide a funding award under this division unless the recipient has documented to the satisfaction of the Secretary that—

(1) the award recipient is financially viable without the receipt of additional Federal funding;

(2) the recipient will provide sufficient information to the Secretary for the Secretary to ensure that the award funds are spent efficiently and effectively; and

(3) a market exists for the technology being demonstrated or applied, as evidenced by statements of interest in writing from potential purchasers of the technology.

(d) FEDERAL SHARE.—The Federal share of the cost of a coal or related technology project funded by the Secretary shall not exceed 50 percent.

(e) APPLICABILITY.—Neither the use of any particular technology, nor the achievement of any emission reduction, by any facility receiving assistance under this title shall be taken into account for purposes of making any determination under the Clean Air Act in applying the provisions of that Act to a facility not receiving assistance under this title, including any determination concerning new source performance standards, lowest achievable emission rate, best available control technology, or any other standard, requirement, or limitation.

SEC. 5007. STUDY.

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, and once every 2 years thereafter through 2016, the Secretary, in cooperation with other appropriate Federal agencies, shall transmit to the Committee on Energy and Commerce and the Committee on Science of the House of Representatives, and to the Senate, a report containing the results of a study to—

(1) identify efforts (and the costs and periods of time associated with those efforts) that, by themselves or in combination with other efforts, may be capable of achieving the cost and performance goals;

(2) develop recommendations for the Department of Energy to promote the efforts identified under paragraph (1); and

(3) develop recommendations for additional authorities required to achieve the cost and performance goals.

(b) EXPERT ADVICE.—In carrying out this section, the Secretary shall give due weight to the expert advice of representatives of the entities described in section 5004(b).

DIVISION F

SEC. 6001. SHORT TITLE.

This division may be cited as the ''Energy Security Act''.

TITLE I—GENERAL PROTECTIONS FOR ENERGY SUPPLY AND SECURITY

SEC. 6101. STUDY OF EXISTING RIGHTS-OF-WAY ON FEDERAL LANDS TO DETERMINE CAPABILITY TO SUPPORT NEW PIPELINES OR OTHER TRANSMISSION FACILITIES.

(a) IN GENERAL.—Within one year after the date of enactment of this Act, the head of each Federal agency that has authorized a right-of-way across Federal lands for transportation of energy supplies or transmission of electricity shall review each such right-of-way and submit a report to the Secretary of Energy and the Chairman of the Federal Energy Regulatory Commission regarding—

(1) whether the right-of-way can be used to support new or additional capacity; and

(2) what modifications or other changes, if any, would be necessary to accommodate such additional capacity.

(b) CONSULTATIONS AND CONSIDERATIONS.—In performing the review, the head of each agency shall—

(1) consult with agencies of State, tribal, or local units of government as appropriate; and

(2) consider whether safety or other concerns related to current uses might preclude the availability of a right-of-way for additional or new transportation or transmission facilities, and set forth those considerations in the report.

SEC. 6102. INVENTORY OF ENERGY PRODUCTION POTENTIAL OF ALL FEDERAL PUBLIC LANDS.

(a) INVENTORY REQUIREMENT.—The Secretary of the Interior, in consultation with the Secretary of Agriculture and the Secretary of Energy, shall conduct an inventory of the energy production potential of all Federal public lands other than national park lands and lands in any wilderness area, with respect to wind, solar, coal, and geothermal power production.

(b) LIMITATIONS.—

(1) IN GENERAL.—The Secretary shall not include in the inventory under this section the matters to be identified in the inventory under section 604 of the Energy Act of 2000 (42 U.S.C. 6217).

(2) WIND AND SOLAR POWER.—The inventory under this section—

(A) with respect to wind power production shall be limited to sites having a mean average wind speed—

(i) exceeding 12.5 miles per hour at a height of 33 feet; and

(ii) exceeding 15.7 miles per hour at a height of 164 feet; and

(B) with respect to solar power production shall be limited to areas rated as receiving 450 watts per square meter or greater.

(c) EXAMINATION OF RESTRICTIONS AND IMPEDIMENTS.—The inventory shall identify the extent and nature of any restrictions or impediments to the development of such energy production potential.

(d) GEOTHERMAL POWER.—The inventory shall include an update of the 1978 Assessment of Geothermal Resources by the United States Geological Survey.

(e) COMPLETION AND UPDATING.—The Secretary—

(1) shall complete the inventory by not later than 2 years after the date of the enactment of this Act; and

(2) shall update the inventory regularly thereafter.

(f) REPORTS.—The Secretary shall submit to the Committee on Resources of the House of Representatives and to the Committee on Energy and Natural Resources of the Senate and make publicly available—

(1) a report containing the inventory under this section, by not later than 2 years after the effective date of this section; and

(2) each update of such inventory.

SEC. 6103. REVIEW OF REGULATIONS TO ELIMINATE BARRIERS TO EMERGING ENERGY TECHNOLOGY.

(a) IN GENERAL.—Each Federal agency shall carry out a review of its regulations and standards to determine those that act as a barrier to market entry for emerging energy-efficient technologies, including fuel cells, combined heat and power, and distributed generation (including small-scale renewable energy).

(b) REPORT TO CONGRESS.—No later than 18 months after date of enactment of this Act, each agency shall provide a report to the Congress and the President detailing all regulatory barriers to emerging energy-efficient technologies, along with actions the agency intends to take, or has taken, to remove such barriers.

(c) PERIODIC REVIEW.—Each agency shall subsequently review its regulations and standards in this manner no less frequently than every 5 years, and report their findings to the Congress and the President. Such reviews shall include a detailed analysis of all agency actions taken to remove existing barriers to emerging energy technologies.

SEC. 6104. INTERAGENCY AGREEMENT ON ENVIRONMENTAL REVIEW OF INTERSTATE NATURAL GAS PIPELINE PROJECTS.

(a) IN GENERAL.—The Secretary of Energy, in coordination with the Federal Energy Regulatory Commission, shall establish an administrative interagency task force to develop an interagency agreement to expedite and facilitate the environmental review and permitting of interstate natural gas pipeline projects.

(b) TASK FORCE MEMBERS.—The task force shall include a representative of each of the Bureau of Land Management, the United States Fish and Wildlife Service, the Army Corps of Engineers, the Forest Service, the Environmental Protection Agency, the Advisory Council on Historic Preservation, and such other agencies as the Secretary of Energy and the Federal Energy Regulatory Commission consider appropriate.

(c) TERMS OF AGREEMENT.—The interagency agreement shall require that agencies complete their review of interstate pipeline projects within a specific period of time after referral of the matter by the Federal Energy Regulatory Commission.

(d) SUBMITTAL OF AGREEMENT.—The Secretary of Energy shall submit a final interagency agreement under this section to the Congress by not later than 6 months after the effective date of this section.

SEC. 6105. ENHANCING ENERGY EFFICIENCY IN MANAGEMENT OF FEDERAL LANDS.

(a) SENSE OF THE CONGRESS.—It is the sense of Congress that Federal land managing agencies should enhance the use of energy efficient technologies in the management of natural resources.

(b) ENERGY EFFICIENT BUILDINGS.—To the extent economically practicable, the Secretary of the Interior and the Secretary of Agriculture shall seek to incorporate energy efficient technologies in public and administrative buildings associated with management of the National Park System, National Wildlife Refuge System, National Forest System, and other public lands and resources managed by such Secretaries.

(c) ENERGY EFFICIENT VEHICLES.—To the extent economically practicable, the Secretary of the Interior and the Secretary of Agriculture shall seek to use energy efficient motor vehicles, including vehicles equipped with biodiesel or hybrid engine technologies, in the management of the National Park System, National Wildlife Refuge System, and other public lands and managed by the Secretaries.

TITLE II—OIL AND GAS DEVELOPMENT

Subtitle A—Offshore Oil and Gas

SEC. 6201. SHORT TITLE.

This subtitle may be referred to as the ''Royalty Relief Extension Act of 2001''.

SEC. 6202. LEASE SALES IN WESTERN AND CENTRAL PLANNING AREA OF THE GULF OF MEXICO.

(a) IN GENERAL.—For all tracts located in water depths of greater than 200 meters in the Western and Central Planning Area of the Gulf of Mexico, including that portion of the Eastern Planning Area of the Gulf of Mexico encompassing whole lease blocks lying west of 87 degrees, 30 minutes West longitude, any oil or gas lease sale under the Outer Continental Shelf Lands Act occurring within 2 years after the date of enactment of this Act shall use the bidding system authorized in section 8(a)(1)(H) of the Outer Continental Shelf Lands Act (30 U.S.C. 1337(a)(1)(H)), except that the suspension of royalties shall be set at a volume of not less than the following:

(1) 5 million barrels of oil equivalent for each lease in water depths of 400 to 800 meters.

(2) 9 million barrels of oil equivalent for each lease in water depths of 800 to 1,600 meters.

(3) 12 million barrels of oil equivalent for each lease in water depths greater than 1,600 meters.

(b) RELATIONSHIP TO EXISTING AUTHORITY.—Except as expressly provided in this section, nothing in this section is intended to limit the authority of the Secretary of the Interior under the Outer Continental Shelf Lands Act (43 U.S.C. 1301 et seq.) to provide royalty suspension.

SEC. 6203. SAVINGS CLAUSE.

Nothing in this subtitle shall be construed to affect any offshore pre-leasing, leasing, or development moratorium, including any moratorium applicable to the Eastern Planning Area of the Gulf of Mexico located off the Gulf Coast of Florida.

SEC. 6204. ANALYSIS OF GULF OF MEXICO FIELD SIZE DISTRIBUTION, INTERNATIONAL COMPETITIVENESS, AND INCENTIVES FOR DEVELOPMENT.

(a) IN GENERAL.—The Secretary of the Interior and the Secretary of Energy shall enter into appropriate arrangements with the National Academy of Sciences to commission the Academy to perform the following:

(1) Conduct an analysis and review of existing Gulf of Mexico oil and natural gas resource assessments, including—

(A) analysis and review of assessments recently performed by the Minerals Management Service, the 1999 National Petroleum Council Gas Study, the Department of Energy's Offshore Marginal Property Study, and the Advanced Resources International, Inc. Deepwater Gulf of Mexico model; and

(B) evaluation and comparison of the accuracy of assumptions of the existing assessments with respect to resource field size distribution, hydrocarbon potential, and scenarios for leasing, exploration, and development.

(2) Evaluate the lease terms and conditions offered by the Minerals Management Service for Lease Sale 178, and compare the financial incentives offered by such terms and conditions to financial incentives offered by the terms and conditions that apply under leases for other offshore areas that are competing for the same limited offshore oil and gas exploration and development capital, including offshore areas of West Africa and Brazil.

(3) Recommend what level of incentives for all water depths are appropriate in order to ensure that the United States optimizes the domestic supply of oil and natural gas from the offshore areas of the Gulf of Mexico that are not subject to current leasing moratoria. Recommendations under this paragraph should be made in the context of the importance of the oil and natural gas resources of the Gulf of Mexico to the future energy and economic needs of the United States.

(b) REPORT.—Not later than 180 days after the date of enactment of this Act, the Secretary of the Interior shall submit a report to the Committee on Resources in the House of Representatives and the Committee on Energy and Natural Resources in the Senate, summarizing the findings of the National Academy of Sciences pursuant to subsection (a) and providing recommendations of the Secretary for new policies or other actions that could help to further increase oil and natural gas production from the Gulf of Mexico.

Subtitle B—Improvements to Federal Oil and Gas Management

SEC. 6221. SHORT TITLE.

This subtitle may be cited as the ''Federal Oil and Gas Lease Management Improvement Demonstration Program Act of 2001''.

SEC. 6222. STUDY OF IMPEDIMENTS TO EFFICIENT LEASE OPERATIONS.

(a) IN GENERAL.—The Secretary of the Interior and the Secretary of Agriculture shall jointly undertake a study of the impediments to efficient oil and gas leasing and operations on Federal onshore lands in order to identify means by which unnecessary impediments to the expeditious exploration and production of oil and natural gas on such lands can be removed.

(b) CONTENTS.—The study under subsection (a) shall include the following:

(1) A review of the process by which Federal land managers accept or reject an offer to lease, including the timeframes in which such offers are acted upon, the reasons for any delays in acting upon such offers, and any recommendations for expediting the response to such offers.

(2) A review of the approval process for applications for permits to drill, including the timeframes in which such applications are approved, the impact of compliance with other Federal laws on such timeframes, any other reasons for delays in making such approvals, and any recommendations for expediting such approvals.

(3) A review of the approval process for surface use plans of operation, including the timeframes in which such applications are approved, the impact of compliance with other Federal laws on such timeframes, any other reasons for delays in making such approvals, and any recommendations for expediting such approvals.

(4) A review of the process for administrative appeal of decisions or orders of officers

or employees of the Bureau of Land Management with respect to a Federal oil or gas lease, including the timeframes in which such appeals are heard and decided, any reasons for delays in hearing or deciding such appeals, and any recommendations for expediting the appeals process.

(c) REPORT.—The Secretaries shall report the findings and recommendations resulting from the study required by this section to the Committee on Resources of the House of Representatives and to the Committee on Energy and Natural Resources of the Senate no later than 6 months after the date of the enactment of this Act.

SEC. 6223. ELIMINATION OF UNWARRANTED DENIALS AND STAYS.

(a) IN GENERAL.—The Secretary shall ensure that unwarranted denials and stays of lease issuance and unwarranted restrictions on lease operations are eliminated from the administration of oil and natural gas leasing on Federal land.

(b) LAND DESIGNATED FOR MULTIPLE USE.—Federal land available for oil and natural gas leasing under any Bureau of Land Management resource management plan or Forest Service leasing analysis shall be available without lease stipulations more stringent than restrictions on surface use and operations imposed under the laws (including regulations) of the oil and natural gas conservation authority of the State in which the lands are located, unless the Secretary includes in the decision approving the management plan or leasing analysis or in the Secretary's acceptance of an offer to lease a written explanation why more stringent stipulations are warranted.

(c) REJECTION OF OFFER TO LEASE.—

(1) IN GENERAL.—If the Secretary rejects an offer to lease Federal lands for oil or natural gas development on the ground that the land is unavailable for oil and natural gas leasing, the Secretary shall provide a written, detailed explanation of the reasons the land is unavailable for leasing.

(2) PREVIOUS RESOURCE MANAGEMENT DECISION.—If the determination of unavailability is based on a previous resource management decision, the explanation shall include a careful assessment of whether the reasons underlying the previous decision are still persuasive.

(3) SEGREGATION OF AVAILABLE LAND FROM UNAVAILABLE LAND.—The Secretary may not reject an offer to lease Federal land for oil and natural gas development that is available for such leasing on the ground that the offer includes land unavailable for leasing. The Secretary shall segregate available land from unavailable land, on the offeror's request following notice by the Secretary, before acting on the offer to lease.

(d) DISAPPROVAL OR REQUIRED MODIFICATION OF SURFACE USE PLANS OF OPERATIONS AND APPLICATION FOR PERMIT TO DRILL.—The Secretary shall provide a written, detailed explanation of the reasons for disapproving or requiring modifications of any surface use plan of operations or application for permit to drill with respect to oil or natural gas development on Federal lands.

SEC. 6224. LIMITATION ON COST RECOVERY FOR APPLICATIONS.

Notwithstanding sections 304 and 504 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1734, 1764) and section 9701 of title 31, United States Code, the Secretary shall not recover the Secretary's costs with respect to applications and other documents relating to oil and gas leases.

SEC. 6225. CONSULTATION WITH SECRETARY OF AGRICULTURE.

Section 17(h) of the Mineral Leasing Act (30 U.S.C. 226(h)) is amended to read as follows:

''(h)(1) In issuing any lease on National Forest System lands reserved from the public domain, the Secretary of the Interior shall consult with the Secretary of Agriculture in determining stipulations on surface use under the lease.

''(2)(A) A lease on lands referred to in paragraph (1) may not be issued if the Secretary of Agriculture determines, after consultation under paragraph (1), that the terms and conditions of the lease, including any prohibition on surface occupancy for lease operations, will not be sufficient to adequately protect such lands under the National Forest Management Act of 1976 (16 U.S.C. 1600 et seq.).

''(B) The authority of the Secretary of Agriculture under this paragraph may be delegated only to the Undersecretary of Agriculture for Natural Resources and Environment.''.

Subtitle C—Miscellaneous

SEC. 6231. OFFSHORE SUBSALT DEVELOPMENT.

Section 5 of the Outer Continental Shelf Lands Act of 1953 (43 U.S.C. 1334) is amended by adding at the end the following:

''(k) SUSPENSION OF OPERATIONS FOR SUBSALT EXPLORATION.—Notwithstanding any other provision of law or regulation, to prevent waste caused by the drilling of unnecessary wells and to facilitate the discovery of additional hydrocarbon reserves, the Secretary may grant a request for a suspension of operations under any lease to allow the reprocessing and reinterpretation of geophysical data to identify and define drilling objectives beneath allocthonus salt sheets.''.

SEC. 6232. PROGRAM ON OIL AND GAS ROYALTIES IN KIND.

(a) APPLICABILITY OF SECTION.—Notwithstanding any other provision of law, the provisions of this section shall apply to all royalty in kind accepted by the Secretary of the Interior under any Federal oil or gas lease or permit under section 36 of the Mineral Leasing Act (30 U.S.C. 192), section 27 of the Outer Continental Shelf Lands Act (43 U.S.C. 1353), or any other mineral leasing law, in the period beginning on the date of enactment of this Act through September 30, 2006.

(b) TERMS AND CONDITIONS.—All royalty accruing to the United States under any Federal oil or gas lease or permit under the Mineral Leasing Act (30 U.S.C. 181 et seq.) or the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq.) shall, on the demand of the Secretary of the Interior, be paid in oil or gas. If the Secretary of the Interior makes such a demand, the following provisions apply to such payment:

(1) Delivery by, or on behalf of, the lessee of the royalty amount and quality due under the lease satisfies the lessee's royalty obligation for the amount delivered, except that transportation and processing reimbursements paid to, or deductions claimed by, the lessee shall be subject to review and audit.

(2) Royalty production shall be placed in marketable condition by the lessee at no cost to the United States.

(3) The Secretary of the Interior may—

(A) sell or otherwise dispose of any royalty oil or gas taken in kind (other than oil or gas taken under section 27(a)(3) of the Outer Continental Shlef Lands Act (43 U.S.C. 1353(a)(3)) for not less than the market price; and

(B) transport or process any oil or gas royalty taken in kind.

(4) The Secretary of the Interior may, notwithstanding section 3302 of title 31, United States Code, retain and use a portion of the revenues from the sale of oil and gas royalties taken in kind that otherwise would be deposited to miscellaneous receipts, without regard to fiscal year limitation, or may use royalty production, to pay the cost of—

(A) transporting the oil or gas,

(B) processing the gas, or

(C) disposing of the oil or gas.

(5) The Secretary may not use revenues from the sale of oil and gas royalties taken in kind to pay for personnel, travel, or other administrative costs of the Federal Government.

(c) REIMBURSEMENT OF COST.—If the lessee, pursuant to an agreement with the United States or as provided in the lease, processes the royalty gas or delivers the royalty oil or gas at a point not on or adjacent to the lease area, the Secretary of the Interior shall—

(1) reimburse the lessee for the reasonable costs of transportation (not including gathering) from the lease to the point of delivery or for processing costs; or

(2) at the discretion of the Secretary of the Interior, allow the lessee to deduct such transportation or processing costs in reporting and paying royalties in value for other Federal oil and gas leases.

(d) BENEFIT TO THE UNITED STATES REQUIRED.—The Secretary may receive oil or gas royalties in kind only if the Secretary determines that receiving such royalties provides benefits to the United States greater than or equal to those that would be realized under a comparable royalty in value program.

(e) REPORT TO CONGRESS.—For each of the fiscal years 2002 through 2006 in which the United States takes oil or gas royalties in kind from production in any State or from the Outer Continental Shelf, excluding royalties taken in kind and sold to refineries under subsection (h), the Secretary of the Interior shall provide a report to the Congress describing—

(1) the methodology or methodologies used by the Secretary to determine compliance with subsection (d), including performance standards for comparing amounts received by the United States derived from such royalties in kind to amounts likely to have been received had royalties been taken in value;

(2) an explanation of the evaluation that led the Secretary to take royalties in kind from a lease or group of leases, including the expected revenue effect of taking royalties in kind;

(3) actual amounts received by the United States derived from taking royalties in kind, and costs and savings incurred by the United States associated with taking royalties in kind; and

(4) an evaluation of other relevant public benefits or detriments associated with taking royalties in kind.

(f) DEDUCTION OF EXPENSES.—

(1) IN GENERAL.—Before making payments under section 35 of the Mineral Leasing Act (30 U.S.C. 191) or section 8(g) of the Outer Continental Shelf Lands Act (30 U.S.C. 1337(g)) of revenues derived from the sale of royalty production taken in kind from a lease, the Secretary of the Interior shall deduct amounts paid or deducted under subsections (b)(4) and (c), and shall deposit such amounts to miscellaneous receipts.

(2) ACCOUNTING FOR DEDUCTIONS.—If the Secretary of the Interior allows the lessee to deduct transportation or processing costs under subsection (c), the Secretary may not reduce any payments to recipients of revenues derived from any other Federal oil and gas lease as a consequence of that deduction.

(g) CONSULTATION WITH STATES.—The Secretary of the Interior—

(1) shall consult with a State before conducting a royalty in kind program under this title within the State, and may delegate management of any portion of the Federal royalty in kind program to such State except as otherwise prohibited by Federal law; and

(2) shall consult annually with any State from which Federal oil or gas royalty is

being taken in kind to ensure to the maximum extent practicable that the royalty in kind program provides revenues to the State greater than or equal to those which would be realized under a comparable royalty in value program.

(h) PROVISIONS FOR SMALL REFINERIES.—

(1) PREFERENCE.—If the Secretary of the Interior determines that sufficient supplies of crude oil are not available in the open market to refineries not having their own source of supply for crude oil, the Secretary may grant preference to such refineries in the sale of any royalty oil accruing or reserved to the United States under Federal oil and gas leases issued under any mineral leasing law, for processing or use in such refineries at private sale at not less than the market price.

(2) PRORATION AMONG REFINERIES IN PRODUCTION AREA.—In disposing of oil under this subsection, the Secretary of the Interior may, at the discretion of the Secretary, prorate such oil among such refineries in the area in which the oil is produced.

(i) DISPOSITION TO FEDERAL AGENCIES.—

(1) ONSHORE ROYALTY.—Any royalty oil or gas taken by the Secretary in kind from onshore oil and gas leases may be sold at not less than the market price to any department or agency of the United States.

(2) OFFSHORE ROYALTY.—Any royalty oil or gas taken in kind from Federal oil and gas leases on the Outer Continental Shelf may be disposed of only under section 27 of the Outer Continental Shelf Lands Act (43 U.S.C. 1353).

(j) PREFERENCE FOR FEDERAL LOW-INCOME ENERGY ASSISTANCE PROGRAMS.—In disposing of royalty oil or gas taken in kind under this section, the Secretary may grant a preference to any person, including any State or Federal agency, for the purpose of providing additional resources to any Federal low-income energy assistance program.

SEC. 6233. MARGINAL WELL PRODUCTION INCENTIVES.

To enhance the economics of marginal oil and gas production by increasing the ultimate recovery from marginal wells when the cash price of West Texas Intermediate crude oil, as posted on the Dow Jones Commodities Index chart, is less than $15 per barrel for 180 consecutive pricing days or when the price of natural gas delivered at Henry Hub, Louisiana, is less than $2.00 per million British thermal units for 180 consecutive days, the Secretary shall reduce the royalty rate as production declines for—

(1) onshore oil wells producing less than 30 barrels per day;

(2) onshore gas wells producing less than 120 million British thermal units per day;

(3) offshore oil wells producing less than 300 barrels of oil per day; and

(4) offshore gas wells producing less than 1,200 million British thermal units per day.

SEC. 6234. REIMBURSEMENT FOR COSTS OF NEPA ANALYSES, DOCUMENTATION, AND STUDIES.

The Mineral Leasing Act (30 U.S.C. 181 et seq.) is amended by inserting after section 37 the following:

''REIMBURSEMENT FOR COSTS OF CERTAIN ANALYSES, DOCUMENTATION, AND STUDIES

''SEC. 38. (a) IN GENERAL.—The Secretary of the Interior may reimburse a person who is a lessee, operator, operating rights owner, or applicant for an oil or gas lease under this Act for costs incurred by the person in preparing any project-level analysis, documentation, or related study required under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) with respect to the lease, through royalty credits attributable to the lease, unit agreement, or project area for which the analysis, documentation, or related study is prepared.

''(b) CONDITIONS.—The Secretary may provide reimbursement under subsection (b) only if—

''(1) adequate funding to enable the Secretary to timely prepare the analysis, documentation, or related study is not appropriated;

''(2) the person paid the costs voluntarily; and

''(3) the person maintains records of its costs in accordance with regulations prescribed by the Secretary.''.

(c) APPLICATION.—The amendments made by this section shall apply with respect to any lease entered into before, on, or after the date of the enactment of this Act.

(d) DEADLINE FOR REGULATIONS.—The Secretary shall issue regulations implementing the amendments made by this section by not later than 90 days after the date of the enactment of this Act.

TITLE III—GEOTHERMAL ENERGY DEVELOPMENT

SEC. 6301. ROYALTY REDUCTION AND RELIEF.

(a) ROYALTY REDUCTION.—Section 5(a) of the Geothermal Steam Act of 1970 (30 U.S.C. 1004(a)) is amended by striking ''not less than 10 per centum or more than 15 per centum'' and inserting ''not more than 8 per centum''.

(b) ROYALTY RELIEF.—

(1) IN GENERAL.—Notwithstanding section 5 of the Geothermal Steam Act of 1970 (30 U.S.C. 1004(a)) and any provision of any lease under that Act, no royalty is required to be paid—

(A) under any qualified geothermal energy lease with respect to commercial production of heat or energy from a facility that begins such production in the 5-year period beginning on the date of the enactment of this Act; or

(B) on qualified expansion geothermal energy.

(2) 3-YEAR APPLICATION.—Paragraph (1) applies only to commercial production of heat or energy from a facility in the first 3 years of such production.

(c) DEFINITIONS.—In this section:

(1) QUALIFIED EXPANSION GEOTHERMAL ENERGY.—The term ''qualified expansion geothermal energy''—

(A) subject to subparagraph (B), means geothermal energy produced from a generation facility for which the rated capacity is increased by more than 10 percent as a result of expansion of the facility carried out in the 5-year period beginning on the date of enactment of this Act; and

(B) does not include the rated capacity of the generation facility on the date of enactment of this Act.

(2) QUALIFIED GEOTHERMAL ENERGY LEASE.—The term ''qualified geothermal energy lease'' means a lease under the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.)—

(A) that was executed before the end of the 5-year period beginning on the date of the enactment of this Act; and

(B) under which no commercial production of any form of heat or energy occurred before the date of the enactment of this Act.

SEC. 6302. EXEMPTION FROM ROYALTIES FOR DIRECT USE OF LOW TEMPERATURE GEOTHERMAL ENERGY RESOURCES.

Section 5 of the Geothermal Steam Act of 1970 (30 U.S.C. 1004) is amended—

(1) in paragraph (c) by redesignating subparagraphs (1) and (2) as subparagraphs (A) and (B);

(2) by redesignating paragraphs (a) through (d) in order as paragraphs (1) through (4);

(3) by inserting ''(a) IN GENERAL.—'' after ''SEC. 5.''; and

(4) by adding at the end the following new subsection:

''(b) EXEMPTION FOR USE OF LOW TEMPERATURE RESOURCES.—

''(1) IN GENERAL.—In lieu of any royalty or rental under subsection (a), a lease for qualified development and direct utilization of low temperature geothermal resources shall provide for payment by the lessee of an annual fee of not less than $100, and not more than $1,000, in accordance with the schedule issued under paragraph (2).

''(2) SCHEDULE.—The Secretary shall issue a schedule of fees under this section under which a fee is based on the scale of development and utilization to which the fee applies.

''(3) DEFINITIONS.—In this subsection:

''(A) LOW TEMPERATURE GEOTHERMAL RESOURCES.—The term 'low temperature geothermal resources' means geothermal steam and associated geothermal resources having a temperature of less than 195 degrees Fahrenheit.

''(B) QUALIFIED DEVELOPMENT AND DIRECT UTILIZATION.—The term 'qualified development and direct utilization' means development and utilization in which all products of geothermal resources, other than any heat utilized, are returned to the geothermal formation from which they are produced.''.

SEC. 6303. AMENDMENTS RELATING TO LEASING ON FOREST SERVICE LANDS.

The Geothermal Steam Act of 1970 is amended—

(1) in section 15(b) (30 U.S.C. 1014(b))—

(A) by inserting ''(1)'' after ''(b)''; and

(B) in paragraph (1) (as designated by subparagraph (A) of this paragraph) in the first sentence—

(i) by striking ''with the consent of, and'' and inserting ''after consultation with the Secretary of Agriculture and''; and

(ii) by striking ''the head of that Department'' and inserting ''the Secretary of Agriculture''; and

(2) by adding at the end the following:

''(2)(A) A geothermal lease for lands withdrawn or acquired in aid of functions of the Department of Agriculture may not be issued if the Secretary of Agriculture, after the consultation required by paragraph (1), determines that no terms or conditions, including a prohibition on surface occupancy for lease operations, would be sufficient to adequately protect such lands under the National Forest Management Act of 1976 (16 U.S.C. 1600 et seq.).

''(B) The authority of the Secretary of Agriculture under this paragraph may be delegated only to the Undersecretary of Agriculture for Natural Resources and Environment.''.

SEC. 6304. DEADLINE FOR DETERMINATION ON PENDING NONCOMPETITIVE LEASE APPLICATIONS.

Not later than 90 days after the date of the enactment of this Act, the Secretary of the Interior shall, with respect to each application pending on the date of the enactment of this Act for a lease under the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.), issue a final determination of—

(1) whether or not to conduct a lease sale by competitive bidding; and

(2) whether or not to award a lease without competitive bidding.

SEC. 6305. OPENING OF PUBLIC LANDS UNDER MILITARY JURISDICTION.

(a) IN GENERAL.—Except as otherwise provided in the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) and other provisions of Federal law applicable to development of geothermal energy resources within public lands, all public lands under the jurisdiction of a Secretary of a military department shall be open to the operation of such laws and development and utilization of geothermal steam and associated geothermal resources, as that term is defined in section 2 of the Geothermal Steam Act of 1970 (30 U.S.C.

1001), without the necessity for further action by the Secretary or the Congress.

(b) CONFORMING AMENDMENT.—Section 2689 of title 10, United States Code, is amended by striking ''including public lands,'' and inserting ''other than public lands,''.

(c) TREATMENT OF EXISTING LEASES.—Upon the expiration of any lease in effect on the date of the enactment of this Act of public lands under the jurisdiction of a military department for the development of any geothermal resource, such lease may, at the option of the lessee—

(1) be treated as a lease under the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.), and be renewed in accordance with such Act; or

(2) be renewed in accordance with the terms of the lease, if such renewal is authorized by such terms.

(d) REGULATIONS.—The Secretary of the Interior, with the advice and concurrence of the Secretary of the military department concerned, shall prescribe such regulations to carry out this section as may be necessary. Such regulations shall contain guidelines to assist in determining how much, if any, of the surface of any lands opened pursuant to this section may be used for purposes incident to geothermal energy resources development and utilization.

(e) CLOSURE FOR PURPOSES OF NATIONAL DEFENSE OR SECURITY.—In the event of a national emergency or for purposes of national defense or security, the Secretary of the Interior, at the request of the Secretary of the military department concerned, shall close any lands that have been opened to geothermal energy resources leasing pursuant to this section.

SEC. 6306. APPLICATION OF AMENDMENTS.

The amendments made by this title apply with respect to any lease executed before, on, or after the date of the enactment of this Act.

SEC. 6307. REVIEW AND REPORT TO CONGRESS.

The Secretary of the Interior shall promptly review and report to the Congress regarding the status of all moratoria on and withdrawals from leasing under the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) of known geothermal resources areas (as that term is defined in section 2 of that Act (30 U.S.C. 1001), specifying for each such area whether the basis for such moratoria or withdrawal still applies.

SEC. 6308. REIMBURSEMENT FOR COSTS OF NEPA ANALYSES, DOCUMENTATION, AND STUDIES.

(a) IN GENERAL.—The Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) is amended by adding at the end the following:

''REIMBURSEMENT FOR COSTS OF CERTAIN ANALYSES, DOCUMENTATION, AND STUDIES

''SEC. 30. (a) IN GENERAL.—The Secretary of the Interior may reimburse a person who is a lessee, operator, operating rights owner, or applicant for a lease under this Act for costs incurred by the person in preparing any project-level analysis, documentation, or related study required under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) with respect to the lease, through royalty credits attributable to the lease, unit agreement, or project area for which the analysis, documentation, or related study is prepared.

''(b) CONDITIONS.—The Secretary shall may provide reimbursement under subsection (a) only if—

''(1) adequate funding to enable the Secretary to timely prepare the analysis, documentation, or related study is not appropriated;

''(2) the person paid the costs voluntarily; and

''(3) the person maintains records of its costs in accordance with regulations prescribed by the Secretary.''.

(b) APPLICATION.—The amendments made by this section shall apply with respect to any lease entered into before, on, or after the date of the enactment of this Act.

(c) DEADLINE FOR REGULATIONS.—The Secretary shall issue regulations implementing the amendments made by this section by not later than 90 days after the date of the enactment of this Act.

TITLE IV—HYDROPOWER

SEC. 6401. STUDY AND REPORT ON INCREASING ELECTRIC POWER PRODUCTION CAPABILITY OF EXISTING FACILITIES.

(a) IN GENERAL.—The Secretary of the Interior shall conduct a study of the potential for increasing electric power production capability at existing facilities under the administrative jurisdiction of the Secretary.

(b) CONTENT.—The study under this section shall include identification and description in detail of each facility that is capable, with or without modification, of producing additional hydroelectric power, including estimation of the existing potential for the facility to generate hydroelectric power.

(c) REPORT.—The Secretary shall submit to the Congress a report on the findings, conclusions, and recommendations of the study under this section by not later than 12 months after the date of enactment of this Act. The Secretary shall include in the report the following:

(1) The identifications, descriptions, and estimations referred to in subsection (b).

(2) A description of activities the Secretary is currently conducting or considering, or that could be considered, to produce additional hydroelectric power from each identified facility.

(3) A summary of action that has already been taken by the Secretary to produce additional hydroelectric power from each identified facility.

(4) The costs to install, upgrade, or modify equipment or take other actions to produce additional hydroelectric power from each identified facility.

(5) The benefits that would be achieved by such installation, upgrade, modification, or other action, including quantified estimates of any additional energy or capacity from each facility identified under subsection (b).

(6) A description of actions that are planned, underway, or might reasonably be considered to increase hydroelectric power production by replacing turbine runners.

(7) A description of actions that are planned, underway, or might reasonably be considered to increase hydroelectric power production by performing generator uprates and rewinds.

(8) The impact of increased hydroelectric power production on irrigation, fish, wildlife, Indian tribes, river health, water quality, navigation, recreation, fishing, and flood control.

(9) Any additional recommendations the Secretary considers advisable to increase hydroelectric power production from, and reduce costs and improve efficiency at, facilities under the jurisdiction of the Secretary.

SEC. 6402. INSTALLATION OF POWERFORMER AT FOLSOM POWER PLANT, CALIFORNIA.

(a) IN GENERAL.—The Secretary of the Interior may install a powerformer at the Bureau of Reclamation Folsom power plant in Folsom, California, to replace a generator and transformer that are due for replacement due to age.

(b) REIMBURSABLE COSTS.—Costs incurred by the United States for installation of a powerformer under this section shall be treated as reimbursable costs and shall bear interest at current long-term borrowing rates of the United States Treasury at the time of acquisition.

(c) LOCAL COST SHARING.—In addition to reimbursable costs under subsection (b), the Secretary shall seek contributions from power users toward the costs of the powerformer and its installation.

SEC. 6403. STUDY AND IMPLEMENTATION OF INCREASED OPERATIONAL EFFICIENCIES IN HYDROELECTRIC POWER PROJECTS.

(a) IN GENERAL.—The Secretary of Interior shall conduct a study of operational methods and water scheduling techniques at all hydroelectric power plants under the administrative jurisdiction of the Secretary that have an electric power production capacity greater than 50 megawatts, to—

(1) determine whether such power plants and associated river systems are operated so as to maximize energy and capacity capabilities; and

(2) identify measures that can be taken to improve operational flexibility at such plants to achieve such maximization.

(b) REPORT.—The Secretary shall submit a report on the findings, conclusions, and recommendations of the study under this section by not later than 18 months after the date of the enactment of this Act, including a summary of the determinations and identifications under paragraphs (1) and (2) of subsection (a).

(c) COOPERATION BY FEDERAL POWER MARKETING ADMINISTRATIONS.—The Secretary shall coordinate with the Administrator of each Federal power marketing administration in—

(1) determining how the value of electric power produced by each hydroelectric power facility that produces power marketed by the administration can be maximized; and

(2) implementing measures identified under subsection (a)(2).

(d) LIMITATION ON IMPLEMENTATION OF MEASURES.—Implementation under subsections (a)(2) and (b)(2) shall be limited to those measures that can be implemented within the constraints imposed on Department of the Interior facilities by other uses required by law.

SEC. 6404. SHIFT OF PROJECT LOADS TO OFF-PEAK PERIODS.

(a) IN GENERAL.—The Secretary of the Interior shall—

(1) review electric power consumption by Bureau of Reclamation facilities for water pumping purposes; and

(2) make such adjustments in such pumping as possible to minimize the amount of electric power consumed for such pumping during periods of peak electric power consumption, including by performing as much of such pumping as possible during off-peak hours at night.

(b) CONSENT OF AFFECTED IRRIGATION CUSTOMERS REQUIRED.—The Secretary may not under this section make any adjustment in pumping at a facility without the consent of each person that has contracted with the United States for delivery of water from the facility for use for irrigation and that would be affected by such adjustment.

(c) EXISTING OBLIGATIONS NOT AFFECTED.—This section shall not be construed to affect any existing obligation of the Secretary to provide electric power, water, or other benefits from Bureau of Reclamation facilities.

TITLE V—ARCTIC COASTAL PLAIN DOMESTIC ENERGY

SEC. 6501. SHORT TITLE.

This title may be cited as the ''Arctic Coastal Plain Domestic Energy Security Act of 2001''.

SEC. 6502. DEFINITIONS.

In this title:

(1) COASTAL PLAIN.—The term ''Coastal Plain'' means that area identified as such in the map entitled ''Arctic National Wildlife

Refuge'', dated August 1980, as referenced in section 1002(b) of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3142(b)(1)), comprising approximately 1,549,000 acres.

(2) SECRETARY.—The term ''Secretary'', except as otherwise provided, means the Secretary of the Interior or the Secretary's designee.

SEC. 6503. LEASING PROGRAM FOR LANDS WITHIN THE COASTAL PLAIN.

(a) IN GENERAL.—The Secretary shall take such actions as are necessary—

(1) to establish and implement in accordance with this title a competitive oil and gas leasing program under the Mineral Leasing Act (30 U.S.C. 181 et seq.) that will result in an environmentally sound program for the exploration, development, and production of the oil and gas resources of the Coastal Plain; and

(2) to administer the provisions of this title through regulations, lease terms, conditions, restrictions, prohibitions, stipulations, and other provisions that ensure the oil and gas exploration, development, and production activities on the Coastal Plain will result in no significant adverse effect on fish and wildlife, their habitat, subsistence resources, and the environment, and including, in furtherance of this goal, by requiring the application of the best commercially available technology for oil and gas exploration, development, and production to all exploration, development, and production operations under this title in a manner that ensures the receipt of fair market value by the public for the mineral resources to be leased.

(b) REPEAL.—Section 1003 of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3143) is repealed.

(c) COMPLIANCE WITH REQUIREMENTS UNDER CERTAIN OTHER LAWS.—

(1) COMPATIBILITY.—For purposes of the National Wildlife Refuge System Administration Act of 1966, the oil and gas leasing program and activities authorized by this section in the Coastal Plain are deemed to be compatible with the purposes for which the Arctic National Wildlife Refuge was established, and that no further findings or decisions are required to implement this determination.

(2) ADEQUACY OF THE DEPARTMENT OF THE INTERIOR'S LEGISLATIVE ENVIRONMENTAL IMPACT STATEMENT.—The ''Final Legislative Environmental Impact Statement'' (April 1987) on the Coastal Plain prepared pursuant to section 1002 of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3142) and section 102(2)(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(C)) is deemed to satisfy the requirements under the National Environmental Policy Act of 1969 that apply with respect to actions authorized to be taken by the Secretary to develop and promulgate the regulations for the establishment of a leasing program authorized by this title before the conduct of the first lease sale.

(3) COMPLIANCE WITH NEPA FOR OTHER ACTIONS.—Before conducting the first lease sale under this title, the Secretary shall prepare an environmental impact statement under the National Environmental Policy Act of 1969 with respect to the actions authorized by this title that are not referred to in paragraph (2). Notwithstanding any other law, the Secretary is not required to identify nonleasing alternative courses of action or to analyze the environmental effects of such courses of action. The Secretary shall only identify a preferred action for such leasing and a single leasing alternative, and analyze the environmental effects and potential mitigation measures for those two alternatives. The identification of the preferred action and related analysis for the first lease sale under this title shall be completed within 18 months after the date of enactment of this Act. The Secretary shall only consider public comments that specifically address the Secretary's preferred action and that are filed within 20 days after publication of an environmental analysis. Notwithstanding any other law, compliance with this paragraph is deemed to satisfy all requirements for the analysis and consideration of the environmental effects of proposed leasing under this title.

(d) RELATIONSHIP TO STATE AND LOCAL AUTHORITY.—Nothing in this title shall be considered to expand or limit State and local regulatory authority.

(e) SPECIAL AREAS.—

(1) IN GENERAL.—The Secretary, after consultation with the State of Alaska, the city of Kaktovik, and the North Slope Borough, may designate up to a total of 45,000 acres of the Coastal Plain as a Special Area if the Secretary determines that the Special Area is of such unique character and interest so as to require special management and regulatory protection. The Secretary shall designate as such a Special Area the Sadlerochit Spring area, comprising approximately 4,000 acres as depicted on the map referred to in section 6502(1).

(2) MANAGEMENT.—Each such Special Area shall be managed so as to protect and preserve the area's unique and diverse character including its fish, wildlife, and subsistence resource values.

(3) EXCLUSION FROM LEASING OR SURFACE OCCUPANCY.—The Secretary may exclude any Special Area from leasing. If the Secretary leases a Special Area, or any part thereof, for purposes of oil and gas exploration, development, production, and related activities, there shall be no surface occupancy of the lands comprising the Special Area.

(4) DIRECTIONAL DRILLING.—Notwithstanding the other provisions of this subsection, the Secretary may lease all or a portion of a Special Area under terms that permit the use of horizontal drilling technology from sites on leases located outside the area.

(f) LIMITATION ON CLOSED AREAS.—The Secretary's sole authority to close lands within the Coastal Plain to oil and gas leasing and to exploration, development, and production is that set forth in this title.

(g) REGULATIONS.—

(1) IN GENERAL.—The Secretary shall prescribe such regulations as may be necessary to carry out this title, including rules and regulations relating to protection of the fish and wildlife, their habitat, subsistence resources, and environment of the Coastal Plain, by no later than 15 months after the date of enactment of this Act.

(2) REVISION OF REGULATIONS.—The Secretary shall periodically review and, if appropriate, revise the rules and regulations issued under subsection (a) to reflect any significant biological, environmental, or engineering data that come to the Secretary's attention.

SEC. 6504. LEASE SALES.

(a) IN GENERAL.—Lands may be leased pursuant to this title to any person qualified to obtain a lease for deposits of oil and gas under the Mineral Leasing Act (30 U.S.C. 181 et seq.).

(b) PROCEDURES.—The Secretary shall, by regulation, establish procedures for—

(1) receipt and consideration of sealed nominations for any area in the Coastal Plain for inclusion in, or exclusion (as provided in subsection (c)) from, a lease sale;

(2) the holding of lease sales after such nomination process; and

(3) public notice of and comment on designation of areas to be included in, or excluded from, a lease sale.

(c) LEASE SALE BIDS.—Bidding for leases under this title shall be by sealed competitive cash bonus bids.

(d) ACREAGE MINIMUM IN FIRST SALE.—In the first lease sale under this title, the Secretary shall offer for lease those tracts the Secretary considers to have the greatest potential for the discovery of hydrocarbons, taking into consideration nominations received pursuant to subsection (b)(1), but in no case less than 200,000 acres.

(e) TIMING OF LEASE SALES.—The Secretary shall—

(1) conduct the first lease sale under this title within 22 months after the date of enactment of this title; and

(2) conduct additional sales so long as sufficient interest in development exists to warrant, in the Secretary's judgment, the conduct of such sales.

SEC. 6505. GRANT OF LEASES BY THE SECRETARY.

(a) IN GENERAL.—The Secretary may grant to the highest responsible qualified bidder in a lease sale conducted pursuant to section 6504 any lands to be leased on the Coastal Plain upon payment by the lessee of such bonus as may be accepted by the Secretary.

(b) SUBSEQUENT TRANSFERS.—No lease issued under this title may be sold, exchanged, assigned, sublet, or otherwise transferred except with the approval of the Secretary. Prior to any such approval the Secretary shall consult with, and give due consideration to the views of, the Attorney General.

SEC. 6506. LEASE TERMS AND CONDITIONS.

(a) IN GENERAL.—An oil or gas lease issued pursuant to this title shall—

(1) provide for the payment of a royalty of not less than 12½ percent in amount or value of the production removed or sold from the lease, as determined by the Secretary under the regulations applicable to other Federal oil and gas leases;

(2) provide that the Secretary may close, on a seasonal basis, portions of the Coastal Plain to exploratory drilling activities as necessary to protect caribou calving areas and other species of fish and wildlife;

(3) require that the lessee of lands within the Coastal Plain shall be fully responsible and liable for the reclamation of lands within the Coastal Plain and any other Federal lands that are adversely affected in connection with exploration, development, production, or transportation activities conducted under the lease and within the Coastal Plain by the lessee or by any of the subcontractors or agents of the lessee;

(4) provide that the lessee may not delegate or convey, by contract or otherwise, the reclamation responsibility and liability to another person without the express written approval of the Secretary;

(5) provide that the standard of reclamation for lands required to be reclaimed under this title shall be, as nearly as practicable, a condition capable of supporting the uses which the lands were capable of supporting prior to any exploration, development, or production activities, or upon application by the lessee, to a higher or better use as approved by the Secretary;

(6) contain terms and conditions relating to protection of fish and wildlife, their habitat, and the environment as required pursuant to section 6503(a)(2);

(7) provide that the lessee, its agents, and its contractors use best efforts to provide a fair share, as determined by the level of obligation previously agreed to in the 1974 agreement implementing section 29 of the Federal Agreement and Grant of Right of Way for the Operation of the Trans-Alaska Pipeline, of employment and contracting for Alaska Natives and Alaska Native Corporations from throughout the State;

(8) prohibit the export of oil produced under the lease; and

(9) contain such other provisions as the Secretary determines necessary to ensure compliance with the provisions of this title and the regulations issued under this title.

(b) PROJECT LABOR AGREEMENTS.—The Secretary, as a term and condition of each lease under this title and in recognizing the Government's proprietary interest in labor stability and in the ability of construction labor and management to meet the particular needs and conditions of projects to be developed under the leases issued pursuant to this title and the special concerns of the parties to such leases, shall require that the lessee and its agents and contractors negotiate to obtain a project labor agreement for the employment of laborers and mechanics on production, maintenance, and construction under the lease.

SEC. 6507. COASTAL PLAIN ENVIRONMENTAL PROTECTION.

(a) NO SIGNIFICANT ADVERSE EFFECT STANDARD TO GOVERN AUTHORIZED COASTAL PLAIN ACTIVITIES.—The Secretary shall, consistent with the requirements of section 6503, administer the provisions of this title through regulations, lease terms, conditions, restrictions, prohibitions, stipulations, and other provisions that—

(1) ensure the oil and gas exploration, development, and production activities on the Coastal Plain will result in no significant adverse effect on fish and wildlife, their habitat, and the environment; and

(2) require the application of the best commercially available technology for oil and gas exploration, development, and production on all new exploration, development, and production operations.

(b) SITE-SPECIFIC ASSESSMENT AND MITIGATION.—The Secretary shall also require, with respect to any proposed drilling and related activities, that—

(1) a site-specific analysis be made of the probable effects, if any, that the drilling or related activities will have on fish and wildlife, their habitat, and the environment;

(2) a plan be implemented to avoid, minimize, and mitigate (in that order and to the extent practicable) any significant adverse effect identified under paragraph (1); and

(3) the development of the plan shall occur after consultation with the agency or agencies having jurisdiction over matters mitigated by the plan.

(c) REGULATIONS TO PROTECT COASTAL PLAIN FISH AND WILDLIFE RESOURCES, SUBSISTENCE USERS, AND THE ENVIRONMENT.—Before implementing the leasing program authorized by this title, the Secretary shall prepare and promulgate regulations, lease terms, conditions, restrictions, prohibitions, stipulations, and other measures designed to ensure that the activities undertaken on the Coastal Plain under this title are conducted in a manner consistent with the purposes and environmental requirements of this title.

(d) COMPLIANCE WITH FEDERAL AND STATE ENVIRONMENTAL LAWS AND OTHER REQUIREMENTS.—The proposed regulations, lease terms, conditions, restrictions, prohibitions, and stipulations for the leasing program under this title shall require compliance with all applicable provisions of Federal and State environmental law and shall also require the following:

(1) Standards at least as effective as the safety and environmental mitigation measures set forth in items 1 through 29 at pages 167 through 169 of the ''Final Legislative Environmental Impact Statement'' (April 1987) on the Coastal Plain.

(2) Seasonal limitations on exploration, development, and related activities, where necessary, to avoid significant adverse effects during periods of concentrated fish and wildlife breeding, denning, nesting, spawning, and migration.

(3) That exploration activities, except for surface geological studies, be limited to the period between approximately November 1 and May 1 each year and that exploration activities shall be supported by ice roads, winter trails with adequate snow cover, ice pads, ice airstrips, and air transport methods, except that such exploration activities may occur at other times, if—

(A) the Secretary determines, after affording an opportunity for public comment and review, that special circumstances exist necessitating that exploration activities be conducted at other times of the year; and

(B) the Secretary finds that such exploration will have no significant adverse effect on the fish and wildlife, their habitat, and the environment of the Coastal Plain.

(4) Design safety and construction standards for all pipelines and any access and service roads, that—

(A) minimize, to the maximum extent possible, adverse effects upon the passage of migratory species such as caribou; and

(B) minimize adverse effects upon the flow of surface water by requiring the use of culverts, bridges, and other structural devices.

(5) Prohibitions on public access and use on all pipeline access and service roads.

(6) Stringent reclamation and rehabilitation requirements, consistent with the standards set forth in this title, requiring the removal from the Coastal Plain of all oil and gas development and production facilities, structures, and equipment upon completion of oil and gas production operations, except that the Secretary may exempt from the requirements of this paragraph those facilities, structures, or equipment that the Secretary determines would assist in the management of the Arctic National Wildlife Refuge and that are donated to the United States for that purpose.

(7) Appropriate prohibitions or restrictions on access by all modes of transportation.

(8) Appropriate prohibitions or restrictions on sand and gravel extraction.

(9) Consolidation of facility siting.

(10) Appropriate prohibitions or restrictions on use of explosives.

(11) Avoidance, to the extent practicable, of springs, streams, and river system; the protection of natural surface drainage patterns, wetlands, and riparian habitats; and the regulation of methods or techniques for developing or transporting adequate supplies of water for exploratory drilling.

(12) Avoidance or reduction of air traffic-related disturbance to fish and wildlife.

(13) Treatment and disposal of hazardous and toxic wastes, solid wastes, reserve pit fluids, drilling muds and cuttings, and domestic wastewater, including an annual waste management report, a hazardous materials tracking system, and a prohibition on chlorinated solvents, in accordance with applicable Federal and State environmental law.

(14) Fuel storage and oil spill contingency planning.

(15) Research, monitoring, and reporting requirements.

(16) Field crew environmental briefings.

(17) Avoidance of significant adverse effects upon subsistence hunting, fishing, and trapping by subsistence users.

(18) Compliance with applicable air and water quality standards.

(19) Appropriate seasonal and safety zone designations around well sites, within which subsistence hunting and trapping shall be limited.

(20) Reasonable stipulations for protection of cultural and archeological resources.

(21) All other protective environmental stipulations, restrictions, terms, and conditions deemed necessary by the Secretary.

(e) CONSIDERATIONS.—In preparing and promulgating regulations, lease terms, conditions, restrictions, prohibitions, and stipulations under this section, the Secretary shall consider the following:

(1) The stipulations and conditions that govern the National Petroleum Reserve-Alaska leasing program, as set forth in the 1999 Northeast National Petroleum Reserve-Alaska Final Integrated Activity Plan/Environmental Impact Statement.

(2) The environmental protection standards that governed the initial Coastal Plain seismic exploration program under parts 37.31 to 37.33 of title 50, Code of Federal Regulations.

(3) The land use stipulations for exploratory drilling on the KIC–ASRC private lands that are set forth in Appendix 2 of the August 9, 1983, agreement between Arctic Slope Regional Corporation and the United States.

(f) FACILITY CONSOLIDATION PLANNING.—

(1) IN GENERAL.—The Secretary shall, after providing for public notice and comment, prepare and update periodically a plan to govern, guide, and direct the siting and construction of facilities for the exploration, development, production, and transportation of Coastal Plain oil and gas resources.

(2) OBJECTIVES.—The plan shall have the following objectives:

(A) Avoiding unnecessary duplication of facilities and activities.

(B) Encouraging consolidation of common facilities and activities.

(C) Locating or confining facilities and activities to areas that will minimize impact on fish and wildlife, their habitat, and the environment.

(D) Utilizing existing facilities wherever practicable.

(E) Enhancing compatibility between wildlife values and development activities.

SEC. 6508. EXPEDITED JUDICIAL REVIEW.

(a) FILING OF COMPLAINT.—

(1) DEADLINE.—Subject to paragraph (2), any complaint seeking judicial review of any provision of this title or any action of the Secretary under this title shall be filed in any appropriate district court of the United States—

(A) except as provided in subparagraph (B), within the 90-day period beginning on the date of the action being challenged; or

(B) in the case of a complaint based solely on grounds arising after such period, within 90 days after the complainant knew or reasonably should have known of the grounds for the complaint.

(2) VENUE.—Any complaint seeking judicial review of an action of the Secretary under this title may be filed only in the United States Court of Appeals for the District of Columbia.

(3) LIMITATION ON SCOPE OF CERTAIN REVIEW.—Judicial review of a Secretarial decision to conduct a lease sale under this title, including the environmental analysis thereof, shall be limited to whether the Secretary has complied with the terms of this division and shall be based upon the administrative record of that decision. The Secretary's identification of a preferred course of action to enable leasing to proceed and the Secretary's analysis of environmental effects under this division shall be presumed to be correct unless shown otherwise by clear and convincing evidence to the contrary.

(b) LIMITATION ON OTHER REVIEW.—Actions of the Secretary with respect to which review could have been obtained under this section shall not be subject to judicial review in any civil or criminal proceeding for enforcement.

SEC. 6509. RIGHTS-OF-WAY ACROSS THE COASTAL PLAIN.

(a) EXEMPTION.—Title XI of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3161 et seq.) shall not apply to the issuance by the Secretary under section 28 of the Mineral Leasing Act (30 U.S.C. 185) of rights-of-way and easements across the Coastal Plain for the transportation of oil and gas.

(b) TERMS AND CONDITIONS.—The Secretary shall include in any right-of-way or easement referred to in subsection (a) such terms and conditions as may be necessary to ensure that transportation of oil and gas does not result in a significant adverse effect on the fish and wildlife, subsistence resources, their habitat, and the environment of the Coastal Plain, including requirements that facilities be sited or designed so as to avoid unnecessary duplication of roads and pipelines.

(c) REGULATIONS.—The Secretary shall include in regulations under section 6503(g) provisions granting rights-of-way and easements described in subsection (a) of this section.

SEC. 6510. CONVEYANCE.

In order to maximize Federal revenues by removing clouds on title to lands and clarifying land ownership patterns within the Coastal Plain, the Secretary, notwithstanding the provisions of section 1302(h)(2) of the Alaska National Interest Lands Conservation Act (16 U.S.C. 3192(h)(2)), shall convey—

(1) to the Kaktovik Inupiat Corporation the surface estate of the lands described in paragraph 2 of Public Land Order 6959, to the extent necessary to fulfill the Corporation's entitlement under section 12 of the Alaska Native Claims Settlement Act (43 U.S.C. 1611); and

(2) to the Arctic Slope Regional Corporation the subsurface estate beneath such surface estate pursuant to the August 9, 1983, agreement between the Arctic Slope Regional Corporation and the United States of America.

SEC. 6511. LOCAL GOVERNMENT IMPACT AID AND COMMUNITY SERVICE ASSISTANCE.

(a) FINANCIAL ASSISTANCE AUTHORIZED.—

(1) IN GENERAL.—The Secretary may use amounts available from the Coastal Plain Local Government Impact Aid Assistance Fund established by subsection (d) to provide timely financial assistance to entities that are eligible under paragraph (2) and that are directly impacted by the exploration for or production of oil and gas on the Coastal Plain under this title.

(2) ELIGIBLE ENTITIES.—The North Slope Borough, Kaktovik, and other boroughs, municipal subdivisions, villages, and any other community organized under Alaska State law shall be eligible for financial assistance under this section.

(b) USE OF ASSISTANCE.—Financial assistance under this section may be used only for—

(1) planning for mitigation of the potential effects of oil and gas exploration and development on environmental, social, cultural, recreational and subsistence values;

(2) implementing mitigation plans and maintaining mitigation projects; and

(3) developing, carrying out, and maintaining projects and programs that provide new or expanded public facilities and services to address needs and problems associated with such effects, including firefighting, police, water, waste treatment, medivac, and medical services.

(c) APPLICATION.—

(1) IN GENERAL.—Any community that is eligible for assistance under this section may submit an application for such assistance to the Secretary, in such form and under such procedures as the Secretary may prescribe by regulation.

(2) NORTH SLOPE BOROUGH COMMUNITIES.—A community located in the North Slope Borough may apply for assistance under this section either directly to the Secretary or through the North Slope Borough.

(3) APPLICATION ASSISTANCE.—The Secretary shall work closely with and assist the North Slope Borough and other communities eligible for assistance under this section in developing and submitting applications for assistance under this section.

(d) ESTABLISHMENT OF FUND.—

(1) IN GENERAL.—There is established in the Treasury the Coastal Plain Local Government Impact Aid Assistance Fund.

(2) USE.—Amounts in the fund may be used only for providing financial assistance under this section.

(3) DEPOSITS.—Subject to paragraph (4), there shall be deposited into the fund amounts received by the United States as revenues derived from rents, bonuses, and royalties under on leases and lease sales authorized under this title.

(4) LIMITATION ON DEPOSITS.—The total amount in the fund may not exceed $10,000,000.

(5) INVESTMENT OF BALANCES.—The Secretary of the Treasury shall invest amounts in the fund in interest bearing government securities.

(e) AUTHORIZATION OF APPROPRIATIONS.—To provide financial assistance under this section there is authorized to be appropriated to the Secretary from the Coastal Plain Local Government Impact Aid Assistance Fund $5,000,000 for each fiscal year.

SEC. 6512. REVENUE ALLOCATION.

(a) IN GENERAL.—Notwithstanding section 6504, the Mineral Leasing Act (30 U.S.C. 181 et seq.), or any other law—

(1) 50 percent of the adjusted bonus, rental, and royalty revenues from oil and gas leasing and operations authorized under this title shall be paid to the State of Alaska; and

(2) the balance of such revenues shall be deposited into the Treasury as miscellaneous receipts.

(b) ADJUSTMENTS.—Adjustments to bonus, rental, and royalty amounts from oil and gas leasing and operations authorized under this title shall be made as necessary for overpayments and refunds from lease revenues received in current or subsequent periods, prior to distribution of such revenues pursuant to this section.

(c) PAYMENTS TO STATE.—Payments to the State of Alaska under this section shall be made quarterly.

TITLE VI—CONSERVATION OF ENERGY BY THE DEPARTMENT OF THE INTERIOR

SEC. 6601. ENERGY CONSERVATION BY THE DEPARTMENT OF THE INTERIOR.

(a) IN GENERAL.—The Secretary of the Interior shall—

(1) conduct a study to identify, evaluate, and recommend opportunities for conserving energy by reducing the amount of energy used by facilities of the Department of the Interior; and

(2) wherever feasible and appropriate, reduce the use of energy from traditional sources by encouraging use of alternative energy sources, including solar power and power from fuel cells, throughout such facilities and the public lands of the United States.

(b) REPORTS.—The Secretary shall submit to the Congress—

(1) by not later than 90 days after the date of the enactment of this Act, a report containing the findings, conclusions, and recommendations of the study under subsection (a)(1); and

(2) by not later than December 31 each year, an annual report describing progress made in—

(A) conserving energy through opportunities recommended in the report under paragraph (1); and

(B) encouraging use of alternative energy sources under subsection (a)(2).

TITLE VII—COAL

SEC. 6701. LIMITATION ON FEES WITH RESPECT TO COAL LEASE APPLICATIONS AND DOCUMENTS.

Notwithstanding sections 304 and 504 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1734, 1764) and section 9701 of title 31, United States Code, the Secretary shall not recover the Secretary's costs with respect to applications and other documents relating coal leases.

SEC. 6702. MINING PLANS.

Section 2(d)(2) of the Mineral Leasing Act (30 U.S.C. 202a(2)) is amended—

(1) by inserting ''(A)'' after ''(2)''; and

(2) by adding at the end the following:

''(B) The Secretary may establish a period of more than 40 years if the Secretary determines that the longer period—

''(i) will ensure the maximum economic recovery of a coal deposit; or

''(ii) the longer period is in the interest of the orderly, efficient, or economic development of a coal resources.''.

SEC. 6703. PAYMENT OF ADVANCE ROYALTIES UNDER COAL LEASES.

(a) IN GENERAL.—Section 7(b) of the Mineral Leasing Act of 1920 (30 U.S.C. 207(b)) is amended to read as follows:

''(b)(1) Each lease shall be subjected to the condition of diligent development and continued operation of the mine or mines, except where operations under the lease are interrupted by strikes, the elements, or casualties not attributable to the lessee.

''(2)(A) The Secretary of the Interior, upon determining that the public interest will be served thereby, may suspend the condition of continued operation upon the payment of advance royalties.

''(B) Such advance royalties shall be computed based on the average price for coal sold in the spot market from the same region during the last month of each applicable continued operation year.

''(C) The aggregate number of years during the initial and any extended term of any lease for which advance royalties may be accepted in lieu of the condition of continued operation shall not exceed 20.

''(3) The amount of any production royalty paid for any year shall be reduced (but not below zero) by the amount of any advance royalties paid under such lease to the extent that such advance royalties have not been used to reduce production royalties for a prior year.

''(4) This subsection shall be applicable to any lease or logical mining unit in existence on the date of the enactment of this paragraph or issued or approved after such date.

''(5) Nothing in this subsection shall be construed to affect the requirement contained in the second sentence of subsection (a) relating to commencement of production at the end of 10 years.''.

(b) AUTHORITY TO WAIVE, SUSPEND, OR REDUCE ADVANCE ROYALTIES.—Section 39 of the Mineral Leasing Act (30 U.S.C. 209) is amended by striking the last sentence.

SEC. 6704. ELIMINATION OF DEADLINE FOR SUBMISSION OF COAL LEASE OPERATION AND RECLAMATION PLAN.

Section 7(c) of the Mineral Leasing Act (30 U.S.C. 207(c)) is amended by striking ''and not later than three years after a lease is issued,''.

TITLE VIII—INSULAR AREAS ENERGY SECURITY

SEC. 6801. INSULAR AREAS ENERGY SECURITY.

Section 604 of the Act entitled ''An Act to authorize appropriations for certain insular areas of the United States, and for other purposes'', approved December 24, 1980 (Public Law 96–597; 94 Stat. 3480–3481), is amended—

(1) in subsection (a)(4) by striking the period and inserting a semicolon;

(2) by adding at the end of subsection (a) the following new paragraphs:

''(5) electric power transmission and distribution lines in insular areas are inadequate to withstand damage caused by the hurricanes and typhoons which frequently occur in insular areas and such damage often costs millions of dollars to repair; and

''(6) the refinement of renewable energy technologies since the publication of the 1982 Territorial Energy Assessment prepared pursuant to subsection (c) reveals the need to reassess the state of energy production, consumption, infrastructure, reliance on imported energy, and indigenous sources in regard to the insular areas.'';

(3) by amending subsection (e) to read as follows:

''(e)(1) The Secretary of the Interior, in consultation with the Secretary of Energy and the chief executive officer of each insular area, shall update the plans required under subsection (c) by—

''(A) updating the contents required by subsection (c);

''(B) drafting long-term energy plans for such insular areas with the objective of reducing, to the extent feasible, their reliance on energy imports by the year 2010 and maximizing, to the extent feasible, use of indigenous energy sources; and

''(C) drafting long-term energy transmission line plans for such insular areas with the objective that the maximum percentage feasible of electric power transmission and distribution lines in each insular area be protected from damage caused by hurricanes and typhoons.

''(2) Not later than May 31, 2003, the Secretary of the Interior shall submit to Congress the updated plans for each insular area required by this subsection.''; and

(4) by amending subsection (g)(4) to read as follows:

''(4) POWER LINE GRANTS FOR TERRITORIES.—

''(A) IN GENERAL.—The Secretary of the Interior is authorized to make grants to governments of territories of the United States to carry out eligible projects to protect electric power transmission and distribution lines in such territories from damage caused by hurricanes and typhoons.

''(B) ELIGIBLE PROJECTS.—The Secretary may award grants under subparagraph (A) only to governments of territories of the United States that submit written project plans to the Secretary for projects that meet the following criteria:

''(i) The project is designed to protect electric power transmission and distribution lines located in one or more of the territories of the United States from damage caused by hurricanes and typhoons.

''(ii) The project is likely to substantially reduce the risk of future damage, hardship, loss, or suffering.

''(iii) The project addresses one or more problems that have been repetitive or that pose a significant risk to public health and safety.

''(iv) The project is not likely to cost more than the value of the reduction in direct damage and other negative impacts that the project is designed to prevent or mitigate. The cost benefit analysis required by this criterion shall be computed on a net present value basis.

''(v) The project design has taken into consideration long-term changes to the areas and persons it is designed to protect and has manageable future maintenance and modification requirements.

''(vi) The project plan includes an analysis of a range of options to address the problem it is designed to prevent or mitigate and a justification for the selection of the project in light of that analysis.

''(vii) The applicant has demonstrated to the Secretary that the matching funds required by subparagraph (D) are available.

''(C) PRIORITY.—When making grants under this paragraph, the Secretary shall give priority to grants for projects which are likely to—

''(i) have the greatest impact on reducing future disaster losses; and

''(ii) best conform with plans that have been approved by the Federal Government or the government of the territory where the project is to be carried out for development or hazard mitigation for that territory.

''(D) MATCHING REQUIREMENT.—The Federal share of the cost for a project for which a grant is provided under this paragraph shall not exceed 75 percent of the total cost of that project. The non-Federal share of the cost may be provided in the form of cash or services.

''(E) TREATMENT OF FUNDS FOR CERTAIN PURPOSES.—Grants provided under this paragraph shall not be considered as income, a resource, or a duplicative program when determining eligibility or benefit levels for Federal major disaster and emergency assistance.

''(F) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this paragraph $5,000,000 for each fiscal year beginning after the date of the enactment of this paragraph.''.

The CHAIRMAN pro tempore. No further amendment is in order except those printed in part B of the report. Each amendment may be offered only in the order printed, may be offered only by a Member designated in the report, shall be considered read, debatable for the time specified in the report, equally divided and controlled by the proponent and an opponent, shall not be subject to amendment, and shall not be subject to a demand for division of the question.

It is now in order to consider amendment No. 1 printed in part B of House Report 107–178.

AMENDMENT NO. 1 OFFERED BY MR. TAUZIN

Mr. TAUZIN. Mr. Chairman, I offer an amendment.

The CHAIRMAN pro tempore. The Clerk will designate the amendment.

The text of the amendment is as follows:

Amendment No. 1 offered by Mr. TAUZIN:

Page 10, after the table of contents, insert the following and make the necessary conforming changes in the table of contents:

SEC. 2. ENERGY POLICY.

It shall be the sense of the Congress that the United States should take all actions necessary in the areas of conservation, efficiency, alternative source, technology development, and domestic production to reduce the United States dependence on foreign energy sources from 56 percent to 45 percent by January 1, 2012, and to reduce United States dependence on Iraqi energy sources from 700,000 barrels per day to 250,000 barrels per day by January 1, 2012.

Page 36, line 15, insert ''or encourage'' after ''discourage''.

Page 36, lines 16 and 17, strike ''; and'' and insert ''when compared to structures of the same physical description and occupancy in compatible geographic locations;''.

Page 36, lines 18 through 23, strike paragraph (2) and insert the following:

(2) the extent to which education could increase the conservation of low-income households who opt to receive supplemental income instead of Low-Income Home Energy Assistance funds;

(3) the benefit in energy efficiency and energy savings that can be achieved through the annual maintenance of heating and cooling appliances in the homes of those receiving Low-Income Home Energy Assistance funds; and

(4) the loss of energy conservation that results from structural inadequacies in a structure that is unhealthy, not energy efficient, and environmentally unsound and that receives Low-Income Home Energy Assistance funds for weatherization.

Page 81, after line 12, insert the following new section, and make the necessary change to the table of contents:

SEC. 309. STUDY TO DETERMINE FEASIBILITY OF DEVELOPING COMMERCIAL NUCLEAR ENERGY PRODUCTION FACILITIES AT EXISTING DEPARTMENT OF ENERGY SITES.

(a) IN GENERAL.—The Secretary of Energy shall conduct a study to determine the feasibility of developing commercial nuclear energy production facilities at Department of Energy sites in existence on the date of enactment of this Act, including—

(1) options for how and where nuclear power plants can be developed on existing Department of Energy sites;

(2) estimates on cost savings to the Federal Government that may be realized by locating new nuclear power plants on Federal sites;

(3) the feasibility of incorporating new technology into nuclear power plants located on Federal sites;

(4) potential improvements in the licensing and safety oversight procedures of the effects of nuclear waste management policies and projects as a result of locating nuclear power plants located on Federal sites; and

(6) any other factors that the Secretary believes would be relevant in making the determination.

(b) REPORT.—Not later than 90 days after the date of enactment of this Act, the Secretary shall submit to Congress a report describing the results of the study under subsection (a).

In section 603 of title V of division A, on page 88, line 11, strike ''; and'' and insert a semicolon.

Page 88, line 17, strike the period and insert ''; and''.

Page 88, after line 17, insert the following new paragraph:

(8) the feasibility of providing incentives to promote cleaner burning fuel.

Page 92, after line 14, insert the following new sections, and make the necessary changes to the table of contents:

SEC. 603. STUDY OF ETHANOL FROM SOLID WASTE LOAN GUARANTEE PROGRAM.

The Secretary of Energy shall conduct a study of the feasibility of providing guarantees for loans by private banking and investment institutions for facilities for the processing and conversion of municipal solid waste and sewage sludge into fuel ethanol and other commercial byproducts, and not later than 90 days after the date of the enactment of this Act shall transmit to the Congress a report on the results of the study.

SEC. 604. STUDY OF RENEWABLE FUEL CONTENT.

(a) STUDY.—The Administrator of the Environmental Protection Agency and the Secretary of Energy shall jointly conduct a

study of the feasibility of developing a requirement that motor vehicle fuel sold or introduced into commerce in the United States in calendar year 2002 or any calendar year thereafter by a refiner, blender, or importer shall, on a 6-month average basis, be comprised of a quantity of renewable fuel, measured in gasoline-equivalent gallons. As part of this study, the Administrator and Secretary shall evaluate the use of a banking and trading credit system and the feasibility and desirability of requiring an increasing percentage of renewable fuel to be phased in over a 15-year period.

(b) REPORT TO CONGRESS.—Not later than 6 months after the date of the enactment of this Act, the Administrator and the Secretary shall transmit to the Congress a report on the results of the study conducted under this section.

Page 93, strike lines 3 through 12 and insert:

SEC. 802. HISTORIC PIPELINES.

Section 7 of the Natural Gas Act (15 U.S.C. 717(f)) is amended by adding at the end the following new subsection:

''(i) Notwithstanding the National Historic Preservation Act, a transportation facility shall not be eligible for inclusion on the National Register of Historic Places unless—

''(1) the Commission has permitted the abandonment of the transportation facility pursuant to subsection (b) of this section, or

''(2) the owner of the facility has given written consent to such eligibility.

Any transportation facility deemed eligible for inclusion on the National Register of Historic Places prior to the date of enactment of this subsection shall no longer be eligible unless the owner of the facility gives warrant consent to such eligibility.''.

Page 190, line 23, strike ''subsection'' and insert ''section''.

Page 220, lines 1 through 4, amend paragraph (1) to read as follows:

(1) $19,400,000 for fiscal year 2002, $14,800,000 for fiscal year 2003, and $8,900,000 for fiscal year 2004 for completion of construction of Project 98–G–304, Neutrinos at the Main Injector, Fermi National Accelerator Laboratory;

In section 6102(b)(1), strike ''42 U.S.C.'' and insert ''43 U.S.C.''.

Page 437, after line 6, (in section 5006 of Division E after subsection (c)) insert:

(d) FINANCIAL ASSISTANCE.—The Secretary shall provide financial assistance to projects that meet the requirements of subsections (a), (b), and (c) and are likely to—

(1) achieve overall cost reductions in the utilization of coal to generate useful forms of energy;

(2) improve the competitiveness of coal among various forms of energy in order to maintain a diversity of fuel choices in the United States to meet electricity generation requirements; and

(3) demonstrate methods and equipment that are applicable to 25 percent of the electricity generating facilities that use coal as the primary feedstock as of the date of enactment of this Act.

Page 437, line 7, (in section 5006 of Division E) strike ''(d)'' and insert ''(e)''.

Page 437, line 10, (in section 5006 of Division E) strike ''(e)'' and insert ''(f)''

Page 438, after line 17, (after section 5007 of Division E) insert the following new section and make the necessary change to the table of contents:

SEC. 5008. CLEAN COAL CENTERS OF EXCELLENCE.

As part of the program authorized in section 5003, the Secretary shall award competitive, merit-based grants to universities for the establishment of Centers of Excellence for Energy Systems of the Future. The Secretary shall provide grants to universities that can slow the greatest potential for advancing new clean coal technologies.

Page 3, in the table of contents for Division A, redesignate title VII relating to miscellaneous provisions as title VIII.

Page 93, line 13, (at the end of division A) strike ''VII'' relating to miscellaneous provisions and insert ''VIII''.

In Division A and in the table of contents for Division A, renumber sections 601 through 604 as 501 through 504 respectively, renumber sections 701 and 702 as 601 and 602 respectively, renumber sections 801 and 802 as 701 and 702 respectively, and renumber sections 901 through 903 as 801 through 803 respectively.

Page 433, line 13, strike ''(c)'' and insert ''(b)''.

Page 444, after line 22, insert the following new section:

SEC. 6106. EFFICIENT INFRASTRUCTURE DEVELOPMENT.

(a) IN GENERAL.—The Secretary of Energy and the Chairman of the Federal Energy Regulatory Commission shall jointly undertake a study of the location and extent of anticipated demand growth for natural gas consumption in the Western States, herein defined as the area covered by the Western System Coordinating Council.

(b) CONTENTS.—The study under subsection (a) shall include the following:

(1) A review of natural gas demand forecasts by Western State officials, such as the California Energy Commission and the California Public Utilities Commission, which indicate the forecasted levels of demand.

(2) A review of the locations of proposed new natural gas-fired electric generation facilities currently in the approval process in the Western States, and their forecasted impact on natural gas demand.

(3) A review of the locations of existing interstate natural gas transmission pipelines, and interstate natural gas pipelines currently in the planning stage or approval process, throughout the Western States.

(4) A review of the locations and capacity of intrastate natural gas pipelines in the Western States.

(5) Recommendations for the coordination of the development of the natural gas infrastructure indicated in paragraphs (1) through (4).

(c) REPORT.—The Secretary shall report the findings and recommendations resulting from the study required by this section to the Committee on Energy and Commerce of the House of Representatives and to the Committee of the House of Representatives and to the Committee on Energy and Natural Resources of the Senate no later than 6 months after the date of the enactment of this Act. The Chairman of the Federal Energy Regulatory Commission shall report on how the Commission will factor these results into its review of applications of interstate pipelines within the Western States to the Committee on Energy and Commerce of the House of Representatives and to the Committee on Energy and Natural Resources of the Senate no later than 6 months after the date of the enactment of this Act.

In section 6223, amend subsection (b) to read as follows:

(b) PREPARATION OF LEASING PLAN OR ANALYSIS.—In preparing a management plan or leasing analysis for oil or natural gas leasing on Federal lands administered by the Bureau of Land Management or the Forest Service, the Secretary concerned shall—

(1) identify and review the restrictions on surface use and operations imposed under the laws (including regulations) of the State in which the lands are located;

(2) consult with the appropriate State agency regarding the reasons for the State restrictions identified under paragraph (1);

(3) identify any differences between the State restrictions identified under paragraph (1) and any restrictions on surface use and operations that would apply under the lease; and

(4) prepare and provide upon request a written explanation of such differences.

At the end of section 6223 add the following:

(e) PRESERVATION OF FEDERAL AUTHORITY.—Nothing in this section or in any identification, review, or explanation prepared under this section shall be construed—

(1) to limit the authority of the Federal Government to impose lease stipulations, restrictions, requirements, or other terms that are different than those that apply under State law; or

(2) to affect the procedures that apply to judicial review of actions taken under this subsection.

In section 6225, in the quoted material—

(1) in paragraph (2)(A), insert ''and consultation with the Regional Forester having administrative jurisdiction over the National Forest System lands concerned'' after ''under paragraph (1)''; and

(2) add at the end the following:

''(3) The Secretary of Agriculture shall include in the record of decision for a determination under paragraph (2)(A)—

''(A) any written statement regarding the determination that is prepared by a Regional Forester consulted by the Secretary under paragraph (2)(A) regarding the determination; or

''(B) an explanation why such a statement by the Regional Forester is not included.

In Section 6303(2), in the quoted material—

(1) in paragraph (2)(A), insert ''and consultation with any Regional Forester having administrative jurisdiction over the lands concerned'' after ''under paragraph (1)''; and

(2) add at the end the following:

''(3) The Secretary of Agriculture shall include in the record of decision for a determination under paragraph (2)(A)—

''(A) any written statement regarding the determination that is prepared by a Regional Forester consulted by the Secretary under paragraph (2)(A) regarding the determination; or

''(B) an explanation why such a statement by the Regional Forester is not included.

In section 6234—

(1) insert ''(a) IN GENERAL.—'' before the first sentence;

(2) redesignate subsections (c) and (d) as subsections (b) and (c); and

(3) in the quoted material, strike the material preceding subsection (b) and insert the following:

''REIMBURSEMENT FOR COSTS OF CERTAIN ANALYSES, DOCUMENTATION, AND STUDIES

''SEC. 38. (a) IN GENERAL.—The Secretary of the Interior may, through royalty credits, reimburse a person who is a lessee, operator, operating rights owner, or applicant for an oil or gas lease under this Act for amounts paid by the person for preparation by the Secretary (or a contractor or other person selected by the Secretary) of any project-level; analysis, documentation, or related study required under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) with respect to the lease.

In section 6308(a), in the quoted material, strike the material preceding subsection (b) and insert the following:

''REIMBURSEMENT FOR COSTS OF CERTAIN ANALYSES, DOCUMENTATION, AND STUDIES

''SEC. 38. (a) IN GENERAL.—The Secretary of the Interior may, through royalty credits, reimburse a person who is a lessee, operator, operating rights owner, or applicant for a lease under this Act for amounts paid by the person for preparation by the Secretary (or a

contractor or other person selected by the Secretary) of any project-level analysis, documentation, or related study required under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) with respect to the lease.

Page 510, after line 8, insert the following new division, and make the necessary changes to the table of contents:

DIVISION G

SEC. 7101. BUY AMERICAN.

No funds authorized under this Act shall be available to any person or entity that has been convicted of violating the Buy American Act (41 U.S.C. 10a–10c).

The CHAIRMAN pro tempore. Pursuant to House Resolution 216, the gentleman from Louisiana (Mr. TAUZIN) and the gentleman from West Virginia (Mr. RAHALL) each will control 10 minutes.

The Chair recognizes the gentleman from Louisiana (Mr. TAUZIN).

Mr. TAUZIN. Mr. Chairman, I yield myself such time as I may consume.

The manager's amendment before us does two basic things: first, it makes a number of technical changes in H.R. 4 that the committees of jurisdiction have agreed upon. Secondly, it incorporates a number of the amendments to H.R. 4 that were originally filed with the Committee on Rules and we thought were deserving of inclusion in the base bill going forward.

Most of these amendments are amendments that call for studies and for expanded research and for expanded scope of existing studies, many of them designed to examine the feasibility of new efficiencies and new energy savings that are critical to managing demand in our country.

With respect to this latter category, I want to commend in particular the gentleman from Arizona (Mr. SHADEGG) and the gentleman from Maryland (Mr. WYNN) of our committee, who worked in a bipartisan fashion to draft an amendment on historic pipelines. As you know, the National Historic Preservation Act was being interpreted to cover pipelines. This bill fixes that, but nevertheless incorporates those that wanted that designation and in fact have it.

The bottom line is this amendment is primarily technical with the study amendments added. I would hope that we could have an easy approval of this amendment. I understand we have some objection to it.

Mr. Chairman, I reserve the balance of my time.

Mr. RAHALL. Mr. Chairman, I yield 2 minutes to the distinguished gentleman from Wisconsin (Mr. KIND), ranking member of the Subcommittee on Energy and Mineral Resources.

Mr. KIND. Mr. Chairman, I thank the gentleman for yielding time.

Mr. Chairman, as ranking member of the Subcommittee on Energy and Mineral Resources of the Committee on Resources, I reluctantly rise in opposition to the base bill.

The American people know we have a long-term energy crisis and that we need to develop a comprehensive and balanced plan. A plan that finds 21st century slolutions to deal with our 21st century energy needs. They were hoping we could work in a bipartisan fashion to accomplish it, but unfortunately this bill does not get us there.

I am glad, however, that there were a couple of amendments made in order. We are going to have an honest debate on whether or not it makes sense to go into the Arctic National Wildlife Refuge to explore and drill for more oil. I am glad we are going to have an honest debate on increasing the fuel efficiency standards of our cars and our trucks in this country.

But there were other important amendments, Mr. Chairman, that were not made in order that also deserve serious discussion. I, along with the ranking member on the Committee on Resources, the gentleman from West Virginia (Mr. RAHALL), and the gentleman from Wisconsin (Mr. PETRI), tried introducing an amendment talking about the oil royalty giveback provision of this bill, a multibillion-dollar giveback provision that we are about to give the oil industry to do what they are already doing. I do not know how many of my colleagues saw the front-page story in the Wall Street Journal on Tuesday which is titled: ''Pumping Money, Major Oil Companies Struggle to Spend Huge Hoards of Cash.'' What the report indicates is that there is over $40 billion of cash reserves that the oil industry is sitting on right now trying to figure out a way of investing it and using it. That number is going to explode to multibillion dollars more accordingly to industry analysts. Yet we are on the verge with this energy plan of giving them back billions of dollars in oil royalty relief that even the Bush administration is not asking for.

I think we also need to address some of the short-term energy problems that we have. I tried offering an amendment with the gentleman from California (Mr. GEORGE MILLER) that would allow the Department of Interior to recover its costs associated with oil and gas leasing on the 95 percent of the public lands that are currently accessible and available for oil and gas drilling. If we want to deal with the backlog of leasing that is existing in the Department of Interior, let us allow them to recover the costs in order to expedite that process to deal with our short-term energy needs. But that amendment was not made in order.

Unfortunately this bill is not balanced. I urge a ''no'' vote.

Mr. TAUZIN. Mr. Chairman, I am pleased to yield 2 minutes to my colleague and dear friend, the gentleman from Louisiana (Mr. VITTER).

Mr. VITTER. Mr. Chairman, I am pleased to rise in support of this bill and in support of the manager's amendment, because it is not just about energy security which is crucial, it is not just about economic security which is crucial. It is also about national security.

That is exactly why I proposed an amendment that was included in the manager's amendment to mandate us to take all action necessary to decrease our reliance on foreign sources of oil. Specifically, it says that we are going to take every action necessary in the areas of conservation, efficiency, alternative source development, technology development, and domestic production to reduce U.S. dependence on foreign energy sources from 56 percent, where we are today and rising, to 45 percent by January 1, 2012, and to reduce U.S. dependence on Iraqi energy sources in particular from 700,000 barrels per day, where we are now, to 250,000 barrels per day by that same date, January 1, 2012.

We need to take a balanced approach that this bill demonstrates and involves if we are going to take the right step forward for national security as well as energy and economic security. Every day we wait, every day we do not act in all areas like conservation and alternative source and domestic production, Saddam Hussein sits back and laughs and collects more money and collects more leverage on our economy. We need to turn that tide around. This bill and this manager's amendment is a crucial and important first step in doing that.

Mr. RAHALL. Mr. Chairman, I yield 2 minutes to the distinguished gentleman from Massachusetts (Mr. MARKEY), a valued member of the Committee on Resources.

□ 1445

Mr. MARKEY. Mr. Chairman, the Republican bill will spend $34 billion, and these are huge breaks, a royalty holiday, meaning the oil and gas companies will not have to pay for going on public lands. Other huge breaks.

Now, where are they going? They just had a huge tax break for the upper 1 percentile just 3 months ago. We have run out of the real surplus. Now people say well, you know what, we still have the Social Security, and we still have the Medicare surpluses.

So here is what they are doing. They are about to build their oil rigs, their gas rigs, on top of the Social Security trust fund, on top of the Medicare trust fund, and they are about to begin to drill so they can pump it dry. They are going to build a pipeline, a pipeline into the pockets of the senior citizens in our country. That is where the money has to come from.

Now, they did not allow the Democrats to make an amendment so that we could have the $34 billion come out of the tax break for the upper one-half of one percent percentile, who, after all, is also going to get this $34 billion. It is going to be a rig that goes directly into Social Security and Medicare, and they are not allowing us to make an amendment to stop this, and that is wrong. That is what this whole debate is all about. It is about this mindless commitment to ensuring that Medicare and Social Security money is spent on things other than the senior citizens in

this country, and blocking the Democrats from protecting these trust funds which have been promised to our seniors. Please.

Mr. TAUZIN. Mr. Chairman, I yield myself 30 seconds.

Mr. Chairman, I do not know what kind of problems the gentleman that preceded me has with the Committee on Rules or the underlying bill, but the manager's amendment before us establishes, for example, studies on the feasibility of processing and converting municipal waste sewage to fuel, ethanol; to find ways to limit demand growth; to find a joint study on boutique fuels; to include using the excise tax program to help encourage new and alternative fuels in the marketplace. It is a good manager's amendment, whatever other problems you have with the bill.

Mr. Chairman, I yield 1½ minutes to the gentleman from Alabama (Mr. BACHUS).

Mr. BACHUS. Mr. Chairman, I could not agree with the gentleman from Louisiana more. This is about increasing our energy supply and doing it domestically and doing it in an environmentally friendly way. If you want to depend on OPEC, then Social Security is going to be threatened.

Contained in the manager's amendment is a study by the Department of Energy on how to best promote turning municipal solid waste and sewer sludge into ethanol, or simply turning garbage into ethanol. Now, what do we do today? We bury our garbage, we spread it across the land, we spread our sewage across the land, we take it on barges and dump it in the ocean, we ship it 500 miles, resulting in air pollution, water pollution.

There is a better way, and that is to take our garbage, convert it into ethanol, and burn it as a clean burning fuel to replace MTBE fuels which pollute the water. The one thing that this bill has that is a revolutionary step that will prove 10, 20, 30 years from now to be one of the best things we did, is to start turning a problem into a solution, and that is garbage into ethanol, something we have too much of, to something we do not have enough of.

I commend the chairman for including this study. We will look back on this day and thank ourselves.

Mr. RAHALL. Mr. Chairman, I yield 1 minute to the gentlewoman from the Virgin Islands (Mrs. CHRISTENSEN), the distinguished ranking member of our Subcommittee on National Parks, Recreation, and Public Lands.

(Mrs. CHRISTENSEN asked and was given permission to revise and extend her remarks.)

Mrs. CHRISTENSEN. Mr. Chairman, I rise in opposition to the manager's amendment and H.R. 4, which really does not secure America's energy future. Instead, the bill threatens the future of Alaska's and one of the country's most pristine natural areas, cuts back on clean air standards, and opens up more of the public lands to mining and drilling, while relieving already rich oil companies of their responsibility for paying the American people for the right to drill on our lands.

Ninety-five percent of the Alaska wilderness is available for drilling. Let us save the 5 percent in the fragile refuge and use the vast lands already available to develop the oil and gas supplies and still create the jobs our workers need.

Let us reject this fig leaf amendment and H.R. 4.

Mr. TAUZIN. Mr. Chairman, I am pleased to yield 1½ minutes to the gentleman from Indiana (Mr. PENCE).

Mr. PENCE. Mr. Chairman, I thank the distinguished chairman for yielding me time, and I rise in support of the manager's amendment to the Securing America's Future Energy Act. I do so because I am very concerned, Mr. Chairman, with America's growing energy crisis.

Fuel economy and fuel efficiency are important, but we cannot afford to tinker with regulations for political purposes when they have no meaningful effect.

Some would like to see changes in the CAFE standards, and allege that such a change would actually help improve America's energy economy. I beg to differ, Mr. Chairman. The most likely response to higher CAFE standards is that safer cars will cost more and will be purchased less. Increasing those standards will undermine automobile safety, needlessly risking the lives of families and children who choose light trucks and other vehicles because they offer superior safety.

In addition, Mr. Chairman, in my own district in Indiana, we are part of a network of automotive manufacturers who help consumers get these safer cars. Arbitrarily increasing CAFE standards will put families at risk on the road and hardworking automotive families at risk at work, who could well lose their jobs if we damage this vital part of our automotive economy.

Say no to higher arbitrary CAFE standards, keep Americans safe on the road, Mr. Chairman, and keep auto workers safely employed.

Mr. RAHALL. Mr. Chairman, I yield myself such time as I may consume.

Mr. Chairman, I rise in opposition to the manager's amendment and hope I may allay some of the concerns of the gentleman from Louisiana about where our remarks are addressed. There are many reasons to oppose this amendment. I will limit my comments to those provisions of this amendment that falls within the jurisdiction of the Committee on Resources.

Under the pretence of improving several particularly egregious provisions of the bill as reported by the Committee on Resources, this manager's amendment does not, as the author suggests, perfect or correct these objectionable provisions.

In fact, the amendment actually maintains the majority's misguided intentions to open the entire Federal estate to oil and gas leasing and to transfer costs now borne by the oil and gas industry to the American taxpayers.

First, the amendment would add a misleading provision entitled ''preservation of Federal authority'' to lull the unsuspecting into believing that oil and gas leasing decisions will be consistent with Federal environmental laws. However, closer reading of the provision clearly states that Federal lease stipulations cannot be more stringent than State oil and gas laws. This means that if a wildlife or hunting regulation would require exploration and development to occur in certain months to protect wildlife breeding habitat, that the Federal Government could not impose that requirement on the oil and gas activity. The Sportsmen's Caucus should be very concerned about this provision.

Second, despite what its authors tell you, the manager's amendment maintains the flaw in H.R. 4 that takes Forest Service decision-making authority away from the Forest Service land manager and instead hauls it into Washington, D.C. It requires the Secretary of Agriculture not to force professionals in the field to decide where oil and gas leasing will occur in National Forest Service lands.

Third, the manager's amendment maintains a nice little kickback for big oil for its costs in preparing environmental impact statements. CBO says this particular provision will cost the American taxpayers $370 million, and, of that amount, the States, oil-producing States like Wyoming, Colorado, and Utah, will lose $185 million.

Why should American taxpayers foot the bill for NEPA documents for the oil and gas industry, which, according to The Wall Street Journal again, is enjoying huge profits and does not know where to spend their hordes of cash?

This amendment does precious little to improve a bad bill. It does not solve the environmental problems created by the Committee on Resources portion of the bill. I would urge my colleagues to vote against the manager's amendment.

Mr. TAUZIN. Mr. Chairman, I am pleased to yield 2 minutes to the gentleman from Oklahoma (Mr. LARGENT), a valued member of the Committee on Energy and Commerce. New.

(Mr. LARGENT asked and was given permission to revise and extend his remarks.)

Mr. LARGENT. Mr. Chairman, there is a Chinese proverb that says that the best time to plant a tree is 20 years ago, but the next best time to plant a tree is today.

The same can be said for a national energy policy. The best time to have had a national energy policy in place would have been 20 years ago, because we would not be in the position we are in today had we done that. But the next best time is today.

Great leaders have the uncanny ability to climb to the highest vantage point to see where we are and where we

want to be, and I want to commend and applaud the efforts of the President and Vice President for climbing to that vantage point and seeing the necessity of having a national energy policy and beginning to implement it today.

Now, the key word in developing a national energy policy is the same key word in having a productive life, and that is balance. And this underlying bill and the manager's amendment, that I speak on behalf of at this time, strikes that balance.

A national energy policy should be balanced. We should strike a balance between our efforts on conservation, which this bill does. We should strike a balance on our fossil fuel resources, between oil and gas and coal, and we do that. We should have a balance in terms of the emphasis on research, or renewable resources as well, and this bill does that.

In the future, in the fall, we will be adding a complement bill to this that looks into how we can encourage and incentivize new additional nuclear power in this country, which is the right thing to do, and to continue to look at ways that we can clear up the electricity wholesale markets in this country, especially in terms of how we deliver electricity across State lines on the big bulk power grid. And that is going to be very important.

But this bill is a good bill, it is a balanced bill, it is a commonsense bill, it is a responsible bill, and I urge my colleagues to support this bill, because today is the next best time to have a national energy policy in place.

Mr. RAHALL. Mr. Chairman, I yield 2 minutes to the gentlewoman from New York (Mrs. MALONEY).

Mrs. MALONEY of New York. I thank the gentleman for yielding me time and for his leadership.

Mr. Chairman, I rise against the manager's amendment because it does nothing to correct the rip-off of corporate welfare in the royalty-in-kind program. I also rise in opposition to the underlying bill, as it might as well have been written in 1901 instead of 2001. It spends billions of taxpayers' dollars on corporate welfare to help dirty, polluting oil energy sources, old energy sources, and it does little to encourage newer, cleaner fuels.

I am particularly disturbed that an amendment was not accepted of mine to delete the royalty-in-kind program and that this manager's amendment does not delete it. The oil companies call it a new way to pay. I call it a new way to rip off America's taxpayers.

Recently, because of work in this body and oversight, the oil companies were revealed that they were underpaying dramatically what was owed the Federal Government for oil extracted from federally owned lands. They settled over $5 billion to the Federal Government, admitting that they underpaid the Federal Government. Now that we have tied their payment to market price, they come up with a new idea, they are going to pay in oil.

What are we going to do with this oil? We are going to probably take it and send it back to the very same companies who just sold it to us and who have been historically cheating us and let them determine what the price is. I ask, why are we letting the government get into the oil business? Since when did this Congress consider creating new massive Federal bureaucracies that we have no idea what they cost?

There have been several GAO reports have pointed out that all of the royalty-in-kind programs have cost taxpayers money.

□ 1500

So why are we going to proceed with corporate welfare? What will this body do next? Will we allow bakers to pay their fees with pies? It is an outrage. It is wrong. Vote no.

Contrary to the Department of Interior's claim that the Wyoming RIK pilot program was successful, an independent analysis determined that it actually LOST almost $3 million compared to what would have been paid by Big Oil if royalties had been paid based on market prices.

FACT SHEET ON ROYALTY-IN-KIND IN H.R. 4, THE ENERGY SECURITY ACT

New Oil Rule Collects $70 Million More Annually—Stops Cheating. In June 2000 the Department of Interior implemented a final rule that collects $70 million more annually from companies drilling oil from federal and Indian lands. As a result, the oil industry's decades-long practice of shortchanging the taxpayers ended. The rule came after years of public debate and litigation that forced the industry to settle with the Justice Department for $425 million.

Oil Industry Pushes Royalty-in-Kind (RIK). During the oil rule battle, the industry promoted RIK—where companies pay royalties in, for example, barrels of oil rather than dollars—as their alternative to paying fair market value under the proposed rule.

RIK Pilot Programs Have LOST Money. Interior has completed two royalty-in-kind pilot programs. Both failed, losing significant revenues compared to dollars received from programs collecting cash. According to Interior, the first pilot program to collect gas royalties-in-kind lost $4.7 million. Earlier this year, a second pilot program to collect oil royalties-in-kind lost $3 million, in spite of Interior's claim that it made $800,000. An independent economist discovered that Interior used old valuation standards in estimating the profit.

Expansion Of RIK Pilots Can Only Lead to Further Losses for the Taxpayer. The two pilot programs failed despite the fact that the Interior Department selected oil and gas leases most likely to succeed in generating comparable income. Expansion of royalty-in-kind programs to leases less likely to succeed will only lead to additional revenue losses for the American people.

GAO Says RIK Won't Work For Federal Royalties. In 1998, the General Accounting Office analyzed the prospect for a successful federal RIK program and concluded: ''According to information from studies and the programs themselves, royalty-in-kind programs seem to be feasible if certain conditions are present . . . However, these conditions do not exist for the federal government or for most federal leases . . .'' The report also notes that requiring RIK on all federal leases will cost the government $140 million to $367 million annually.

There is no evidence that royalty-in-kind will end litigation or disputes over how much oil and gas companies should be paying. Pending lawsuits filed by whistleblowers allege that companies manipulated the volume and heating content of gas taken from public lands in order to avoid paying royalties. The allegations call into question the wisdom of accepting any payments in- kind—until the allegations are fully investigated.

Mr. TAUZIN. Mr. Chairman, I yield the remaining time to the gentleman from Virginia (Mr. TOM DAVIS) for a colloquy.

(Mr. TOM DAVIS of Virginia asked and was given permission to revise and extend his remarks.)

Mr. TOM DAVIS of Virginia. Mr. Chairman, H.R. 4 contains provisions that would impose mandatory standards on the high-tech sector, a community that for 10 years has worked voluntarily with the Federal Government through the Energy Star program to achieve approximately 7,000 energy-efficient consumer products for more than 1,000 manufacturers. By imposing mandatory standards, we risk quelling innovation and, as a result, hindering growth.

I am concerned that inflexible, mandatory standards, as they exist now, could stunt the technology engines of our economy and compromise our competitiveness worldwide. For this reason, I would respectfully ask the chairman to work with me as we address some of these concerns as we prepare to go to conference on this measure.

Mr. TAUZIN. Mr. Chairman, will the gentleman yield?

Mr. TOM DAVIS of Virginia. I yield to the gentleman from Louisiana.

Mr. TAUZIN. Mr. Chairman, I would be happy to work with the gentleman on those concerns, and hopefully, in the conference, we can alleviate those concerns.

Mr. DREIER. Mr. Chairman, will the gentleman yield?

Mr. TOM DAVIS of Virginia. I yield to the gentleman from California.

Mr. DREIER. Mr. Chairman, I would simply like to say that this falls in line with the remarks that I made during consideration of the rule. I believe it is very important that we address the potential unintended consequences on this as we head into conference, so that we ensure that our very important friends in the technical industries that are creating 45 percent of the GDP growth in this country are not affected in a deleterious way on this issue.

Mr. RAHALL. Mr. Chairman, I yield myself the remaining time.

I think it is appropriate that that side had the chair of their Republican Campaign Committee as their cleanup hitter on this particular legislation.

I guess the reason the majority decided to wait until August 1 to bring this bill up was so they could not be tagged with providing Christmas in July for the major oil companies. They brought the bill up on August 1 because it is a grab bag of goodies for the oil companies.

The manager's amendment does nothing to eliminate any of these rip-

offs of the American taxpayer. The American taxpayers are still going to pick up the tab for many of the costs incurred by the major oil companies who are today reaping hoards of cash and do not know what to do with it.

Mr. BROWN of South Carolina. Mr. Chairman, this provision for a feasibility study of commercially owned and operated nuclear power plants is intended to be simple and straight-forward. We know that the nuclear plants operating today are quickly approaching the end of their serviceable years. If nuclear power is going to continue to provide a significant source of this nation's electricity, this study by DOE will help the Congress determine if there are any unique advantages to having commercial nuclear power plants on existing DOE sites. The fact is that nuclear power is our cleanest source of energy and provides about 20 percent of U.S. electricity generation. That compares to almost 76 percent in France, 56 percent in Belgium, and 30 percent in Germany. In my state of South Carolina, nuclear power provides 55 percent of our electricity. Demand for energy in the United States is rising and nuclear power can continue to help us meet this need. These DOE sites offer a potential solution to problems such as securing new land for the next generation of nuclear power plants, contentious licensing, absence of local community support, and investments in costly basic infrastructure.

The CHAIRMAN pro tempore (Mr. LINDER). All time has expired. The question is on the amendment offered by the gentleman from Louisiana (Mr. TAUZIN).

The question was taken; and the Chairman pro tempore announced that the ayes appeared to have it.

Mr. TAUZIN. Mr. Chairman, I demand a recorded vote and, pending that, I make the point of order that a quorum is not present.

The CHAIRMAN pro tempore. Pursuant to clause 6 of rule XVIII, further proceedings on the amendment offered by the gentleman from Louisiana (Mr. TAUZIN) will be postponed.

The point of no quorum is considered withdrawn.

The CHAIRMAN pro tempore. It is now in order to consider Amendment No. 2 printed in part B of House report 107–178.

AMENDMENT NO. 2 OFFERED BY MRS. BONO

Mrs. BONO. Mr. Chairman, I offer an amendment.

The CHAIRMAN. The Clerk will designate the amendment.

The text of the amendment is as follows:

Amendment No. 2 offered by Mrs. BONO:

After section 141, insert the following new section and make the necessary conforming changes in the table of contents:

SEC. 141A. ENERGY SUN RENEWABLE AND ALTERNATIVE ENERGY PROGRAM.

(a) AMENDMENT.—The Energy Policy and Conservation Act (42 U.S.C. 6201 and following) is amended by inserting the following after section 324A:

"SEC. 324B. ENERGY SUN RENEWABLE AND ALTERNATIVE ENERGY PROGRAM.

''(a) PROGRAM.—There is established at the Environmental Protection Agency and the Department of Energy a government-industry partnership program to identify and promote the purchase of renewable and alternative energy products, to recognize companies that purchase renewable and alternative energy products for the environmental and energy security benefits of such purchases, and to educate consumers about the environmental and energy security benefits of renewable and alternative energy. Responsibilities under the program shall be divided between the Environmental Protection Agency and the Department of Energy consistent with the terms of agreements between the two agencies. The Administrator of the Environmental Protection Agency and the Secretary of Energy—

''(1) establish an Energy Sun label for renewable and alternative energy products and technologies that the Administrator or the Secretary (consistent with the terms of agreements between the two agencies regarding responsibility for specific product categories) determine to have substantial environmental and energy security benefits and commercial marketability.

''(2) establish an Energy Sun Company program to recognize private companies that draw a substantial portion of their energy from renewable and alternative sources that provide substantial environmental and energy security benefits, as determined by the Administrator or the Secretary.

''(3) promote Energy Sun compliant products and technologies as the preferred products and technologies in the marketplace for reducing pollution and achieving energy security; and

''(4) work to enhance public awareness and preserve the integrity of the Energy Sun label.

For the purposes of carrying out this section, there is authorized to be appropriated $10,000,000 for each of fiscal years 2002 through 2006.

''(b) STUDY OF CERTAIN PRODUCTS, TECHNOLOGIES, AND BUILDINGS.—Within 18 months after the enactment of this section, the Administrator and the Secretary, consistent with the terms of agreements between the two agencies, shall conduct a study to determine whether the Energy Sun label should be authorized for products, technologies, and buildings in the following categories:

''(1) Passive solar, solar thermal, concentrating solar energy, solar water heating, and related solar products and building technologies.

''(2) Solar photovoltaics and other solar electric power generation technologies.

''(3) Wind.

''(4) Geothermal.

''(5) Biomass.

''(6) Distributed energy (including, but not limited to, microturbines, combined heat and power, fuel cells, and stirling heat engines).

''(7) Green power or other renewables and alternative based electric power products (including green tag credit programs) sold to retail consumers of electricity.

''(8) Homes.

''(9) School buildings.

''(10) Retail buildings.

''(11) Health care facilities.

''(12) Hotels and other commercial lodging facilities.

''(13) Restaurants and other food service facilities.

''(14) Rest area facilities along interstate highways.

''(15) Sports stadia, arenas, and concert facilities.

''(16) Any other product, technology or building category, the accelerated recognition of which the Administrator or the Secretary determines to be necessary or appropriate for the achievement of the purposes of this section.

Nothing in this subsection shall be construed to limit the discretion of the Administrator or the Secretary under subsection (a)(1) to include in the Energy Sun program additional products, technologies, and buildings not listed in this subsection. Participation by private-sector entities in programs or studies authorized by this section shall be (A) voluntary, and (B) by permission of the Administrator or Secretary, on terms and conditions the Administrator or the Secretary (consistent with agreements between the agencies) deems necessary or appropriate to carry out the purposes and requirements of this section.

''(c) DEFINITION.—For the purposes of this section, the term 'renewable and alternative energy' shall have the same meaning as the term 'unconventional and renewable energy resources' in Section 551 of the National Energy Conservation Policy Act (42 U.S.C. 8259)''.''.

(b) TABLE OF CONTENTS AMENDMENT.—The table of contents of the Energy Policy and Conservation Act is amended by inserting after the item relating to section 324A the following new item:

''Sec. 324B. Energy Sun renewable and alternative energy program.''.

The CHAIRMAN. Pursuant to House Resolution 216, the gentlewoman from California (Mrs. BONO) and a Member opposed each will control 5 minutes.

The Chair recognizes the gentlewoman from California (Mrs. BONO).

Mrs. BONO. Mr. Chairman, I yield myself such time as I may consume.

I would first like to commend the gentleman from Louisiana (Mr. TAUZIN) and the gentleman from Michigan (Mr. DINGELL), along with the gentleman from Texas (Mr. BARTON) and the gentleman from Virginia (Mr. BOUCHER) for their hard work in putting together the part of H.R. 4 provided by the Committee on Energy and Commerce. After years of neglecting to formulate a national energy policy, I am thankful that this administration and Congress have turned their attention towards this vital issue.

A critical part of the diverse energy mix is renewable and alternative energy. This bill provides for more use of renewable energy by the Federal Government, alternative fuel vehicles, and a very aggressive program of research and development for renewables and alternative energy sources.

But we can do more. California's 44th congressional district has been a leader in the development of green power. Solar, wind, distributed energy, and other developing technologies help protect the environment and save money on consumer energy bills. This amendment would promote these promising technologies through a government-industry partnership project sponsored by the EPA and the DOE.

This initiative would be called the ''Energy Sun'' partnership program. It is modeled on the highly successful EPA–DOE program of a similar name, the Energy Star program, which focuses on promoting energy-efficient products. For the private sector, the Energy Sun program, like Energy Star, would be purely voluntary. It would promote renewable and alternative energy through consumer education and market forces, not mandates.

EPA and DOE would recognize only the best products, those that promise substantial environmental and energy security benefits. It would also recognize companies that use those products, creating a marketing incentive for companies to use environmentally friendly, renewable and alternative energy.

If adopted, I look forward to working on this program, not only with the Committee on Energy and Commerce, but also with the gentleman from New York (Mr. BOEHLERT) and the Committee on Science, who have also done a lot of work to promote the alternative forms of energy.

I believe this program would help promote our Nation's energy security, reduce pollution, and make a clean, diverse energy supply more affordable for all Americans. I ask my colleagues to vote for this amendment.

Mr. Chairman, I reserve the balance of my time.

Mr. TAUZIN. Mr. Chairman, although I support the amendment, I claim the time in opposition, and I yield myself such time as I may consume.

I rise in support of the amendment offered by the gentlewoman from California (Mrs. BONO) to establish the Energy Sun program, a government-industry partnership to recognize promising renewable and alternative energy products and technologies.

Mr. Chairman, H.R. 4 already authorizes a very successful EPA and Department of Energy program called the Energy Star program. The point of Energy Star is to educate, not to mandate. It works because consumers want to save energy and they also want to save money on their energy bills. Energy Sun will do for renewable energy what Energy Star has done for efficiency.

Many consumers have heard of energy solar panels or wind power, or maybe even a green power program through an electric utility company. But the average consumer has no way of knowing which renewable source or alternative technology is really available, which one is practicable for their own needs. Like Energy Star, Energy Sun program will enhance our country's energy security by educating consumers, and then harnessing the power of the marketplace.

I would like to thank the gentlewoman from California (Mrs. BONO) for offering this amendment, and I encourage my colleagues to vote for it.

Mr. Chairman, I yield such time as he may consume to the gentleman from Virginia (Mr. BOUCHER).

Mr. BOUCHER. Mr. Chairman, I thank the gentleman from Louisiana for yielding, and I asked that he do so only for the purpose of saying that we have no objection to this provision on our side. I want to commend the gentlewoman from California (Mrs. BONO) for a constructive amendment. I am pleased to support it, and I encourage others to do so.

Mr. TAUZIN. Mr. Chairman, I yield such time as he may consume to the gentleman from New York (Mr. BOEHLERT).

Mr. BOEHLERT. Mr. Chairman, I rise in support of the amendment offered by the gentlewoman from California (Mrs. BONO).

The amendment amends division A, which is based on text reported by the Committee on Energy and Commerce. The amendment establishes a new program within EPA and the Department of Energy regarding certain renewable and alternative energy products and technologies, and I commend her for that approach.

Under the Rules of the House, the Committee on Science has jurisdiction over all energy research development and demonstration, commercial application of energy technology, and environmental research and development.

Am I correct that the committee does not intend for the placement of this amendment in division A of H.R. 4 and its revision of the Energy Policy and Conservation Act to diminish or otherwise affect the jurisdiction of the Committee on Science?

Mr. TAUZIN. Mr. Chairman, will the gentleman yield?

Mr. BOEHLERT. I yield to the gentleman from Louisiana.

Mr. TAUZIN. Mr. Chairman, the gentleman is correct. Both the Committee on Energy and Commerce and the Committee on Science have jurisdiction over energy-related programs of the Environmental Protection Agency and the Department of Energy.

Mr. BOEHLERT. Mr. Chairman, I thank the gentleman for his clarification and cooperation. I look forward to working with him and his committee and my colleagues on the Committee on Energy and Commerce on this provision, as well as other provisions of mutual interest.

Mrs. BONO. Mr. Chairman, I yield 30 seconds to the gentleman from California (Mr. DREIER).

Mr. DREIER. Mr. Chairman, I thank the gentlewoman for yielding.

I rise to not only congratulate the distinguished chairman of the Committee on Energy and Commerce, but also to congratulate, from my perspective as a Californian, one of its three most important members, the gentlewoman from Palm Springs, California (Mrs. BONO). Focusing on the issue of renewable energy and conservation is a very important thing and pursuing this program, I believe, will go a long way towards doing just that.

So I compliment her and thank her very much for the leadership that she has shown on this very important issue.

Mrs. BONO. Mr. Chairman, I yield 2 minutes to the gentlewoman from Wyoming (Mrs. CUBIN).

Mrs. CUBIN. Mr. Chairman, I too rise in support of the Bono amendment.

I want to speak, however, to the amendment that is coming up after this one, the Corporate Average Fuel Economy standard increase.

Last year in my home State of Wyoming, registration of light trucks outnumbered passenger cars by about 2 to 1. While this statistic may be surprising to some of my colleagues, it is in no way surprising to me. Despite the many advantages that we enjoy living in Wyoming, its cold, harsh, long winters, long-distance traveling and often rugged terrain create additional safety and utility needs to such everyday events as traveling to a nearby town for business or for transporting one's children to soccer practice.

SUVs, Suburbans and minivans have replaced the station wagon as the soccer mom's vehicle of choice, because these vehicles provide levels of safety, passenger room and utility that allow an active family to meet their needs.

Wyoming's agriculture community also depends on light truck utility vehicles to accomplish the necessary work associated with farming and ranching. It should not take a farmer or a rancher to tell us we cannot haul a bail of hay in a Geo Metro. While that vehicle also has its place in the market, and I do not deny that, agriculture families simply have different needs.

Thankfully, the auto industry constantly works to address these needs by building and marketing larger and safer and, yes, more fuel-efficient vehicles. After all, these vehicles are what consumers want to buy, and it only makes sense for the market to respond to that consumer demand.

Increasing CAFE standards today would put automobile manufacturers at odds with consumers by forcing the auto industry to produce smaller and lighter vehicles. Such a requirement would not only translate into reduction of consumer choice, but would sacrifice the safety benefits that go along with larger vehicles.

The National Research Council's report on CAFE standards released only yesterday stated that without a thought for a restructuring of the program, additional traffic fatalities would be the trade-off that we must incur.

Mr. Chairman, I urge my colleagues to support the Bono amendment and vote against the Boehlert amendment.

Mrs. BONO. Mr. Chairman, I yield such time as he may consume to the gentleman from New Hampshire (Mr. BASS).

Mr. BASS. Mr. Chairman, I rise in support of the Bono amendment.

Mr. Chairman, I rise in support of the Bono Amendment to H.R. 4. Today we have an opportunity to advance the use of renewable and alternative energy products. The Energy Sun program has significant environmental and energy security benefits. I support extending the Energy Sun label to renewable and alternative energy products including solar, wind, biomass, and distributed energy. Specifically, I believe new technologies, like that of the stirling heat engine, will go far to reduce pollution and our dependence on dangerously strained electric power grids. Now is the time to recognize and encourage the use of products and

technologies that will improve our homes, our communities, and our environment.

Mr. TAUZIN. Mr. Chairman, I yield 1½ minutes to the gentleman from South Dakota (Mr. THUNE).

Mr. THUNE. Mr. Chairman, I thank the gentleman for yielding time.

I too want to commend the gentlewoman from California (Mrs. BONO) for her commitment to promoting renewables.

Mr. Chairman, America needs a balanced energy policy. We need more renewables. We know ethanol cannot replace petroleum, at least not yet, but we think we can increase the market share for biofuels in this country and therefore lessen America's dependence upon foreign oil.

So for that reason I want to thank the gentleman from Louisiana (Mr. TAUZIN) for including in his manager's amendment a provision commissioning a study of administering a program to establish a renewable fuel standard for motor vehicle fuel sold in the United States. The provision, as offered, was based on a bill that I have cosponsored, or I should say, I sponsored, the Renewable Fuels for Energy Security Act of 2001.

While I believe this Nation is ready for such a program, I am encouraged by the chairman's willingness to direct EPA and the Department of Energy to review this approach. That, I believe, is a step in the right direction.

I look forward to working with the chairman and my colleagues in the House in ways that we can decrease our dependence upon foreign sources of energy and make renewable fuels, such as ethanol, biodiesel and biomass a significant part of the energy mix in this country.

A 3 percent market share for ethanol and biodiesel will displace about 9 billion gallons of gasoline annually, or between 500,000 and 600,000 barrels of crude oil a day, which is the amount that the U.S. now imports from Iraq.

We need a balanced energy policy, Mr. Chairman. We need to support renewables. I commend the gentlewoman from California (Mrs. BONO) for her effort in that regard, and I thank the chairman for his efforts in trying to move this forward.

Mr. TAUZIN. Mr. Chairman, I am pleased to yield 30 seconds if the gentlewoman from California (Mrs. BONO) would yield 30 seconds to the gentleman from New York (Mr. FOSSELLA).

Mrs. BONO. Mr. Chairman, I also yield 30 seconds to the gentleman from New York (Mr. FOSSELLA).

□ 1515

Mr. FOSSELLA. Mr. Chairman, I thank the gentleman for yielding time to me.

Mr. Chairman, I think it is easy to be against a lot of things, but the question is, what are we for as a Congress. We are for encouraging conservation. We are for encouraging energy efficiency. We are for the use of alternative sources of energy and renewables. That is what we are for.

The great thing about this country, our country, is when the American people are given the truth, they can make the determinations that best suit their needs, their families, and their businesses.

So what we are for are lower energy prices, lower electricity prices, lower gas prices, and at the same time, it strikes the balance by protecting our environment and providing safeguards so that the industries do not run wild. That is what the underlying bill does.

I commend the gentlewoman for complementing that and doing what is right and responsible for now and for America's future.

The CHAIRMAN pro tempore (Mr. LINDER). All time on both sides has expired.

The question is on the amendment offered by the gentlewoman from California (Mrs. BONO).

The question was taken; and the Chairman pro tempore announced that the ayes appeared to have it.

Mr. TAUZIN. Mr. Chairman, on that I demand a recorded vote.

The CHAIRMAN pro tempore. Pursuant to clause 6 of rule XVIII, further proceedings on the amendment offered by the gentlewoman from California (Mrs. BONO) will be postponed.

SEQUENTIAL VOTES POSTPONED IN THE COMMITTEE OF THE WHOLE

The CHAIRMAN pro tempore. Pursuant to clause 6 of rule XVIII, proceedings will now resume on those amendments on which further proceedings were postponed in the following order: amendment No. 1 offered by the gentleman from Louisiana (Mr. TAUZIN); amendment No. 2 offered by the gentlewoman from California (Mrs. BONO).

The Chair will reduce to 5 minutes the time for the second electronic vote.

AMENDMENT NO. 1 OFFERED BY MR. TAUZIN

The CHAIRMAN pro tempore. The pending business is the demand for a recorded vote on amendment No. 1 offered by the gentleman from Louisiana (Mr. TAUZIN) on which further proceedings were postponed and on which the ayes prevailed by voice vote.

The Clerk will redesignate the amendment.

The Clerk redesignated the amendment.

RECORDED VOTE

The CHAIRMAN pro tempore. A recorded vote has been demanded.

A recorded vote was ordered.

The vote was taken by electronic device, and there were—ayes 281, noes 148, not voting 4, as follows:

[Roll No. 309]

AYES—281

Abercrombie
Aderholt
Akin
Allen
Armey
Baca
Bachus
Baker
Baldacci
Ballenger
Barcia
Barr
Bartlett
Barton
Bass
Bentsen
Bereuter
Berry
Biggert
Bilirakis
Bishop
Blunt
Boehlert
Boehner
Bonilla
Bono
Boucher
Boyd
Brady (TX)
Brown (SC)
Bryant
Burr
Burton
Buyer
Callahan
Calvert
Camp
Cannon
Cantor
Capito
Carson (OK)
Castle
Chabot
Chambliss
Clement
Clyburn
Coble
Collins
Combest
Condit
Cooksey
Costello
Cox
Cramer
Crane
Crenshaw
Cubin
Culberson
Cummings
Cunningham
Davis (FL)
Davis, Jo Ann
Davis, Tom
Deal
DeLay
DeMint
Diaz-Balart
Dooley
Doolittle
Doyle
Dreier
Duncan
Dunn
Edwards
Ehlers
Ehrlich
Emerson
English
Everett
Ferguson
Flake
Fletcher
Foley
Forbes
Fossella
Frelinghuysen
Gallegly
Ganske
Gekas
Gibbons
Gilchrest
Gillmor
Gilman
Gonzalez
Goode
Goodlatte
Gordon
Goss
Graham
Granger
Graves
Green (TX)
Green (WI)
Greenwood
Grucci
Gutknecht
Hall (TX)
Hansen
Hart
Hastings (WA)
Hayes
Hayworth
Hefley
Herger
Hill
Hilleary
Hilliard
Hinojosa
Hobson
Hoekstra
Holden
Horn
Hostettler
Houghton
Hulshof
Hunter
Hyde
Isakson
Issa
Istook
Jackson-Lee (TX)
Jefferson
Jenkins
John
Johnson (CT)
Johnson (IL)
Johnson, E. B.
Johnson, Sam
Jones (NC)
Keller
Kelly
Kennedy (MN)
Kerns
King (NY)
Kingston
Kirk
Knollenberg
Kolbe
LaHood
Lampson
Largent
Larsen (WA)
Latham
LaTourette
Leach
Lewis (CA)
Lewis (KY)
Linder
Lipinski
LoBiondo
Lucas (KY)
Lucas (OK)
Manzullo
Mascara
McCarthy (NY)
McCrery
McHugh
McInnis
McKeon
Mica
Miller (FL)
Miller, Gary
Mink
Moore
Moran (KS)
Morella
Myrick
Nethercutt
Ney
Northup
Norwood
Nussle
Ortiz
Osborne
Ose
Otter
Oxley
Pascrell
Pence
Peterson (MN)
Peterson (PA)
Petri
Phelps
Pickering
Pitts
Platts
Pombo
Pomeroy
Portman
Pryce (OH)
Putnam
Quinn
Radanovich
Ramstad
Regula
Rehberg
Reyes
Reynolds
Riley
Rodriguez
Rogers (KY)
Rogers (MI)
Rohrabacher
Ros-Lehtinen
Ross
Roukema
Royce
Ryan (WI)
Ryun (KS)
Sandlin
Saxton
Scarborough
Schaffer
Schiff
Schrock
Scott
Sensenbrenner
Sessions
Shadegg
Shaw
Shays
Sherwood
Shimkus
Shows
Shuster
Simmons
Simpson
Skeen
Smith (MI)
Smith (NJ)
Smith (TX)
Smith (WA)
Snyder
Souder
Stearns
Stenholm
Stump
Stupak
Sununu
Sweeney
Tancredo
Tauzin
Taylor (MS)
Taylor (NC)
Terry
Thomas
Thompson (MS)
Thornberry
Thune
Tiahrt
Tiberi
Toomey
Traficant
Turner
Upton
Vitter
Walden
Walsh
Wamp
Watkins (OK)
Watts (OK)
Weldon (FL)
Weldon (PA)
Weller
Whitfield
Wicker
Wilson
Wolf
Wynn
Young (AK)
Young (FL)

NOES—148

Ackerman
Andrews
Baird
Baldwin
Barrett
Becerra
Berkley
Berman
Blagojevich
Blumenauer
Bonior
Borski
Boswell
Brady (PA)
Brown (FL)
Brown (OH)
Capps
Capuano
Cardin
Carson (IN)
Clay
Clayton
Conyers
Coyne
Crowley
Davis (CA)
Davis (IL)
DeFazio
DeGette
Delahunt
DeLauro
Deutsch
Dicks
Dingell
Doggett
Engel
Eshoo
Etheridge
Evans

Farr
Fattah
Filner
Ford
Frank
Frost
Gephardt
Gutierrez
Harman
Hastings (FL)
Hinchey
Hoeffel
Holt
Honda
Hooley
Hoyer
Inslee
Israel
Jackson (IL)
Jones (OH)
Kanjorski
Kaptur
Kennedy (RI)
Kildee
Kilpatrick
Kind (WI)
Kleczka
Kucinich
LaFalce
Langevin
Lantos
Larson (CT)
Lee
Levin
Lewis (GA)
Lofgren
Lowey
Luther
Maloney (CT)
Maloney (NY)
Markey
Matheson
Matsui
McCarthy (MO)
McCollum
McDermott
McGovern
McIntyre
McKinney
McNulty
Meehan
Meek (FL)
Meeks (NY)
Menendez
Millender-McDonald
Miller, George
Mollohan
Moran (VA)
Murtha
Nadler
Napolitano
Neal
Oberstar
Obey
Olver
Owens
Pallone
Pastor
Paul
Payne
Pelosi
Price (NC)
Rahall
Rangel
Rivers
Roemer
Rothman
Roybal-Allard
Rush
Sabo
Sanchez
Sanders
Sawyer
Schakowsky
Serrano
Sherman
Skelton
Slaughter
Solis
Spratt
Strickland
Tanner
Tauscher
Thompson (CA)
Thurman
Tierney
Towns
Udall (CO)
Udall (NM)
Velazquez
Visclosky
Waters
Watson (CA)
Watt (NC)
Waxman
Weiner
Wexler
Woolsey
Wu

NOT VOTING—4

Hall (OH)
Hutchinson
Spence
Stark

□ 1537

Ms. KILPATRICK, Messrs. OWENS, LANGEVIN, MORAN of Virginia, and Ms. McCOLLUM changed their vote from ''aye'' to ''no.''

Mr. POMEROY changed his vote from ''no'' to ''aye.''

So the amendment was agreed to.

The result of the vote was announced as above recorded.

ANNOUNCEMENT BY THE CHAIRMAN PRO TEMPORE

The CHAIRMAN pro tempore (Mr. LINDER). Pursuant to clause 6 of rule XVIII, the Chair announces that he will reduce to a minimum of 5 minutes the period of time within which a vote by electronic device will be taken on the next amendment.

AMENDMENT NO. 2 OFFERED BY MRS. BONO

The CHAIRMAN pro tempore. The pending business is the demand for a recorded vote on amendment No. 2 offered by the gentlewoman from California (Mrs. BONO) on which further proceedings were postponed and on which the ayes prevailed by voice vote.

The Clerk will redesignate the amendment.

The Clerk redesignated the amendment.

RECORDED VOTE

The CHAIRMAN pro tempore. A recorded vote has been demanded.

A recorded vote was ordered.

The CHAIRMAN. This will be a 5-minute vote.

The vote was taken by electronic device, and there were—ayes 411, noes 15, not voting 7, as follows:

[Roll No. 310]

AYES—411

Abercrombie
Ackerman
Aderholt
Akin
Allen
Andrews
Armey
Baca
Bachus
Baird
Baker
Baldacci
Baldwin
Ballenger
Barcia
Barrett
Bartlett
Barton
Bass
Becerra
Bentsen
Bereuter
Berkley
Berman
Berry
Biggert
Bilirakis
Bishop
Blagojevich
Blumenauer
Blunt
Boehlert
Boehner
Bonilla
Bonior
Bono
Borski
Boswell
Boucher
Boyd
Brady (PA)
Brady (TX)
Brown (FL)
Brown (OH)
Brown (SC)
Bryant
Burr
Burton
Buyer
Callahan
Calvert
Camp
Cannon
Cantor
Capito
Capps
Capuano
Cardin
Carson (IN)
Carson (OK)
Castle
Chabot
Chambliss
Clay
Clayton
Clement
Clyburn
Combest
Condit
Conyers
Cooksey
Cox
Coyne
Cramer
Crane
Crenshaw
Crowley
Cubin
Culberson
Cummings
Cunningham
Davis (CA)
Davis (FL)
Davis (IL)
Davis, Jo Ann
Davis, Tom
Deal
DeFazio
DeGette
Delahunt
DeLauro
DeLay
DeMint
Deutsch
Diaz-Balart
Dicks
Dingell
Doggett
Dooley
Doolittle
Doyle
Dreier
Duncan
Dunn
Edwards
Ehlers
Ehrlich
Emerson
Engel
English
Eshoo
Etheridge
Evans
Everett
Farr
Fattah
Ferguson
Fletcher
Foley
Forbes
Ford
Fossella
Frank
Frelinghuysen
Frost
Gallegly
Ganske
Gekas
Gephardt
Gibbons
Gilchrest
Gillmor
Gilman
Gonzalez
Goode
Goodlatte
Gordon
Goss
Graham
Granger
Graves
Green (TX)
Green (WI)
Greenwood
Gutierrez
Gutknecht
Hall (OH)
Hall (TX)
Hansen
Harman
Hart
Hastings (FL)
Hastings (WA)
Hayes
Hayworth
Hefley
Herger
Hill
Hilleary
Hilliard
Hinchey
Hinojosa
Hobson
Hoeffel
Hoekstra
Holden
Holt
Honda
Hooley
Horn
Houghton
Hulshof
Hunter
Hyde
Inslee
Isakson
Israel
Issa
Istook
Jackson (IL)
Jackson-Lee (TX)
Jefferson
Jenkins
John
Johnson (CT)
Johnson (IL)
Johnson, E. B.
Jones (OH)
Kanjorski
Kaptur
Keller
Kelly
Kennedy (MN)
Kennedy (RI)
Kildee
Kilpatrick
Kind (WI)
King (NY)
Kingston
Kirk
Kleczka
Knollenberg
Kolbe
Kucinich
LaFalce
LaHood
Lampson
Langevin
Lantos
Larsen (WA)
Larson (CT)
Latham
LaTourette
Leach
Lee
Levin
Lewis (CA)
Lewis (GA)
Lewis (KY)
Linder
Lipinski
LoBiondo
Lofgren
Lowey
Lucas (KY)
Lucas (OK)
Luther
Maloney (CT)
Maloney (NY)
Manzullo
Markey
Mascara
Matheson
Matsui
McCarthy (MO)
McCarthy (NY)
McCollum
McCrery
McDermott
McGovern
McHugh
McInnis
McIntyre
McKeon
McKinney
McNulty
Meehan
Meek (FL)
Meeks (NY)
Menendez
Mica
Millender-McDonald
Miller (FL)
Miller, Gary
Miller, George
Mink
Mollohan
Moore
Moran (KS)
Moran (VA)
Morella
Murtha
Myrick
Nadler
Napolitano
Neal
Nethercutt
Ney
Northup
Norwood
Nussle
Obey
Olver
Ortiz
Osborne
Ose
Owens
Pallone
Pascrell
Pastor
Payne
Pelosi
Peterson (MN)
Peterson (PA)
Petri
Phelps
Pickering
Pitts
Platts
Pombo
Pomeroy
Portman
Price (NC)
Pryce (OH)
Putnam
Quinn
Radanovich
Rahall
Ramstad
Rangel
Regula
Rehberg
Reyes
Reynolds
Riley
Rivers
Rodriguez
Roemer
Rogers (KY)
Rogers (MI)
Rohrabacher
Ros-Lehtinen
Ross
Rothman
Roukema
Roybal-Allard
Royce
Rush
Ryan (WI)
Ryun (KS)
Sabo
Sanchez
Sanders
Sandlin
Sawyer
Saxton
Scarborough
Schakowsky
Schiff
Schrock
Scott
Sensenbrenner
Serrano
Sessions
Shadegg
Shaw
Shays
Sherman
Sherwood
Shimkus
Shows
Shuster
Simmons
Simpson
Skeen
Skelton
Slaughter
Smith (MI)
Smith (NJ)
Smith (TX)
Smith (WA)
Snyder
Solis
Souder
Spratt
Stearns
Stenholm
Strickland
Stump
Stupak
Sununu
Sweeney
Tancredo
Tanner
Tauscher
Tauzin
Taylor (MS)
Taylor (NC)
Terry
Thomas
Thompson (CA)
Thompson (MS)
Thornberry
Thune
Thurman
Tiahrt
Tiberi
Tierney
Toomey
Towns
Traficant
Turner
Udall (CO)
Udall (NM)
Upton
Velazquez
Visclosky
Vitter
Walden
Walsh
Wamp
Waters
Watkins (OK)
Watson (CA)
Watt (NC)
Watts (OK)
Waxman
Weiner
Weldon (FL)
Weldon (PA)
Weller
Wexler
Whitfield
Wicker
Wilson
Wolf
Woolsey
Wu
Wynn
Young (AK)
Young (FL)

NOES—15

Barr
Coble
Collins
Costello
Filner
Flake
Hostettler
Johnson, Sam
Jones (NC)
Kerns
Oberstar
Otter
Paul
Pence
Schaffer

NOT VOTING—7

Grucci
Hoyer
Hutchinson
Largent
Oxley
Spence
Stark

□ 1545

Mr. WAXMAN changed his vote from ''no'' to ''aye.''

So the amendment was agreed to.

The result of the vote was announced as above recorded.

The CHAIRMAN pro tempore (Mr. LINDER). It is now in order to consider Amendment No. 3 printed in part B of the House report 107–178.

AMENDMENT NO. 3 OFFERED BY MR. BOEHLERT

Mr. BOEHLERT. Mr. Chairman, I offer an amendment.

The CHAIRMAN pro tempore. The Clerk will designate the amendment.

The text of the amendment is as follows:

Amendment No. 3 offered by Mr. BOEHLERT:

Page 66, beginning at line 11, strike sections 201, 202, and 203 and insert the following:

SEC. 201. INCREASED AVERAGE FUEL ECONOMY STANDARDS FOR PASSENGER AUTOMOBILES AND LIGHT TRUCKS.

(a) COMBINED STANDARD.—Section 32902(b) of title 49, United States Code, is amended to read as follows:

''(b) STANDARDS FOR PASSENGER AUTOMOBILES AND LIGHT TRUCKS.—(1) Except as provided in this section, the average fuel economy standard for the combination of passenger automobiles and light trucks manufactured by a manufacturer—

''(A) in each of model years 2005 and 2006 shall be 26.0 miles per gallon; and

''(B) in a model year after model year 2006 shall be 27.5 miles per gallon.

''(2) Except as provided in this section, and notwithstanding paragraph (1), the average fuel economy standard for passenger automobiles manufactured by a manufacturer in

model years 2005 and 2006 shall be 27.5 miles per gallon.''.

(b) AMENDING STANDARDS FOR PASSENGER AUTOMOBILES AND LIGHT TRUCKS.—Section 32902(c) of title 49, United States Code, is amended—

(1) by amending so much as precedes the second sentence of paragraph (1) to read as follows:

''(c) AMENDING STANDARD FOR COMBINATION OF PASSENGER AUTOMOBILES AND LIGHT TRUCKS.—The Secretary of Transportation shall prescribe regulations amending any of the standards under subsection (b) of this section for a model year to any higher level that the Secretary decides is the maximum feasible average fuel economy level for that model year.''; and

(2) by striking paragraph (2).

(c) DEFINITION OF LIGHT TRUCK.—

(1) IN GENERAL.—Section 32901(a) of title 49, United States Code, is amended by adding at the end the following:

''(17) 'light truck' means a 4-wheeled vehicle that is propelled by fuel, or by alternative fuel, that is manufactured primarily for use on public streets, roads, and highways (except a vehicle operated only on a rail line), and that the Secretary decides by regulation—

''(A) is rated—

''(i) at less than 8,500 pounds gross vehicle weight, in the case of an automobile manufactured in model year 2005 or 2006; or

''(ii) at less than 10,000 pounds gross vehicle weight, in the case of an automobile manufactured in a model year after model year 2006;

''(B) is manufactured primarily for transporting not more than 10 individuals; and

''(C) is not a passenger automobile.''.

(2) DEADLINE FOR REGULATIONS.—The Secretary of Transportation—

(A) shall issue proposed regulations implementing the amendment made by this subsection by not later than 6 months after the date of the enactment of this Act; and

(B) shall issue final regulations implementing such amendment by not later than one year after the date of the enactment of this Act.

(c) CONFORMING AMENDMENTS.—

(1) Section 32901(a)(3) of title 49, United States Code, is amended by striking ''and rated at—'' and inserting ''and is a light truck or is rated at—''.

(2) Section 32902(a) of title 49, United States Code, is amended—

(A) by striking ''NON-PASSENGER AUTOMOBILES.—'' and inserting ''STANDARDS FOR CERTAIN AUTOMOBILES.—''; and

(B) by striking ''(except passenger automobiles)'' and inserting ''(except passenger automobiles and light trucks)''.

(3) Section 32908(a)(1) of title 49, United States Code, is amended by striking ''8,500'' and inserting ''10,000''.

(d) APPLICATION.—The amendments made by this section shall apply beginning on January 1, 2005.

(e) APPLICABILITY OF EXISTING STANDARDS.—This section does not affect the application of section 32902 of title 49, United States Code, to passenger automobiles and light trucks manufactured before model year 2005.

SEC. 202. AMENDMENTS TO MANUFACTURING INCENTIVES FOR ALTERNATIVE FUEL AUTOMOBILES.

Section 32905 of title 49, United States Code, is amended—

(1) in subsection (b) by striking ''2004'' and inserting ''2008'';

(2) in subsection (b)(1) by striking ''.5 divided'' and inserting ''the number determined by (A) subtracting from 1.0 the alternative fuel use factor for the model, and (B) dividing the difference calculated under clause (A) by'';

(3) in subsection (b)(2) by striking ''.5 divided'' and inserting ''the number determined by dividing the alternative fuel use factor for the model by'';

(4) in subsection (d) by striking ''2004'' and inserting ''2008'';

(5) in subsection (d)(1) by striking ''.5 divided'' and inserting ''the number determined by (A) subtracting from 1.0 the alternative fuel use factor for the model, and (B) dividing the difference calculated under clause (A) by'';

(6) in subsection (d)(2) by striking ''.5 divided'' and inserting ''the number determined by dividing the alternative fuel use factor for the model by''; and

(7) by adding at the end the following:

''(h) DETERMINATION OF ALTERNATIVE FUEL USE FACTOR.—(1) For purposes of subsections (b) and (d) of this section, the term 'alternative fuel use factor' means, for a model of automobile, such factor determined by the Administrator under this subsection.

''(2) At the beginning of each year, the Secretary of Energy shall estimate the amount of fuel and the amount of alternative fuel used to operate all models of dual fuel automobiles during the most recent 12-month period.

''(3) The Administrator shall determine, by regulation, the alternative fuel use factor for each model of dual fueled automobile as the fraction that represents, on an energy equivalent basis, the ratio that the amount of alternative fuel determined under paragraph (1) bears to the amount of fuel determined under paragraph (1).''.

(c) APPLICATION.—The amendments made by this section shall apply beginning on January 1, 2005.

(d) APPLICABILITY OF EXISTING STANDARDS.—This section does not affect the application of section 32901 of title 49, United States Code, to automobiles manufactured before model year 2005.

SEC. 203. ENSURING SAFETY OF PASSENGER AUTOMOBILES AND LIGHT TRUCKS.

The Secretary of Transportation shall exercise such authority under Federal law as the Secretary may have to ensure that passenger automobiles and light trucks (as those terms are defined in section 32901 of title 49, United States Code, as amended by this Act) are safe.

The CHAIRMAN pro tempore. Pursuant to House Resolution 216, the gentleman from New York (Mr. BOEHLERT) and a Member opposed each will control 20 minutes.

Mr. TAUZIN. Mr. Chairman, I claim the time in opposition and yield 9 of those minutes to the gentleman from Michigan (Mr. DINGELL) for the purposes of control.

The CHAIRMAN pro tempore. Is there objection to the request of the gentleman from Louisiana?

There was no objection.

(Mr. BOEHLERT asked and was given permission to revise and extend his remarks.)

Mr. BOEHLERT. Mr. Chairman, I yield myself 7 minutes.

Mr. Chairman, I think virtually every Member of this body agrees that we need to raise the fuel economy of passenger vehicles. That is a no-brainer. Raising fuel economy saves money, makes us less dependent on foreign oil sources and helps protect the environment without cramping our life-style one bit. That is why even this bill, which is so tepid about conservation, includes a small increase in fuel economy standards. There is just no persuasive argument against raising the standards. It is the simplest, most basic step available to us.

The question, though, is whether we are going to just appear to take this step or whether we are going to do it for real. The language in this bill is about keeping up appearances. The Boehlert-Markey amendment is about actually saving oil. In fact, there is a chart before me which makes clear, our amendment would save more oil than would be produced from drilling in ANWR under even the most optimistic scenarios. Those figures come from the nonpartisan Congressional Research Service.

The proponents of H.R. 4 will say they are not just keeping up appearances. They plan to save 5 billion gallons of oil over 5 years. That is a big number, but it is not a lot in a Nation that oil burns more than 350 million gallons of oil as gasoline on our highways each and every day. That is why we usually measure oil in barrels because gallons are too small a unit to bother contemplating.

But the proponents will say, but 5 billion is a lot. It is like parking next year's production of SUVs for 2 years. But, guess what, during the second year, and the year after, and the year after that, ad infinitum, a whole new fleet of gas-guzzling SUVs will hit the highways and will not be metaphorically parked.

The Nation is importing more than half its oil, but the proponents of H.R. 4 have done nothing more on CAFE than put a finger in the dike. The CAFE provision in the bill will have no long-range impact on the Nation's demand for oil. The CAFE language in the bill is a distraction, not a solution.

Now, that might be okay if we did not have the technological wherewithal to build safe, affordable American cars and SUVs that meet a higher standard. But we do have that capability. In fact, we could reach CAFE standards far higher than the ones that we are proposing in this amendment, but we are taking a truly moderate approach.

The Boehlert-Markey amendment would, after 5 years, include cars and SUVs and light trucks in a single fleet that would have to meet a 27.5 mile per gallon average, the level cars must meet today. That gives the automobile manufacturers the flexibility, they get the flexibility to decide if they want to make cars more fuel efficient or SUVs more fuel efficient, or some combination of both.

Our amendment creates new incentives for the ethanol industry because we would provide credits to cars that actually run on ethanol, not to cars that could use ethanol but do not. So we give automakers incentives to make sure that ethanol does become a commonly available fuel.

In short, the standard we propose is flexible, fair, moderate and feasible. Members can tell that because our opponents have hit new rhetorical

heights in arguing against the amendment; but luckily, we have the latest science on our side. I refer Members to the report of the National Academy of Sciences that was released Monday. Here is what the Academy panel concluded:

First, the National Academy of Sciences says having separate standards for cars and SUVs makes no sense. My colleagues can refer to pages ES–4 and 5–10 for confirmation.

Second, the National Academy of Sciences says that raising fuel economy standards will be a net saver for consumers, and we want to help consumers save. Look at pages 4–7 to check that out.

Third, the National Academy of Sciences says raising fuel economy standards will not hurt American workers, and they base this on the real experience of past decades. That is on pages 2–16.

Fourth, the National Academy of Sciences says that raising fuel economy is perfectly feasible even with currently available technology, technology that is on the shelf, ready to be put into use, and even for higher standards than we are proposing. That is on page ES–5. And the front page of Automobile News that is on easel behind me illustrates the technology that auto companies already have to meet this new standard.

Fifth, and most important of all, the Academy says fuel economy can be achieved ''without degradation of safety,'' again, without degradation of safety, so let us put that bogeyman to rest. That is on page 4–26.

The opponents may say the automobile companies disagree. No surprise there. It is easier to keep making gas-guzzling cars, just like it was easier to keep making cars without seat belts and cars without air bags and cars without pollution control equipment, all advances that the auto industry now touts, even though it vehemently opposed each as they were initiated.

This case is no different. Just look at the credibility of the auto industry. Here is what a top Ford executive said about safety standards in 1971. ''The shoulder harnesses, the headrests are a complete waste of money, and you can see that safety has really killed off our business.'' That is what the auto people said.

Here is what GM said about pollution control in 1972. ''It is conceivable that complete stoppage of the entire production could occur with the obvious tremendous loss to the company,'' if we required pollution control equipment. Give me a break.

I could go on and on with examples like this.

Mr. Chairman, we should be used to these scare tactics by now and wise to them. Let us not believe the folks that said seat belts would destroy the auto industry when they say they fear for our safety if we raise CAFE standards.

I am going to listen to the National Academy of Sciences. We have the evidence we need to raise CAFE standards, we just need the will, the will to give the public what it wants. The public wants better fuel economy if for no other reason than to save money. And what the National Academy of Sciences report demonstrates is that we can give them that fuel economy without depriving them, including me, of our SUVs, without compromising safety, without threatening jobs.

Mr. Chairman, I urge support of the Boehlert-Markey-Shays-Waxman amendment.

Mr. TAUZIN. Mr. Chairman, I yield myself 1 minute.

Mr. Chairman, for a year now I have been fighting tires that kill. I am on the floor today fighting an amendment that will kill. If the Boehlert amendment passes, the National Academy of Sciences says that this kind of an increase in CAFE too soon, too fast over a 4-year period, 46 percent increase, will force automakers to downsize and downweight automobiles, trucks, light trucks in particular, SUVs and minivans. They tell us, ''Additional traffic fatalities would be expected.'' That is the National Academy of Sciences.

Now, the bill contains reasonable increases in fuel savings, 5 billion gallons in this category of vehicles over the next 6 years. This is the language of the National Academy of Sciences warning us if my colleagues go further than the bill goes, my colleagues can expect fatalities.

Mr. Chairman, I want to show Members the list of SUVs and vans regulated by the bill without this amendment. This is the list of all of the SUVs and vans that this amendment would literally replace in the law, sections that provide a 5-billion gallon savings in this list of vehicles.

These vehicles alone consume 2.4 billion gallons a year. Our bill provides a savings of twice that, 5 billion.

Keep to the bill. Do not kill Americans with this amendment.

□ 1600

Mr. BOEHLERT. Mr. Chairman, I ask unanimous consent that the total time in support of the Boehlert-Markey amendment be equally divided between the gentleman from Massachusetts (Mr. MARKEY) and the principal author.

The CHAIRMAN pro tempore (Mr. LINDER). Without objection, the gentleman from Massachusetts can control 10 minutes.

There was no objection.

Mr. MARKEY. Mr. Chairman, I yield 2 minutes to the gentleman from California (Mr. WAXMAN).

Mr. WAXMAN. I thank the gentleman for yielding time to me.

Mr. Chairman, I strongly support this CAFE amendment. It is urgently needed to restore some balance to this legislation. This is the most important conservation measure that we will have before us in the whole energy bill if this amendment is adopted. If this amendment is not adopted, I want Members to realize that the CAFE provisions in the bill itself are a mirage. The legislation claims to save 5 billion gallons of gasoline by 2010. This sounds like a lot of gasoline, but we are talking about a reduction of 5 billion gallons out of a pool of over 2.5 trillion gallons. So even if the provisions worked as advertised, the 5 billion-gallon reduction translates into only a cut of two-tenths of 1 percent. But, in fact, this bill will not even achieve these minuscule savings. The fine print of the bill contains CAFE loopholes that will allow fuel consumption to increase by 9 billion gallons.

Mr. Chairman, I include for the RECORD an analysis of the H.R. 4 provisions which will explain why we will even go backwards if H.R. 4 is adopted as it is written. It will allow under the Bush administration's analysis an increase of 9 million gallons. The loopholes make the CAFE provisions in this bill a step backward.

Just this week, the National Academy of Sciences released a new study on CAFE that shows we can do much more. The Boehlert-Markey-Shays-Waxman amendment will make reasonable, commonsense improvements in the fuel efficiency standards of our light trucks. And it will close the loopholes in the current law and in the bill before us.

I urge support of the amendment.

ANALYSIS OF THE H.R. 4 PROVISIONS WHICH AMEND THE CORPORATE AVERAGE FUEL ECONOMY (CAFE) LAW

On Wednesday, August 1, 2001, the House of Representatives is considering H.R. 4, the ''Securing America's Future Energy Act of 2001.'' This legislation contains an amendment offered by Rep. Richard Burr (R–NC) at Subcommittee which amends the federal law governing automobile fuel economy. This amendment was heralded by some as a significant increase in fuel economy standards applicable to sport utility vehicles (SUVs) and other light trucks. Upon analysis, this amendment appears to be seriously flawed.

I. BACKGROUND

Under current law, the Secretary of Transportation is directed to prescribe by regulation average fuel economy standards for light trucks 18 months prior to the beginning of each model year. Sec. 32902(a). The standard is set at the ''maximum feasible average fuel economy level'' that the Secretary decides the manufacturers can achieve in that model year. Id. In setting a standard, the Secretary is required to consider technological feasibility, economic practicability, the effect of other governmental motor vehicle standards on fuel economy, and the need of the United States to conserve energy. Sec. 32902(f). Under this approach, the maximum feasible average fuel economy standard is determined on an ongoing basis with new technology being recognized and considered in the development of standards each and every year.

The current CAFE standard for light trucks is 20.7 miles per gallon. Since 1995, the Secretary of Transportation has not been permitted to revise this standard due to a congressional prohibition on such action passed each year in the appropriations process.

II. THE IMPROVED FUEL ECONOMY PURPORTED TO BE ACHIEVED BY H.R. 4 IS INSIGNIFICANT

H.R. 4 purports to reduce the projected gasoline consumption of light trucks manufactured between 2004 and 2010 by 5 billion

gallons in the years 2004 through 2010. As discussed below, the achievement of any improvement in fuel economy is in doubt under this language. However, assuming that a 5 billion gallon reduction in projected gasoline consumption is achieved, this reduction is insignificant.

Under this legislation, light trucks manufactured between 2004 and 2010 must reduce consumption by 5 billion gallons over the years 2004 through 2010. During the period from 2004–2020, total consumption of petroleum is projected to be 2.27 trillion gallons of petroleum. Although 5 billion gallons sounds like a lot of gasoline, it amounts to a mere 0.22% reduction in projected petroleum use. The Union of Concerned Scientists has estimated that the fuel economy of light trucks would only need to be improved by one mile per gallon in model years 2004 through 2010 to achieve this goal.

III. H.R. 4 UNDERMINES CURRENT LAW

Proponents of H.R. 4 have stated that the 5 billion gallon reduction in projected gasoline use is merely the floor for increased fuel economy and that the integrity of the CAFE law is preserved, allowing for any other appropriate improvements in fuel economy to be made. Upon analysis, it appears that H.R. 4 would actually encourage the consumption of more fuel than it conserves, while substantially altering the way the CAFE law functions and inhibiting further progress on fuel economy.

A. H.R. 4 wastes more gasoline than it would purport to save by extending the flawed CAFE incentive for dual fueled vehicles for an additional four years

Even as H.R. 4 purports to save five billion gallons of gasoline, it includes provisions that the Bush administration has estimated would increase gasoline consumption by nine billion gallons.

H.R. 4 extends a flawed program which creates CAFE incentives for dual fueled vehicles. Under current law, the production of dual fueled automobiles earns significant CAFE credits. As a result, manufactures produce many of these vehicles. According to the New York Times, General Motors, Ford Motor and the Chrysler unit of DaimlerChrysler have made 1.2 million dual-fuel vehicles, almost all of which are designed to burn either ethanol or gasoline. These include most Chrysler minivans and some Chevrolet S–10 pickups, Ford Taurus sedans and Ford Windstar minivans. These vehicles differ from other vehicles only in that they contain a $200 sensor for burning ethanol, which their owners are often not even aware of.

Dual fueled automobiles are manufactured to run on ethanol yet virtually no vehicles actually do so. In fact, only 101 of the 176,000 services stations in the United States sell nearly pure ethanol. Most of these service stations are in the Midwest. There is not a single one on the West Coast and there are only two on the East Coast—one in Virginia and one in South Carolina.

These credits have allowed the automakers to reduce the average fuel economy of all vehicles they sell by five-tenths to nine-tenths of a mile per gallon. Under current law these credits are scheduled to sunset in 2004 unless the Administration extends the programs for an additional four years. H.R. 4 would statutorily extend the CAFE law until 2008, and allow for the credits to be extended until 2012.

According to a draft report prepared by the Bush Administration, continuing the program from 2005 to 2008 will increase gasoline consumption by nine billion gallons. This is almost twice as much fuels as H.R. 4 purports to save.

B. H.R. 4 fundamentally alters the standard-setting process for light trucks which may hinder incentives for advanced technology vehicles

H.R. 4 substitutes the yearly approach under current law with an approach that will set standards from 2004 through 2010. This is a substantial weakening of current law. While no one can definitively predict what the ''maximum feasible average fuel economy level'' will be in the future, the ''maximum feasible'' level is clearly higher than the miniscule requirements of H.R. 4.

C. H.R. 4 removes incentives for advanced weight reduction technologies and materials

Automakers have been learning that safer, more fuel efficient vehicles can be manufactured using lighter weight materials, such as aluminum, or through advanced engineering approaches like unibody construction which can produce lighter and structurally sound frames. Under the current system, manufacturers have incentives to deploy these weight reduction technologies and materials, because all light duty trucks fall under a single CAFE standard.

H.R. 4 promotes a weight-based system for establishing fuel economy standards for light trucks. This approach could eliminate the incentives for these advanced construction technologies and materials by assuming that the weight of light trucks cannot be reduced.

D. H.R. 4 does not address passenger vehicles and requires no improvements in the fuel economy of diesel vehicles

H.R. 4 does not direct any increase in the CAFE standards for passenger cars which make up about half of the new vehicles sold in the United States.

Similarly, H.R. 4 sets no targets for reducing the consumption of diesel fuel. The auto manufacturing industry has indicated that they intend to expand the use of diesel engines in the coming years. In fact, as discussed below H.R. 4 gives manufacturers additional incentives to increase diesel use as a means of meeting their obligations under H.R. 4.

E. H.R. 4 creates incentives for greater reliance on diesel vehicles

H.R. 4 sets a goal for avoided gasoline consumption for light trucks manufactured between 2004 and 2010. The way H.R. 4 is drafted this goal can be achieved by producing more diesel-powered light trucks and fewer gasoline-powered light trucks. Automakers could comply with the letter of the law by merely increasing the portion of light trucks that are diesel-powered.

Mr. TAUZIN. Mr. Chairman, I yield such time as he may consume to the gentleman from Michigan (Mr. CAMP).

(Mr. CAMP asked and was given permission to revise and extend his remarks.)

Mr. CAMP. I thank the gentleman for yielding me this time.

Mr. Chairman, I rise today in strong opposition to the amendment offered by my colleagues, Mr. MARKEY and Mr. BOEHLERT that would set a combined fleet standard of 27.5 miles per gallon for cars and trucks. This amendment will cost jobs, consumer choice and safety.

This large increase in the light truck standard would have devastating impacts on light truck production from American automakers and threaten the jobs of over 1,000,000 auto workers in Michigan and many more around the country.

This amendment would also substantially restrict the ability of American automakers to continue to provide the vehicles that American consumers are purchasing. The product changes needed to accomplish this level of increase would adversely affect the most popular light trucks on the road-including restrictions on the sale by American automakers on the large pick-up trucks and SUV's that represent 50 percent or more of light truck sales.

Finally, raising CAFE standards would put Japanese automakers at a strategic advantage over U.S. automakers. The Japanese have an edge of a several miles per gallon because they have huge amounts of banked CAFE credits from the surpluses they have run in the past. This allows the Japanese to take advantage of selling larger vehicles in our market that do not meet the CAFE standards that U.S. automakers are expected to meet. Essentially, Japanese automakers have a credit cushion that would not require any product changes to meet CAFE for about two model years before it exhausts its banked CAFE credits. This disparity will cripple the U.S. auto industry. I encourage my colleagues to vote against this amendment.

Mr. DINGELL. Mr. Chairman, I yield myself 1½ minutes.

(Mr. DINGELL asked and was given permission to revise and extend his remarks.)

Mr. DINGELL. Mr. Chairman, this amendment affords you a rare opportunity to cast a vote for more jobs, for fewer deaths and injuries on the highway and against sharp price increases in the most popular of our vehicles.

All you have got to do is vote ''no'' on the amendment. I urge you to do so.

Take a look at the jobs that are involved here. Those are where your constituents work in automobile plants. There is nothing in the base bill which would preclude the Secretary of Transportation from fixing the levels of CAFE at those which are fixed by the Markey amendment. All that they would have to do is to find that it is technologically feasible and economically desirable and possible to so do.

The Secretary now can and will under the base bill save 5 billion gallons of gasoline. That is equivalent to taking off the road the production of 1999 pickups and SUVs for a period of 2 years. In a word, that ain't hay.

I would tell you some other things about this. The UAW and the American autoworkers are going to be most hurt if this amendment is adopted. It will force the auto companies to eliminate 135,000 jobs now held by American working men and women. It will force GM to close 16 of its plants and DaimlerChrysler to close two plants. That is about as bad as it gets until you consider that each auto company job supports seven other supplier jobs throughout the American economy.

What about safety? The National Academy of Sciences says that the higher CAFE standards contribute to more deaths and injuries by creating lighter and less safe vehicles.

I urge my colleagues to vote ''no'' on this amendment.

Mr. TAUZIN. Mr. Chairman, I yield such time as he may consume to the gentleman from Indiana (Mr. BUYER).

(Mr. BUYER asked and was given permission to revise and extend his remarks.)

Mr. BUYER. Mr. Chairman, I rise in opposition to the Markey-Boehlert amendment.

Mr. Chairman, I rise in opposition to further increases in CAFE standards, and in defense of the common sense compromise that the Energy and Commerce Committee has included in the energy bill.

Like most everyone, I support fuel conservation. Conservation can reduce dependence on foreign oil and enhance environmental protection. That's why the Committee developed a compromise that sets an achievable conservation goal while protecting jobs and safety. The compromise would produce substantial fuel savings by setting a goal of saving 5 billion gallons between 2004 and 2010. This is a good and balanced compromise.

But some want to go beyond this compromise and set a new CAFE number. This would be a big mistake because this amendment will jeopardize jobs and public safety.

Proponents of the amendment also seem to disregard these safety concerns. A strong and growing body of evidence indicates that increased CAFE standards result in increased traffic deaths. We shouldn't pass these kinds of huge increases without fully understanding or considering these safety concerns.

Let's conserve fuel, but let's do it safely. Support the Committee's compromise, oppose further CAFE increases.

Mr. TAUZIN. Mr. Chairman, I yield 1 minute to the gentleman from New Hampshire (Mr. BASS), a valued member of the Committee on Energy and Commerce.

Mr. BASS. Mr. Chairman, I rise in opposition to this amendment as one who believes that fuel efficiency in light trucks and SUVs should be improved. But this is not the time for this amendment. For the last 6 years, DOT has been barred from examining the CAFE standards. Just yesterday, or the day before, the NAS released its report. Most of us have had almost no time to examine this report, and nowhere in this report am I under the impression that it recommends an approach similar to that envisioned by this amendment.

This amendment could have detrimental effects on a very delicate economy in this country. It may impact safety, as we have already heard. I am assured by the chairman of the Committee on Energy and Commerce that we will have complete hearings on this whole issue of CAFE and where we should be headed and come up with a real plan and not a knee-jerk reaction to a problem that has come up in the last 6 months.

Mr. Chairman, this amendment is premature, it is potentially counterproductive, and I think we should step back, relax, and support the committee in its reasonable efforts. It is a good start on the process of improving fuel economy.

Mr. BOEHLERT. Mr. Chairman, I yield 30 seconds to the gentlewoman from Maryland (Mrs. MORELLA).

Mrs. MORELLA. Mr. Chairman, I urge this body to vote in support of the Boehlert-Markey amendment. We heard that earlier this week the National Academy of Sciences issued their long-awaited report which concluded that technologies currently exist which can help our Nation substantially increase fuel economy. This amendment simply moves this conclusion forward. By raising the average fuel economy standards for cars and light trucks, we will save more oil than the most generous estimates suggest that ANWR would provide.

The NAS report also concludes that these improvements are both safe and economically affordable. The Boehlert-Markey amendment allows our Nation the opportunity to be a world leader in the development and advancement of new technologies to improve our environment.

Vote ''yes.''

Mr. MARKEY. Mr. Chairman, I yield myself 1 minute.

Mr. Chairman, in 1974, the average for automobiles and light trucks in the United States was 12.9 miles per gallon. There was an energy crisis. In 1975, Congress responded. And they increased to 26.2 miles per gallon the fleet average. But believe it or not by 1981 they had already reached 24.6 miles per gallon, almost a doubling. Today, it is back to 24.7 miles per gallon. Our amendment, the Boehlert-Markey-Shays-Waxman amendment increases the average up to 27.5 miles per gallon, a 1.3-mile-per-gallon increase since 1987.

We have deployed the Internet since then, the human genome project, the Soviet Union has collapsed. We are arguing for a 1.3-mile-per-gallon increase since 1987, by the way, equal to how much oil is in the Arctic wilderness if you want to avoid having to vote to drill in that sacred land.

Mr. TAUZIN. Mr. Chairman, I yield 1½ minutes to the gentlewoman from New Mexico (Mrs. WILSON).

Mrs. WILSON. Mr. Chairman, I think we need to keep in mind that the base bill we have been offered here saves 5 billion gallons of gasoline and does it flexibly, by giving some options to manufacturers to be able to do this safely. The National Academy of Sciences says that it may be possible to increase fuel economy for light trucks over the next 10 to 15 years, but the sponsors of this amendment want to do it in 4 years. The only way you can do that is to reduce the weight of these vehicles, which compromises safety.

In February of 1998, I was driving down the road from Santa Fe to Albuquerque and a truck in front of me dropped something off the back end. I swerved to avoid it. I avoided it, but the car started to roll at 75 miles an hour. I walked away that day. I had a lot to be thankful for. But the thing I was most thankful for was that I was alone in the car.

Mr. Chairman, women make most of the decisions in this country about what car to buy. It is the same in my family. I drive a Subaru Outback SUV because it is safe for my two little kids in the back seat. I want efficient vehicles in this country. This base bill gives it to us. But I am not willing to compromise their safety by an accelerated standard that is not technically possible.

Mr. DINGELL. Mr. Chairman, I yield 1½ minutes to the distinguished gentleman from Pennsylvania (Mr. DOYLE).

(Mr. DOYLE asked and was given permission to revise and extend his remarks.)

Mr. DOYLE. Mr. Chairman, I rise in opposition to the Boehlert-Markey amendment. Every American supports increasing the fuel efficiency of the vehicles that we drive, but the question that we are all faced with today is, what cost to our safety, our economy and our life-styles are we willing to accept to meet the unreasonable standards imposed by this amendment?

The bill we are debating will significantly reduce fuel consumption while ensuring that consumer safety and American jobs are not compromised. This balance will be threatened by this amendment.

The American auto and steel industries are working together to increase fuel economy through technologies such as zero emission fuel cells and lightweight steel. These technologies will decrease emissions, increase fuel economy, and preserve the high safety standards that protect each and every one of us. If this amendment passes, over 18 plants and 135,000 automotive jobs will be lost in addition to thousands of jobs in the American steel industry, an industry already facing high unemployment as a result of dumping of illegal steel into American markets.

In addition to the steel and automotive industries, workers in the rubber, aluminum, plastics, electronics and textile industries will not escape the job cuts that will be forced on the American economy. Furthermore, the National Highway Traffic Safety Administration has confirmed that higher CAFE standards may result in the use of weaker materials in construction which will increase the likelihood of injury and death on our national roadways.

For these reasons, for the loss of American jobs, the cost to the American economy and the safety of the American consumer, I ask that we defeat this amendment.

Mr. BOEHLERT. Mr. Chairman, I yield 30 seconds to the gentleman from Maryland (Mr. GILCHREST).

Mr. GILCHREST. Mr. Chairman, I thank the gentleman for yielding time.

I guess the question here is, for those of us who want a vote on this increase in gas mileage is, is it technically feasible? Do we have the brains, the will, the initiative to increase gas mileage and improve safety of these vehicles? The answer is yes, we have the brains, the skill, the technology. We can increase gas mileage, improve the environment and provide safety for those Americans who choose to buy SUVs or light trucks.

I urge support of the amendment.

Mr. TAUZIN. Mr. Chairman, I am pleased to yield 1 minute to the gentleman from Michigan (Mr. UPTON), the chairman of the Subcommittee on Telecommunications and the Internet of the Committee on Energy and Commerce.

Mr. UPTON. Mr. Chairman, I would like to support the Boehlert amendment, but I cannot. The technology just is not ready yet.

One of the arguments presented here today is that the auto industry cried wolf in the 1970s on new CAFE standards and at the end of the day met the standards. But at what cost? More job loss and more market share loss. Can the auto industry meet this new standard called for in this amendment? Of course they can.

□ 1615

But at what expense? More market loss and more job loss.

Last year, this year, next year the auto industry will be spending hundreds of millions of dollars each year on new technologies designed to improve efficiencies and reduce our dependence on foreign oil. One of them is the hydrogen fuel cell. Well, guess what? There is a limited supply of R&D dollars; and if they are forced to meet this new standard, there will not be the dollars to develop this new standard.

It is hoped that those cars will be in the showrooms in the next 8 to 10 years. If this amendment passes, it will not be 8 to 10 years; it will be more than 10 years away. Is that what we want? I do not think so.

Please join me in voting no. We have the technology to make this thing work. This amendment takes those dollars away and will hurt all consumers, period.

Mr. MARKEY. Mr. Chairman, I yield 1 minute to the gentlewoman from California (Ms. ESHOO).

Ms. ESHOO. Mr. Chairman, I thank the gentleman from Massachusetts for yielding me time.

I rise in support of the Markey-Boehlert amendment. Let me state why. In the voices of my children, who are 32 and 30 years old, this debate is really about yesterday. What this amendment represents is tomorrow, is the future. It is exactly why people are attracted to America. So what we are battling is yesterday with this amendment.

The sham automobile efficiency provision in this bill is the proverbial drop in the oil bucket. They are talking 5 billion gallons of gasoline saved. We are talking 40 billion.

How anyone can say this is about jobs and the American automobile industry, it is a joke. This is enough to say that the Edsel is making a comeback.

The Congress can do better. The automobile industry is saying one thing. I understand that. We are not the automobile industry, we are the Congress of the United States. And when we vote this in, we are voting in less dependence on foreign oil, we are voting in high standards for our environment, we are saying you do not have to drill in ANWR, and we are saying that we have the technologies today to put into tomorrow's automobiles.

Support this amendment. It is a step toward the future. We will be better off as a result of it.

ANNOUNCEMENT BY THE CHAIRMAN PRO TEMPORE

The CHAIRMAN pro tempore (Mr. LATOURETTE). The Chair would ask that Members attempt to confine their remarks to the time yielded to them.

Mr. TAUZIN. Mr. Chairman, I yield 1 minute to the gentleman from Michigan (Mr. KNOLLENBERG).

Mr. KNOLLENBERG. Mr. Chairman, I thank the gentleman for yielding me time.

Mr. Chairman, I strongly oppose this amendment. It does nothing more than punish the automobile industry for making cars that people want to buy.

I am opposed for many reasons, but let me focus on three. This amendment will force Americans to drive smaller cars that are less safe than what we drive now. Smaller cars mean more traffic fatalities; a fact confirmed by the recent NAS report.

This amendment will also have the devastating economic impact of affecting every worker in the auto industry whose job will be affected. There are seven others affected as a spin-off from the one worker in the factory.

This amendment will also impose these new standards on an impossible timetable, which the NAS report explicitly argued against.

Why should Congress adopt policies that cause economic hardship, reduce consumer choice and lessen auto safety? Obviously we should not.

I urge my colleagues to oppose this harmful and dangerous amendment.

Mr. BOEHLERT. Mr. Chairman, I yield such time as she may consume to the gentlewoman from Connecticut (Mrs. JOHNSON).

(Mrs. JOHNSON of Connecticut asked and was given permission to revise and extend her remarks.)

Mrs. JOHNSON of Connecticut. Mr. Chairman, I rise in strong support of this amendment.

Mr. DINGELL. Mr. Chairman, I yield 1½ minutes to the distinguished gentleman from Louisiana (Mr. JOHN).

(Mr. JOHN asked and was given permission to revise and extend his remarks.)

Mr. JOHN. Mr. Chairman, I rise in opposition to the Boehlert-Markey amendment. I do not have any auto manufacturing plants in my district, so I am not opposing this amendment out of concerns for that industry. Representing the seventh district of Louisiana, which is very rural and agricultural and whose people's livelihood depends on light trucks and pickup trucks, I am concerned that this amendment would put unrealistic standards, given the time tables, on this class of vehicles. Even if these stringent standards, and I emphasize, even if these stringent standards can be met, it will certainly increase the cost of these vehicles, in some reports up to $7,000.

My concern is that the manufacturers who make these vehicles, these light trucks and pickups, that this amendment will threaten their ability to continue making them. In fact, DaimlerChrysler says that they could not raise the fuel economy standards of their Dakota or Dodge Ram pickup trucks 50 percent in 5 years, as this amendment requires; and it would therefore possibly stop them from producing them.

I am not sure if it was the intent of the authors of this amendment to unduly hurt the farmers, ranchers, contractors, electricians, plumbers, carpenters, construction workers, and many others who use pickups and light pickup trucks as their office on wheels. By forcing heavy commercial pickup trucks that weigh less than 10,000 pounds to achieve car CAFE standards, this amendment sets a standard that no one, and, I repeat, no one, has demonstrated achievable without compromising safety.

I urge Members to vote no on this amendment.

Mr. MARKEY. Mr. Chairman, I yield 1 minute to the gentleman from Massachusetts (Mr. OLVER).

Mr. OLVER. Mr. Chairman, the amendment before us requires only a 10 percent increase in fleet fuel efficiency by model year 2007; but, by 2010, it would save half a million barrels of oil a day, reduce our oil imports by 5 percent, and reduce carbon dioxide emissions by over 100 million tons each year.

But there is an even better reason to do this. Oil is the least abundant of all of our fossil fuels. All of it will be gone from this world before the end of this century if we and our fellow men continue to burn it at low efficiency. What then will we use for our industry, for the chemicals, clothing, construction materials, for every product used in our lives that is manufactured from polymers?

It is in our national interests to reduce our dependence on foreign oil, but it is a matter of national security that we conserve our most important industrial feedstock. The National Academy of Sciences report released this week tells us the technology already exists to take this modest step.

I urge my colleagues to support this bipartisan amendment.

Mr. TAUZIN. Mr. Chairman, I yield 30 seconds to the distinguished gentleman from Michigan (Mr. SMITH).

(Mr. SMITH of Michigan asked and was given permission to revise and extend his remarks.)

Mr. SMITH of Michigan. Mr. Chairman, I–94 runs east and west through my Congressional Michigan District

going into Detroit. This is the auto supply route. Many businesses in this area supply the auto industry. The estimate from General Motors is that we would lose with this amendment 65,000 jobs, Daimler-Chrysler estimates a $35,000 job loss, a total of 130,000. Let me tell you at least partially why this job loss happens. The way we calculate these averages of miles-per-gallon means that some auto imports, for example, have accumulated so many credits that they could actually continue to sell their less-miles-per-gallon trucks and displace our more gas efficient miles-per-gallon vehicles that we are not going to be able to sell because of this amendment. This means fewer sales and less employment.

Mr. Chairman, I rise in opposition to this amendment.

Since the CAFE standards were implemented in 1978, the market for passenger vehicles has been severely distorted. As a result, today, lights trucks account for over have of the new car market. The American people do not want small under-powered, and unsafe vehicles to transport their family. But under CAFE, there are fewer change cars available as alternatives.

The recent report from the National Research Council report found that, ''CAFE standards, probably resulted in an additional 1,300 to 2,600 traffic fatalities in 1993.'' Further, it noted that if the increase standards resulted in lighter or smaller vehicles, ''some additional traffic fatalities would be expected.''

An earlier analysis reported in USA Today estimated that for each mile per gallon CAFE saved, 7,700 people lost their lives.

There is another price we will pay with this amendment—lost jobs. GM, Ford, and Daimler-Chrysler say they would be forced to eliminate 135,000 jobs. In my home state of Michigan, more than a million workers could be affected by this amendment.

Mr. Chairman, this amendment would limit consumer choice, reduce vehicle safety, and throw people out of work. I urge my colleagues to vote ''no.''

Mr. DINGELL. Mr. Chairman, I yield 1½ minutes to the distinguished gentleman from Michigan (Mr. KILDEE).

Mr. KILDEE. Mr. Chairman, I rise to oppose the Markey-Boehlert amendment to legislatively mandate increases in corporate average-fuel-economy standards. While I support the goal of improved fuel economy, this mandate is not the answer.

Despite proposing significant CAFE increases in the amendment, the phase-in time is a little more than 2 model years. Furthermore, it takes away flexibility mechanisms that allow auto makers to respond to unexpected changes in consumer behavior.

The National Highway Traffic Safety Administration is the appropriate venue for CAFE review. NHTSA must consider the safety trade-offs, utility impacts, and economic feasibility of any CAFE increase.

The National Academy of Sciences outlines these trade-offs in its report released this week. It warned of overly ambitious CAFE increases with short implementation periods. NAS stated that quick significant increases would have a detrimental effect on vehicle safety and the health of the auto industry.

If we adopt the Markey-Boehlert amendment, tens of thousands of jobs will be jeopardized as production plans are significantly disrupted. By comparison, the current bill takes the right approach by allowing NHTSA to determine the appropriate timetable and the appropriate fuel economy standard.

The auto industry is the largest manufacturing industry in the United States. We must be judicious in our approach and mindful of unintended consequences.

Vote no on the amendment.

Mr. MARKEY. Mr. Chairman, I yield 1 minute to the gentlewoman from California (Ms. HARMAN).

(Ms. HARMAN asked and was given permission to revise and extend her remarks.)

Ms. HARMAN. Mr. Chairman, this debate is not fundamentally about cars, tail pipes, or engine technology, it is about health and what policy gets our country to better air quality standards in the most cost-effective way.

To be sure, CAFE standards are an imperfect tool. A fleet average has little bearing on what consumers are purchasing. Even though CAFE forces Detroit or Japan to manufacture a cleaner and more efficient vehicle, we see a proliferation of gas-guzzling SUVs, minivans, and trucks. They are what the consumer wants. If we are to increase fuel efficiency across the fleet of vehicles, we also need to change consumer behavior.

In the Committee on Ways and Means title of this bill we begin to tackle the consumer side of the equation through tax incentives and credits for the purchase of electric, fuel cell, hybrid, alternative fuel, and advanced burn vehicles. Striking the right balance is hard.

I opposed an earlier version of the Markey amendment in committee because I thought it imposed unreasonable burdens and unachievable goals. This amendment strikes a better balance. I believe industry can do this. I know that hybrid SUVs are close to production, and this amendment will push new technology solutions that are critical to increased fuel economy.

I side with Markey-Boehlert, because it sets the direction in which we need to go.

This debate is not about cars, tailpipes or engine technology. It's about health and what policy gets our country to better air quality standards in the most cost effective way.

This most fundamental and basic element of the discussion is lost entirely when it hits Washington. We think of fuel efficiency as a technology issue, or a financial issue, or a complex policy issue. But Corporate Average Fuel Efficiency (CAFÉ) and other clean air act rules are fundamentally about protecting public health. Our children's health will be decided by the decisions we make today.

We need nothing less than a massive shift of the tectonic plates of automobile tailpipe emissions policy and the standards used to promote efficiency and air quality improvement. Clearly the automakers have the resources to support further exploration of improved emissions reduction, but some of the onus must be placed on the consumer to buy the product and on the government to help consumers choose clean technology. Mandates should include a means of developing a consumer market for cleaner technology.

That's why, in my view, the notion of average duel efficiency over a fleet of cars—the concept underlying CAFÉ standards—has not worked particularly well.

A fleet average has little bearing on what consumers are purchasing. Even though CAFÉ forces Detroit to manufacture a cleaner and more fuel-efficient vehicle, we see a proliferation of gas-guzzling SUVs, mini-vans, and trucks. They are what the consumer wants and needs. As much as I love Toyota's Prius, it isn't a practical alternative for many families or workers in our society.

If we are to increase fuel efficiencies across the fleet of vehicles, we also need to influence changes in consumer behavior. We need to work hand-in-glove to develop policies that make energy-efficient vehicles attractive purchasing options. Fortunately, in the Ways and Means title of this bill, we begin to tackle the consumer side of the equation through some tax incentives and credits for the purchase of electric, fuel-cell, hybrid, alternative fuel and advanced lean burn vehicles.

Striking the right balance is hard. Both consumers and industry must be challenged. I opposed an earlier version of the Markey amendment in committee because I thought it imposed unreasonable burdens and unachievable goals. This amendment, co-authored by Messers. Markey and Boehlert, strikes a better balance. By moving SUVs and light trucks to the existing CAFÉ standards for cars—over five years—it closes the SUV loophole and challenges industry to clean up its most popular models.

I believe industry can do this. The timetable for achieving the target miles-per-gallon may be aggressive given the kinds of investments that must be made in retooling a new car line. But I know that hybrid SUVs are close to production, and this amendment will push new technology solutions that are critical to increased fuel efficiency.

This is a hard choice. But because we are in the business of making choices, I side with Markey-Boehlert as pointing in the direction we want to go. Combined with emerging technologies and tax incentives influencing consumer behavior, I think the goals are attainable.

Support Markey-Boehlert.

Mr. TAUZIN. Mr. Chairman, I yield 1 minute to the gentleman from Michigan (Mr. ROGERS), a leader in the construction of the reasonable provisions of the current bill.

Mr. ROGERS of Michigan. Mr. Chairman, I am proud to hear the previous speaker talk about adverse health effects. You cannot get a more serious adverse health effect than death. The National Academy of Sciences report says one thing, if you arbitrarily, aggressively raise CAFE standards, more Americans will die.

Do we want politicians on this floor setting a political number that really

is not based on science, or do we want engineers, scientists, and moms making the decision about what goes on the road and how we get to conservation?

We chased moms out of station wagons in the seventies with CAFE increases, and they chose, for safety reasons for themselves and their families, minivans. We are fast approaching trying to chase moms out of minivans. Moms know best about safety for their family.

There are two ways to get here, Mr. Chairman: the way that this chairman of the committee has engineered, that says we want scientists and engineers to, over time, develop conservation standards that we know allows these vehicles to be safe; or the political CAFE amendment increase that says we want smaller, shorter wheelbases, lighter cars, that we know will take the lives of Americans, independent review said as many as 7,000 per mile a gallon. That is 53,000 families.

Mr. Chairman, make the choice today. Let scientists, engineers, and moms make the choice, not politicians on this floor.

Mr. DINGELL. Mr. Chairman, I yield 1½ minutes to the distinguished gentleman from New York (Mr. TOWNS).

Mr. TOWNS. Mr. Chairman, I have great respect for the authors of this amendment, the gentleman from Massachusetts (Mr. MARKEY) and the gentleman from New York (Mr. BOEHLERT), but this is a discriminatory amendment that is ill conceived and counterproductive. It would bring about a tremendous job loss, and that is the last thing we need at this particular time. I am talking about high-paying jobs, jobs where people are well paid and able to support their family and be able to live a strong and positive life.

I understand what the drafters are trying to do with this amendment, but this is the wrong way to go about it. This is a dangerous amendment.

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I ask my colleagues to vote no on this amendment. The timing could not be worse.

I am hoping that my colleagues will recognize that fact and would even withdraw this amendment. But if they do not withdraw it, then I would ask my colleagues to vote no.

Mr. MARKEY. Mr. Chairman, I yield 30 seconds to the gentleman from Ohio (Mr. SAWYER).

Mr. BOEHLERT. Mr. Chairman, I also yield 30 seconds to the gentleman from Ohio (Mr. SAWYER).

(Mr. SAWYER asked and was given permission to revise and extend his remarks.)

Mr. SAWYER. Mr. Chairman, I rise in support of the amendment. The Academy recommendation lays before us a framework for improving CAFE that is complex. It includes tradeable efficiency credits and weight-based fuel economy targets. It is complex, but we need to do it. We should begin now and move forward with care.

Do we have the technology to achieve it? Sure, we do. Improved aerodynamics, advances in engine management and combustion technologies, tire technology, advanced polymer materials that reduce weight and add strength, all of this is within our grasp. But production inertia and market acceptance rates may make the proposed time lines difficult, and perhaps impossible, so I have sympathy with the opponents of this amendment.

But we need to move the debate forward. Neither the amendment nor the bill includes the underlying recommendations of the Academy, so they do not fix the embedded problems in CAFE. So I support this amendment in the hope that it will not end, but start, the serious discussion that we need to have to move this process forward.

Mr. TAUZIN. Mr. Chairman, I am pleased to yield 1 minute to the gentleman from Wisconsin (Mr. RYAN).

Mr. RYAN of Wisconsin. Mr. Chairman, I thank the gentleman for yielding time.

Mr. Chairman, we all want higher fuel efficiency for cars. Everybody believes in that goal, but we do not want to accomplish this goal at the expense of vehicle safety and workers' jobs.

This chart shows what the amendment is proposing. They are proposing a steep, steep increase in CAFE standards in an unworkable time line.

One point that I have noticed that has not been shared on the floor today is this: The foreign automobile manufacturers have more CAFE credits than the American automobile manufacturers do. So when this amendment passes, what we will be accomplishing is a shift in market share. We will be compromising American jobs. That means less Tahoes, less Suburbans, less Cherokees, less Wranglers and more Land Cruisers, more Range Rovers. So we are not going to pull these big SUVs off the road because the market demand is still there.

Mr. Chairman, this will put us at a competitive disadvantage. It will cost us jobs, thousands of jobs in America with no practical result, because the gap will be filled by the foreign competitors who will get an unfair competitive advantage over American auto producers if this amendment passes.

Mr. MARKEY. Mr. Chairman, I yield 30 seconds to the gentlewoman from California (Ms. WOOLSEY).

Ms. WOOLSEY. Mr. Chairman, so here is the question for all of us: If, in fact, the U.S. auto industry suffers from increased CAFE standards, then what is the effect and how much does the industry suffer and how much does our economy suffer when Americans import fuel-efficient automobiles from other countries? Because with the high cost of fuel, the detrimental effect on our environment, and the interest of American consumers to be independent of foreign oil, we will be purchasing fuel-efficient autos, domestic or foreign.

Mr. MARKEY. Mr. Chairman, I yield 30 seconds to the gentleman from Texas (Mr. DOGGETT).

Mr. DOGGETT. Mr. Chairman, it is called CAFE, but unless this amendment is approved, special interests will enjoy another free lunch as they guzzle down plates piled high to satisfy a very hefty energy appetite. With 200 million tons of global-warming pollution pouring through this unwarranted loophole every year, all the rest of us are left choking on this all-you-can-pollute buffet, and billions of gallons of gasoline are wasted.

Manufacturers have had 6 long years of Republican congressional dining at Cafe Delay to prepare for fuel economy. Now their allies combined some new ''do-little'' language with the same old doom-and-gloom scenario they have previously relied upon to oppose everything from seat belts to rollover protection.

Reject the excuses and enact genuine fuel economy.

Mr. TAUZIN. Mr. Chairman, I yield 30 seconds to the gentlewoman from California (Mrs. BONO).

Mrs. BONO. Mr. Chairman, I thank the gentleman for yielding time.

Mr. Chairman, I am concerned that unrealistic CAFE standards will result in more highway deaths. In 1999, a USA Today article reported on a National Highway Traffic Safety Administration and insurance safety study which found that in the years since CAFE standards were mandated under the Energy Policy and Conservation Act of 1975, about 46,000 people have died in crashes that they would have survived if they had been traveling in heavier cars.

We increased fuel efficiency standards for SUVs in this bill, but we did it in a responsible manner which balances the needs of the environment with the critical need to maintain high safety standards. As a mother of two children, I value these safety concerns and cannot support a measure which would compromise the safety of our kids.

Mr. BOEHLERT. Mr. Chairman, I yield 30 seconds to the gentleman from Connecticut (Mr. SHAYS).

Mr. SHAYS. Mr. Chairman, we will not have a world to live in if we continue our neglectful ways. Apologists for the automobile industry are going to kill America if they keep it up.

Two-thirds of all the oil used in the United States is consumed in the transportation sector. If SUVs and other light trucks were held to the same efficiency standards as today's cars, we would save more gasoline in just 3 years than is economically recoverable from ANWR, and these drivers would save $25 billion a year.

Higher mileage standards promise cleaner air and water, less oil imports, and billions and billions of dollars saved to the consumer.

Mr. MARKEY. Mr. Chairman, I yield 30 seconds to the gentleman from Oregon (Mr. BLUMENAUER).

Mr. BLUMENAUER. Mr. Chairman, there is no longer a rational reason for

us to distinguish between SUVs and light trucks and other vehicles. They are mostly used as passenger cars in the first place.

The base bill simply does not provide enough conservation: approximately 6 days of oil consumption over the next 9 years. There is a big difference between the average car and a 13-mile-per gallon SUV. It is the equivalent of leaving a refrigerator door open for 6 years for the average year.

I would suggest that the opponents of this amendment are selling American industry short. There is no reason the American auto industry cannot keep pace with foreign competition. We should not drive Americans into their hands.

Mr. TAUZIN. Mr. Chairman, I yield 1 minute to the gentleman from Nebraska (Mr. TERRY), who deserves a great deal of credit for bringing the CAFE improvements in our bill forward.

Mr. TERRY. Mr. Chairman, I rise in strong opposition to this amendment.

This bill, our bill allows the Department of Transportation to explore many possible solutions for conservation, such as a weight-based system so we do not treat a Ford pickup truck like a Ford Fiesta; so that our farmers can do their hard work and our contractors can store their equipment in a vehicle a bit more substantial than the standard hatch-back.

By giving authority over fuel economy to the DOT, we allow more flexibility to deal with this complex issue with greater expertise.

We have heard about the NAS study which reaches dozens of conclusions, but yet this amendment relies on only one. If we were to take this report in its totality, we find that we should implement a weight-based system, which this amendment forbids, and we must not downweight our vehicles which, in essence, this amendment demands, and that we must continue to develop technology, which this amendment does not encourage. And we must allow sufficient time for its implementation, which this amendment also does not do.

Mr. Chairman, I urge my colleagues to support H.R. 4 and Buy American. Vote against this amendment.

Mr. MARKEY. Mr. Chairman, I yield myself such time as I may consume.

Mr. Chairman, the fuel economy standards in the United States are going down. In 1986, we peaked at about 26½ miles per gallon, and we have been going backwards ever since.

Now, if we have an energy crisis, should we not look at where we put two-thirds of all of the oil that we consume in the United States? It goes into gasoline tanks. If we want to do anything about an energy crisis, we have to look at gasoline tanks.

Now, our amendment just takes America back pretty much to where it was in 1986. This is not rocket science. This is auto mechanics. Every high school in America has a course on this.

Do not tell us this is going to cause some huge, unbearable burden to be imposed upon the auto industry. The burdens are upon the American people. We are importing too much oil.

The environmental consequences? Well, the President says he cannot comply with the Kyoto Treaty. Well, if we do not do anything about automobiles, we are not going to do anything about Kyoto. The American Lung Association says that there is a dramatic increase in lung disease, in asthma, especially among young children in this country. If we do not do anything about automobile emissions into our atmosphere, we are not doing anything about the American Lung Association's top agenda item.

So I say to my colleagues, we have a choice. All we are asking is that we improve by 1.3 miles per gallon the American auto fleet from where it was in 1986, and we give them until 2007, 21 years, to make that huge technological leap. We do not want to hear another word about the energy crisis, about how you cannot comply with Kyoto, about how you care about all the additional health care consequences in the country, if you cannot find some way of dealing with what is obviously the major cause of most of the problems in the environment in our country.

Mr. DINGELL. Mr. Chairman, I yield the remainder of our time to the distinguished gentleman from Michigan (Mr. BONIOR), the minority whip and my good friend.

Mr. BONIOR. Mr. Chairman, I thank the gentleman for yielding me this time.

Mr. Chairman, the auto industry has helped build this Nation. It has provided economic opportunities for generations, including generations of my own family. I believe a strong, a vibrant, and a domestic auto industry will continue to be the key to our economic future.

For our prosperity to continue, we need to lead the way in using new technologies that protect our environment. Hybrid and cell-fuel-powered vehicles are the future, and the future will soon be upon us. Our domestic auto companies are moving in that direction, and they are moving in that direction with speed. Forward. General Motors, Daimler Chrysler, they all recognize that consumers want safe, fuel-efficient vehicles. They have announced that they will increase the average fuel economy in the sports utility by up to 25 percent over the next 5 years.

In the future, we will be talking about ways to store hydrogen and natural gas in our fuel cells, not increasing CAFE. The CAFE debate that we are having on this floor may very well be one of the last that we will have. The future is in these new technologies, in hydrogen fuel cells, in hybrids that will be coming on line in some of our automobiles within a year.

N O T I C E

Incomplete record of House proceedings. Except for concluding business which follows, today's House proceedings will be continued in the next issue of the Record.

EXECUTIVE COMMUNICATIONS, ETC.

Under clause 8 of rule XII, executive communications were taken from the Speaker's table and referred as follows:

3245. A letter from the Acting Administrator, Rural Utilities Service, Department of Agriculture, transmitting the Department's final rule—Policy on Audits of RUS Borrowers; Management Letter (RIN: 0572–AB66) received July 27, 2001, pursuant to 5 U.S.C. 801(a)(1)(A); to the Committee on Agriculture.

3246. A letter from the Acting Administrator, Rural Utilities Service, Department of Agriculture, transmitting the Department's final rule—Policy on Audits of RUS Borrowers; Generally Accepted Government Auditing Standards (GAGAS) (RIN: 0572–AB62) received July 27, 2001, pursuant to 5 U.S.C. 801(a)(1)(A); to the Committee on Agriculture.

3247. A letter from the Congressional Review Coordinator, Animal and Plant Health Inspection Service, Department of Agriculture, transmitting the Department's final rule—Mexican Fruit Fly Regulations; Regulated Areas, Regulated Articles, and Treatments [Docket No. 99–075–5] received July 31, 2001, pursuant to 5 U.S.C. 801(a)(1)(A); to the Committee on Agriculture.

3248. A letter from the Principal Deputy Associate Administrator, Environmental Protection Agency, transmitting the Agency's final rule—Tepraloxydim; Pesticide Tolerance [OPP–301148; FRL–6791–7] (RIN: 2070–AB78) received July 30, 2001, pursuant to 5 U.S.C. 801(a)(1)(A); to the Committee on Agriculture.

3249. A letter from the Principal Deputy Associate Administrator, Environmental Protection Agency, transmitting the Agency's final rule—Isoxadifen-ethyl; Pesticide Tolerance Technical Correction [OPP–301156; FRL–6794–3] (RIN: 2070–AB78) received July 30, 2001, pursuant to 5 U.S.C. 801(a)(1)(A); to the Committee on Agriculture.

3250. A letter from the Principal Deputy Associate Administrator, Environmental Protection Agency, transmitting the Agency's final rule—Azoxystrobin; Pesticide Tolerances for Emergency Exemptions [OPP–301151; FRL–6792–5] (RIN: 2070–AB78) received July 27, 2001, pursuant to 5 U.S.C. 801(a)(1)(A); to the Committee on Agriculture.