PUERTO RICO'S POST-DISASTER RECONSTRUCTION AND POWER GRID DEVELOPMENT

OVERSIGHT HEARING

BEFORE THE

COMMITTEE ON NATURAL RESOURCES
U.S. HOUSE OF REPRESENTATIVES

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OVERSIGHT HEARING ON "PUERTO RICO'S POST-DISASTER RECONSTRUCTION AND POWER GRID DEVELOPMENT"

Thursday, November 17, 2022
U.S. House of Representatives
Committee on Natural Resources
Washington, DC

The Committee met, pursuant to notice, at 10:04 a.m., Room 1324, Longworth House Office Building, Hon. Raúl M. Grijalva [Chairman of the Committee] presiding.

Present: Representatives Grijalva, Gallego, Leger Fernández, Velázquez, Soto, San Nicolas, García, Tonko; Westerman, Lamborn, Wittman, McClintock, Graves, Webster, González-Colón, Fulcher, Obernolte, and Bentz.

Also present: Representative Ritchie Torres from New York.

The CHAIRMAN. The Committee will come to order.

The Committee is meeting today to receive testimony on the status of Puerto Rico's reconstruction and recovery after recent natural disasters, beginning with Hurricane Maria in 2017, a series of earthquakes that occurred in 2020, and Hurricane Fiona just this past September.

We are also here to discuss the restoration and modernization of Puerto Rico's power grid, which has experienced numerous major failures with significant impacts to the residents of Puerto Rico.

Under Committee Rule 4(f), any oral opening statements at the hearing are limited to the Chair and the Ranking Minority Member, or their designees. This will allow us to better hear from our witnesses sooner and help Members keep to their schedules.

Therefore, I ask unanimous consent that all other Members' opening statements be made part of the hearing record if they are submitted to the Clerk by 5 p.m. today, or at the close of this hearing, whichever comes first.

Hearing no objections, so ordered.

Without objection, the Chair may also declare a recess, subject to the call of the Chair.

Without objection, the Member from New York, Representative Torres, is authorized to question the witnesses in today's hearings after permanent Members have had their opportunity.

As described in the hearing notice, statements, documents, or motions must be submitted to the electronic repository at HNRCDocs@mail.house.gov. Members physically present should provide a hard copy for staff.

Additionally, please note that Members are responsible for their own microphones. As with our fully in-person meetings, Members may be muted by the staff only to avoid inadvertent background noise.

Finally, Members or witnesses experiencing technical problems should inform Committee staff immediately.

I now want to recognize the Vice Chair of the Insular Affairs Committee, Mr. Sablan, if he has any opening statement.

Hearing none, let me turn to Vice Ranking Member of that Committee, Representative González-Colón. Commissioner?

Miss GONZÁLEZ-COLÓN. Thank you, Mr. Chairman.

The CHAIRMAN. You are recognized for 5 minutes.

STATEMENT OF THE HON. JENNIFFER GONZÁLEZ-COLÓN, A RESIDENT COMMISSIONER IN CONGRESS FROM THE TERRITORY OF PUERTO RICO

Miss GONZÁLEZ-COLÓN. Thank you, Mr. Chairman. I really appreciate this Committee doing this hearing and actually deferring the time from the original date that was near Hurricane Fiona. I think it is important, what we are doing today. I think Puerto Rico has been facing many——

[Audio malfunction.]

Miss GONZÁLEZ-COLÓN [continuing]. Also from the physical situation——

[Audio malfunction.]

The CHAIRMAN. I think we are having some technical problems. We are not able to hear the Commissioner directly.

Miss GONZÁLEZ-COLÓN. Can you hear me now, sir?

The CHAIRMAN. Now we can. Thank you. You are recognized.

Miss GONZÁLEZ-COLÓN. Thank you.

[Audio malfunction.]

Miss GONZÁLEZ-COLÓN [continuing]. Federal funding that has been approved for the island, and many of those funds, the funding is not being used because of the hurdles and the red tape of many Federal agencies to use on the island.

For example, we are talking about more than $11.8 billion are coming from HUD to do an upgrade of the electrical system on the island. That is one of the major issues we are facing because of the situation. Sometimes we have a week, and we have cellular——

[Audio malfunction.]

Miss GONZÁLEZ-COLÓN [continuing]. That is going to put the island——

[Audio malfunction.]

The CHAIRMAN. This is going to be a problem.

Miss GONZÁLEZ-COLÓN [continuing]. Have an old system with a lot of lack of maintenance during all those years, and we may require doing, literally, an upgrade. And that means not just equipment outdated by decades, but also in terms of the determent and some bad habits of all administrations just to cancel whatever projects were approved during the prior administration. And that is just a wasting of time and, of course, a wasting of funds.

One of the issues that we have been facing in PREPA, or the local company since 2017, is that every component of the power has not only——

[Audio malfunction.]

Miss GONZÁLEZ-COLÓN. So, many issues are being discussed here. And my colleagues in Congress came with me to the island after Maria. Many of them saw firsthand what was going on. After

Fiona, a few Members of Congress, as well, went to the island. They saw what happened. But results have been slow.

First, major obligations for permanent infrastructure rebuilding were announced only late 2020. And getting the money out from the Federal agencies is just—it is just a situation that over $80 billion in recovery funds are being allocated, but just one-third of them have been actually disbursed. Why is that? And I think the Governor of Puerto Rico and government officials can answer all those hurdles and problems they are facing in terms of getting that money out.

So, with that, Mr. Chairman, I yield back.

[The prepared statement of Miss González-Colón follows:]

PREPARED STATEMENT OF THE HON. JENNIFFER GONZÁLEZ-COLÓN, A RESIDENT COMMISSIONER IN CONGRESS FROM THE TERRITORY OF PUERTO RICO

Thank you, Mr. Chairman and Ranking Member Westerman.

Puerto Rico has been facing a long and tough recovery in every sense of the word.

It has been 5 years since Hurricanes Irma and Maria, yet the effects still linger.

Since then, we have been impacted by other disasters: earthquakes; the COVID-19 pandemic; economic slowdowns; and, on the eve of Maria's fifth anniversary along came, Hurricane Fiona. All while still trying to undertake a fiscal and economic recovery.

The effects of Fiona and the ongoing rains have brought back to our attention that the necessary public works to make our infrastructure more resilient, are going at a snail's pace.

We still have a vast amount of transportation and public utility infrastructure waiting for the required permanent replacement and improvement to more resilient, climate resistant standards, so it keeps failing again, and we keep having to repair it, again.

The electric grid is the biggest example. Even before Maria hit us it suffered from:

- equipment outdated by decades, suffering from deferred maintenance;
- new plans would be made with every incoming administration at the Puerto Rico Electric Power Authority, wasting time and funds;
- revenues being directed to first pay current expenses, EPA fines, and rising bond debt, leaving none for capital investment.

And, since 2017, PREPA, PRASA, and every other component of our public infrastructure sector has not only needed physical rebuilding, but also fiscal restructuring under the PROMESA Law, that continues to this day.

Following Hurricane Maria, several Members of Congress and Administration officials have visited the Island to assess the damages and provide the resources to assist in its recovery.

But results have been too slow. The first major obligations for permanent infrastructure rebuilding were announced in late 2020. Of over 80 billion dollars in recovery funds, just a third has been disbursed to date.

My constituents hear about all those billions, and they ask a simple question, where are they? They need to see infrastructure recovery TODAY. Not in 2030 or 2040.

Last year, PREPA granted an Operation and Management contract for Transmission and Distribution to LUMA Energy. It was hoped this would bring greater efficiency in the rebuilding of the energy grid. It hasn't!

But what do the people of Puerto Rico see on the ground? Still unreliable service, with constant brownouts: power plants going offline for days and weeks, substations blowing up in a gulf of fire, down transmission lines. And the monthly bill keeps increasing month after month, making our electric bill the most expensive in the nation. Just a couple of months ago my constituents were paying .33 cents a kwh, while receiving the worst electrical power service in the country.

The power utility has been working on virtually no reserves, keeping power plants running that needed to be cycled off for maintenance work and therefore risking damaging them even more.

This past year even before Fiona the electrical grid interruptions continued and when we asked FEMA about it, it turned out that only a small fraction of permanent work projects had been submitted.

I am disappointed that PREPA and the Energy Bureau are not here today: I would have wanted all components of the Energy Sector to be at the same table so that we could end the ongoing blame game and do what the people are screaming at the government to do, give them reliable, stable electrical power service.

So, my constituents rightfully ask, what is being done with the billions of dollars in aid? What are the plans? When will we see results? I truly hope we can get some clear answers to these fundamental questions today. Our people deserve no less.

The CHAIRMAN. The gentlelady yields. Thank you very much. Let me attempt to recognize Mr. Sablan, if he has joined us, for any opening statement or comment he may have.

[Pause.]

The CHAIRMAN. Let me now ask the Full Committee Ranking Minority Member for any statement he may have.

Mr. Westerman.

STATEMENT OF THE HON. BRUCE WESTERMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARKANSAS

Mr. WESTERMAN. Thank you, Mr. Chairman. I thank everybody for being here today, and I do look forward to continue to work with the Resident Commissioner to ensure that Puerto Rico has a stable footing.

I also look forward to the day when we are all in person back in the hearing room again, and we are not doing remote testimonies or remote voting, as we see again the trouble that we often face with technology.

I believe that attaining financial stability, repairing infrastructure, and ensuring access to affordable and reliable energy for the residents of Puerto Rico will set the island on a solid and prosperous path forward.

I appreciate the ongoing and tireless work of Miss González-Colón here in Congress on behalf of the residents of Puerto Rico.

Devastatingly, Hurricane Fiona made landfall in Puerto Rico on September 21, 2022, crossing the southwest corner of the island. It brought 85-mile-per-hour winds and heavy rainfall on the island, almost unimaginable rainfall, totaling 32 inches in 72 hours near the southern coast, the City of Ponce. If we could figure out how to move that rain from Puerto Rico to California and the West, that would solve a lot of our problems. But, unfortunately, we don't have that technology yet.

Those hurricane force winds and the heavy rains caused an island-wide blackout and severe flooding. The storm taxed Puerto Rico's already fragile electrical grid, which had been patched but never fully repaired or upgraded after Hurricane Maria in 2017.

In early October, I traveled with the Resident Commissioner to Puerto Rico and met with the Governor, who I am glad to see is here today. We met with local agencies, Federal officials, and power grid operators to learn about the recovery efforts underway after Hurricane Fiona and to assess damages in several municipalities firsthand. We also discussed ongoing challenges to restoring electricity across the island in the wake of Hurricane Fiona.

It was reassuring to see the amount of progress that had been made in restoring power and water systems on the island less than

3 weeks after Fiona made landfall. But there is still much work to do to restore critical infrastructure, homes, and communities after the devastating storm and flooding. Federal agencies need to continue working with the Puerto Rico Government and local municipalities to recover from the natural disasters that have impacted Puerto Rico.

We should strive to increase the resiliency of the island so that when there are future natural disasters, we can see even quicker recoveries and less damage.

The Puerto Rico Electric Power Authority, or PREPA, has been plagued for decades by issues leading to inefficiency of operations. In 2021, LUMA Energy won a contract to operate PREPA's electricity transmission and distribution system. I have recognized that there have been several challenges with LUMA's operations on the island. We all need to work together to ensure the island's electric grid is strong and, again, a grid that provides affordable and reliable electricity to the people of Puerto Rico.

As I have said before, I support an all-of-the-above energy approach, but it has to be an energy approach that works and delivers. We need to work for affordable and reliable energy that meets the needs of local communities. We will continue working for that and assisting in any way that we can.

I yield back.

The CHAIRMAN. The gentleman yields. Thank you, and let me recognize myself.

STATEMENT OF THE HON. RAÚL M. GRIJALVA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARIZONA

The CHAIRMAN. I want to begin by thanking my colleagues for taking the time to join us for this Full Committee oversight hearing on Puerto Rico's post-disaster reconstruction and power grid development.

In the last 5 years, Puerto Rico has been impacted by one major natural disaster after another, and the litany is there, and everybody is aware of them, the latest being September 2022. Just this morning, a Magnitude 5 earthquake struck the island. The territory's structural issues, including fragile infrastructure and some of the nation's highest poverty rates, make Puerto Rico extremely vulnerable to the compounding effects of climate change, especially the increase in the frequency and the intensity of hurricanes and storms.

The purpose of today's hearing is to receive testimony from key stakeholders regarding post-disaster reconstruction efforts in Puerto Rico. We will also discuss a legislative proposal designed to provide lifesaving, post-disaster energy resources to those least able to access them. We will hear from local government officials, the electric utility private operator, local non-profit and community leaders, and professional associations.

Although FEMA's administrator was unable to join us today, I want to thank the Biden administration for its rapid and bold actions to ensure Puerto Rico has the resources it needs to recover from Hurricane Fiona and previous natural disasters.

After Hurricane Irma and Maria impacted Puerto Rico, Congress appropriated disaster aid for the territory. But the reconstruction

process has moved slowly, very slowly. For almost 3 years, the previous administration withheld billions of dollars for critical projects on the island.

Further, although FEMA provided significant support to Puerto Rico, the agency's response was hindered by its adherence to protocols that failed to account for Puerto Rico's structural issues, including the territory's financial situation.

The Government of Puerto Rico has been criticized for its inability to apply disbursed funds in a timely manner toward critical projects, community organizations, and small businesses.

In June 2021, operational control of Puerto Rico's energy grid was transferred from Puerto Rico Electric Power Authority, PREPA, to private operator, LUMA Energy, which was tasked with rebuilding the grid and improving service. Since then, Puerto Rico has not seen an improvement in the frequency of outages but, problematically, has seen an increase in their duration.

The local government must conduct aggressive oversight of LUMA's contract to operate, maintain, and modernize the electric grid. Additionally, additional accountability is necessary. The residents of Puerto Rico deserve a reliable electric service.

To increase resilience on the island, the Government of Puerto Rico made significant infrastructure investments. This includes prioritizing projects to modernize the electric grid toward a more reliable system for residents that is decentralized and less reliant on fossil fuels. But Puerto Rico doesn't have the funding to go it alone, and the Federal disaster funds that have been appropriated so far cannot provide the resiliency that Puerto Rico's most vulnerable populations need.

I am seeking to include in a post-Hurricane Fiona Emergency Supplement $5 billion for the Department of Energy to provide rooftop solar and battery storage systems for low-income households and households with people with disabilities in Puerto Rico. I want to thank Secretary Jennifer Granholm for supporting the proposal.

And amidst the island-wide blackout caused by Hurricane Fiona, pockets of solar power generation were able to keep the lights on. A preliminary study from the National Lab of Renewable Energy PR100 program found that Puerto Rico's high exposure to sunlight could produce over four times the amount of energy that it needs for rooftop solar power.

[The prepared statement of Mr. Grijalva follows:]

PREPARED STATEMENT OF THE HON. RAÚL M. GRIJALVA, CHAIR, COMMITTEE ON NATURAL RESOURCES

I want to begin by thanking my colleagues for taking the time to join us for this Full Committee oversight hearing on Puerto Rico's Post-Disaster Reconstruction and Power Grid Development.

In the last 5 years, Puerto Rico has been impacted by one major natural disaster after the other, including Hurricanes Irma and Maria in 2017, the earthquakes of 2020, and Hurricane Fiona in September 2022. Just this morning, a magnitude 5 earthquake struck the island. The territory's structural issues—including fragile infrastructure and some of the nation's highest poverty rates—make Puerto Rico extremely vulnerable to the compounding effects of climate change, especially the increase in the frequency and intensity of hurricanes and storms.

The purpose of today's hearing is to receive testimony from key stakeholders regarding post-disaster reconstruction efforts in Puerto Rico. We will also discuss a

legislative proposal designed to provide life-saving post-disaster energy resources to those least able to access them.

We will hear from local government officials, the electric utility private operator, local nonprofit and community leaders, and professional associations.

Although FEMA's Administrator was unable to join us today, I want to thank the Biden administration for its rapid and bold actions to ensure Puerto Rico has the resources it needs to recover from Hurricane Fiona and previous natural disasters.

After Hurricanes Irma and Maria impacted Puerto Rico, Congress appropriated disaster aid for the territory, but the reconstruction process has moved slowly. For almost 3 years, the Trump administration withheld billions of dollars for critical projects on the island. Further, although FEMA provided significant support to Puerto Rico, the agency's response was hindered by its adherence to protocols that failed to account for Puerto Rico's structural issues, including the territory's financial situation.

The Government of Puerto Rico has also been criticized for its inability to apply disbursed funds in a timely manner toward critical projects, community organizations, and small businesses.

In June 2021, operational control of Puerto Rico's energy grid was transferred from the Puerto Rico Electric Power Authority to private operator LUMA Energy, which was tasked with rebuilding the grid and improving service. Since then, Puerto Rico has not seen an improvement in the frequency of outages but, problematically, has seen an increase in their duration.

The local government must conduct aggressive oversight of LUMA's contract to operate, maintain, and modernize the electric grid. Additional accountability is necessary. The residents of Puerto Rico deserve reliable electric service.

To increase resilience on the island, the Government of Puerto Rico must make significant infrastructure investments. This includes prioritizing projects to modernize the electric grid toward a more reliable system for residents that is decentralized and less reliant on fossil fuels.

But Puerto Rico doesn't have the funding to go it alone. And the Federal disaster funds that have been appropriated so far cannot provide the resiliency that Puerto Rico's most vulnerable populations need. I am seeking to include in a post-Hurricane Fiona emergency supplemental $5 billion for the Department of Energy to provide rooftop solar and battery storage systems for low-income households and households with people with disabilities in Puerto Rico. I want to thank Secretary Jennifer Granholm for supporting the proposal.

Amidst the island-wide blackout caused by Hurricane Fiona, pockets of solar-powered generation were able to keep the lights on. A preliminary study from the National Lab of Renewable Energy's PR100 program found that Puerto Rico's high exposure to sunlight could produce over four times the amount of energy it needs from rooftop solar power.

The CHAIRMAN. Now I want to welcome all our witnesses. Thank you for joining us today. We welcome your insight and recommendations.

But first, let me remind all the witnesses and my colleagues on the dais that the 5-minute rule will be more aggressively monitored. We have a lot of witnesses, and it is a voting day, and I have heard from Members that have made plans to leave and go back to their districts and their homes. So, in order to maintain as much participation by Members, I would hope that everybody strictly takes to that 5-minute rule. And I will remind Members as we go forward.

Let me now introduce our first witness, the distinguished Governor of Puerto Rico, the Honorable Pedro Pierluisi.

Sir, thank you so much for the time to be here. You are recognized, sir, for 5 minutes.

STATEMENT OF THE HON. PEDRO PIERLUISI, GOVERNOR OF PUERTO RICO

Governor PIERLUISI. Chairman Grijalva, Ranking Member Westerman, Resident Commissioner González-Colón, and members of the Committee, thank you for holding this hearing about the recovery of Puerto Rico.

I am pleased to report that Puerto Rico is emerging from a challenging period with strength and optimism into a new era of stability evidenced by the island's economic upswing. As our economy recovers, we are working to ensure that Puerto Rico's energy system is reliable and resilient, speeding up our reconstruction, and seeking fair treatment in Medicaid and Medicare, as well as inclusion in the SNAP program.

Puerto Rico, Congress, and the Biden administration have committed significant resources to the island's recovery after the 2017 hurricanes, the subsequent earthquakes, the pandemic, and the most recent Hurricane Fiona. As of today, 70 percent of the CDBG-DR disaster funds have been obligated. Out of over 12,000 eligible families, more than 6,400 families have had their homes rebuilt or received housing vouchers.

In addition, over 2,300 residences are under construction or preconstruction. FEMA has obligated over 91 percent of the funding allocated for emergency and permanent work projects, and almost 20 percent has already been disbursed. We now have 2,132 projects under construction for a total cost of $800 million, and over 1,600 projects totaling over $1.4 billion are in the permitting process and should start construction soon.

The transformation of our electric system is one of our highest priorities. We are committed to moving away from fossil fuels and toward renewable energy, converting our fragile and integrated electric grid into a modern, resilient, and interdependent one that can serve Puerto Rican residents and businesses without blackouts.

The great reconstruction is underway—with multiple substations repaired, thousands of poles and streetlights replaced, and over 33,000 new solar customers connected. Also, 90 energy projects are in the design phase, 43 are awaiting FEMA approval, 51 have been approved, and 40 projects are under construction.

Furthermore, 1,000 megawatts in utility-scale renewable energy generation projects, including 200 megawatt battery storage, are in design or construction. And we are about to finish an RFP process for additional renewable energy projects that will generate 1,000 megawatts, along with 500 megawatts in battery storage.

In addition, we are installing solar and battery systems on all homes rebuilt under the R3 program and have allocated $500 million of CDBG-MIT funding for assisting low-income households in acquiring solar panels and batteries.

Moreover, work has begun to deploy $1.3 billion in CDBG-MIT-DR funds for microgrids and energy storage systems in remote communities and first response agencies. However, given Hurricane Fiona's recent impact on Puerto Rico, our electric system has suffered additional damages.

After I requested emergency assistance to stabilize our power system, FEMA agreed to provide resources to assist Puerto Rico in increasing its power generation capacity and improving our

transmission and distribution of energy. The plan proposes to install temporary generation through power barges and high capacity portable generators, and to perform short-term repair work in our existing generation plants and electric grid. This will allow Puerto Rico to concentrate all efforts on advancing the transformation and modernization of its electric system, while our people have stable service.

Our asks to this Committee and Congress include providing 100 percent Federal share match for energy-related FEMA-funded projects; giving congressional authorization to FEMA to adjust fixed cost estimates of approved projects, given the recent increase in the cost of construction materials and supply chain disruptions; amending the Stafford Act to authorize FEMA to consolidate disasters into a single award of Federal assistance; and supporting the proposal of Chairman Grijalva and other Members of Congress to allocate $5 billion in directed CDBG-DR funding for residential solar energy systems on the island.

Finally, I must remind this Congress that, even after the successful restructuring of our public debt and rebuilding of our infrastructure, Puerto Rico will remain hindered until our century-long status question is resolved. The people of Puerto Rico voted and chose statehood as their path forward. Congress should call for a vote on the political future of Puerto Rico and commit to implementing the will of the majority. After all, that is what democracy is all about.

I thank you for favorably reporting H.R. 8393 out of this Committee, and I urge Congress to approve it. Thank you.

[The prepared statement of Governor Pierluisi follows:]

PREPARED STATEMENT OF THE HON. PEDRO R. PIERLUISI, GOVERNOR OF PUERTO RICO

Chairman Grijalva, Ranking Member Westerman, Resident Commissioner González-Colón, and Members of the Committee:

Thank you for holding this hearing regarding the post-disaster reconstruction efforts and the transformation of the electric system of the U.S. territory of Puerto Rico. I am pleased to report that Puerto Rico is emerging from a challenging period with strength and optimism.

Successfully restructuring our public debt to sustainable levels is helping us rise from bankruptcy with renewed momentum. This new era of economic stability and progress-oriented policies is already working to restore investor confidence on the Island, which is evidenced by the economic upswing being felt across Puerto Rico.

We also strategically allocated federal funds related to the pandemic to mitigate the effect on our public health and our economy. This has helped provide a sustained rise in economic activity indexes for the past twenty months. In fact, even accounting for inflation and historic high fuel prices, our economy is growing, businesses are expanding, and tax collections are rising consistently.

All banks and co-ops in Puerto Rico have shown steady growth in the past two years, with increasing personal loans, positive movement in the mortgage sector, manufacturing indexes rising and bankruptcies decreasing.

Additionally, with an increase in the local minimum wage, and the impact of this Congress's inclusion of Puerto Rican families in the Child Tax Credit and the federal funding you allocated to increase our local Earned Income Tax Credit, the poverty rate on the island has decreased by 2 percent and is expected to decrease by 7 percent by next year.

Moreover, we have been able to create over 105,000 jobs in less than twenty months since I took office, and Puerto Rico's unemployment rate is at 5.8%, its lowest point in our history. Also, more people have joined the workforce, reaching levels we have not seen in almost 15 years, and last month 44 percent of businesses on the Island reported plans to increase their workforce.

As our economy recovers and we continue to promote our socioeconomic development, we must also ensure that Puerto Rico's energy system is reliable and resilient, we must speed up our reconstruction, and most critically, continue to protect the health of our people working with Congress to receive fair treatment in Medicaid and Medicare, as well as inclusion in the SNAP program.

RECOVERY & RESILIENCY

Puerto Rico, this Committee, Congress, and the Biden Administration have committed significant resources to Puerto Rico's recovery after the ravages of the 2017 Hurricanes and their human and economic toll, as well as subsequent earthquakes, the COVID-19 pandemic, and the most recent Hurricane Fiona two months ago. I am pleased to report significant advances in these efforts during my administration.

The Puerto Rico Department of Housing (PRDOH), as the designated CDBG-DR Grantee, and the Central Office for Recovery, Reconstruction and Resiliency (COR3), as the designated FEMA Grantee, are working nonstop for the recovery of the Island. Both agencies will share a detailed update with this Committee, but I would like to highlight some important advancements. I also want to underline that the assistance provided by the Biden Administration to speed up access to these funds has been instrumental.

PRDOH has successfully obligated 70 percent (approximately $7 billion) of the more than $10 billion in CDBG-DR disaster recovery funds. In its Repair, Reconstruction and Relocation Program, out of over 12,000 eligible families, more than 6,400 families have been served, with 4,376 homes rebuilt and 2,027 housing vouchers granted. In addition, 1,341 residences are under construction and 973 in pre-construction.

The Buyer Assistance Program, with an allocation of $295 million, has already helped 4,131 families acquire a new home. Under the Low-Income Housing Tax Credit Program, which has an allocation of $963 million, 6 projects with 981 units under construction in its first phase, and the second phase aims to achieve the construction of 2,535 housing units through 17 projects that have already been selected and one has already begun construction.

As for COR3, FEMA has obligated over 91 percent (nearly $30 billion) of the funding allocated for emergency and permanent work projects (which totals over $32 billion), and almost 20 percent has already been disbursed. By thinking outside the box, COR3 developed the Working Capital Advance Program to advance 25 percent of the FEMA approved cost of a project, which now provides necessary cash-flow for projects that were delayed due to municipalities or agencies not having enough capital to begin the design and construction processes.

This program has been so successful in the few months since it was established that FEMA has approved its use for all public and private sector entities that have approved projects, and now has been expanded to up to a 50 percent advance for compliant recipients.

As of today, we have 2,132 projects under construction for a total cost of $800 million in FEMA funding. Also, 1666 projects totaling over $1,400 million are in the permitting process and should start construction soon. These are projects of all sizes and types, such as critical infrastructure, community improvements and utilities, all over Puerto Rico.

Furthermore, we have had significant progress in water and sewer infrastructure reconstruction, with multiple large projects already under construction, valued at $116.3 million, along with others totaling $294 million that are in the process of architectural and engineering work. Likewise, 26 additional water and sewer projects have been obligated by FEMA for another $828 million.

ENERGY TRANSFORMATION

The transformation of our electric system is certainly one of our highest priorities. The Puerto Rico Electric Power Authority is still in bankruptcy, saddled with over $9 billion in bonded debt, and burdened with an antiquated infrastructure that was devasted by Hurricanes Irma and María, and for which emergency restoration work took over a year to repair. The Government of Puerto Rico is hard at work with the Oversight Board trying to restructure its debt to affordable levels. We are also committed to achieving our comprehensive and ambitious public policy to transform our existing power generation assets, moving away from fossil fuels toward renewable energy, and converting our fragile and integrated electric grid into a modern, resilient and interdependent one that can serve Puerto Rican residents and businesses without blackouts.

By way of background, on June 20, 2018, the Government of Puerto Rico enacted the "Puerto Rico Electric Power System Transformation Act, Act No. 120-2018 ("Act

120"), with the stated goal of transforming Puerto Rico's energy system into a modern, sustainable, reliable, efficient, resilient, and cost-effective system.

On April 11, 2019, the Government of Puerto Rico then enacted Act 17-2019 ("Act 17"), further advancing our public policy, which mandates the delegation or transfer of the operation of the Puerto Rico Power Authority ("PREPA") electric power generation, transmission and distribution, commercialization, and operation systems to the private sector through the execution of publicprivate partnership contracts ("P3 Contracts"), all to be done within certain specific milestones.

The first P3 Contract in connection with Puerto Rico's energy transformation was executed between PREPA, the P3 Authority, and LUMA Energy. LUMA is now in charge of the operation and management of the transmission and distribution assets of PREPA.

LUMA also must lead the redesign and reconstruction of our electric grid to make it more modern, reliable, able to function interdependently with generation units to avoid island wide outages, and able to provide for the interconnection of microgrids and renewable energy systems. It is also important to recognize that the $9.5 billion in awarded by FEMA for the energy system reconstruction were approved in the later months of 2020. Since then, significant advances have been achieved.

While we recognize there have been delays, the path toward modernization has been set and we are committed to providing modern and reliable electric service to all on the island. The grid reconstruction by LUMA is underway, with hundreds of substations repaired, thousands of poles and streetlights replaced, and over 33,000 new solar customers connected.

Also, more than 389 FEMA funded projects have been approved by the Puerto Rico Energy Bureau, 90 projects are in the design phase, 43 projects are awaiting FEMA approval, 51 projects have already been approved by FEMA, and 40 projects are under construction.

Furthermore, work continues to safely integrate 1,000 MW of utility-scale renewable energy generation and 250 MW of energy storage into our system. Likewise, we are completing an RFP process for additional utility-scale renewable energy projects totaling 1000 MV with 500 MV of storage and proponents will be chosen soon by the Puerto Rico Energy Bureau.

In addition, the Puerto Rico Department of Housing is installing solar and battery systems on all homes rebuilt under its R3 program. It also has begun the process for the administration of $1.3 billion in CDBG-DR funds for microgrids and energy storage systems for remote communities and first response agencies. The first of these projects will be built in our primary medical center, Centro Médico, for which proposals for its design and construction should be ready by the beginning of next year.

Further, the Department of Housing and the Green Energy Trust will use $500 million in CDBG-MIT funds, which my administration has allocated to assist low- and moderate-income households in acquiring renewable energy systems. With this allocation, we expect to have 25,000 additional solar systems and solar communities across our Island.

The Green Energy Trust will also pursue other funding venues, including but not limited to the Investment and Infrastructure Jobs Act and the Inflation Reduction Act, which can finance programs that promote the development of green energy projects.

However, given Hurricane Fiona's recent impact on Puerto Rico, which brought over thirty inches of rain to some municipalities, combined with additional historic rainfall during the months of September and October, our electric system has suffered additional damages, causing major power outages.

Last month, I formally requested emergency assistance from FEMA to stabilize our power system by providing additional generation assets and accelerating work on our transmission and distribution grid.

In response, FEMA created the Puerto Rico Power System Stabilization Task Force, which includes the U.S. Department of Energy, the U.S. Army Corps of Engineers and the Environmental Protection Agency (EPA), led by FEMA, which together with our administration's energy stakeholders developed a plan to stabilize our electric system to be able to provide reliable service to the residents of Puerto Rico, while we continue to carry our reconstruction projects.

FEMA has agreed to provide resources for this stabilization process that will include actions to assist Puerto Rico in increasing its power generation capacity and helping improve transmission and distribution of energy. The plan proposes to:

1. Install temporary generation through power barges and high-capacity portable generators.
    a. FEMA has already identified available units and is making arrangements to hire and mobilize them to Puerto Rico.
2. Perform key short-term work in existing generation plants that allow for the reincorporation of units that are not operating at full capacity or that are out of service.
3. Perform key short-term improvements on the electrical grid, such as repairing key substations and transformers, and replacing high-voltage breakers.

The work that FEMA and its federal partners will be doing will be coordinated with our local stakeholders so that it is done systematically. With this aid, Puerto Rico will be able to focus all efforts on advancing the transformation and modernization of its electric system while our people have a stable service.

CONGRESSIONAL INTERVENTION AND ASSISTANCE

We respectfully ask this Committee and Congress to help us address some additional challenges that we are facing in our ongoing post-disaster reconstruction.

First, we ask for 100 percent federal match for energy related FEMA funded projects. This was done in other states where catastrophic damages occurred and will enable us to use the funds that we have earmarked for the local match for additional renewable energy projects and microgrids.

Second, we ask that FEMA be given Congressional authorization to adjust fixed costs estimates of approved permanent projects given the recent increase in the cost of construction materials and supply chain disruptions. Without this, there is a possibility that some projects will not have enough funding to be completed, putting Puerto Rico's resiliency and reconstruction at risk.

Thirdly, we ask that you support an amendment to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 *et seq*.) to authorize FEMA to consolidate disasters into a single award under DR-4339-PR for the administration of federal assistance. This request will ensure a sound approach to the recovery process and help lessen the administrative burden for both the Government of Puerto Rico and FEMA in managing both disasters.

Lastly, we support the proposal of Chairman Grijalva and other Members of Congress to allocate $5 billion in directed CDBG-DR funding for residential solar energy systems on the Island. This will provide necessary energy independence to residents of Puerto Rico and democratize access to renewable energy.

STATUS

In conclusion, 125 years of unequal treatment toward the American citizens living in Puerto Rico have taken a toll on our society. Even after the successful restructuring of our public debt and the rebuilding of our infrastructure, Puerto Rico will remain hindered until our century-long status question is resolved.

The people of Puerto Rico voted and chose permanent union with the United States through statehood as their path forward. So many Puerto Ricans have defended American democratic values at home and abroad that their lack of voting representation in Congress and voting rights is clearly unacceptable.

Congress should call for a vote on the political future of Puerto Rico and commit to implementing the will of the majority. After all, that is what democracy is all about. I thank you for favorably reporting H.R. 8393 out of this Committee and urge Congress to approve it.

Thank you.

QUESTIONS SUBMITTED FOR THE RECORD TO THE HON. PEDRO PIERLUISI, GOVERNOR OF PUERTO RICO

Questions Submitted by Representative Leger Fernández

Question 1. What would you recommend Congress do to improve the Robert T. Stafford Disaster Relief and Emergency Assistance Act, or other relevant statutes, to enhance FEMA's and the Federal Government's response, more broadly, to the disasters Puerto Rico experienced, as well as future disasters?

Answer. Based on our experience, and the experiences shared with us of other States, we recommend five improvements to the Stafford Act that will enhance the Federal Government's response capabilities to not only Puerto Rico, but other States and Territories faced with catastrophic damage:

A. Natural Disaster Consolidation:

First, we are asking Congress to support our request that FEMA consolidate the disaster declarations for Hurricane María (DR-4339-PR) and Hurricane Fiona (DR-4671-PR) into DR-4339-PR with respect to the administration of federal assistance. FEMA has the authority to make such adjustments independently pursuant to Stafford Act § 5172(e)(1)(A)(i). Consolidating disasters reduces administrative burdens associated with allocating costs and damage to each disaster, which can be particularly difficult in Puerto Rico where work required as a result of Hurricanes Irma and María was not complete when Hurricane Fiona hit the Island, in some cases damaging the same facilities. Consolidation is also beneficial to FEMA, reducing the need for separate resources devoted to each disaster. It also benefits Puerto Rico as a Recipient of federal funding, currently managing disaster grants for not only Hurricanes Irma and María, but also other major disaster such as the 2020 Earthquakes and COVID-19.

Consolidation is not unprecedented. FEMA previously consolidated close-in-time disasters, such as Hurricanes Irma and María in Puerto Rico, Hurricanes Delta and Zeta in Louisiana, and Hurricanes Laura and Sally in Alabama and Florida. These storms occurred within weeks of each other, and FEMA concluded it had the authority to make such adjustments independently pursuant to Stafford Act § 5172(e)(1)(A)(i). Due to the lapse of time between Hurricanes María and Fiona, however, FEMA has been hesitant to consolidate them and has advised that congressional action is needed to allow the consolidation.

Stafford Act § 5172(e)(1)(A)(i) requires FEMA to estimate the eligible cost of repairing or replacing a facility "on the basis of the design of the facility as the facility existed immediately before the major disaster." This has been the basis for FEMA's consolidation of close-in-time disasters, because when events occur in rapid succession, it is often difficult, if not impossible, to identify the pre-disaster condition of the facility. While Hurricanes María and Fiona were about five years apart (almost to the day), when Hurricane Fiona hit, many facilities had not been fully repaired or replaced following Hurricane María. Therefore, limiting FEMA assistance based on the pre-disaster condition of a facility for Hurricane Fiona is likely to be restrictive. Even where the post-María, pre-Fiona condition of the facility is well documented, having several grant projects spanning multiple disasters for repairs to or replacement of a single facility is likely to lead to duplicative costs and efforts. For instance, documenting repairs to the power grid funded by the Hurricane María disaster versus separately distinguishing and documenting repairs to the power grid funded by the Hurricane Fiona disaster creates unnecessary bureaucracy, adds no value, and leads to the same result with twice the effort.

For an effective consolidation of the disasters, Stafford Act § 428, Public Assistance Program Alternative Procedures (PAAP) (42 U.S.C. § 5189f) will need to be amended to allow obligated projects, with agreed fixed cost estimates, to be versioned to include damages caused by Hurricane Fiona. In addition, we reiterate our request that § 428 PAAP obligated projects under Hurricane María (DR-4339-PR), be amended to allow versions to accommodate any impacts due to inflation, construction material cost increases, and labor shortages, among others.

B. Support 100% Federal Cost Share:

We request that 100% federal cost share be provided for all Hurricane María (DR-4339-PR) and Hurricane Fiona (DR-4671-PR)) permanent work (Categories C-G) projects. Providing 100% federal cost share for all permanent work projects for both disasters, especially for work relating to the repair of Puerto Rico's electrical grid, is crucial for the Island's recovery.

Increasing the cost share for Public Assistance permanent work to 100% federal funding will help expedite the rebuilding of the electrical grid without imposing an additional financial burden on Puerto Rico. On May 26, 2021, COR3 made a request to FEMA for a cost share adjustment of 100% for the Hurricane María major disaster declaration (DR-4339-PR). FEMA denied the request on November 23, 2021, asserting that the regulation at 44 C.F.R. § 206.47 did not provide for making a recommendation to the President to increase the cost share for Public Assistance permanent work to 100% federal funding.

Providing 100% federal cost share is not unprecedented. When Hurricane Katrina impacted several states in late August 2005, the state of Louisiana was granted a 100% federal cost share for permanent work through legislation. Thus, Congress has the authority to enact specific legislation to remedy the situation and allow increasing the federal cost share for all Hurricane María (DR-4339-PR) and Hurricane Fiona (DR-4671-PR) permanent work (Categories C-G) projects.

C. Roads, bridges, and highways:

The Bipartisan Budget Act (Pub. L. No. 115-123, § 20601, 132 Stat. 64) ("BBA") and Stafford Act § 406 should be amended to extend their applicability to Hurricane Fiona and to include as critical services Puerto Rico's transportation services, which comprise, among other things, ports, roads, bridges, and highways, all of which have been devastated by Hurricanes María and Fiona. This will allow FEMA to provide assistance pursuant to Stafford Act § 428 to restore disaster-damaged facilities that provide critical services to an industry standard.

D. Disaster Flexible Match:

We would like to reiterate our previous request to allow the implementation of FEMA's Disaster Flexible Match (DFM) Program to alleviate administrative burden and avoid the projected grant deadline-related challenges of its Public Assistance Program (PA). Like the global match process for FEMA's Hazard Mitigation Grant Program, the DFM Program for the PA program will allow the non-federal cost share to be based on a percentage of a disaster's overall obligation instead of on a per project basis.

E. Clarify Stafford Act § 705(c)

Stafford Act § 705(c) prohibits FEMA's recoupment of obligated funds where certain conditions have been met: (1) the payment was authorized by an approved agreement specifying the costs (i.e., the obligated Project Worksheet); (2) the costs were reasonable; and (3) the purpose of the grant was accomplished. FEMA has issued a policy that greatly undermines the protection afforded by Congress in enacting Stafford Act § 705(c), which was intended to prevent FEMA's recoupment of funds, often as a result of FEMA realizing its own errors, after recipients and subrecipients have received and spent the money. FEMA's policy significantly limits application of § 705(c) by, e.g., requiring a subrecipient demonstrate compliance with all post-award terms and conditions (i.e., procurement requirements, insurance requirements, etc.) in order for FEMA to consider "the purpose of the grant" accomplished. This policy allows FEMA to claw back funding where the scope of work is complete, based on a finding of noncompliance that bears no relation to the "purpose of the grant"—e.g., to repair a building. The Policy also specifies that it may make "project cost adjustments" prior to determining whether § 705(c) applies, even though such adjustments are precisely what § 705(c) prohibits.

The effects of FEMA's policy are being felt all over the United States, but particularly in Puerto Rico—where recoupments are debilitating on the Territory's ability to recover financially. For example, FEMA has recently deobligated millions in power restoration costs paid by Puerto Rico Electric Power Authority to utilities providing emergency restoration services under a mutual aid-type agreement. Such deobligations are prohibited by § 705(c), but FEMA's own policy gutting the statute's effectiveness leaves the agency undeterred from clawing back funds.

We request Congress to amend Stafford Act § 705(c) to make its intent clear to FEMA—the purpose of the grant is accomplished when the scope of work is complete, and FEMA cannot choose to apply § 705(c) only after it makes the recoupments that § 705(c) prohibits. We also ask that Congress extend § 705(c)'s prohibition to recoupments from private non-profit entities, which are similarly burdened by FEMA's recoupments.

Questions Submitted by Representative Westerman

Question 1a. What were the challenges associated with working with FEMA on recovery after Hurricane María?

Answer. Aside from complicated bureaucratic processes and repeated rule changes, the major obstacle to recovery in Puerto Rico has been access to working capital in particular for large infrastructure and construction projects. FEMA's disaster recovery programs are based on a reimbursement model pursuant to the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards at 2 C.F.R. Part 200, as adopted by the Department of Homeland Security at 2 C.F.R. Part 3002. At the time Hurricanes Irma and María made landfall on the island, Puerto Rico was in the middle of a financial crisis and lacked the necessary liquidity to expend funds.

Moreover, sometimes new ideas intended to move things forward hit speedbumps, because implementation needed to comply with existing rules. An example of this is the FEMA Accelerated Award Strategy ("FAASt"). FAASt uses a Statistical Sampling Methodology to arrive at fixed cost estimates for groups of critical infrastructure projects, rather than requiring inspections and cost estimating for each individual project. While this allowed FEMA to expedite *obligation*, it did not expedite performance of work. FAASt effectively amounted to a master recovery budget for each FAASt subrecipient without authorizing any related construction. This is because despite the expedited obligation of funds, all projects still had to go through each step of the FEMA National Delivery Model. For a project to be authorized for construction, scopes of work needed to be submitted with enough engineering and design data to allow FEMA to conduct an Environmental and Historic Preservation review, as well as potentially approving additional dollars to finance hazard mitigation measures under Stafford Act § 406. As implemented, the FAASt program as implemented did not accelerate recovery, but rather slowed it down.

Question 1b. Were those challenges resolved?

Answer. The most critical strategy developed and implemented by COR3, in consultation and approval by FEMA, is the Working Capital Advance Program (WCA). This program was implemented specifically to provide a mechanism to advance the federal share of funds reimbursed for permanent work projects under FEMA's Public Assistance program and HMGP projects for damages incurred as a result of Hurricane María. The WCA Program is currently available for all Puerto Rico subrecipients. Subrecipients who request a WCA in compliance with the policy requirements are eligible to receive an initial payment equal to 25% of the obligated federal share of the associated project.

We appreciate FEMA's recent efforts to simplify its Public Assistance process and look forward to additional steps it may take to reduce the burden on applicants going forward. Although 2022 appears to be a major milestone in Puerto Rico's recovery, there is much ground to be made up after years of delays.

For example, now more than five years later, FEMA is still making eligibility determinations and processing administrative appeals for emergency work costs incurred in 2017 and 2018. The DHS-Office of Inspector General ("OIG") released a Report in July 2022 outlining its assessment of FEMA's Public Assistance Alternative Procedures Program (PAAP). In comparing obligation times for over fifteen thousand large projects, the OIG determined that FEMA took, on average, more than twice as long to obligate funds for the PAAP projects (845 days) as compared to standard § 406 projects (411 days). The OIG further found that FEMA's funding obligation times increased significantly for projects in Puerto Rico and the U.S. Virgin Islands.

Similarly, while significant funds have been obligated for Puerto Rico's critical infrastructure under FAASt, this obligation has effectively established project budgets without expedited project execution. As aforementioned, each project must still work its way through FEMA's lengthy Public Assistance process before obligated funding can be disbursed. While § 428 and FAASt were well intended, their effectiveness is limited by the complicated framework under which they must be implemented.

Additionally, although authorization and support for the WCA has been helpful and effective, it came late in the process. There is no doubt that Puerto Rico would have been better positioned if advances for permanent projects could be approved like they were in Louisiana for Hurricane Katrina. Puerto Rico was denied these early benefits, which would have accelerated the commencement of reconstruction of bridges, roads, schools, hospitals, the electric grid, and wastewater treatment plants, among many others.

Even so, we remain exceptionally hopeful for the future, and we look forward to continuing to build and nurture the collaborative relationship that we feel we now have with our federal partners. We believe past FEMA experiences should not hold us back in the future.

Question 1c. What have been the challenges associated with working with FEMA on recovery after Hurricane Fiona?

Answer. Aside from the challenges stated in our answer to Question 1a from Rep. Westerman in which we are seeking congressional assistance, because there are multiple other open major disasters, COR3 and Puerto Rico subrecipients find themselves working with different FEMA teams, who each have their own interpretation of the Public Assistance program and view of policy implementation. This makes managing the disasters unnecessarily difficult. We believe consolidating Hurricanes María and Fiona will go a long way to reducing this administrative burden.

Question 1d. Have those challenges been resolved?

Answer. No. That is why the Congressional assistance we request is so imperative.

Question 1e. What other policy changes can FEMA make to ensure obligated funds are spent well and spent quickly on all needed recovery projects?

Answer. We believe FEMA already has the authority to implement the following policy changes that would ensure funds are spent effectively on recovery:

1. **Amendment to Stafford Act (Natural Disaster Consolidation):** to authorize FEMA to consolidate Hurricane María (DR-4339-PR) and Hurricane Fiona (DR-4671-PR) disasters into a single award under DR-4339-PR for the administration of federal assistance.
2. **Support 100% Federal Cost Share:** we request that 100% federal cost share be provided for all Hurricane María (DR-4339-PR) and Hurricane Fiona (DR-4671-PR)) permanent work (Categories C-G) projects.
3. **Amendment to Stafford Act § 705(c):** to remove the unnecessary limitations within its current guidance on 705(c) protections and provide that the purpose of the grant is accomplished when the scope of work is complete.
4. **Amendment to the 2018 Bipartisan Budget Act and Stafford Act § 406:** to extend their applicability to Hurricane Fiona and to include as critical services Puerto Rico's transportation services, which comprise, among other things, ports, roads, bridges, and highways, all of which have been devastated by Hurricanes María and Fiona.
5. **Disaster Flexible Match:** we request the allowance for the implementation of FEMA's Disaster Flexible Match (DFM) Program to alleviate the administrative burden and avoid the projected grant deadline-related challenges of its Public Assistance Program (PA).
6. **Additional Time Extension Requests:** due to the limitations of wide-scale construction on an island, time extensions for permanent work project period of performance were requested for the remaining permanent recovery work to be completed. On September 26, 2022, FEMA approved a blanket extension for 6 months. Puerto Rico appreciates the support from the Federal Government in granting our request.

Question 2a. After Hurricane María, how did the Government of Puerto Rico and its instrumentalities improve their systems to ensure recovery efforts get to the people who need it?

Answer. In the 5 years following the devastation of Hurricanes Irma and María, COR3 has implemented numerous changes to its system to ensure a more transparent and streamlined recovery.

Our partnership with FEMA and other Federal agencies has grown tremendously as we have made major improvements and worked together to resolve early obstacles and lift restrictions that previously hindered progress. For example, the Government of Puerto requested, and FEMA agreed, to relieve Puerto Rico from a 2019 agreement that imposed conditions on the Island before requests for reimbursements could be approved. As discussed earlier, a major obstacle to recovery in Puerto Rico has been access to working capital to meet the cash-flow needs of our subrecipients, especially for large infrastructure and construction projects, since FEMA disaster recovery programs are based on a reimbursement model. As we transition to the recovery phase where these projects are an even greater focus, a successful plan to address these issues is of the utmost importance. Puerto Rico has therefore developed and is now working to implement several

strategies to provide the necessary support for these projects. One of these strategies is the WCA mentioned before.

In addition, COR3 has also worked to educate and support our subrecipients, to build capacity through training events over the last year and will continue these efforts. The training provided is based on a customized approach focused on project execution, grants management, procurement, maximization of eligible scope of work, project management, and compliance from project formulation to closeout.

Puerto Rico is also encouraged by the continuing close collaboration with FEMA regarding COR3's administration of the Public Assistance program and implementation of payment processes for subrecipients. FEMA has agreed to flexibilities in the management of the PA program that have been incorporated into the COR3 Cash Management Policies, transforming the processes around reimbursements and advances. Under the new reimbursement policy, disbursements for reconstruction projects under development by municipalities, government agencies, and non-profit organizations are being expedited, significantly reducing the average number of days by over 75%. Similarly, new processes relating to requests for advances for immediate expenses are executed, on an average, more than 80% quicker than before. These changes, coupled with the WCA program, enable much greater support of permanent work projects and help provide the resources necessary for all projects to progress more efficiently.

Question 2b. How have those systems worked post-Fiona?

Answer. By applying the lessons learned from Hurricane María, the success in COR3's systems has led to a faster start on recovery after Hurricane Fiona.

Question 2c. How can the Puerto Rican government and instrumentalities continue to improve their systems to make sure recovery assistance gets to the populations that need it quickly and with proper oversight?

Answer. With the majority of emergency work completed for Hurricanes María and Irma, Puerto Rico's disaster response transitioned to long-term recovery, with its primary focus on the formulation and execution of permanent work projects. By its nature, long-term infrastructure recovery is a slower process, as it requires the development of the design and engineering of projects, environmental approvals and permits, procurement of construction contracts, and ultimately construction. All relevant indicators, however, show significant momentum since 2021.

Under FAASt, FEMA, COR3, and PREPA and LUMA Energy have worked together to develop Scopes of Work, submit them to FEMA for proper evaluation and approval, and advance shovel on the ground projects. Construction projects are being completed in accordance with applicable codes, standards, and industry best practices, and in the majority of the cases, with added measures to mitigate hazards and build additional resilience. Notably, the projects that are and will be executed under FAASt by PREPA will be compatible for renewable energy integration to ensure sustainability and resiliency in future disasters.

Question 3. The Puerto Rican Government established a renewable energy generation goal of 100% by 2050. What is the status toward achieving that goal and how have ongoing recovery efforts impacted that goal? Has your administration considered shifting those goals to accommodate the ongoing multiple natural disaster recoveries?

Answer. The transformation of our electric system is certainly one of our highest priorities. The Puerto Rico Electric Power Authority is still in bankruptcy, saddled with over $9 billion in bonded debt, and burdened with an antiquated infrastructure that was devastated by Hurricanes Irma and María, and for which emergency restoration work took over a year to repair. The Government of Puerto Rico is hard at work with the Oversight Board trying to restructure its debt to affordable levels. We are also committed to achieving our comprehensive and ambitious public policy to transform our existing power generation assets, moving away from fossil fuels toward renewable energy, and converting our fragile and integrated electric grid into a modern, resilient, and interdependent one that can serve Puerto Rican residents and businesses without blackouts.

By way of background, on June 20, 2018, the Government of Puerto Rico enacted the "Puerto Rico Electric Power System Transformation Act, Act No. 120-2018 ("Act 120"), with the stated goal of transforming Puerto Rico's energy system into a modern, sustainable, efficient, resilient, and cost-effective system.

On April 11, 2019, the Government of Puerto Rico then enacted Act 17-2019 ("Act 17"), further advancing our public policy, which mandates the delegation or transfer of the operation of the Puerto Rico Power Authority ("PREPA") electric power generation, transmission and distribution, commercialization, and operation systems

to the private sector through the execution of public-private partnership contracts ("P3 Contracts"), all to be done within certain specific milestones.

The first P3 Contract in connection with Puerto Rico's energy transformation was executed between PREPA, the P3 Authority, and LUMA Energy. LUMA is now in charge of the operation and management of the transmission and distribution assets of PREPA. LUMA also must lead the redesign and reconstruction of our electric grid to make it more modern, reliable, able to function interdependently with generation units to avoid island-wide outages, and able to provide for the interconnection of microgrids and renewable energy systems.

It is also important to recognize that the $9.5 billion awarded by FEMA for the energy system reconstruction were approved in the later months of 2020. Since then, significant advances have been achieved.

While we recognize there have been delays, the path toward modernization has been set and we are committed to providing modern and reliable electric service to all on the island. The grid reconstruction by LUMA is underway, with hundreds of substations repaired, thousands of poles and streetlights replaced, and over 33,000 new solar customers connected.

Also, more than 389 FEMA funded projects have been approved by the Puerto Rico Energy Bureau, 90 projects are in the design phase, 43 projects are awaiting FEMA approval, 51 projects have already been approved by FEMA, and 40 projects are under construction.

Furthermore, work continues to safely integrate 1,000 MW of utility-scale renewable energy generation and 250 MW of energy storage into our system. Likewise, a second tranche of additional utility-scale renewable energy projects totaling 1000 MV with 500 MV of storage just finished the request for proposal process and proponents will be chosen soon by the Puerto Rico Energy Bureau.

In addition, the Puerto Rico Department of Housing is installing solar and battery systems on all homes rebuilt under its R3 program. It also has begun the process for the administration of $1.3 billion in CDBG-DR funds for microgrids and energy storage systems for remote communities and first response agencies. The first of these projects will be built in our primary medical center, Centro Médico, for which proposals for its design and construction should be ready by the beginning of next year.

Further, the Department of Housing and the Green Energy Trust will use $500 million in CDBG-MIT funds to assist low- and moderate-income households in acquiring renewable energy systems. With this allocation, we expect to have 25,000 additional solar systems and solar communities across our Island.

The Green Energy Trust will also pursue other funding venues, including but not limited to the Investment and Infrastructure Jobs Act and the Inflation Reduction Act, which can finance programs that promote the development of green energy projects.

However, given Hurricane Fiona's recent impact on Puerto Rico, which brought over thirty inches of rain to some municipalities, combined with additional historic rainfall during the months of September and October, our electric system has suffered additional damages, causing major power outages. Last month, I formally requested emergency assistance from FEMA to stabilize our power system by providing additional generation assets and accelerating work on our transmission and distribution grid.

In response, FEMA created the Puerto Rico Power System Stabilization Task Force, which includes the U.S. Department of Energy, the U.S. Army Corps of Engineers, and the Environmental Protection Agency (EPA), led by FEMA, which together with our administration's energy stakeholders developed a plan to stabilize our electric system to be able to provide reliable service to the residents of Puerto Rico, while we continue to carry our reconstruction projects.

FEMA has agreed to provide resources for this stabilization process that will include actions to assist Puerto Rico in increasing its power generation capacity and helping improve transmission and distribution of energy. The plan proposes to:

1. Install temporary generation through power barges and high-capacity portable generators.
    a. FEMA has already identified available units and is arranging to hire and mobilize them to Puerto Rico.
2. Perform key short-term work in existing generation plants that allow for the reincorporation of units that are not operating at full capacity or are out of service.
3. Perform key short-term improvements on the electrical grid, such as repairing key substations and transformers, and replacing high-voltage breakers.

The work that FEMA and its federal partners will be doing will be coordinated with our local stakeholders so that it is done systematically. With this aid, Puerto Rico will be able to focus all efforts on advancing the transformation and modernization of its electric system while our people have a stable service.

Question 4. Specifically on electricity restoration after Hurricanes María and Fiona, what did you see that was an improvement from how LUMA has recovered the grid in the past when PREPA had full control? Can you provide specifics about where LUMA's performance differed from PREPA's recovery actions after hurricane outages?

Answer. After a disaster such as Hurricane María, there are always lessons learned that are applied to avoid committing the same mistakes that occurred during previous disasters. Such was the case here. Before Hurricane María, Puerto Rico was fortunate enough to not have suffered from a major hurricane for many years. Since María, the Government of Puerto Rico has turned their attention to the preparedness of our system.

As to our energy grid, considering the vulnerable position that the power transmission and distribution system had before the storm events, and the devastating blow it took during the hurricanes, Puerto Rico embarked on a process to transform PREPA. The goal of the transformation continues to be to increase the resiliency and reliability of Puerto Rico's power system and maximize the use of modern and new technology to deliver a lower cost electric service to all customers in Puerto Rico. Since LUMA took over the T&D projects, PREPA has continued developing scopes of work and undertaken the required actions to conduct repairs, rehabilitation, mitigation, and permanent works in its generation system and water assets. These actions combined with the experience after Hurricane María, placed our grid in a stronger position than before the storm. Also, LUMA was able to count on quicker outside support since they had pre-positioned contracts for emergency work, which gave them the necessary resources to begin to deal with to the emergency before Hurricane Fiona left the island.

Question 5. Please provide data and specifics that details how rooftop solar systems and other decentralized renewable energy resources will improve resiliency for your constituents, specifically 1) reports or data shows how the current decentralized energy systems that are currently in place are effective or not effective, 2) reports or data showing damage caused or not cause to rooftop solar systems after hurricanes or other storms and rain events, 3) other data or stories that provide evidence of effectiveness or ineffectiveness in increasing resiliency for Puerto Ricans.

Answer. On December 17, 2020, the U.S. Department of Energy's National Renewable Energy Laboratory (NREL) issued a report titled "Puerto Rico Low-to-Moderate Income Rooftop PV and Solar Savings Potential". The report analyzed the rooftop solar potential of low- to moderate-income (LMI) households across the island and estimated 510,100 low- to moderate-income structures suitable for solar rooftop installation across the island. Of these, the report estimated that approximately 75% are single-family (more suitable for solar installation) and 60% are owner-occupied (easier process for eligibility purposes—not an economic development activity). Therefore, an estimated 229,600 single-family structures occupied and owned by a low-to-moderate-income household are suitable for solar rooftop installation across the island.

Based on estimates from the Puerto Rico Department of Housing (PRDOH) there are 86,700 single-family structures occupied and owned by low- to moderate-income households suitable and eligible for photovoltaic system installation. Just looking at the municipalities most damaged by Hurricane Fiona and assuming everyone will be interested in a small $30,000 solar rooftop photovoltaic installation, $2.6 billion would be needed to meet this need.

Questions Submitted by Representative González-Colón

Question 1a. Governor Pierluisi, you are requesting that we in Congress amend the Stafford Act to authorize FEMA to consolidate the Hurricane María and Hurricane Fiona disasters into a single award for the administration of federal assistance. Can you elaborate on this proposal and why you believe such an amendment is necessary?

Answer. As mentioned before, we are asking to consolidate the María (DR-4339-PR) and Fiona (DR-4671-PR) Hurricane disasters into a single award under DR-4339-PR for the administration of federal assistance. To do this, we believe there has to be an amendment to the Robert T. Stafford Disaster Relief and Emergency Assistance Act that would expressly authorize FEMA to combine the disasters by,

among other things, provide assistance to replace, reconstruct, or restore an eligible damaged facility without regard to the pre-disaster condition of the facility if the facility or system was also damaged by Hurricane María under DR-4339-PR. It will also provide FEMA the ability to: (a) include costs to repair or reconstruct damages caused by Hurricane Fiona (DR-4671-PR) without reducing approved fixed cost estimates or approved projects for DR-4339-PR; (b) identify new damages caused by Hurricane Fiona for facilities and systems with an agreed-upon fixed cost estimate under section 428 or an approved project under section 406 for DR-4339-PR and document them separately and add the costs to the DR-4339-PR fixed cost estimate; (c) apply a one-time increase of the total approved DR-4339-PR approved fixed cost estimates to adjust for inflation and supply chain cost increases since the date of the disaster; (d) revisit DR-4339-PR projects approved for repair under Stafford Act § 406, and calculate the combined cost to repair the facility or system after Hurricane Fiona, and if the adjustment exceeds 50% of the fair market value of the facility or system, declaring the facility or system eligible for replacement; (e) declare as eligible all reconstructions and demolition costs for facilities and systems where work had begun on or before September 18, 2022 that were DR-4339-PR projects and suffered additional damages from Hurricane Fiona; and (f) identify new damage and approve a single subgrant for the cost to repair or replace the facility from damages from DR-4339-PR and Hurricane Fiona where the facility had no approved project or fixed cost estimate as of November 1, 2022, and if the combined cost to repair the facility exceeds 50% of the fair market value of the facility on September 1, 2017, the facility is eligible for replacement.

This consolidation will, without a doubt, alleviate the administrative burden and funding necessary to manage the disasters separately, for the Government of Puerto Rico, the subrecipients and FEMA.

Question 1b. Specifically, does this extend to amending any ***appropriation*** *that has been made in the past covering a specific disaster by name or by year and with a set deadline, to now encompass the others, or would this amendment rather have the goal of having a single* ***administrative*** *coordination structure to handle the different funds and applications? That is, would there still be María/Earthquake/Covid/Fiona-specific funds but all under one same coordinating office, or are they become all a single all-Puerto Rico all-disaster fund?*

Answer. What we are seeking is for the funding assigned and to be assigned for both María (DR-4339-PR) and Fiona (DR-4671-PR) be managed under a single disaster, María (DR-4339-PR). This will let Puerto Rico, through COR3, to manage both disasters under the same administrative and financial coordination structure that exists today for the Hurricane María disaster. The earthquake and COVID-19 disasters would not be consolidated and continue to be managed separately.

Question 2. What are the most recent damage estimates for Hurricane Fiona and have these been shared with Congress and federal agencies with jurisdiction over disaster recovery? Some of the most significant damages have been sustained by our public infrastructure, mainly roads and bridges. Can you please share an estimate of funds that will be needed to cover these specific damages?

Answer. As you are aware, on September 18, 2022, Hurricane Fiona made landfall in southwest Puerto Rico bringing heavy rains and 90 mile per hour sustained winds impacting power and infrastructure across the island. The 30+ inches of rain that fell caused devastating flooding that damaged homes and washed out newly constructed roads and bridges. The winds also caused severe damaged to the power grid, causing an island-wide blackout and left much of the island without power and water for weeks. Hurricane Fiona not only exacerbated the prior disaster damage to the power grid, but also caused new damage. Even though Hurricane Fiona was a much smaller storm, it caused a cascading effect that is compounding the difficulty of the recovery from the multiple disasters that Puerto Rico has endured within the last five years. As of today, COR3 expects the damages to public infrastructure, including roads, bridges, highways and power grid, as well as other eligible infrastructure to amount to $5B.

The Puerto Rico Department of Housing estimates an impact of 50% increase in housing needs when compared to Hurricane María. Extrapolating the R3 data generated with Hurricane María, PRDOH estimates it will receive approximately 5,300 applications for rehabilitation, reconstruction, and relocation assistance. Following R3 trends, rehabilitations, reconstructions, and relocations represent 38.3%, 29.5%, and 32.2%, respectively, of the awards issued. Projecting average cost data for each award, PRDOH estimates a rehabilitation, reconstruction, or relocation need due to Hurricane Fiona of $872 million.

Regarding other housing assistance, similar to CDBG-DR funding for Hurricanes Irma and María, housing assistance due to Hurricane Fiona should be broader than just rehabilitation, reconstruction, or relocation. In the CDBG-DR Action Plan for Hurricanes Irma and María, PRDOH set 68% of the housing budget for rehabilitation, reconstruction, and relocation assistance, and 32% for other housing activities, such as homebuyer assistance, multi-family construction, and housing counseling services, among other CDBG-eligible housing activities. Following the same percent distribution as in the current CDBG-DR Action Plan, PRDOH requests an additional $414 million for other housing assistance needs arising from Hurricane Fiona.

Question 3. PREPA's current depleted fiscal situation prevents them from entering long-term contracts without approval from the Financial Oversight Board. In your view, does this affect implementation of a permanent rebuilding plan?

Answer. Currently, the FOMB contract approval process for PREPA contracts is taking an average of 10–12 days. This does not seem to delay the overall timeline of project commencement and completion.

The CHAIRMAN. The gentleman yields. I am going to pass on myself at this point and ask the Ranking Member if he has any questions for the Governor.

Mr. WESTERMAN. Thank you, Mr. Chairman, and thank you again, Governor, for being here with your testimony.

We know that both electricity generation and transmission distribution were affected by Hurricane Fiona. The winds and rain knocked down power lines, substations were flooded, and supply lines were interrupted, as we noted in the visit that you led us on with the Resident Commissioner when we were in Puerto Rico.

So, based on the information that you have, was the power loss primarily the result of downed power lines, or lack of electricity generation, or some combination of the two? Where would you say the most emphasis needs to be placed?

Governor PIERLUISI. It is a combination of the two.

Actually, LUMA has estimated that the damage to the transmission and distribution grid could amount to up to $4 billion. But at a minimum, it will be $2 to $3 billion worth of repairs that need to be done. You are talking about mostly lines falling, poles falling that need to be replaced, switches of breakers, transformers damaged, among other damage.

In the case of generation, some of the generating units suffered damage because of all the excess humidity that they were exposed to. And even there, I understand the extent of the damage doesn't involve or reach the number that LUMA estimated for the repair of the transmission and distribution grid. But it is substantial.

FEMA, at my request, came to Puerto Rico after Fiona and made an assessment, along with DOE, Corps of Engineers, and EPA. They visited 35 generation facilities, substations, critical substations, and they confirmed—and I saw this, about 2 weeks ago they gave me an informal report with pictures on everything—the damage that had taken place. And FEMA has agreed to come in and assist us in increasing our power generation for a period of time which could range between 1 year and 1½ years.

Why? This is important. Right now, because of units failing, generation units damaged, we are barely supplying the demand that our people, our constituents, have. And we cannot repair the units or give them even regular maintenance, as they should.

Mr. WESTERMAN. Are you talking about the oil-fired units?

Governor PIERLUISI. I am talking about all of them. FEMA has already agreed to make repairs in the Aguirre Plant we flew over, which is a bunker diesel oil plant; Costa Sur Plant, which is mostly—or should be—an LNG plant; the San Juan Plant; and the Palo Seco Plant, which, again, in the case of Palo Seco, a bunker C oil-burning plant.

San Juan is a combination——

Mr. WESTERMAN. I am going to have to move on, Governor.

Governor PIERLUISI. Yes.

Mr. WESTERMAN. But you brought out a lot of points I would like to discuss more.

I know we talked about LNG exports, and I think you said you have two places where you can import or bring ships in with LNG. But because of the Jones Act, and because we don't have LNG-flagged U.S. vessels, you are having to buy that gas from, I think, Sierra Leone, or maybe—you told me another country.

Governor PIERLUISI. It is mostly Trinidad and Tobago.

Mr. WESTERMAN. Trinidad and Tobago.

Governor PIERLUISI. But it can come from as far—like what you just mentioned, Sierra Leone.

Mr. WESTERMAN. Yes, where we could be using domestic-produced gas coming out of the Gulf, but also when we look at having an electric system that is more affordable, more reliable, and that is cleaner than the bunker oil. I know there has been a lot of emphasis on offshore wind or solar, but to give that real base-load power, it seems like there would be more of an emphasis on building gas plants and figuring out how to get domestic gas there from the Gulf of Mexico. We know it provides very clean, very reliable, and very affordable power when we are rebuilding this system.

We need to have a lot more discussion about that. But there is——

Governor PIERLUISI. Let me quickly respond, because it is something that you should know, with all respect.

The Energy Bureau of Puerto Rico just authorized a request for proposals process to have in Puerto Rico a 300 mega-LNG plant privately financed. It has entrusted the P3 authority to handle that RFP process, request for proposals, and I envision that that process will start at some point early next year. So, we will be seeking a private LNG plant at that level, 300 mega, which is significant——

The CHAIRMAN. OK, thank you very much.

Governor PIERLUISI. So, for your knowledge.

The CHAIRMAN. Thank you, sir. I hate to interrupt you, but this hard and fast rule is already being broken, as we speak.

[Laughter.]

The CHAIRMAN. I recognize my colleague from Arizona, Mr. Gallego.

Sir, you are recognized.

Mr. GALLEGO. Thank you, Mr. Chairman.

Good morning, Governor Pierluisi. Thank you for being here today. We are all eager to continue the conversation about Puerto Rico's resilience and disaster reconstruction. And I am proud to have worked closely with you on this issue during my recent visit to the island in the immediate aftermath of Hurricane Fiona. Being

present on the ground and seeing the situation firsthand is an important step in understanding how it can be most helpful, moving forward.

It is also important to note that the continued question of Puerto Rico's status has hindered Federal assistance programs for years, and will continue to do so until it is resolved. So, passing the Puerto Rican Status Act out of this Committee was a big step in the right direction, and we should all work together to keep that momentum going and bring it to the Floor.

I have a couple of questions.

No. 1, Hurricane Fiona was only the latest in a series of hurricanes and natural disasters impacting Puerto Rico in recent years. What changes did the Government of Puerto Rico make to improve disaster response after Hurricane Maria, and do you believe those changes improved the response to Hurricane Fiona?

Governor PIERLUISI. Well, the FEMA administrator is the one that has praised us, actually, because of our response to Fiona. Deanne Criswell has said that the coordination she saw in Puerto Rico between our first responders and FEMA can be used as a model for the rest of the nation.

She also said that, for example, they have warehouses with supplies in Puerto Rico, four of them now. In Maria, they only had—I am talking about FEMA—one warehouse. They were much better stocked to help our people. The way FEMA works is they step in if our local agencies, municipalities, are not able to supply the needs of our people and coordinate NGOs, who are always assisting. They didn't have to use much, if at all, of those supplies, because we were taking care of our people.

The area where I have to admit that there is still a lot of room for improvement is power, power in Puerto Rico. Because, actually, when a hurricane happens, there is a blackout. That is to be expected anywhere. There was a huge blackout in Florida just recently. But the question is, how soon can you restore power, which is an essential service? In Puerto Rico, basically, it took LUMA and PREPA about 2 weeks to restore 50 percent of the power. One week, roughly, a little bit more than 1 week to restore 50 percent of our power generation. Two weeks, 75 percent. Three weeks, about 95 percent. A hundred percent by about a month.

To me, that is too long. And the reason is we have an integrated system which causes that—when there is any major disruption, the system shuts down to protect itself. We don't have what is called in the energy field Black Start Units, which means that our plants cannot restart unless they have a battery system allowing them to do so without being connected to the grid. It sounds nonsensical. The plants that are the ones generating power need power, and a lot of our old plants don't have those systems. That is part of the work that we will be doing in the near future.

So, we need to improve our energy system so we don't have this power disruption for so long after a major disaster, and we will always be exposed to major disasters.

Mr. GALLEGO. Yes, and on that subject—we have a minute and 15 seconds, I don't want to get gaveled down—what is the plan in regards to microgrids and distributed energy that you are putting

together to meet your renewable energy goal of 100 percent by 2025? How is that looking?

Governor PIERLUISI. OK. Lots of things are ongoing. I mentioned quickly that we are devoting $1.3 billion of CDBG-DR funding for microgrids, distributed energy initiatives in remote communities, these communities in Puerto Rico, and in critical public facilities.

The first one that we will be installing takes care of Centro Medico, our major medical center. There will be a grid for that, because it is a critical facility. But an RFP process will be outstanding in early—in January, actually, of 2023. So, it is about to happen.

We are also devoting $500 million of CDBG-MIT funding for incentivizing low-income households to have solar panels and batteries at home. We expect to reach roughly 25,000 households doing that, basically assuming the cost of those solar systems for them, among other initiatives that we are doing.

Mr. GALLEGO. Thank you, Governor.

The CHAIRMAN. The gentleman yields, thank you.

Mr. Lamborn, you are recognized for 5 minutes, sir.

Mr. LAMBORN. Thank you, Mr. Chairman. In a moment I am going to yield the remainder of my time to the excellent Resident Commissioner to Congress from Puerto Rico, Miss Jenniffer González-Colón. Her dedication to the island is legendary.

First, I have a few brief comments. Governor Pierluisi, I enjoyed serving with you when you were a Resident Commissioner to Congress, and I also enjoyed meeting with you in your office recently on a visit I made to the island. So, it is good to see you again.

Governor PIERLUISI. Thank you for visiting.

Mr. LAMBORN. The Federal Government has made fixing the energy grids of Puerto Rico and the U.S. Virgin Islands a top priority since Hurricanes Maria and Irma, yet the government-run utilities, PREPA and Virgin Islands WAPA, remain mired in debt and mismanagement. WAPA owes more than $150 million for building an LPG terminal and PREPA owes $300 million for work performed to restore power immediately after the hurricanes. And despite actions by this Committee, PREPA is still in bankruptcy.

It is time for the islands to pay their debts. And with that, I would yield the balance of my time to the gentlelady from Puerto Rico.

Miss GONZÁLEZ-COLÓN. Thank you, my dear friend, for yielding the time, for visiting the island, and being always available for the issues regarding Puerto Rico.

Good morning, Governor.

Governor PIERLUISI. Good morning.

Miss GONZÁLEZ-COLÓN. I understand that the biggest challenge Puerto Rico is facing is the unstable condition of the grid and the generation plants, and we all know that back home. Congress has provided Puerto Rico and FEMA has allocated funds for this purpose.

And in addition, Puerto Rico has also received CDBG-DR funds for the grid enhancement. And I am concerned that a lot of this funding is being obligated, but not disbursed. Can you explain

what you are doing just to get that money out of the Federal agencies?

Governor PIERLUISI. I will try to be brief, but——

Miss GONZÁLEZ-COLÓN. Thank you, because I have another question.

Governor PIERLUISI. OK, then I will be brief. For about 3 years, the spending that happened in Puerto Rico was emergency spending by FEMA. And for 3 years, even the HUD hadn't authorized us to use much of the CDBG-DR funding that you referred to.

In late 2020 was when, basically, FEMA allowed us to access the $9.5 billion that we have for the electric grid and our generation system. And it was in May 2021 when FEMA changed its bureaucratic procedures to expedite the access to this funding.

Since then, FEMA has been working closely with us. It has streamlined its Environmental Historic Preservation Review, and now the projects are moving forward. And I mentioned the number. It is roughly—we now have 40 projects under construction. In addition, FEMA has given us access, or an advance has allowed us to get 50 percent of the cost of the projects in advance, so that recipients that didn't have the cash-flow to start the projects can have an advance of 25 percent of the cost of the project, and as soon as they spend that in accordance with requirements, then 25 percent more. That is a game-changer. So, that is new.

And in the case of CDBG-DR, by the beginning of 2021, only $100 million had been spent of CDBG-DR funding. Now we are up to $1.3 billion. And the Secretary of Housing will explain to you, to the members of this Committee, all the initiatives that are ongoing and the traction that we are getting. The momentum is there. I envision a very busy 2023 with thousands of construction projects on the way.

Miss GONZÁLEZ-COLÓN. Governor, you said as well that you are requesting that in Congress we amend the Stafford Act to authorize FEMA to consolidate Hurricanes Irma, Maria, and Hurricane Fiona disasters into a single award for the administration of Federal assistance.

So, that would be the issue of why we need such an amendment. This amendment is going to lessen the administrative burdens that you are already talking that FEMA is working——

Governor PIERLUISI. Yes, that is another measure to streamline bureaucratic requirements. Managing two disasters at the same time, Maria and Irma, along with Fiona, which caused damage in some of the projects that we were working on for Maria-related damages, it is nightmarish. It just makes the life of the FEMA personnel and our COR3 personnel, our counterpart in Puerto Rico, much harder.

So, that is why we are requesting the consolidation, which has been done elsewhere in the States.

Miss GONZÁLEZ-COLÓN. I yield back.

The CHAIRMAN. Thank you.

Mr. LAMBORN. I yield back.

The CHAIRMAN. The gentleman yields. Let me now ask—going down the dais—Mr. Soto, do you have any questions? You are recognized, sir.

Mr. SOTO. Thank you so much, Chairman.

Governor, welcome back to the Natural Resources Committee and thanks for always being so accessible.

We know Puerto Rico has faced many challenges: Hurricane Maria, which we both saw together; Hurricane Fiona, which—thank you for hosting us down there, and I appreciate your strong response to Hurricane Fiona. We saw flooding, particularly in the south. So, we take your comments very seriously about the need to adjust the FEMA funding to recognize that Hurricane Fiona has exacerbated some of these problems.

But thank God for the strong response and that we are seeing the island quickly recover from that. The disaster relief funding is there. That is the positive news, right? And we are finally seeing it start flowing. I was really excited to hear that 70 percent of the FEMA disaster relief funds have been obligated, and how critical that is going to be.

The first question has to deal with LUMA and with power. We know you inherited a LUMA contract, and you are doing your best to manage Puerto Rico's energy distribution with them and making sure that we can improve the grid. Why do you think the contract and the extension by LUMA is vital for keeping Puerto Rico on the path to a more resilient future? And what would be the consequences of canceling the LUMA contract, if that were to happen?

Governor PIERLUISI. Well, the first thing that I have to say is that there is an energy transformation law in Puerto Rico, which was approved on a bipartisan basis in 2018. It is Law 120, which is the one that says we cannot continue doing more of the same, relying on a state-owned monopoly. We need to do public-private partnerships for both transmission and distribution and generation, and actually split the two so that there is no monopoly in Puerto Rico.

LUMA was awarded this contract after a very detailed and exhaustive P3 process. The Attorney General of Puerto Rico just issued a comprehensive opinion explaining every step that was taken before that contract happened. And, actually, I knew that it was the proper procedure for procurement for the contract, and also knew that the contract had no invalid or legally invalid clauses, and so on. I actually knew it. I understood it. But it is great that the head of the P3 authority requested this opinion from the Attorney General, and I welcome all of you to read that opinion, because it explains the process, it explains the contract in plain vanilla, and it validates it the same way that a Federal judge, Judge Taylor Swain, in the PREPA bankruptcy process, has so far validated it, as well. And a lot is said out there, but I have to say that first.

Second, canceling that contract is, to me, a nightmare. We have 1.5 billion people being served by our electric system. Changing LUMA from one day to the next, even transitioning LUMA out for a year or a year and a half, would disrupt the service that we are getting and would delay the transformation that you are following up on and the reconstruction that you are following up on, because our law would require that I start a new P3 process to substitute LUMA. So, to me, that is out of the question.

Mr. SOTO. Thank you, Governor.

Governor PIERLUISI. LUMA, come December 1, would have two options, roughly, as I see it: continue rendering its services under the 15-year contract that was entered into—that is one option, waiving some conditions that are set in that contract; or continuing to render its services under a supplemental agreement that was entered into because of the bankruptcy process until the bankruptcy process ends. It is as simple as that.

And that will be announced, either course, at some point before December 1. But, again, nobody should expect that I will allow, if I can help it, for a major disruption of our system just because some people didn't like the P3 process that happened before I assumed office and don't like the contract that was entered into and that is the law in Puerto Rico.

Mr. SOTO. Thank you, Governor. We know that you will continue to press to hold them accountable and make sure we can continue to get Puerto Rico's electrical grid back to reliability with a boost in renewable energy.

I yield back.

The CHAIRMAN. The gentleman yields.

Mr. Hice, sir, you are recognized.

Dr. HICE. Thank you, Mr. Chairman. Look, I am fully aware that the purpose of this hearing is to deal with the post-disaster reconstruction and the power grid development. But the reality is every time we have a hearing here on Puerto Rico, it is one of two things, and it is happening here again today. It is coming here with hands out asking for more money and/or asking for statehood. That is what we ever deal with in here.

And it is no secret I oppose statehood for Puerto Rico, and I am certainly not alone in that position. It is also no secret that many people in Puerto Rico want statehood. But there are many compelling facts and arguments that need to be considered, and the bill that this Committee forced through, H.R. 1522, had intrinsic flaws in it.

The bill did not allow, for example, Puerto Rico to remain a territory. Well, it is critical that pieces of legislation allow for all possible options, and that is a pretty significant one that was absolutely left out.

The bill had questionable rules that would have forced the people of Puerto Rico to put laws into their constitution that they had not agreed to.

The bill also did absolutely nothing to solve the debt crisis that they have been facing, and had they voted to be independent, would have made things even worse for the new country financially.

And what disturbs me probably more than anything is that this Committee rammed that piece of legislation through the process, through a markup hearing, without even having hearings on the legislation itself. That is unacceptable. When you are dealing with something like statehood, that should be well thought out. It is a meticulous process. It is not something to be rammed through, nor is it something to be dealt with without any serious thought in just a markup hearing, just say, OK, well, let's vote on this, let's move with it. It is absolutely not the way to deal with it.

But that is the common way that this Committee has dealt with this issue in Puerto Rico. And, quite frankly, the Puerto Rican Commonwealth has been suffering for quite some times with issues that have majorly impacted the residents thereof in negative ways and have halted their future progress.

I was here in 2016 when PROMESA was passed, the Puerto Rico Oversight Management Economic Stability Act. I was here, some others were here at that time, as well. And here we are. I mean, 6 years later, Puerto Rico still does not have a balanced budget.

Now, listen, there has been progress made, and I am not going to imply otherwise. I know there has been some progress made. But we are not even close to having a serious discussion about statehood. There are so many issues, and here we have been playing games with the issue, just trying to make it happen without any even serious hearings.

The government must take responsibility and fix the major issues that are facing Puerto Rico before we even begin any serious discussion here about statehood.

And this Committee right here should be holding more hearings about the status of PROMESA. I don't even remember, Chairman, the last time we had a hearing to deal with PROMESA. That should be a priority if we are going to continue.

In order for us to move forward on any issue regarding Puerto Rico, we need to see more growth from the government; the terms of PROMESA need to be met; the bonds need to be rated by major credit rating agencies. I believe this Committee has done Puerto Rico a great disservice by passing legislation right here without even holding additional hearings on PROMESA itself.

And therefore, Chairman, I call on this Committee to be responsible in that regard, and let's have hearings on the status of PROMESA. Let's quit playing games with this and move forward with it. And, with that, sir, I will yield back.

The CHAIRMAN. The gentleman yields, and before I recognize the gentlelady from New York, Ms. Velázquez——

Governor PIERLUISI. Mr. Chairman, that was not a question, obviously, but——

The CHAIRMAN. No, and the time is up. Let me do my part.

Governor PIERLUISI. OK. At some point I would like to just make a brief reply, if I may.

The CHAIRMAN. Well, when somebody asks you a question, you can use that time.

Governor PIERLUISI. OK. Well, I will be respectful to whoever asks me a question, but that is fine.

Ms. VELÁZQUEZ. Not on my time.

Governor PIERLUISI. I understand.

Ms. VELÁZQUEZ. Not on my time.

[Laughter.]

The CHAIRMAN. Let me enjoy the prerogative of the Chair for a little longer, please, sir, Governor. Let me make a short comment.

The American citizens of Puerto Rico did not come to us after these disasters with their hands out. They came the same way that the people that suffered disasters in Florida and in Texas came to us for relief. And this reconstruction is tied to that relief. This is

not a situation of charity. This is a situation of mutual support for American citizens across the board, regardless.

With that, let me recognize the gentlelady from New York, Ms. Velázquez, for 5 minutes.

Ms. VELÁZQUEZ. Thank you, Mr. Chairman and Ranking Member, for holding this meeting.

Governor, welcome.

Governor PIERLUISI. Thank you.

Ms. VELÁZQUEZ. We are talking about disaster relief and the hurricanes. Because of Maria, Irma, and Fiona, you have monies available to pay for capital costs for the reconstruction of the electrical grid. What are you doing to ensure that the Federal money will be used to help the people of Puerto Rico as quickly as possible, and not allow in any way a windfall for bondholders' recoveries that will ultimately benefit vulture funds?

Governor PIERLUISI. OK. Your question has two components. In terms of what we are doing to expedite this, the moment I came into office and the Biden administration came into office, we started removing bureaucratic obstacles that were in both FEMA and HUD. Marsha Fudge and Deanne Criswell, I tell you—and this is a new day, and FEMA is allowing us to get 50 percent advances for the projects, so that is going to help.

Another thing we are doing is——

Ms. VELÁZQUEZ. No, let's go to the not using the money, it will not allow——

Governor PIERLUISI. Well, this will allow me to talk about PROMESA. Actually, we have already restructured the public debt of the Commonwealth of Puerto Rico. We have already restructured most of the public debt that was outstanding, successfully—80 percent debt reduction for the Government of Puerto Rico.

PREPA is still pending, and the oversight board, along with the Government of Puerto Rico—we are doing the best to reach a consensual agreement. The board needs to submit a proposed plan of adjustment on December 1 to the Federal court.

Ms. VELÁZQUEZ. OK, so allow me, Governor. I have a question about PREPA.

Governor PIERLUISI. OK. But take my word that I am not going to support any restructuring that is not sustainable, that is not affordable. That is the track record I have so far. So, I wouldn't worry about bondholders getting a windfall.

Ms. VELÁZQUEZ. So, you are telling me that you are going to fully litigate all pending matters regarding PREPA before you agree to a settlement that will burden the people of Puerto Rico with unaffordable electricity and a detrimental deal that will further increase costs?

Governor PIERLUISI. It depends on——

Ms. VELÁZQUEZ. And only benefit vulture funds?

Governor PIERLUISI. My answer has to be that will depend on the nature and extent of the settlement, because, actually, there were outstanding claims before we got the 80 percent reduction in the Commonwealth's debt that were settled. So, I cannot rule out that there will be settlement negotiations along the road.

But take my word that I am not going to allow PREPA to end up with a debt burden that is going to end up causing

extraordinary increases, unacceptable increases, in the cost of electricity in Puerto Rico. It has to be affordable. It has to be——

Ms. VELÁZQUEZ. So, what you are telling me is that you will not support a deal that will bind the people of Puerto Rico with a bad deal for the next 30, 40, 50 years.

Governor PIERLUISI. Yes.

Ms. VELÁZQUEZ. OK. Because Puerto Ricans cannot afford it.

Governor PIERLUISI. Agreed.

Ms. VELÁZQUEZ. So, Governor, are you going to move forward with a 15-year contract regarding LUMA that does not include financial penalties for poor performance or strong and independent oversight?

Governor PIERLUISI. Actually, the 15-year contract provides for either penalties or bonus payments, depending on LUMA's performance. The Energy Bureau will be publishing the metrics that will apply to LUMA's performance once the 15-year contract is in place.

And, actually, when that 15-year contract is in place, the fee that LUMA gets is considerably less than what we are paying LUMA right now, the way this works.

On December 1, as I said before, I see two acceptable options. Either LUMA starts rendering services under the 15-year contract with the new payment methodology as set forth in the same, or LUMA agrees to continue rendering services under the supplemental agreement until the bankruptcy process ends. Those are the two options that I would accept.

I don't want to even think about the third option which would be to cancel the LUMA contract and get LUMA on a transition out of Puerto Rico.

Ms. VELÁZQUEZ. OK. And what is your government commitment——

The CHAIRMAN. The time is—if I may, the time is over.

Ms. VELÁZQUEZ. OK.

The CHAIRMAN. And we could circle around again.

Ms. VELÁZQUEZ. I yield back.

The CHAIRMAN. Thank you very much.

Ms. VELÁZQUEZ. Thank you.

The CHAIRMAN. Mrs. Radewagen, you are recognized.

Mrs. RADEWAGEN. Thank you, Mr. Chairman and Ranking Member, for holding this important hearing. I simply would like to yield all of my time to Congresswoman González-Colón.

Thank you, Mr. Chairman. I yield back.

Mr. SOTO [presiding]. The Chair recognizes Representative González-Colón.

Miss GONZÁLEZ-COLÓN. Thank you, Mr. Chairman. I want to thank Congresswoman Amata Radewagen for yielding the time.

I am sorry that Mr. Hice just left. I think it is necessary to make clear some issues here.

First, he is entitled to his opinion regarding the status of the island, but he does not live in Puerto Rico. He does not represent the island, as well. Nobody from the island voted for him to make those such questions. The only ones elected to do that job is the Governor of Puerto Rico, who is sitting right there, and me. He is a Democrat. I am a Republican. And both of us are respecting the

will of the people of Puerto Rico that voted not once, not twice, many times rejecting the current territorial status.

So, what we are supporting here is what the people of the island voted for, and that is statehood. And that is democracy, right? So, again, everybody can have their own opinion. But coming here to this Committee and saying many things about the island—and the main issue for our problems, financial problems, is the status. And that is the root of the problem.

We wouldn't be needing PROMESA or any economic other situation if we were treated as equal American citizens under the law. And he is right. The U.S. Congress can do whatever they want with territories, they can do whatever they want with the issue of Puerto Rico. And, yet, we are still facing a lot of the needs like the states of Louisiana, New Jersey, Florida, and Texas that were hit by hurricanes, as well. So, why treat Puerto Rico differently than the way you treat other states when they are in times of need?

I am sorry that I am bringing that issue, but I cannot be silent when somebody is entitled to their opinion, but not respecting the will of the people of Puerto Rico.

Having said that, I think it is important that one of the issues, Governor, that we are discussing here is that there are many hurdles for the island to manage Federal funding because we are a territory. And you were saying a few minutes ago—you were asking regarding the barges and FEMA, you were requesting power barges and high capacity portable generators. How long will those generators be on the island?

Governor PIERLUISI. Yes. The FEMA regional coordinator for the Fiona disaster anticipates that the barges could be contracted for within a month or 2 or 3 months, that time frame for having them, because, obviously, FEMA would have to lease those——

Miss GONZÁLEZ-COLÓN. A question. How long will they be there, once they are on the island?

Governor PIERLUISI. They would remain in Puerto Rico for, at most, a year. It could be a bit more. Because the purpose of having this additional generation is to give stability to the system while we continue with the transformation, while we continue rebuilding the grid, improving the plants, and repairing the plants in due course, giving them the required maintenance, right? That is why we need additional generation.

Now, let me say something, Resident Commissioner.

Miss GONZÁLEZ-COLÓN. One quick question, just to finish——

Governor PIERLUISI. OK.

Miss GONZÁLEZ-COLÓN. How much will the installment of these barges reduce blackouts and brownouts?

Governor PIERLUISI. It would help incredibly, because we are talking about 600 to 700 megawatts of additional generation capacity. That is what is going to happen by getting the barges, as well as portable generators. The Corps of Engineers has portable generators, but they can also lease or contract for additional portable generators.

FEMA estimates that they will need seven of those portable generators all together, three barges, seven generators. We should be having, like, 600 to 700 megawatt additional capacity. That is a game-changer. That is going to allow us to then repair, continue

repairing, continue improving the existing generation plants, as well as improving the grid, because we need to keep in mind that what we need is stable power while we transform our energy system.

Miss GONZÁLEZ-COLÓN. Thank you. And just to clear the record, this Committee did not pass H.R. 1522. We passed H.R. 8393. That was a consensus bill that had many hearings through the years.

With that, I yield back.

Mr. SOTO. The gentlelady yields back, and the Chair associates himself with the Resident Commissioner's remarks.

The gentlelady from New Mexico is recognized.

Ms. LEGER FERNÁNDEZ. Thank you, Chair.

And buenos dias, thank you, Governor, for coming and joining us here. I am heartbroken about the difficulties that you are experiencing in Puerto Rico and with what the people have endured with the disasters and the pain of the aftermath.

And I think a real point that you have made in your testimony, and that I have suffered and my communities in New Mexico, is we can appropriate the funds, the President can sign bills into law, but when the funds don't actually make it to help reduce and resolve the problems on the ground, then we have not finished our job. And we need to keep raising these issues and exploring that.

Would you share a bit more about what have been the barriers to actually getting the funds that have already been obligated, dispersed, on the ground?

Governor PIERLUISI. Well, both Manuel Laboy and William Rodriguez will be able to expand, because they are in charge of actually the CDBG-DR and MIT funds in Puerto Rico and the FEMA funds. But let me just give you the long story short.

FEMA, it took FEMA up to 2020—and Maria happened in 2017—to actually give us access to the funds, most of the funds. And, also, for a couple of years, FEMA was the one handling the disbursements. It wasn't Puerto Rico. Finally, like in 2019 if I am correct—if not, I will be corrected later—FEMA allowed Puerto Rico to handle the disbursement, but then it told Puerto Rico, "We need to audit you before you actually can disburse." So, it was like a pre-disbursement audit. It made no sense.

When Deanne Criswell came into her office, it took her just a couple of months, until about May 2021, to remove that all together, allow us to handle the procurement, the disbursements process, comply with compliance requirements, and that changed the landscape for us. This is since—about a year, a bit more than a year ago. That is why you see, from then on, a significant increase in disbursements.

In the case of CDBG-DR, something similar happened. There was a grant agreement imposing quite a lot of restrictions on us. And when Secretary Fudge assumed office, it took her a couple of months, until April 2021, to remove that grant agreement, or at least the strict requirements in it.

Since then you see an uptick that is undeniable in our use of CDBG-DR funds. So, that is——

Ms. LEGER FERNÁNDEZ. So, what you have just described to me, Governor, is really, basically, part of the issues, I think, with

FEMA. And we need to look at it as a Congress—there are statutory constraints.

And we are going to be dealing with many more disasters, and we are going to need to, as a Congress, address the limitations of FEMA to deal with these disasters and the pain and the loss. Because the Stafford Act right now cannot do what the communities need. That is very clear. But, administratively, big changes can be made in terms of removing the bureaucracy and having things move quicker. So, I think that those two are—it is not necessarily the jurisdiction of this Committee, but we need to look at that.

Another area, and I would love and I would ask that you supplement your answer with those who are behind you with expertise, and then also writing as a supplemental answer.

From your experience—because you are dealing with it on the ground, we are dealing with it on the ground with the opposite. You are dealing with water. We are dealing with fire. FEMA does not know how to deal with fire. It is used to dealing with water. But what we are suffering in the Southwest is going to be fires, right? And we need FEMA to be able to do that.

But what I would love for you to give us in a submission, tell us from the ground, "This is what we think the Stafford Act should be modified from our experience on the ground." So, I would appreciate if you would do that.

Governor PIERLUISI. Count on it.

Ms. LEGER FERNÁNDEZ. I am also out of time, but I also am very concerned about the inequities that we are going to see if we don't modify when we deal with the farm bill with regards to the nutrition programs and those kinds of things. I do sit on some relevant committees and would also think that that is going to be important to address, because that is a problem.

Governor PIERLUISI. We would like to be included in the SNAP program, and we are requesting that. It is only fair that we get the same nutrition assistance as our fellow American citizens in the States.

Ms. LEGER FERNÁNDEZ. Yes, every citizen should be treated the same.

Governor PIERLUISI. Yes.

Mr. SOTO. The gentlelady yields back. The Chair now recognizes the Resident Commissioner, Jenniffer González-Colón.

Miss GONZÁLEZ-COLÓN. Thank you, Mr. Chair, for recognizing us.

Governor, we were talking about the situations between FEMA, PREPA, and many people on the island that are following this hearing are always complaining that every week we do have a lot of blackouts. And I experienced those myself.

So, I want to know how the fiscal restructuring draft plan for PREPA was rejected early this year, and has been reworked, and the Financial Oversight Management Board has recently indicated that the increased number of customers who intend to go off the grid is going to impact the cash-flow of PREPA, the cash that they have available to pay the settlement, any settlement.

And the public opinion is strongly against the idea of seeing their future utility bills include not only paying for actual service, but a charge to pay the settlement, regardless of what they consume.

My question will be, in your view, how does this pending completion of the fiscal restructuring plan affect the recovery process of the island in the long term, and if that will prevent PREPA from investing in their infrastructure?

Governor PIERLUISI. Having a plan of adjustment confirmed by the Federal court is absolutely essential, because it would stabilize PREPA's finances, and it would make it a better counterparty to any entity that deals with PREPA.

Now, you mentioned the loss of revenue for PREPA if we turn to renewable energy sources like we are committed to because of our public energy policy law. I am not concerned about that, and let me explain why.

On the one hand, people who have solar power will reduce the cost of energy for themselves, and they will be paying less to PREPA through the metering system we have, no question about it. On the other hand, though, people using electric vehicles will be consuming more power from PREPA because instead of spending in fuel, they will be spending in just electricity.

And, by the way, the Federal Highway Authority just approved a plan for stationing electric vehicle chargers on all the major highways in Puerto Rico.

So, in addition, the way that this is envisioned is that we will be shutting off traditional generation plants as renewable energy comes into the system, and we have 18 projects right now already approved by the Energy Bureau and the Government of Puerto Rico to add roughly 1,850 megawatts of capacity to our system from solar power, with 200 megawatt battery storage.

We also will be having another 1,000 megawatts in additional renewable energy projects. This is going to be an RFP that is coming out. And what is going to happen once we keep adding renewable energy production generation in Puerto Rico, we will be shutting off the plants of PREPA. And that is going to generate savings for PREPA.

So, this cannot be viewed as losing revenue from customers and then having a precarious financial condition. You will not. If you generate the savings related to this transformation that is ongoing, there shouldn't be any financial issue for PREPA.

Miss GONZÁLEZ-COLÓN. Governor——

Governor PIERLUISI. And the debt needs to be the lower the better.

Miss GONZÁLEZ-COLÓN. Thank you.

Governor PIERLUISI. And that is what I will be keeping an eye on in terms of the plan of adjustment.

Miss GONZÁLEZ-COLÓN. Thank you. A year-and-half ago, LUMA took control of the transmission and distribution system on the island. What you are doing to ensure LUMA improve its service and the performance metric?

Governor PIERLUISI. There is oversight on LUMA from so many quarters. I personally do oversight, my chief of staff does oversight. I have an assistant chief of staff full-time on energy affairs doing it, as well. Then we have the P3 authority, which is the administrator of the contract, doing oversight, as required by the contract. We have the legislature doing oversight. We have mayors doing oversight. If anything, there is oversight all over the place.

The CHAIRMAN [presiding]. Thank you.

Governor PIERLUISI. And what we are doing is ensuring——

The CHAIRMAN. Governor——

Governor PIERLUISI [continuing]. That LUMA improves its service and reduces the duration of the disruptions that we are still facing.

Miss GONZÁLEZ-COLÓN. I yield back.

The CHAIRMAN. Thank you.

Mr. San Nicolas, you are recognized.

Mr. SAN NICOLAS. Thank you so much, Mr. Chairman. Are you receiving me OK?

The CHAIRMAN. Yes, thank you.

Mr. SAN NICOLAS. Thank you, Mr. Chairman. As you know, the people of Guam have always stood in solidarity with the people of Puerto Rico.

Governor Pierluisi, you mentioned several segments back a desire for additional time to remark on some comments made that were directed particularly toward statehood and Puerto Rico, as well as the financial condition of Puerto Rico. I would like to forward you 3 minutes of my time, and if Ms. Velázquez is still present, I would afford the final minute to her. And if not, I will yield the full balance of my time to Governor Pierluisi.

Governor PIERLUISI. I thank you so much for your courtesy. I will be brief.

Part of the comments I heard deal with the procedures that were followed in this Committee while I wasn't a member of the Committee. So, I am not in a position to comment on that. Our Resident Commissioner already commented on that, and I know others could, as well. But I have to reply to a couple of statements that were made.

The first thing that I will say is that most, if not all, territories that have become states were under-performing the states financially and economically. And one of the reasons why they aspired to become states was to do better, for starters.

Second, all of them didn't have the vote for the President and the Vice President, didn't have voting representation in Congress. So, they were aspiring to become states because they wanted to have full democracy. To think that you can put that aside just because you are facing a public debt issue or facing a recession in Puerto Rico misses the point all together.

The second thing that I will say is that there has been a lot of progress in terms of the public finances of Puerto Rico. Two budgets, including this one, are clearly balanced, as certified by the oversight board we have, including the payment of debt. The debt of the Commonwealth of Puerto Rico has already been restructured, as well as the principal government entities in Puerto Rico. And we just had two fiscal years with economic growth: 2021, 1 percent growth coming after a 3 percent reduction in our GNP; 2022/2023, 4 percent growth. And this one is on the same track.

Tourism is booming. Manufacturing is increasing consistently. We have the lowest unemployment rate in our history. Labor participation has increased by 5 percent. We have right now more people employed in Puerto Rico than ever since 2009, when Puerto Rico had half a million more people living in Puerto Rico. The

statistics are there. If anything, what we are proving is the successful management of the Government of Puerto Rico and its economy. And this is not only the credit of my administration. The people of Puerto Rico and our economic sectors, they deserve the credit, as well.

Having said that, we do not get the same deal in key Federal programs like Medicaid, Medicare, SSI, and SNAP. No question that that would help us economically, financially, which would be something else that Congress could do to assist the American citizens of Puerto Rico.

And we are not coming here to ask for special treatment. We are coming here to be treated the same as our fellow American citizens. We were treated the same in terms of the COVID response, the pandemic response, and what ended up happening is that Puerto Rico was on top in terms of vaccination. We proved that when you treat us equally, we can do as well or better than anybody in the States.

So, that is why you always see us saying remember that we are American citizens, proud American citizens, and that we simply want full democracy and a fair deal.

For the first time, Mr. Chairman, there is still time running on my clock.

[Laughter.]

Mr. SAN NICOLAS. With that, Mr. Chairman, if there is no further comment—unless Mr. Soto would like the remaining time.

Mr. SOTO. I thank the gentleman from Guam.

Governor, it is great to see you speak so passionately about something that we all feel very strongly about.

We had two historic 4- or 5-hour hearings on the status of Puerto Rico, followed by a historic compromise on allowing for statehood, both of our preferences, along with options for independence, to decolonize Puerto Rico. And we are working to the last minute to ensure we could get a Floor vote on that very legislation. So, I thank you for your leadership, and for the leadership of the Resident Commissioner, Jenniffer González-Colón.

And I yield back.

The CHAIRMAN. The gentleman yields. Mr. Obernolte, you are recognized, sir.

Mr. OBERNOLTE. Thank you, Mr. Chairman.

Governor, I have been enjoying your testimony. I would like to continue a line of questioning that Mr. Gallego started concerning your request for the allocation of $5 billion in directed CDBG-DR funding for residential solar. Can you talk a little bit about how that money would be used to enhance Puerto Rico's energy resiliency?

Governor PIERLUISI. Yes. First of all, this was the Chairman's request, along with several Members of Congress, and I support it.

As I told you, when I add up what we are doing in terms of promoting solar energy systems in Puerto Rico, incentivizing that, incentivizing distributed energy and microgrid, when you add it all up I am using—because it is my call—roughly $2.2 billion of CDBG-DR and CDBG-MIT funding for that purpose, which is—CDBG-DR funding is being used to install solar panels on all

homes rebuilt in Puerto Rico, newly constructed because of damage caused by Maria.

I am using—actually, I left this out—ARPA funding. I used ARPA funding to provide incentives, assistance to small and medium businesses in Puerto Rico so that they can install solar panels and battery systems in their facilities. We are using $1.3 billion of CDBG-DR funding for microgrids, distributed energy systems, in remote areas in Puerto Rico and facilities.

Mr. OBERNOLTE. Well, let's tunnel down on that, because this is where my concern lies.

The CDBG-DR action plan for Puerto Rico energy systems is to create 159 microgrids within the island, to increase the resiliency of the energy infrastructure. But residential solar to increase resiliency would have to have a much, much finer array of microgrids because 159—I mean, obviously, those are still large areas.

So, I am asking about how this is going to increase resiliency, because I am concerned that just putting solar panels on a residence, if you are still depending on that connection to the utility, to PREPA, it is not going to increase resiliency. So, I am wondering what the plan is.

Governor PIERLUISI. Well, OK, let me just say this. LUMA has provided for the interconnection of 33,000 new solar systems in Puerto Rico, and they are interconnected. And there is technology these days that actually, depending on who is the installer of the system and who owns the system, you can have, like, virtual power being generated in Puerto Rico and added to the system in a systematic way.

Mr. OBERNOLTE. That is good, but it does not increase resiliency.

Governor PIERLUISI. I believe it increases resiliency in the sense that you are making these households more self-sufficient.

If they have battery systems, they can go through a natural disaster without losing power, if they handle their systems adequately.

But let me say more. I am devoting—it is my call—$500 million of CDBG-MIT funding to provide, basically, solar systems with batteries to roughly 25,000 low-income households.

Why am I supporting the $5 billion proposal of Chairman Grijalva and others in Congress for more solar systems? Because do a quick math. If we are reaching 25,000 households with $1 million worth of CDBG funding, if we get earmarked funding at the tune of $5 billion, you extrapolate it, it is 10 times more. So, then you are talking about 250,000 households.

Mr. OBERNOLTE. Yes, OK. Let me reclaim my time before we run out of time here.

Governor PIERLUISI. OK. I am sorry.

Mr. OBERNOLTE. Let me just ask you. Please make sure that, when you create the action plan for that funding, if you get it, that you create enough microgrids to make it so that it also increases resiliency. Because that is the purpose of DR funding, right? It is supposed to increase resiliency. There are other pools of money for residential solar.

Governor PIERLUISI. Your point is well taken. And I know part of what LUMA is doing is making sure that all the systems can be

interdependent. Instead of relying on the grid, they can be on their own.

One thing that we are doing with industrial-scale renewable energy——

Mr. OBERNOLTE. Thank you, sir. I yield back, Mr. Chair.

The CHAIRMAN. Thank you. I appreciate it, sir.

To be clear on the proposal for solar and batteries, it is the issue of batteries where the resiliency comes from primarily, and that is an essential part of the proposal.

Let me now turn to Mr. Tonko. Sir, you have 5 minutes, and thank you.

Mr. TONKO. Thank you, Mr. Chair and Mr. Ranking Member, for holding this hearing.

And, Mr. Governor, thank you for joining us today. It was an honor to serve with you, and it is great to see you.

It is so important that everyone has access to clean, affordable, and reliable electricity to power our homes, our businesses, emergency medical centers, water treatment plants, and so many other critical facilities. But natural disasters continue to severely damage Puerto Rico's centralized electric grid, causing extended outages for the entire island.

So, Mr. Governor, what are some of the economic impacts of an extended island-wide outage for people and businesses in Puerto Rico?

Governor PIERLUISI. Well, there is no question that when you have a power outage it has an impact on businesses in Puerto Rico. As I said before, it took about 2 weeks to restore 75 percent of our power after Fiona. So, for 2 weeks, I am sure that a lot of businesses were not operating. We saw, in the month of September, a downward movement in our GNP, our economic index activity report or activity indexes. And that is not surprising.

But the way these Federal Emergency management programs work is that they provide individual assistance. So, by the month of October, already FEMA had disbursed over $600 million to individuals. SBA was assisting businesses. So, the economy I have no question, I have no doubt, that in the month of October, it is recovering, and then we will continue our course.

The combination of a quicker response or recovery from the blackout and the FEMA's assistance will ensure that this is not going to be like Maria. Maria—it took Puerto Rico back then, it took the PREPA back then, and it took FEMA back then, 11 months to restore 100 percent of the power of the island. This is night and day.

And one thing, Mr. Tonko, that I didn't mention, and I wanted to mention it because it is important. We do have industrial scale renewable energy projects ongoing as we speak. But what we are considering doing is, when you have a solar farm, let's make a grid in that area. Let's have that solar farm provide the power for the households and businesses in that area. And right now I mentioned there are 18 of those projects ongoing, and it will continue increasing. There are many things we can be doing.

And, by the way, the amount of private investment in those 18 projects that I am talking about is about $1 billion. So, it is not a small amount.

So, there are lots of things ongoing at the moment. Some of it is using FEMA funding, using CDBG-DR and MIT funding, but some of it is actually incentivizing the private sector to come in and add renewable energy to Puerto Rico, with the goal of producing 40 percent of our energy from renewable sources by 2025, the immediate goal.

By the way, this is working. I am confident that we could reach that goal by 2025, because there are a lot of projects in the pipeline. And if this $5 billion earmark happens, you have to add it all. You need to add a solar power generation of households, businesses. And my people will give you the statistics later on. And you need to add what these industrial-scale renewable projects will be generating, and add it all and, hopefully, reach the renewable energy portfolio standard that we have set in our law.

Mr. TONKO. OK. Thank you, Governor. And I am thrilled that the Department of Energy recently awarded funding to General Electric in my district to develop and demonstrate a new microgrid technology in Puerto Rico. It would automate the process of leveraging power from one microgrid to restore power to a nearby microgrid, perhaps one serving a hospital or a critically underserved community.

This project will be researched and worked on in my district, in New York's capital region, creating local jobs in innovation and demonstrated in Puerto Rico. It shows that modernizing Puerto Rico's grid is essential for ensuring the health and safety of our fellow Americans on the island. It also has mutual benefits for communities all over the United States.

So, I look forward to seeing this and similar projects advance to help bring about a clean and just future for all of Puerto Rico.

Governor PIERLUISI. Thank you.

Mr. TONKO. Thank you.

With that, I yield back, Mr. Chair.

The CHAIRMAN. The gentleman yields. Ms. Conway?

Mr. BENTZ. This is Mr. Bentz.

The CHAIRMAN. Mr. Bentz, sorry.

Mr. BENTZ. Thank you, Mr. Chair.

Governor, I wouldn't want your job.

[Laughter.]

Mr. BENTZ. Just saying.

So, under your debt restructuring, the debt was written down in January from $34 billion to $7.4 billion, a portion of it. And then the Office of Management and Budget created a plan that Puerto Rico is supposed to be following. I am familiar with these plans. I am a lawyer. I have helped structure debt repayment programs for many, many different clients. And consistent performance under the plan is essential if the plan is going to work.

Governor PIERLUISI. You are referring to the plan of adjustment?

Mr. BENTZ. I am sorry.

Governor PIERLUISI. Are you referring to the plan of adjustment that was confirmed by the Federal court?

Mr. BENTZ. Yes.

Governor PIERLUISI. OK.

Mr. BENTZ. And is reducing the value of all the bonds by $6 billion and the debt service payments by 32 percent. In January,

a Federal judge confirmed a plan of adjustment for general obligation bonds, reducing the central government's debt from $34 billion to $7.4 billion. That is what I am referring to.

Governor PIERLUISI. OK.

Mr. BENTZ. And then, as a condition of such reduction, there was a plan, a certified fiscal plan for the Commonwealth of Puerto Rico.

What I am concerned about is the report that was issued in the FOMB's 2022 annual report, where the board noted that the Puerto Rican Government has "struggled with implementing reforms and reporting on this implementation in a timely manner, causing progress to be inconsistent and incomplete with many reforms either delayed or not occurring."

And it goes on to talk about—or we could talk about the implications this has when it comes to trying to obtain money from FEMA, the structure you referred to a couple of times, where the money is actually given out first and then reporting follows.

And I also have here a report. FEMA did not effectively manage disaster case management program funds in Hurricane Maria recovery services. The Office of Inspector General found fault with how FEMA operated.

I have had occasion to work with FEMA because the state of Oregon, which I am from, suffered a dramatic fire loss several years ago. The way that we finally made it work with FEMA—and I say finally, that is not the right word. They worked rapidly to help. But we had systems in place in the state of Oregon, local systems, county systems, all kinds of systems that are set up to appropriately respond. And as I read this report, that does not appear to be the case in Puerto Rico. And I say that without knowing. I am just drawing some conclusions from these reports.

But what I really would like you to address is the FOMB's 2022 annual report, where it says that the Puerto Rican Government has struggled with implementing reforms and reporting on this implementation in a timely manner, causing progress to be inconsistent and incomplete. Why does that report say that?

And can you explain why—I don't want an excuse. I want you to call out the cause of the delay.

Governor PIERLUISI. Well, actually, the first thing that I will say is that some of those reforms that the fiscal plan provides for require legislation. But the oversight board doesn't have the power under PROMESA to impose legislation. So, the fiscal plan, to the extent it requires legislation, it depends on the will of the legislature for that to happen or not. So, that is the first question, I will say.

Some of the reforms call for administrative action. There has been undeniable progress in complying with board requirements. The transparency that you see in Puerto Rico you have never seen before. Three financial statements, audited financial statements, have been published since the beginning of my tenure, and we will be up to date by May of next year. All our financial statements, audited financial statements, will be published. That is an incredible progress for Puerto Rico.

The board complained about legislation that recently was approved in Puerto Rico providing specific vacation leave for private-sector employees, as well as some other rights to our labor

force, which actually we had before. There was a reform several years ago. The board complaint went to court. That case is pending. I suspect some of the board's complaints relate to that particular legislation.

But in terms of my administration's dealings with the board, we have an effective relationship. We don't agree always, and there are disagreements, but there has been an improvement.

Mr. BENTZ. Thank you, Governor.

I yield.

The CHAIRMAN. Thank you very much. Let me now recognize the gentleman from Chicago, Mr. García.

You are recognized, sir.

Before the Representative uses his time, votes are going to be called. There is also an announcement that my side of the aisle will be at that involves the Speaker. So, at some point soon, maybe in 20 minutes or half an hour, I am going to call a recess so that we can attend to those two things, the Speaker's announcement and the votes that have been called on the Floor.

This hearing isn't going fast, nor should it. So, we will be back, and we will continue at that point with whatever is left.

But right now, Mr. García, sir, you are recognized.

Mr. GARCÍA. Thank you, Mr. Chairman, for holding this critically important hearing on the political, economic, and structural neglect that Puerto Rico faces as it tries to rebuild.

It has been 5 years since Hurricanes Irma and Maria devastated Puerto Rico, Culebra, and Vieques. And during the reconstruction that followed, many projects were poorly managed, funding has been insufficient, and even available funds have not been disbursed. Then, this past September, of course, Puerto Rico experienced another devastating storm, Hurricane Fiona.

So, it is especially important for us to look frankly at the slow, under-resourced reconstruction of the last 5 years. We have to apply those lessons now. We have to build a sustainable, resilient power grid that is responsive to consumer needs. And of course, we need to prioritize consultation with community members and civil society. With that in mind, I would like to ask my first question to Governor Pierluisi.

Buenos dias, Governor.

Governor PIERLUISI. Good morning.

Mr. GARCÍA. Good morning. In 2011, you created El Concilio de Reconstruccion by executive order. This reconstruction council was supposed to help the recommendation, consultation, and permits for rebuilding move in an efficient manner. According to its webpage, the council published two comprehensive reports in 2021.

So, let me first ask, what is the composition of the council, sir?

Governor PIERLUISI. I cannot tell you from the top of my head, but I understand that what you have there is representation from the homebuilders, the builders association, the AGC, Associated General Contractors. You have the College of Engineers, College of Architects. You have mostly all the entities that deal with the construction industry in Puerto Rico. And they advise us regularly through that council.

I also created a reconstruction government committee that is currently chaired by my chief of staff that meets regularly—could

be weekly, biweekly—to follow up on all reconstruction projects. It is a massive undertaking. But there has been a change, a significant change, in the speed of the disbursements since the Biden administration came into office and my administration came to office. That is undeniable.

Mr. GARCÍA. Well, thank you for that.

Now, this council, of course, seems like a significant opportunity to involve local leaders and civil society groups in the rebuilding process. The community consultation is essential for developing solutions that actually help the communities that they are meant to serve.

What efforts have been made to continue this work and/or to include municipalities or civil community groups or civil society participation?

Governor PIERLUISI. Well, I know—and our Secretary of Housing could expand—that we are using a considerable amount of CDBG-DR funding for planning purposes, and that NGOs are assisting us for planning purposes. And he could talk about that.

In terms of municipalities, we are going out of our way to provide funding to municipalities. Actually, the proposal that we gave to FEMA to give us a 25 percent advance of the cost of reconstruction projects initially was intended to assist municipalities. Seventy-five percent of the reconstruction projects in Puerto Rico with FEMA funding come from municipalities. But they were not happening, the permanent projects, because the municipalities didn't have the cash-flow to start the projects.

You have to understand that FEMA works based on reimbursements, so the municipalities didn't have the cash-flow to hire engineers, architects to handle the design and the permitting of the projects. And they were not getting off the ground. We convinced FEMA to give them a 25 percent advance, and it has been a total success. Now, FEMA has allowed us to expand that to agencies and NGOs, and that is making a difference.

And, again, both my Secretary of Housing and the head of the COR3 agency in Puerto Rico could expand when they take their turn on the next panel.

Mr. GARCÍA. OK. Thank you for that. We look forward to hearing from them.

And, Mr. Chairman, I yield back.

The CHAIRMAN. Thank you.

Chair Leger Fernández, you are recognized if you are prepared to ask questions.

[Pause.]

The CHAIRMAN. Mr. Torres, you are recognized, sir.

Mr. TORRES. Thank you, Chair, for allowing me the opportunity to ask questions.

And thank you, Governor, for your public service.

Governor PIERLUISI. Thank you.

Mr. TORRES. Puerto Rico's electric grid is so fragile that every natural disaster seems to cause widespread power outages. And it seems to me the Achilles heel of Puerto Rico's electric grid is the lack of redundancy. So, what progress are you making toward rebuilding the grid with greater resiliency and with more distributed energy?

Governor PIERLUISI. Well, first let me say that we need an adequate reserve in terms of our generation capacity, which we don't have at the moment because of plants failing or in need of repair. That is why what FEMA is doing now, giving us assistance to increase our power generation for a specific period of time, it is like giving us breathing room while we keep rebuilding and improving the system. It makes all the sense in the world.

In terms of adding renewable energy projects, we are going at it expeditiously, actually. We already have about 1,000 megawatt additional generation capacity from renewable projects in the design, and some in the construction stage, with 200 megawatt in battery support.

We also have an RFP process, which is about to be launched, for an additional 1,000 megawatt generation capacity from solar sources, along with 500 megawatts in battery storage. This is industrial scale projects, but we are also submitting or issuing an RFP process in January to use $1.3 billion that we destined for microgrids, distributed energy initiatives in remote communities, in critical facilities. And the first one that we will have actually, it is a microgrid that will handle our Centro Medico, our medical center, the only trauma center we have in Puerto Rico.

So, we will continue doing that. But having FEMA's support, both on a short-term basis as well as this up to 50 percent advance of funding, is going to make the difference.

Mr. TORRES. Now, I had heard—and maybe I had a misunderstanding—that there were issues with the advance payments, that the advance payments were based on fixed cost estimates, and that Puerto Rico would have to pay the gap between the fixed cost estimates and advance payments.

Governor PIERLUISI. That is a different issue which we are dealing with. It is one of my asks to this Committee.

Yes, we are using Section 428 of the Stafford Act. The way that section works is FEMA agrees with the recipient, with Puerto Rico and subrecipient, as to the estimate of the cost of the project, and locks it in. So, you need to live with that estimate——

Mr. TORRES. Even if those estimates have been rendered obsolete by inflation?

Governor PIERLUISI. Exactly. That is why we are calling for Congress to authorize FEMA to adjust those fixed cost estimates due to the increase in the cost of construction materials and supply chain disruption.

Mr. TORRES. So, it is fair to say that neither FEMA's existing reimbursement program nor FEMA's advanced payment programs are sufficiently mindful of the unique fiscal needs in Puerto Rico.

Governor PIERLUISI. We still need to improve them is the answer that I can give you. And one pending item is this flexibility that FEMA should have in adjusting fixed cost estimates that have been agreed to a couple of years ago, a couple of years ago, or 1, 2 years ago, when the inflation was not what we are facing right now, when it didn't have the disruption in supply chains we have been facing since the pandemic. And that is why I have this ask for this Committee.

Mr. TORRES. And I want to quickly ask you. When I took a tour of Puerto Rico with you, I noticed that most of the housing I saw

was informally constructed. So, I am wondering, how do we avoid repairing these homes in the same fragile form?

Does FEMA provide you with the flexibility you need to rebuild these homes with greater resilience?

Governor PIERLUISI. Well, one thing FEMA is doing is actually funding a public affairs campaign, public education campaign, encouraging people to build up to code, to comply with our construction code and permitting system.

Mr. TORRES. Is there enough funding to that effect?

Governor PIERLUISI. We got a decent amount of funding to do that, but that is a public education issue. At least 50 percent of our households are not code compliant, which is to your point. And FEMA is trying to be flexible in providing assistance to the owners of those households.

The CHAIRMAN. Thank you, sir. The gentleman yields.

Let me ask one general question, if I may, Governor, and thank you for being with us. It is much appreciated.

Governor PIERLUISI. Thank you.

The CHAIRMAN. The plan to expand, repair, remodel the schools—one of the things I found striking in visiting Puerto Rico this year, as I did, there are many schools that have not been rebuilt or repaired since they were damaged back in Maria in 2017. Is there a lack of progress, or what do you see for that? Like, 500 schools——

Governor PIERLUISI. Well, there has been a lot of progress in fixing structural issues in our schools. We had some earthquakes, as you may recall in early 2020. And one school totally collapsed because of the design of its structural columns, defective design. So, we have fixed, using FEMA funding, it is close to 600 schools already that had those structural issues.

We have $2.2 billion of FEMA funding to either repair or rebuild schools, or build new schools. And that is an ongoing project. The working capital advance is assisting us. The Department of Education just requested, if my recollection serves me right, a bit more than $40 million in this—in the form of a working capital advance, which will help it launch, hire, again, engineers, architects for the design and permitting of the schools we need to work on. So, that is an ongoing project.

The CHAIRMAN. OK. Let me ask you one other question, Governor, and a pathway, a timeline to where—it is not just a particular interest of mine. It is something that I heard over and over in Puerto Rico about their schools, their safety, and their availability. So, I think that would be of interest——

Governor PIERLUISI. I can supplement my testimony by giving you a status report on the Department of Education infrastructure projects.

The CHAIRMAN. I appreciate that. That is what I was getting at.

LUMA renegotiations, looking at the contract. And one of the things that is noticeable—perhaps you can correct me if I am wrong—is that the benchmarks that have to be obtained by the private contractor for additional money—that is the target, those are the benchmarks—one of the things that to me is glaring is that there are no consequences for not meeting certain benchmarks.

Governor PIERLUISI. There are consequences.

The CHAIRMAN. In the contracts, as it exists?

Governor PIERLUISI. Well, what is happening is this. The 15-year contract provides a payment methodology that includes either bonuses or penalties, depending on compliance with the metrics that the Energy Bureau will be setting. The current supplemental agreement does not. And the reason is because we have this bankruptcy process ongoing.

Because of the uncertainty involved in having a bankruptcy process for PREPA, the parties agreed—meaning the P3 authority, PREPA, and LUMA agreed—to enter into this supplemental agreement that simply provides LUMA a fixed fee for its services. And the Energy Bureau, along with the P3 authority, monitor LUMA's performance, and periodically report, the Energy Bureau does, how LUMA is doing in terms of the metrics. And the metrics that so far——

The CHAIRMAN. OK, that is our confusion, Governor, and I think we need to clarify that because the opportunity to make some corrections—although many people cry for the end of LUMA as the provider, and those voices are not only on the island, they are also here in Congress—it is providing that information, where our reading of it, or at least the staff and my reading of it, the downside was that there was no consequence.

Governor PIERLUISI. No, they are wrong.

The CHAIRMAN. Well, if we are wrong, if you could provide it, because we won't keep repeating that.

Governor PIERLUISI. LUMA is represented at this hearing, so you can ask them directly. And I am sure that we can also supplement my testimony to give you the specifics in terms of the requirements on LUMA, and the way that we are overseeing LUMA.

The CHAIRMAN. Thank you, Governor, and thank you for your testimony.

We are going to call a recess so that those of us that are interested in hearing from the Speaker will do so, then take the votes, and then come back and begin with the second panel.

I apologize for the delay, but that was inevitable, given the structure of the day, and all the stuff that is before us.

But, Governor, again, thank you for your time, and——

Governor PIERLUISI. And I thank the attendance of so many members of this Committee. That also has to do with the time that it has taken. I appreciate that. There has been a lot of interest in this topic, and I really appreciate it on behalf of the people of Puerto Rico.

The CHAIRMAN. And to your credit and my credit, we kind of kept on time.

[Laughter.]

The CHAIRMAN. I appreciate it.

[Recess.]

The CHAIRMAN. Thank you. Let me reconvene the meeting and, to the witnesses, extend my regrets. But, despite the fact they missed the last two votes, there were votes and there was an announcement by the Speaker. And the Members wanted to be part of that. So, my regrets and apologies for the timing of that, but we are not in charge of that.

We have Panel 2, and I think two of the Members are here with us today. Thank you very much. Let me begin by recognizing and extending the time to Mr. Manuel Laboy, Executive Director, Central Office for Recovery, Reconstruction, and Resiliency.

Sir, you are recognized for 5 minutes.

STATEMENT OF MANUEL LABOY, EXECUTIVE DIRECTOR, CENTRAL OFFICE FOR RECOVERY, RECONSTRUCTION, AND RESILIENCY

Mr. LABOY. Thank you, Chairman Grijalva, Resident Commissioner González-Colón, and members of the Committee for the chance to be here today to talk about the status and progress of Puerto Rico's disaster recovery.

As you know, between 2017 and 2020, efforts were dedicated to completing the emergency works related to Hurricane Maria. For this, FEMA obligated $5.3 billion, including $1.9 billion for the electrical grid reconstruction under emergency terms. Simultaneously, FEMA and COR3 worked closely to obligate permanent work funding in order to begin the long-term recovery and reconstruction.

To reach this goal, in mid-2019, FEMA implemented for the first time its FEMA Accelerated Award Strategy, or FAASt. In September 2020, under the FAASt, FEMA obligated $9.5 billion of Federal share to PREPA for the long-term permanent work reconstruction based on a fixed cost estimate. Although COR3 and FEMA have taken proper steps to accelerate the reconstruction phase of the disasters, including the FAASt initiative, it also came with limitations and restrictions.

First, FEMA's disaster recovery programs are based on a reimbursement model. This is fundamental to consider, since Puerto Rico and PREPA, prior to Hurricane Maria, were in a fiscal and economic crisis that resulted in declaring bankruptcy in 2017.

Second, FAASt only created a mechanism to agree on a universal budget for all permanent work projects, and it didn't include authorization for construction. Therefore, PREPA and LUMA are required to submit detailed scopes of work for each specific project to FEMA through their national delivery model. Once the scope of work is obligated by FEMA, then PREPA and LUMA are authorized to proceed to the construction phase and request COR3 the corresponding reimbursements.

Third, PREPA and LUMA still have to comply with the local approval process, such as submitting all scopes of work to our independent energy regulator, the Puerto Rico Energy Bureau, to ensure all projects are aligned with our state energy public policy. Notwithstanding, PREPA and LUMA have submitted over $2.5 billion in projects which are under FEMA's consideration and approval, of which FEMA has already approved 51, including 11 for generation, 38 for transmission and distribution, and one for advance purchasing of critical long lead materials and equipment.

COR3 forecasts that before the end of this year the total amount of projects approved by FEMA will reach at least 100, setting the stage for 2023.

Another major change has been COR3's development of a program aimed to address our service recipients' liquidity

constraints. At the request of the Government of Puerto Rico, in September 2021, FEMA lifted certain restrictions related to the disbursement process. In May 2022, FEMA paved the way for COR3 to release the Working Capital Advance program. The WCA program allows COR3 to advance 25 percent of the Federal share obligated by FEMA for large, permanent work projects. In June 2022, this program was launched.

This week, Governor Pierluisi announced that the WCA program was expanded from 25 percent to 50 percent. To put things in perspective, in just 5 months COR3 has successfully disbursed over $550 million, which has impacted around 400 projects, including $180 million for PREPA and LUMA projects alone.

Despite the aforementioned progress, Hurricane Fiona, however, gave Puerto Rico another devastating blow. The storm impacted many parts of the electrical grid and generation facilities islandwide. A critical aspect of Fiona's recovery is the grid stabilization plan announced this week by Governor Pierluisi and FEMA, which will be implemented under FEMA's direct Federal assistance. This plan will provide short-term stability to our generation infrastructure, while COR3, PREPA, and LUMA continue to focus on advancing the long-term reconstruction projects under FAASt, as well as the energy-related projects to be funded under FEMA's Hazard Mitigation Grants program.

Although 2022 appears to be a major milestone in Puerto Rico's recovery, there is much ground to be made up after years of delays and the now devastating blow of Fiona. Consequently, we ask Congress to amend the Stafford Act to authorize FEMA to consolidate the Hurricane Maria and Hurricane Fiona disasters not only to ensure a sound approach to the recovery process, but also help lessen the administrative burden for Puerto Rico to manage these disasters separately.

Additionally, we request Congress to authorize a 100 percent Federal cost share for all permanent work projects under Hurricane Maria and Fiona disasters specifically for projects related to repairing the power grid. We are confident that the momentum gain advancing the reconstruction will not diminish. On the contrary, it will accelerate in 2023 and beyond.

Again, we thank you for the opportunity to be here to share this with you.

[The prepared statement of Mr. Laboy follows:]

PREPARED STATEMENT OF THE HON. MANUEL LABOY,
AUTHORIZED REPRESENTATIVE OF THE GOVERNOR
CENTRAL OFFICE FOR RECOVERY, RECONSTRUCTION, AND RESILIENCE (COR3)
GOVERNMENT OF PUERTO RICO

Chairman Grijalva, Ranking Member Westerman, and Members of the Committee:

Thank you for the opportunity to present on behalf of the American Citizens of Puerto Rico an update of our island's reconstruction and power grid development post-disaster. In the 5 years following the devastation of Hurricanes Irma and María, we have made significant progress toward building back our island despite numerous subsequent disasters. This progress is, in part, the result of the tremendous and often bipartisan support we have received from this Committee and Congress more broadly. Even though Hurricane Fiona caused another recent devastating blow to the power grid, as well as other critical infrastructure such as housing, roads and bridges, the Government of Puerto Rico, in conjunction with the

Federal Government, is much better positioned today to respond and assist in this post-disaster reconstruction then it was 5 years ago. The current primary focus of the Government of Puerto Rico continues to be the advancement of a reliable and efficient power grid as fast as possible. As I will detail more below, the support of the Federal Government has been critical to the immediate response and relief, and we look forward to a continued close relationship with the Federal Emergency Management Agency and the Department of Energy to advance clean and affordable energy to Puerto Rico.

Pre-Hurricanes Irma and Maria

As has been well documented, before Hurricanes Irma and María made landfall on the island, Puerto Rico was already in the middle of a financial crisis. In the prior decade, the Government of Puerto Rico had amassed unsustainable levels of debt, to a point where credit rating agencies implemented a series of credit rating downgrades for Puerto Rico-Related Bonds at various points between 2012 and 2014, with most of those bonds reaching "junk" status between February and June 2014. This caused the Government of Puerto Rico and its entities to lose access to capital markets which strained Puerto Rico's liquidity capabilities.

On June 30, 2016, President Barack Obama signed into law the Puerto Rico Oversight, Management, and Economic Stability Act ("PROMESA"), which established a financial oversight board, a process for restructuring debt, and expedited procedures for approving critical infrastructure projects in order to combat the debt crisis. Through PROMESA, the US Congress established the Financial Oversight and Management Board of Puerto Rico ("FOMB") to help Puerto Rico achieve fiscal responsibility with pro-growth fiscal reforms and renew access to capital markets. Essentially, FOMB represented the Puerto Rico Government entities having debt in the debt restructuring process, but also presented an additional bureaucratic layer for execution of the Government's responsibilities.

In addition to the financial crisis, Puerto Rico was also suffering from an infrastructure crisis, which made the island vulnerable to natural hazards. Puerto Rico's energy grid, roads, bridges, dams, ports, hospitals, water treatment plants and more had been decaying for years mainly due to deferred maintenance. Moreover, the Puerto Rico Electric Power Authority ("PREPA") relied too heavily on expensive oil and was plagued by aging infrastructure dating back to the 1960s. Additionally, buildings and infrastructure, including residential septic tanks, were commonly constructed without permits and thus were not in compliance with building codes. Construction was allowed to occur in areas that are known to be hazardous, such as areas prone to flooding and landslides. Similarly, unmetered water connections and inconsistent electricity metering were common, and laws and regulations governing these activities were not rigorously enforced.

In the middle of a financial crisis, Puerto Rico was also in desperate need of transforming its energy grid, modernizing the telecommunications system, rebuilding its water system, strengthening maritime, surface and air transportations, as well as repairing and rebuilding residential housing, without practically any economic and financial means to achieve it.

Impact of Hurricanes Irma and Maria to Puerto Rico's Fragile Power Infrastructure

Hurricanes Irma and María dealt a devastating blow to Puerto Rico, resulting in the largest and most complex disaster response and recovery effort in U.S. history. Hurricane Irma skirted the northern coast of the Island from September 6–7, 2017 as a Category 5 storm, causing extreme flooding, regional power and water outages, and other significant impacts. Before response operations had even concluded, however, an even more devastating Hurricane Maria slammed into Puerto Rico on September 20, making a direct strike as a strong Category 4 storm and causing widespread devastation and destruction the likes of which the island had never seen. María represented a "worst case scenario" for Puerto Rico, tracking east-to-west across the island and leaving no one and no thing untouched. Within a matter of hours, 100% of Puerto Rico's population, economy, critical infrastructure, social service network, healthcare system, and even the government became casualties of the storm. Damage to the electrical grid—including downed power lines, transmission lines, and poles—was severe. All power was lost across the island as a direct result of the catastrophic failure of PREPA's transmission and distribution infrastructure. This produced a cascading effect that impacted critical infrastructure and services that relied on power to operate (such as airports, seaports, hospitals, water systems, communications networks, hotels, traffic and streetlights, etc.). With much of Puerto Rico's power grid offline, wastewater treatment plants were out of

service. Some sewage plants were upstream from the drinking water supply, so their failure could have increased the risk of contamination of drinking water.

Under the National Response Framework, the Department of Homeland Security ("DHS") is the federal department with primary responsibility for coordinating disaster response, and within DHS, the Federal Emergency Management Agency ("FEMA") has lead responsibility. The Administrator of FEMA serves as the principal adviser to the President and the Secretary of Homeland Security regarding emergency management. Due to Hurricane Irma's damages, on September 10, 2017, President Donald Trump issued a major disaster declaration for Puerto Rico (DR-4336). Later, after Hurricane María left island wide devastation, a second major disaster declaration was issued on September 20, 2017 (DR-4339), and FEMA extended eligibility for Public Assistance to all 78 of Puerto Rico's municipalities. The major disaster declarations triggered a variety of federal response and recovery programs for Puerto Rico government and nongovernmental entities, households, and individuals, including assistance through the Public Assistance program.

Emergency Response for Power Restoration after Hurricane Maria

To attend to the power restoration of the island Puerto Rico entered into immediate emergency response work. PREPA, the public entity responsible for Puerto Rico's power grid, brought on third-party contractors in mid-October 2017 for power restoration services. These contractors were responsible for mobilizing its own and subcontracted labor forces and equipment (both heavy and small) from the continental United States (CONUS) to the Island. In addition, the United States Army Corps of Engineers (USACE), acting under a mission assignment from FEMA, engaged contractors to perform power restoration services, with assignment of line segments coordinated by a Unified Command Group (UCG) consisting of FEMA, PREPA, USACE, and the Puerto Rico Emergency Management Agency. In order to fund all this work, FEMA obligated various projects under Categories A and B of the Public Assistance program.

In anticipation of the need for a centralized entity to lead the coordination of the response, long-term recovery and, reconstruction planning and execution process for the Government of Puerto Rico, the then Governor of Puerto Rico, Hon. Ricardo Rosselló, issued Executive Order 2017-65 (as amended by Executive Order 2017-69). These executive orders created the Central Recovery & Reconstruction Office ("COR3"), to act as the lead agency within the Government of Puerto Rico in the coordination, development, and execution of long-term recovery and reconstruction efforts.

Due to the vast devastation, the response effort took over 3 years, making it impossible to shift into the reconstruction phase. From 2017–2020, FEMA, COR3 and PREPA worked together to agree on and obligate emergency projects geared toward electrical pole replacement and debris removal, among others. During this time span no permanent work projects were obligated, therefore, the much need reconstruction of our outdated electrical grid had not even begun.

Transition to Reconstruction Phase

As mentioned, Puerto Rico already was going through its share of challenges before the storms, the unprecedented devastation presented a new set of challenges that would muddle an already complicated process under the Public Assistance program. Federal grant award regulations allow FEMA to impose additional specific grant award conditions under certain circumstances, such as to mitigate risk and ensure fiscal accountability of the recipient or subrecipient. In normal circumstances under the Public Assistance program, once FEMA obligates funds, the recipient can expend funds as necessary. However, in November 2017, FEMA instituted a manual reimbursement process for subrecipients in Puerto Rico for federal funds, including Public Assistance funds, to mitigate fiduciary risk and decrease the risk of misuse of funds. In addition, the Public Assistance program is a reimbursement program which requires the recipient and subrecipients to have enough liquidity to expend funds, something Puerto Rico completely lacked.

To make matter worse, Puerto Rico insurance companies received $8.5 billion in insurance claims. On average, customers received about 60 percent of the amounts they submitted on their claims. Nearly 18 months after the hurricane, there were still about 11,000 unpaid claims. As part of its Public Assistance program, FEMA must ensure that the assistance provided does not duplicate assistance from another source, including insurance. This exacerbated Puerto Rico's ability to quicken its recovery efforts.

Moreover, in 2019 FEMA introduced a new Public Assistance delivery model (the "National Delivery Model"). While, in the broadest sense, Puerto Rico supported the implementation of the National Delivery Model, there were concerns that the model

had never before been used on a disaster where Section 428 alternative procedures [1] governed nearly all of the disaster grant funding. Additionally, because it was different from the delivery model Puerto Rico had been using since September 2017, it inserted another change in procedures, which raised concerns over impacts to the already glacial pace of recovery on the island. However, we adapted and continued the recovery as directed.

In mid-2019, in an effort to expedite the permanent work process, especially for Puerto Rico's electrical grid, FEMA implemented for the first time, its FEMA Accelerated Award Strategy ("FAASt"), under which it uses a Statistical Sampling Methodology to arrive at fixed cost estimates for groups of critical infrastructure projects, rather than requiring inspections and cost estimating for each individual project. While this allowed FEMA to expedite obligation, it amounted to a master recovery budget for each FAASt subrecipient, it did not however, authorize any related construction. Still all projects had to go through normal and traditional obligation steps through the FEMA National Delivery Model by submitting Scopes of Work with enough engineering and design data to allow FEMA to conduct an Environmental and Historic Preservation review, as well as potentially approving additional dollars to finance hazard mitigation measures under Section 406 of the Stafford Act. Once the Scope of Work is obligated by FEMA, the project is authorized for construction.

To make matters worse, Puerto Rico suffered two additional major disasters—major earthquakes that shocked the Island beginning in late 2019 and lasting over six months and the COVID-19 Pandemic.

Despite these challenges, with the help of the Federal Government, Puerto Rico worked diligently to pull itself out of the literal and figurative darkness that the 2017 Hurricanes had cast over the Island. By the end of 2020, FEMA had obligated over $1.8 billion in emergency work projects (Category B) for power restoration. However, during this time, permanent work projects were slow to develop. Through 2020, no PREPA permanent work projects were obligated by FEMA, however through FAASt, $9.5 billion had now been approved and today $1.6 billion has been drawn down and disbursed for the power grid for emergency work, $184 million for permanent work and $40 million for management costs.[2] The FAASt obligations were a major turning point as it moved the Island out of response and into recovery.

COR3's Strategic Plan for Recovery 2021–2022

With the majority of emergency work completed for Hurricanes María and Irma, Puerto Rico's disaster response transitioned to long-term recovery, with its primary focus on the formulation and execution of permanent work projects.

By its nature, long-term infrastructure recovery is a slower process, as it requires the development of the design and engineering of projects, obtention of environmental approvals and permits, procurement of construction contracts, and ultimately construction. All indications, however, show significant momentum since 2021. Under FAASt, FEMA, COR3 and PREPA and LUMA Energy have worked together to develop Scopes of Work, get them submitted to FEMA for proper evaluation and approval, and advance shovel on the ground projects. Construction projects are being completed in accordance with applicable codes, standards and industry best practices, and in the majority of the cases, with added measures to mitigate hazards and built additional resilience. Notably, the projects that are and will be executed under FAASt by PREPA will be compatible for renewable energy integration to ensure sustainability and resiliency in future disasters.

Efforts to Increase Support of Recovery by Providing Access to Necessary Capital

As discussed earlier, a major obstacle to recovery in Puerto Rico has been access to working capital to the cash-flow needs of our subrecipients, especially for large infrastructure and construction projects, since FEMA disaster recovery programs are based on a reimbursement model pursuant to the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards at 2 CFR § 200, as adopted by the Department of Homeland Security at 2 CFR § 3002. As we transition to the recovery phase where these projects are an even greater focus, a successful plan to address these issues is of the utmost importance. Puerto Rico has therefore developed and is now working to implement several strategies to provide the necessary support for these projects.

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[1] Under Stafford Act § 428, Public Assistance Alternative Procedures, FEMA may award fixed cost grants for large permanent work projects, rather than on an actual cost basis. See Public Assistance Alternative Procedures (Section 428) Guide for Permanent Work, FEMA-4339-DR-PR (Feb. 10, 2020).

[2] See Attachment 1, Project Status of the Puerto Rico Electric Power Authority.

The most critical strategy developed and implemented by COR3, in consultation and approval by FEMA, is the Working Capital Advance Program (WCA). This program was implemented specifically to provide a mechanism to advance the federal share of funds reimbursed for permanent work projects under FEMA's Public Assistance program and HMGP projects for incurred damages as a result of Hurricane María. It also applies to the 2020 Earthquake disaster, and will eventually apply to large permanent work projects under Hurricane Fiona disaster.

The program was introduced officially through published revision to COR3's guidance document, the Disaster Recovery Federal Funds Management Guide (DRFFMG), in the form of a new Chapter 7, Payment and Cash Management Policy. The WCA was launched in June 2022, after receiving formal approval from FEMA in May 2022, and is already demonstrating significant support for the recovery effort. As such, in just 5 months, COR3 has successfully disbursed over $519M which have impacted 377 permanent work projects across all permanent work categories (C thru G) of FEMA's Public Assistance program, including municipalities, multiple state agencies and public corporations, and equally important, PREPA and LUMA Energy to support generation, transmission and distribution reconstruction projects.

The WCA Program is currently available for all Puerto Rico subrecipients. Subrecipients who request a WCA in compliance with the policy requirements are eligible to receive an initial payment equal to 25% of the obligated federal share of the associated project. Recently, COR3 added a second stage to the WCA Program that allows a second disbursement of 25% after the first 25% is fully validated, which will correspond to a 50% total advance. To date, COR3 has approved WCAs for approximately $180 million for PREPA/LUMA alone. This has been critical in PREPA/LUMA's ability to move forward with the permanent projects needed for reliable power, since the 25% WCA is leveraging over $700 million in projects, from purchasing equipment and materials, repairs to existing power generation units, to replacement of poles, streetlights, switchyards and substations.

Approval Process for PREPA Permanent Work Projects

Although COR3 and FEMA have taken proper steps to accelerate the reconstruction phase of the disasters, including the FAASt initiative, as mentioned beforehand, this only created a mechanism to agree on a universal budget for all permanent work projects. PREPA and LUMA, entity in charge of operating, maintaining and modernizing Puerto Rico's transmission and distribution infrastructure, still have to comply with FEMA's funding obligation as well as local approval process. Currently it's an 8-step process under FEMA's National Delivery Model that currently takes an average of 67 days to complete.

The process begins with PREPA/LUMA submitting a scope of work to the Puerto Rico Energy Board ("PREB"). Once approved by PREB the project is submitted to COR3 for any possible alternate or improved project evaluation and subsequent approval by PREPA/LUMA. The agreed upon project is then submitted to FEMA, where it would go through their regular approval process by its Consolidated Resource Center ("CRC") for CRC for Environmental and Historic Preservation ("EHP"), cost and Section 406 review. After approval from COR3, the project is resent to the CRC for additional review. Subsequently, the project is resubmitted to PREPA/LUMA for approval. After final approval by COR3, the project is sent for review to the US Office of Legislative Affairs for review and obligation. It is evident that even implementing FAASt, the approval process is lengthy and time consuming. However, COR3 is working closely with all parties involved in the approval process to make sure it flows as expeditiously as possible.

Notwithstanding, COR3, FEMA and PREPA/LUMA have been able to obligate more permanent projects in the past 2 years than the prior 3 years combined. Pursuant to the FAASt program, FEMA and PREPA are formulating projects under the FAASt program approval of $9.5 billion. Until a project is formulated and submitted to through the PW obligation process, neither PREPA nor COR3 have access to the funds. To date, PREPA has submitted over $2 billion dollars in projects which are under FEMA's consideration and approval. In addition, FEMA has already approved 51 projects, of which 2 are global Project Worksheets, 11 for generation and 38 for transmission and distribution projects. To date, 35 projects for both generation and transmission/distribution are under construction. Additionally, PREPA/LUMA have submitted 41 detailed Scopes of Work which are currently under review by FEMA. COR3 forecast that before the end of 2022, the total amount of projects approved by FEMA would reach at least 100, setting the stage for 2023 as the year that Puerto Rico would finally experience the much anticipated construction activities to rebuild the electrical grid system.

Energy Projects under Stafford Act Section 404 Hazard Mitigation Grants Program (HMGP)

In addition to the reconstruction projects currently been implemented under the FAASt program, Puerto Rico's electric power infrastructure will greatly benefit from unprecedented investments that will be sought through FEMA's 404 hazard mitigation grants program, also administered by COR3. The planned investments will cover a wide range of assets and technologies, from peaking units and dams to ocean energy, solar and hydro power, to batteries and micro-grids.

To date, FEMA has approved 4 projects: the replacement of existing peaking units, which are used to manage power reserves and address power load peaks, a power generation project for the north region of Puerto Rico, an early warning system for PREPA's dams, and the retrofit of the Patillas dam. For the first, recently the PREB issued a resolution approving replacing 11 peaking units island-wide, including the purchase of 4 new back-start units. The remaining 7 units will be replaced with new systems with built-in capacity to use green hydrogen as an alternate fuel. PREPA estimates that will be implementing the replacement of the 11 units in a period of 24 to 36 months. For north generation project, PREPA and COR3 are collaborating with FEMA to develop and submit a new application package for power storage/battery system. In terms of the dam-related projects, PREPA is making significant progress advancing the planning, engineering and permitting phases of each project. Construction is estimated to begin between 2023 and 2024. Between the 4 projects, it is estimated that a total of $1.4 B would be invested via FEMA's 404 HMG program.

On the other hand, COR3 has successfully submitted an additional 5 application packages for FEMA's review and approval that are targeted to reduce Puerto Rico's reliance on fossil fuel and to diversify the Island's energy generation portfolio through renewable energy projects, while mitigating future hazards that causes loss of power after a major disaster. If approved by FEMA, about $1.1 B would be used to implement the following projects: a new micro-grid for Vieques and Culebra municipal-islands, new submarine cables also for Vieques and Culebra, the retrofit of PREPA's existing hydropower fleet, a new solar power system for the Guajataca dam, and the very first ocean thermal energy conversion project in Puerto Rico, the Caribbean and the Americas.

Greater Flexibilities for Cash Management and Reimbursement Processes

COR3 is also encouraged by the continuing close collaboration with FEMA regarding COR3's administration of the Public Assistance program and implementation of payment processes for subrecipients. When the manual drawdown process was lifted Puerto Rico in 2019, FEMA imposed multiple new conditions and requirements on Puerto Rico's recovery efforts and specifically regarding payment process implemented by COR3 (the "2019 Agreement"). In April 2021, Puerto Rico sought termination of the 2019 Agreement, as COR3 had successfully met all the federal terms and conditions for two years. Puerto Rico believed it was time to end these special restrictions and allow Puerto Rico to receive equal treatment to the other jurisdictions serving as recipients across the Continental United States. Puerto Rico's request was approved on September 22, 2021. The elimination of these additional restrictions allowed Puerto Rico the necessary flexibility to expedite the processing of reimbursement requests and the disbursements of federal funds to subrecipients.

The elimination of the 2019 Agreement has also created flexibilities that have been incorporated into the COR3 Cash Management Policies, transforming the processes around reimbursements and advances. Under the new reimbursement policy, disbursements for reconstruction projects are being expedited, significantly reducing the average number of days from 240 to 60 days. Similarly, new processes around requests for advances for immediate expenses are currently being processed in an average of 21 days rather than 150 days, as was before. These changes, coupled with the WCA program, enable much greater support of permanent work projects and help provide the resources necessary for all projects to progress more efficiently.

Another positive step in our recovery is the significant progress toward usage of Community Development Block Grant-Disaster Recovery ("CDBG-DR") grant funds for the non-federal cost share on approved FEMA projects. On January 3, 2020, a Memorandum of Understanding ("MOU") was signed by FEMA and HUD to work together to facilitate Puerto Rico's recovery and mitigation activities. This collaboration includes joint-guidance on the flexible application of CDBG-DR grants as resources for the cost share for FEMA-funded projects. Since then, the Puerto Rico Department of Housing ("PRDOH"), the administrators of CDBG-DR funds allocated

to Puerto Rico, and COR3 have continued to coordinate on the design, development, and implementation of the FEMA PA Flexible Match Methodology Guidelines ("Guidelines") as published on October 14, 2020. COR3 and PRDOH have also submitted a joint petition to FEMA discussing the implementation procedure of the Disaster Flexible Match ("DFM") approach. The DFM proposes a funding strategy for the FEMA Public Assistance program that eliminates the need for eligible applicants to comply with CDBG-DR requirements under each individual project to receive its non-federal share, but rather applying for match payments based on the total cost share corresponding to selected FEMA projects for a specific disaster, thereby reducing additional administrative burdens to the recipient and the participating subrecipients/applicants. Leveraged together, COR3's FEMA Public Assistance and PRDOH's CDBG-DR programs ensure that subrecipients receive the greatest, and most efficient benefit from federal recovery funding while rebuilding in smarter, more resilient ways. Recently, FEMA, at COR3's request, is assessing the implementation of a DFM approach for the FAASt program, a major step in the right direction to continue streamlining Puerto Rico's reconstruction processes and eliminating unnecessary administrative burden that will allow projects and related funding advance in a more efficient and cost-effective manner.

Hurricane Fiona

On September 18, 2022, Hurricane Fiona made landfall in southwest Puerto Rico bringing heavy rains and 90 mile per hour sustained winds impacting power and infrastructure across the island. The 30+ inches of rain that fell caused devastating flooding that damaged homes and washed out newly constructed roads and bridges. The winds also caused severe damaged to the power grid, causing an island-wide blackout and left much of the island without power and water for weeks.

Hurricane Fiona not only exacerbated the prior disaster damage to the power grid, but also caused new damage. Despite the fact that Hurricane Fiona was a much smaller storm, it caused a cascading effect that is compounding the difficulty of the recovery from the multiple disasters that Puerto Rico has endured within the last five years.

To meet this unique situation, the Government of Puerto Rico is working with its federal recovery partners to discuss innovative ideas that will allow for an efficient and cost effective approach. As we did after Hurricanes María and Irma, we are working closely with FEMA and other federal partners to ensure close collaboration regarding COR3's administration of the Public Assistance program and implementation of payment processes for PREPA and other subrecipients. The leadership of Puerto Rico and the Federal government are currently in the process of developing a coordinated plan that includes specialized policies that benefit a resilient grid reconstruction providing a long-term solution to Puerto Rico's power needs.

Simultaneously, on October 12th, 2022, Governor Pierluisi requested direct federal assistance (DFA) to FEMA under Fiona disaster to assess and implement short-term, feasible solutions that will result in stabilizing our power grid. The request was accepted by FEMA and for the past weeks, the Government of Puerto Rico has been supporting FEMA and its federal partners (DOE, USACE and EPA) in fulfilling the objectives of the DFA. The overarching goal is to achieve short-term stabilization while PREPA/LUMA, with the support from COR3 and FEMA, continues to advance shovel on the ground permanent work and resilient projects under the FAASt and 404 HMG programs.

Lessons Learned and Opportunities to Support Recovery

It has been a difficult journey, but Puerto Rico is on the road to recovery and resilience. As we reflect on the last 5 years, there have been lessons learned. We know that complicated bureaucratic processes and repeated rule changes slow the process, and that sometimes new ideas intended to move things forward cannot realize those goals, as long as they are required to be implemented under existing rules. We appreciate FEMA's recent efforts to simplify its Public Assistance process and look forward to additional steps it may take to reduce the burden on applicants going forward. Although 2022 appears to be a major milestone in Puerto Rico's recovery, there is much ground to be made up after years of delays. Even so, we remain exceptionally hopeful for the future, and we look forward to continuing to build and nurture the collaborative relationship that we now we feel we have with our federal partners.

Additional Support of, and Flexibilities for, Capped Grants

One of the lessons learned so far is that attempts to expedite funding and simplify processes are only as effective as the framework in which they are implemented. Two examples of this are FEMA's Public Assistance Alternative Procedures Program under Stafford Act § 428 and FAASt.

The DHS-Office of Inspector General ("OIG") released a Report in July 2022 outlining its assessment of FEMA's Public Assistance Alternative Procedures Program (PAAP).[3] In comparing obligation times for over 15 thousand large projects, the OIG determined that FEMA took, on average, more than twice as long to obligate funds for the PAAP projects (845 days) as compared to standard Section 406 projects (411 days). The OIG further found that FEMA's funding obligation times increased significantly for projects in Puerto Rico and the U.S. Virgin Islands.

Similarly, while significant funds have been obligated for Puerto Rico's critical infrastructure under FAASt, this obligation has effectively established project budgets without expedited project execution. As aforementioned, each project must still work its way through FEMA's lengthy Public Assistance process before obligated funding can be disbursed.

While § 428 and FAASt were well intended their effectiveness is limited by the complicated framework under which they must be implemented.

Additionally, although authorization and support for the WCA has been helpful and effective, unfortunately it came late in the process. There is no doubt that Puerto Rico would have been in a much better place if advances for permanent projects could be approved like they were in Louisiana for Hurricane Katrina. Deficiencies under this disaster affected Puerto Rico as we were denied these benefits which would have accelerated the commencement of reconstruction of bridges, roads, schools, hospitals, electric grid, wastewater treatment plants, among many others. We believe past FEMA experiences should not be in detriment of current recoveries.

Changes to Robert T. Stafford Disaster Relief and Emergency Assistance Act

Governor Pedro Pierluisi is in the process of submitting several requests to Congress geared toward aiding and facilitating administrative efficiency in the recovery of Hurricanes María and Fiona. Many of these requests could be achieved by amending the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 *et seq*.) to authorize FEMA to consolidate both disasters into a single award under DR-4339-PR for the administration of federal assistance. **We ask** Congress to support our request as this will not only ensure a sound approach to the recovery process but also help lessen the administrative burden for both Puerto Rico and FEMA and reduce the amount of funds required to manage these disasters separately.

Support 100% Federal Cost Share

Governor Pierluisi has also requested that a 100% Federal Cost Share be extended for all consolidated María (DR-4339-PR) and Fiona (DR-4671-PR) permanent work projects. Since 2017, Puerto Rico has endured four (4) major disasters which have further exacerbated its subrecipients disaster management capabilities. This has proven to be an intense and difficult process considering the island's dire economic situation. **We ask** Congress to support our Governor's request to alleviate the financial strains the disaster recovery process requires.

Nonetheless, if our aforementioned request is not granted, it is imperative to at least authorize 100% Federal Cost Share for all permanent work projects related to repairing its power grid. Increasing the cost share for permanent work to 100% Federal funding will undoubtedly expedite the rebuilding of the power grid while alleviating the financial burden on Puerto Rico.

Amendment to the 2018 Bipartisan Budget Act

We further ask Congress to amend the 2018 Bipartisan Budget Act, specifically section 20601 to include Hurricane Fiona and expand the definition of "critical facility" to include our Island's transportation services which comprise, among other things, of roads, bridges, and highways, all of which have been devastated by Hurricanes María and Fiona. Puerto Rico's transportation system is, in many cases, comprised of a single entry and exit route, which makes its recovery critical for the United States citizens that reside here.

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[3] OIG Audit Report OIG-22-51, *Assessment of FEMA's Public Assistance Alternative Procedures Program* (July 13, 2022), available as of Sept. 12, 2022 at https://www.oig.dhs.gov/sites/default/files/assets/2022-07/OIG-22-51-July22.pdf.

Appreciation for Additional Time Extension Requests

Due to the limitations of wide-scale construction on an island, time extensions for permanent work project period of performance were requested for the remaining permanent recovery work to be completed. On September 26, 2022, FEMA approved a blanket extension for 6 months. Puerto Rico appreciates the support from the Federal Government in granting our request.

Conclusion

Our mission at COR3 as recipient of FEMA Public Assistance and HMGP funds, and our inherent responsibility over compliance and transparency of the federal funds flowing to subrecipients, is to provide all required technical assistance to the subrecipients of Puerto Rico in furtherance of the execution of the approved recovery and reconstruction projects, which will allow for a better, more resilient Puerto Rico. Effective completion of this work will support a much more stable electrical infrastructure system and create better economic opportunities for our citizens, all of which are goals that we are confident are shared by FEMA, this Congress, and the rest of the federal government.

On behalf of the entire COR3 team, we thank Congress and the U.S. Government for its continued support toward a better life for everyone in Puerto Rico. Puerto Rico appreciates the attention and focus Congress is bringing to these important issues we look forward to working with Congress to evaluate and address the lessons we have learned, and continue to learn, from these unprecedented events.

QUESTIONS SUBMITTED FOR THE RECORD TO MR. MANUEL LABOY, EXECUTIVE DIRECTOR, CENTRAL OFFICE FOR RECOVERY, RECONSTRUCTION, AND RESILIENCY

Mr. Laboy did not submit responses to the Committee by the appropriate deadline for inclusion in the printed record.

Questions Submitted by Representative Leger Fernández

Question 1. What would you recommend Congress do to improve the Robert T. Stafford Disaster Relief and Emergency Assistance Act, or other relevant statutes, to enhance FEMA's and the Federal Government's response, more broadly, to the disasters Puerto Rico experienced, as well as future disasters?

Questions Submitted by Representative Westerman

Question 1. The Committee has heard concerns about the lack of coordination between all the governmental entities (federal, territorial, and local) that are working on the multiple disaster recovery efforts in Puerto Rico. Please further expand on what the coordination process is between COR3 and the Federal Government departments, FEMA, Dept. of Homeland Security, Dept. of Housing and Urban Development, etc. What has been your coordination process with Puerto Rico's municipalities, and how has that improved since Hurricane Maria? What processes and systems are effective and what is not effective?

Question 2. Which FEMA processes are the most challenging to get through to actually have money obligated to spend on projects in Puerto Rico? What has FEMA been good at from your perspective?

Question 3. Can you describe the pace of recovery efforts of COR3, including power restoration, after Hurricane Fiona and how that compared to the response after previous disasters or storms? What did you see that was better than what has happened in the past with both LUMA's recovery from outages and from PREPA's recovery from outages?

Question 4. Your written testimony to the House Transportation and Infrastructure Committee from September 2022 detailed the Working Capital Advance Program that had a goal of helping with liquidity constraints for projects. Please provide the Committee with an update on how it has worked for projects begun before Fiona and, also if this is a program used for Fiona recovery projects?

Questions Submitted by Representative González-Colón

Question 1. Mr. Laboy, you indicated you need for FEMA to streamline the approval and funding processes. Are there any specific measures that could be taken in Congress that would help spped FEMA funding obligation approvals? That is, what legislative changes could we enact to help streamline this process and eliminate bureaucratic hurdles to advance Puerto Rico's reconstruction process, particularly to help rebuild Puerto Rico's energy infrastructure?

Question 2. To date, how many subrecipients—municipalities, state agencies, non-profit organizations—have applied for or received support from in the working Capital Advance are currently participating in the program? Does COR3 expect that all municipalities will eventually participate?

Question 3. Governor Pierluisi made his request that we in Congress amend the Stafford Act to authorize FEMA to consolidate the Hurricane Maria and Hurricane Fiona disasters into a single award for the administration of federal assistance. Can you discuss how will it lessen administrative burdens and reduce the amounts of funds required to manage both disasters?

Question 4. There is concern that with inflation, supply chain and job market issues that have developed in the past 3 years, the estimates on which obligations for disaster programs that were already made may no longer suffice for completion of the work, or truly reflect the cost of the work for which they were approved. Is there a risk of not being able to finish recovery projects when recovery funding obligations are based on estimates that have a fixed cost and, for example, there are sharp increases in costs of material or labor? In other words, has inflation and the rising cost of construction and labor already impacted recovery work? Would the proposal for a one-time cost adjustment for Section 428 projects be sufficient to address this need?

Question 5. The Governor has requested an amendment to the Stafford Act to authorize FEMA to consolidate the Hurricane Maria and Hurricane Fiona disasters into a single award for the administration of Federal assistance. Does this extend to amending any ***appropriation*** *that has been made in the past covering a specific disaster by name or by year and with a set deadline, to now encompass the others, or would this amendment rather have the goal of having a single* ***administrative*** *coordination structure to handle the different funds and applications? That is, would there still be Maria/Earthquake/Covid/Fiona-specific funds but all under one same coordinating office, or are they become all a single all-Puerto Rico all-disaster fund?*

Question 6. Reminder of documents requested for the Committee during the hearing:

- *Copy or breakdown of the Action Plan for the rebuilding of the power system to the Committee, including the timelines and estimated years in which milestones are to be achieved.*
- *Breakdown how many electric grid projects have been submitted, obligated, approved, and disbursed. What are their funding sources, and can you please provide the total amount under each stage as of today.*
- *Similarly for the other permanent infrastructure segment recovery projects.*

The CHAIRMAN. Thank you very much. Let me now turn to Mr. William Rodriguez, Secretary of the Puerto Rico Department of Housing.

Sir, you are recognized.

STATEMENT OF WILLIAM RODRIGUEZ, SECRETARY, PUERTO RICO DEPARTMENT OF HOUSING

Mr. RODRIGUEZ. Good afternoon, Chairman Grijalva, Ranking Member González-Colón, and members of the House Committee. On behalf of the Government of Puerto Rico, I wish to thank the Committee for inviting me to testify as Secretary of Puerto Rico Department of Housing on the status of Puerto Rico's post-disaster

reconstruction under the Community Development Block Grant Disaster Recovery and Mitigation allocations.

As you know, just over 5 years ago, Hurricanes Irma and Maria struck Puerto Rico and devastated the island's electrical power system, which led to the longest sustained blackout in modern U.S. history. However, the impact on the power grid remains ever present in the daily lives of island residents, as was recently laid bare after the impact of Hurricane Fiona. Therefore, a resilient electrical power service remains the single most comprehensive and critical factor to the future of Puerto Rico.

In June 2021, the U.S. Department of Housing and Urban Development, HUD, allocated $1.9 billion for the enhancement and improvement of Puerto Rico's electrical power system to provide long-term energy resilience to the most impacted and distressed areas and to low- and moderate-income communities in Puerto Rico. This is an unprecedented allocation and, along with the U.S. Virgin Islands, the only one of its kind.

So, PRDOH worked in close collaboration with HUD and other Federal agencies throughout the action plan design and approval process. After conducting a stakeholder engagement strategy, which included multiple participatory workshops, public hearings, and consultation with a broad range of Federal agencies, in January 2022, PRDOH submitted the action plans to HUD. In March 2022, we received approval of the $1.4 billion budgeted for the electrical power reliability and resilience, ER2, program of the $1.9 billion allocation, for which a grant agreement with HUD was executed in August 2022.

An amendment to the grant agreement for access to the remaining $500 million will be executed when HUD approves the energy grid rehabilitation and reconstruction, ER1, non-Federal cost share program through an action plan substantial amendment, as requested by HUD.

PRDOH is determined to serve the most vulnerable by prioritizing strategic projects for critical infrastructure and areas with demonstrated reliability and resilience challenge under ER2 program. The strategic projects will promote the integration of renewable sources of energy and distributed generation. Experiences with previous disasters have taught us that critical infrastructure such as hospitals are some of the places where we are most vulnerable, having had to evacuate patients due to lack of power.

Therefore, one of these strategic projects will be a microgrid for Centro Medico, which is the island's main hospital complex and trauma center. We will focus on the implementation of targeted, high-impact projects in collaboration and with the guidance of partners such as the U.S. Department of Energy while the larger, long-term grid transformation projects are developed. These enable us to identify opportunities for alignment and to impact the populations that suffer the most in times of outages, while the PR100 study provides the blueprint for the comprehensive grid approach within the larger context covered by Federal partners such as FEMA.

Before receiving the allocation for electrical power system enhancement, PRDOH proactively carved out funds of its DR and

MIT portfolios to allocate funds to individual households and community-level resilience projects. This includes $300 million on the CDBG-DR Community Energy and Water Resilience Installations Program, which launched in 2021, and $500 million under the CEWRI-MIT programs, which will launch in the upcoming month.

The energy-related activities to be found across the DR and MIT portfolios are intended to drive electrical system enhancement and improvement through our forward thinking and holistic approach at individual households and community scales. These programs will complement the regional and grid-level scales to be addressed by the electrical system allocations. This will allow for a greater and more meaningful impact that targets Puerto Rico's most vulnerable.

We are fully committed to the implementation of these strategic projects as our part of Puerto Rico's recovery landscape. PRDOH looks forward to ongoing Federal support and approval to allow assistance to privately-owned utilities as we move to execute the strategic projects with expediency.

I appreciate the opportunity to appear before this Committee and look forward to answering any questions you may have.

[The prepared statement of Mr. Rodriguez follows:]

PREPARED STATEMENT OF WILLIAM RODRÍGUEZ RODRÍGUEZ, ESQ., SECRETARY, PUERTO RICO DEPARTMENT OF HOUSING

Good afternoon, Chairman Grijalva and Members of the House Committee,

On behalf of the Government of Puerto Rico, I wish to thank the Committee for inviting me to testify, as Secretary of the Puerto Rico Department of Housing (PRDOH), on the state of Puerto Rico's Post-Disaster Reconstruction under the Community Development Block Grant for Disaster Recovery and Mitigation (CDBG-DR and CDBG-MIT) allocations.

I. Impact of the Disasters

As you know, just over five years ago Hurricanes Irma and María struck Puerto Rico and devastated the electrical power system leaving the entire Island without power, which led to the longest sustained blackout in modern United States history. The impact on the power grid caused harmful effects to communities, water, health, and education systems, as well as telecommunications, among others. Without power, residents were unable to gain access to healthcare, communication, refrigeration, water, cooling, and security. With sustained systemic insecurity, residents continue to feel many of the same impacts, economic recovery is hampered, and the cycle of recovery cannot be completed.

In the months following Hurricanes Irma and María, 3.2 million U.S. citizens lived without power. Around 4% of the population migrated from the Island, and thousands died as a result of the storms. It also left mental healthcare providers scrambling to address post-traumatic stress disorder (PTSD), depression, and other psychological effects. The conditions in which people were living caused severe anxiety, and these conditions only worsened as time passed and essential services remained lacking. This in turn led to an intense fear of future events that could threaten the Island. This reality was recently laid bare after the impact of Hurricane Fiona, which resulted in prolonged power outages posing health and safety threats as critical services remained unavailable to citizens due to lack of power. Therefore, a resilient electrical power service remains the single most comprehensive and critical factor to the future of the Island.

II. Energy Allocation and Action Plan

On June 22, 2021, the U.S. Department of Housing and Urban Development (HUD) allocated $1.9 billion for the improvement of Puerto Rico's electrical grid to provide long-term energy resilience to the most impacted and distressed areas and to low- and moderate-income (LMI) communities. It is important to understand, however, that the entire island of Puerto Rico was impacted by the hurricanes, and

this fact was recognized by HUD in the Energy Notice (86 FR 32681) by declaring the entire jurisdiction as a "most impacted and distressed" area, which is unique in the context of disaster recovery.

This is an unprecedented allocation and, along with the U.S. Virgin Islands', the only one of its kind, so PRDOH has been working in close collaboration with HUD and other federal agencies throughout the Action Plan design and approval process. Since August 2021, PRDOH has met with relevant federal agencies, including the federal members of the Technical Coordination Team (TCT), as well as with various stakeholders such as municipalities, residents, non-profit organizations, academic institutions, and local government agencies to receive their input during the Action Plan development process. The TCT team, co-led by the U.S. Department of Energy (DOE) and the Federal Emergency Management Agency (FEMA), consists of a variety of key federal agencies, such as the U.S. Army Corps of Engineers (USACE), the Environmental Protection Agency (EPA), the United States Department of Agriculture (USDA), the Federal Communications Commission (FCC), the Government Accountability Office (GAO), and the U.S. Treasury, amongst others. We appreciate the valuable input these agencies have provided in the development of our energy recovery strategy.

On November 8, 2021, PRDOH published a draft of its Electrical Power System Improvements Action Plan on the CDBG-DR website for public comment to receive recommendations and comments to support the development of the Plan. Additionally, PRDOH held two public hearings as part of the efforts to inform the approach to address Puerto Rico's unmet energy needs. The Action Plan divides the allocation's budget between two programs: the Energy Grid Rehabilitation and Reconstruction (ER1) Cost Share Program ($500,000,000) and the Electrical Power Reliability and Resilience Program (ER2) ($1,316,406,180).

ENERGY PROGRAM	PROGRAMMATIC BUDGET	% OF BUDGET	LMI GOAL	LMI BUDGET
Energy Grid Rehabilitation and Reconstruction (ER1) Cost Share Program	$500,000,000	26%	70%	$350,000,000
Electrical Power Reliability and Resilience Program (ER2)	$1,316,406,180	68%	70%	$921,484,326
ADMINISTRATIVE				
Administrative Budget	$96,617,350	5%	N/A	
PLANNING				
Planning	$19,323,470	1%	N/A	
Total	$1,932,347,000	100%	70% LMI*	$1,271,484,326

*LMI Calculation does not include Administration and Planning.

The purpose of the ER1 Program is to maximize the benefit from federal grant programs by positioning CDBG-DR as local match to other federal funding streams, in this case the FEMA Public Assistance allocation for electrical grid reconstruction. This approach will relieve the financial burden related to the recovery efforts of Puerto Rico's Electrical Grid and Puerto Rico's long-term infrastructure resilience needs. Through the matching of funding provided by other federal agencies, critical infrastructure needs will be addressed making the island more adaptable to changing conditions and able to withstand and recover rapidly from disruptions caused by future disasters.

The ER2 Program will provide assistance to create electrical system reliability and resilience through the implementation of decentralized renewable energy resources, including, but not limited to both small and large microgrid projects as allowed under Puerto Rico Energy policy. PRDOH is determined to serve the most vulnerable by prioritizing strategic projects for critical infrastructure and areas with demonstrated reliability and resilience challenges under the ER2 Program. Strategic projects will promote the integration of renewable sources of energy and distributed generation.

Experiences with previous disasters have taught us that critical infrastructure such as hospitals are some of the places where we are most vulnerable, having had to evacuate patients due to lack of power. Therefore, one of these strategic projects will be a microgrid for Centro Medico, which is the Island's main hospital complex and trauma center. We will focus on the implementation of targeted high-impact projects, in collaboration and with the guidance of partners such as the DOE and its national laboratories, while the larger long-term grid transformation projects are developed. It should also be noted that DOE collaboration is already embedded

within program planning, design, strategic project selection, and implementation. This enables us to identify opportunities for alignment and to impact the populations that suffer the most in times of outages, while the PR100 study provides the blueprint for the comprehensive grid approach within the larger context covered by federal partners such as FEMA.

On January 24, 2022, PRDOH submitted the CDBG-DR Electrical Power System Enhancements and Improvements Action Plan to HUD for their review and approval. A few weeks later HUD provided a summary of the comments and recommendations made by HUD's internal cross-cutting requirements partners and members of the Energy TCT to inform revisions to the Plan. After considering the agencies' comments, on March 15, 2022, PRDOH submitted the revisions to the Plan for HUD's consideration. Finally, on March 25, 2022, HUD notified that the Action Plan was partially approved, pending additional project-specific information for the ER1 Program.

Through the execution of a grant agreement on August 5, 2022, of the $1.9 billion allocation, PRDOH gained access to the $1.4 billion budgeted for the ER2 Program. An amendment to the grant agreement for access to the remaining $500 million will be executed once HUD approves the ER1 Cost Share Program through an Action Plan Substantial Amendment as requested by HUD. PRDOH has been coordinating with various stakeholders such as the Puerto Rico Electrical Power Authority (PREPA), LUMA, and others, with the purpose of identifying the projects that may be eligible for funding, as requested by HUD, for ER1 Program Approval, and to coordinate and assure consistency of all CDBG-DR funded electrical power system improvements with other disaster recovery and mitigation planning and development activities.

III. Energy-related Activities under the CDBG-DR and CDBG-MIT Portfolios

Before receiving the allocation for electrical power system enhancements and recognizing the need for energy resilience measures in Puerto Rico, PRDOH proactively carved out funds under its CDBG-DR and CDBG-MIT program portfolios to allocate funds to address household and community level energy resilience projects. These include $300 million under the CDBG-DR Community Energy and Water Resilience Installations (CEWRI) Program which has already launched, and $500 million under the CDBG-MIT CEWRI Subprograms.

The energy-related activities to be funded across the CDBG-DR and CDBG-MIT portfolios are intended to drive electrical system enhancements and improvements through a forward-thinking and holistic approach at individual household and community scales. These programs will complement the regional and grid-level scales to be addressed by the electrical system allocation. This will allow for a greater and more meaningful impact that targets Puerto Rico's most vulnerable.

SCALE	NEEDS SERVED	IMPACT	ESTIMATED PROJECT SIZE	INVESTMENT	GRANT SOURCE AND PRDOH PROGRAM
Individual	Household Resilience	~22k households	~3kW+	Up to $20-30k per household	**CDBG-DR** CEWRI **CDBG-MIT** CEWRI-HERI CEWRI-IP
Community	Community Resilience	~20 communities	~1MW+	Up to $2M per community	**CDBG-MIT** CEWRI-CI
Grid	Grid Improvements – Transmission and Distribution			10% Non-Federal Match required for electrical systems recovery	**CDBG-DR Energy** ER1
	Grid Improvements – Grid reliability, affordability, and resilience through distributed generation, microgrids, and enabling technologies	~700MW in generation	~10-20MW	Minimum award of $5M	**CDBG-DR Energy** ER2

IV. Streamlining Processes

a. Simplify Bureaucracy

i. LMI Impact

Energy is critical to life and continues to be an urgent need in Puerto Rico. PRDOH has been consistent in clarifying to HUD that, because the entire grid is interconnected and ninety-three percent (93%) of the population is considered to reside in LMI census tracts, improvements and enhancements to the grid will have a direct benefit to LMI households across the whole Island. However, HUD is requiring that PRDOH establish, by budget line item, how each individual project to be assisted under the energy programs will benefit LMI populations. Documenting the impact of an electrical project to the smallest area possible to indicate the specific LMI population that will be benefited is a redundant administrative process given the Island's overall high-poverty makeup. Considering the fragility and current state of the system, which is in desperate need of reconstruction and rehabilitation, the recommended option for expediting recovery efforts should be to recognize electrical projects that benefit the Puerto Rico electrical power system as meeting the LMI requirement.

ii. TCT Consultation

Another area where processes may be streamlined is the TCT consultation process.[1] PRDOH has been conducting weekly collaboration meetings with DOE and its national laboratories, and they have reviewed and provided feedback on program guidelines, as well as on the program implementation and project selection strategy. However, according to the Energy Notice, 86 FR 32681 PRDOH must submit every electrical project for consultation to both HUD and DOE simultaneously, for these agencies to then notify PRDOH whether to submit the project for further consultation with the Energy TCT.

Relieving PRDOH from these consultation requirements, which includes projects that are assisted by FEMA and already approved by another federal agency, will accelerate project implementation.

b. Private Utilities Waiver Requests

The Housing and Community and Development Act (HCDA) states that under the regular CDBG Program, a nonprofit or for-profit private utility may be assisted with CDBG funds as long as the utility is publicly regulated.[2] However, the Energy Notice, 86 FR 32681 contains a prohibition from providing assistance to privately-owned utilities. PRDOH made clear through the Action Plan and in meetings with federal partners our intent to provide assistance to private utilities as part of the ER2 Program to further renewable energy. On April 13, 2022, PRDOH submitted a consultation to HUD stating that "the exclusion of [...] privately-owned utility[ies] would make the ER2 Program's decentralized renewable energy approach impracticable and would severely hinder Puerto Rico's ability to meet its energy resilience and renewable energy goals."

On July 27, 2022, HUD advised PRDOH to submit the formal waiver request, which PRDOH did on August 31, 2022. Simultaneously, PRDOH decided to move forward and submit another waiver request to allow assistance to for-profit and non-profit privately-owned utilities under CDBG-MIT and CDBG-DR programs, as designed and already approved by HUD in both Action Plans. Both waiver requests are pending approval.

Hurricane Fiona put into perspective the need to expedite the approval of the privately-owned utilities waiver requests, and the need to swiftly approve the ER1 Program to quickly launch projects that will bring the much-needed energetic resilience the people of Puerto Rico deserve. Maintaining HUD's restriction on assistance to privately-owned utilities will cripple PRDOH's efforts to properly address the fragility of the Island's electrical power system. Hurricane Fiona also demonstrated, once again, that Puerto Rico's electrical power system is interconnected and that improvements and enhancements to the grid will benefit the Island as a whole, which is mostly LMI.

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[1] See, Federal Register, 86 FR 32681, Section V.A.2.e.—Additional consultation requirements.
[2] 24 C.F.R. § 570.201(l).

c. Lead-based Paint Abatement Requirements

The CDBG-MIT CEWRI-HH Program (CEWRI-HERI and CEWRI-IP) has been developed to provide funds for the installation of photovoltaic systems (PVSs) and/or battery storage systems (BSSs) for households that own a single-family structure as their primary residence to provide participants with a resilient energy alternative during times of electric grid failure. Based on the CDBG-DR Repair, Reconstruction and Relocation (R3) Program data, approximately 55% of participating single-family residential properties were built prior to 1978. Of these, approximately 37% have tested positive for lead. The CDBG-MIT CEWRI-HH Program is expected to process around 14,000 applications. Therefore, it is expected that 7,700 applications will require a lead hazards assessment and that, of these, approximately 2,800 will require some abatement works.

Since the program activities will not disturb painted surfaces totaling more than 20 square feet on exterior surfaces or 2 square feet in any one interior room or space, PRDOH proposed to HUD a lead mitigation approach based on *di minimis* levels, which do not require PRDOH to conduct safe work practices such as paint testing, abatement, and clearance, but instead to establish interim controls during installations of PVSs and BSSs. However, the proposed approach was not approved, meaning that the CEWRI-HH Program will be required to conduct testing, abatement, and clearance at each residence. Due to this determination, PRDOH is in the process of procuring services for risk assessments and mitigation for an estimated total of $39M. **This cost represents an equivalent loss of 1,560 households for the CEWRI-HH Program that would otherwise have had access to solar panels and batteries in their homes.**

V. Building on Success

Since being designated as the CDBG-DR Grantee for Puerto Rico in 2018, PRDOH has built strong institutional capacity and has successfully disbursed over $1.2 billion in CDBG-DR funds. Our more than 365 professionals have the experience of managing an extremely large and complex allocation, while earning an "on pace" expenditure classification from HUD.

Through the establishment of twenty (20) programs designed to provide grant opportunities to citizens, small businesses, municipalities, agencies, and non-governmental organizations, PRDOH is creating a significant impact on the local housing, infrastructure, economic, and planning sectors. To date, the R3 Program has completed the repair and reconstruction of 4,376 homes and awarded 2,927 relocation vouchers; the Non-Federal Match Program (NFMP) has issued over $42.5 million in non-federal match disbursements; the Homebuyers Assistance (HBA) Program has provided assistance to 4,131 participants for a total of $130.6 million disbursed; and the Small Business Financing (SBF) Program has issued over 2,610 awards for a total of $114.5 million disbursed. We can proudly say that we have been able to directly impact over 11,715 families with access to safe housing.

We understand that time is of the essence in this critical effort and are fully committed to the expedited implementation of the abovementioned strategic projects as our part of Puerto Rico's recovery landscape.

VI. Conclusion

We are working closely with our federal partners to streamline processes wherever feasible, as well as with key local partners such as the Puerto Rico Energy Bureau (PREB), Puerto Rico's Central Office for Recovery, Reconstruction and Resiliency (COR3), PREPA, and LUMA to ensure alignment as we launch the ER1 and ER2 Programs. The DOE and National Laboratories (NREL) have been allies to PRDOH by providing ongoing technical assistance. Through this collaboration, DOE and NREL have reviewed and provided feedback on program guidelines, as well as on the program implementation and project selection strategy, and have assisted with data collection and analysis.

PRDOH looks forward to ongoing federal support as we move to execute targeted high-impact projects with expediency. I appreciate the opportunity to appear before this Committee and look forward to answering any questions you may have.

QUESTIONS SUBMITTED FOR THE RECORD TO WILLIAM RODRIGUEZ, SECRETARY, PUERTO RICO DEPARTMENT OF HOUSING

Questions Submitted by Representative Leger Fernández

Question 1. What would you recommend Congress do to improve the Robert T. Stafford Disaster Relief and Emergency Assistance Act, or other relevant statutes, to enhance FEMA's and the Federal Government's response, more broadly, to the disasters Puerto Rico experienced, as well as future disasters?

Answer. With natural disasters becoming ever more frequent, it is imperative to rethink the way the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) and other relevant statutes are being implemented. There are certain ways in which the Federal Government can streamline its disaster recovery response to expedite recovery measures. From Puerto Rico's experience with recent disasters, FEMA assistance under permanent works categories require a cost-share amount that in most cases exceeds the amount Puerto Rico is able to match without funding available from other sources. Puerto Rico seeks 100% Federal Share for permanent works to effectively launch disaster recovery projects. Alternatively, a true Global Match approach for non-federal cost-share would ease the administrative burden resulting from undertaking individual 10% non-federal match projects. Although impactful, many of these projects may not be of a scale that justifies the administrative burden to undertake them individually. It is simply not cost-effective nor reasonable.

Federal disaster recovery assistance is typically tied to the response to a specific disaster event, prompted by Presidential and Congressional actions. Another measure to swiftly deliver assistance funds to the citizens in immediate post-disaster need is to allow grantees to provide federal disaster assistance interchangeably among disaster allocations and not necessarily tied to specific disaster events. This is particularly important for low- to moderate-income families who experience damages to their homes or even displacement. These households cannot afford to wait for the appropriation cycle and subsequent allocation process to see their homes rebuilt, repaired or their families relocated out of harm's way. For the same reasons, states must be able to provide rental assistance to these displaced families even before the federal funding for the applicable disaster is made available through the ordinary processes.

Additionally, the application of federal statutes and regulations require the grantees to perform an evaluation of the availability of other sources of funding to ensure disaster recovery assistance is not duplicative. This evaluation entails entering into individual data sharing agreements with FEMA, HUD, and SBA, among other federal agencies, to obtain the necessary data to avoid duplication of benefits (DOB). Although HUD and FEMA are moving toward some data-sharing agreements, the Federal Government and grantees would greatly benefit from a unified federal assistance database where data from across all federal agencies related to disaster recovery assistance and beneficiaries can be stored and shared, streamlining the required DOB analysis. This would translate to a reduced risk of providing duplicative assistance while targeting the population most in need of disaster recovery assistance at the early stages after a disaster event.

Questions Submitted by Representative Velázquez

Question 1. Since 2020, your agency has had available $1.29 billion under the City Revitalization Program meant to enhance resiliency in urban centers and key corridors, such as the pathways destroyed after Hurricane Fiona. However, only ***2 of the 327*** *projects under this program have started. How much out of the allocated funding do these two projects represent and what is your strategy to ensure that all of them are started?*

Answer. The City Revitalization Program (CRP) has an allocation of $1.29 billion, from which $1.07 billion have been obligated. The two projects that have started the construction phase represent $4.7 million (0.6%) of the current project funds for the CRP program, as described in Table 1—Budget Distribution by Projects Phase.

While as of November 23, 2022, two of the 320 eligible projects had started construction, another 94 projects are active in the design and procurement phase. Different strategies have been implemented to ensure that projects start under the CRP Program. The Puerto Rico Department of Housing (PRDOH) has contracted three Program Managers (PMs) to provide dedicated hands-on support to the municipalities for a wide range of needs. PM support includes:

- Provide technical assistance to Municipalities in the implementation of public policy of the CRP program
- Provide support to Municipalities in the identification of eligible projects
- Provide support to Municipalities in the preparation and development of project scope
- Provide support to Municipalities in the preparation of cost estimates and project implementation itinerary
- Provide assistance in the preparation of scope and cost documents for the contracting of professional services
- Provide assistance in processes related to the acquisition of properties in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URA)
- Provide assistance in the review or preparation of environmental evaluation documents (Environmental Review)
- Provide assistance in the preparation of Underwriting documents for affordable housing and economic development projects
- Provide assistance in the preparation of scope and cost documents for the contracting of construction services
- Prepare monthly reports
- Provide assistance to PRDOH in the review of payroll invoices and professional services presented by the Municipalities

PRDOH is also actively working with municipalities to identify projects which meet key compliance requirements. We have been in constant communication with different local and federal agencies to accelerate the processing of permits and endorsements required for the projects to begin construction.

Currently, there are 320 eligible projects amongst the Subrecipients. The status of these projects is distributed as follows:

Table 1-Budget Distribution by Projects Phase

	Approved	Design	Bid	Construction	Total
Quantity of Projects per Status	224	91	3	2	320
Estimated Cost per Status ($millions)	$455,331	$263,485	$18,703	$4,786	$742,304*

*Total amount does not include program management and contingency costs.

As Table 1 shows, a total of 224 projects are in the approved phase. Projects in this status are being actively evaluated by Municipalities for the procurement of design services to move to the next phase. Projects in the approved phase need to comply with different requirements, such as URA requirements, underwriting, etc., before being ready for the procurement of design services. The 224 approved projects, which have a cost estimate of approximately $455 million, are planned to be under design contracts next year with the goal to start construction by 2024. The statuses of the projects may vary depending on their complexity. Currently, Municipalities are working on identifying and evaluating 42 additional projects with an estimated cost of $108 million.

CRP expects that the 91 projects that are under the design phase will soon move to the bid phase. As a result, potentially 94 (the projects in design and bid) projects will be in process to start construction or bid during 2023, for approximately $281 million.

The detailed distribution of CDBG-DR funds related to eligible projects, according to their status of development in the CRP Program by the 78 Municipalities, are shown in Table 2 below:

Table 2-Eligible Projects Program Budget Distribution by Municipality

Subrecipient	App	Des	Bid	Con
Adjuntas	$7.517	-	-	-
Aguada	$3.062	$8.146	-	
Aguadilla	$2.332	$6.323		
Aguas Buenas	$5.483			
Aibonito	$8.434			
Arecibo	$8.605	$2.340		
Arroyo		$7.214		
Barceloneta	$3.447	$5.495		
Barranquitas	$7.711			
Bayamón	$1.080	$2.679		
Cabo Rojo	$7.117	$7.073		
Caguas		$22.332		
Camuy	$1.754	$6.535		
Canóvanas	$11.195			
Carolina			$15.991	
Cataño		$10.189		
Cayey	$2.464	$3.720		
Ceiba	$2.000	$5.903		
Ciales	$9.150			
Cidra		$7.304		
Coamo		$7.454		
Comerío	$6.741			
Corozal	$7.862			
Culebra	$9.208			
Dorado	$5.082	$3.371		
Fajardo	$9.795			
Florida	$7.899			
Guánica		$7.612		
Guayama	$12.050			
Guaynabo	$10.333			
Gurabo	$9.050			
Hatillo		$9.013		
Hormigueros		$6.599	$0.312	
Humacao	$2.000	$6.177		
Isabela	$6.718	$1.678		
Jayuya	$3.308	$4.206		
Juana Díaz	$7.396			
Juncos	$9.474			
Lajas	$7.500			
Lares	$3.800	$2.678		
Las Marías	$3.480	$4.512		
Las Piedras	$5.000		$2.400	
Loíza	$8.145			
Luquillo	$6.252			
Manatí	$8.791			
Marícao	$3.832	$3.189		
Maunabo	$6.000			
Mayagüez	$9.002	$8.470		
Moca	$9.756			
Morovis	$8.123			
Naguabo	$0.750	$6.056		
Naranjito	$9.648			
Orocovis	$9.104			
Patillas	$2.000	$5.420		
Ponce		$16.586		
Quebradillas	$2.350	$3.246		
Rincón	$4.999	$3.317		
Río Grande	$12.852			
Sabana Grande	$1.400	$6.709		
Salinas	$6.916	$3.763		
San Germán	$4.598	$1.456		
San Juan	$38.861	$10.743		$3.314
San Lorenzo		$6.245		
San Sebastián	$5.506	$4.916		
Santa Isabel	$4.950	$2.102		
Toa Alta	$6.590	$3.117		
Toa Baja	$10.728			
Trujillo Alto	$7.981	$3.261		
Utuado	$1.650	$7.846		
Vega Alta	$5.449	$4.390		
Vega Baja	$14.081			
Vieques	$10.336			
Villalba	$3.500	$1.666		
Yabucoa		$7.284		
Yauco	$6.297			

*App: Approved Projects, Des: Projects in Design phase, Bid: Projects in Construction Bid phase, Con: Projects in Construction phase, $ Millions

Follow-up Question. Can you mention what percentage of the funds have been obligated and disbursed to subrecipients?

Answer. As of November 23, 2022, the CRP Program has obligated 83% ($1 billion) of the $1.29 billion budget and 1.3% ($16.7 million) has been disbursed to subrecipients.

Question 2. The Puerto Rico Department of Housing received a $1.9 billion CDBG-DR allocation to improve the electrical power system. In the department's Energy Action Plan, you established that 80% of the Electrical Power Reliability and Resilience Program (known as "ER2") budget will go to distributed energy and microgrids. Can you precise how many renewable energy projects the agency is intending to fund under ER2?

Answer. At this moment, we are unable to provide a specific number of renewable energy projects that may be funded under the ER2 Program since each project may vary by size and scale. However, the Program's objective is to promote the maximum integration of renewable energy across the portfolio. Specifically, microgrids funded under the ER2 Program are required to foster renewable energy integration and community-level resilience.

Question 3. What metrics will your department use to measure the impact of these projects on Puerto Rico's goal of achieving 100% of renewable energy by 2050?

Answer. The U.S. Department of Energy (DOE) and the National Labs (National Renewable Energy Laboratory (NREL) and Sandia National Laboratories) are key stakeholders in the ER2 Program. They have been embedded in the development and selection process of the strategic projects for the Program, which ensures alignment with the PR100 Study and its path to Puerto Rico's clean energy future. Additionally, the PRDOH is part of the Steering Committee for the PR100 Study. We will continue to work with DOE and the National Labs to establish appropriate metrics and accompanying data sources to measure project impact.

Question 4. How has HUD's revision of the Energy Action Plan progressed since January 2022?

Answer. On January 24, 2022, PRDOH submitted the Action Plan for HUD review and approval of two programs: 1) The Energy Grid Rehabilitation and Reconstruction (ER1) Cost Share program, and 2) the Electrical Power Reliability and Resilience (ER2) program. On March 25, 2022, HUD partially approved the Energy Action Plan, only for the ER2 Program. For ER1 Program approval, HUD required PRDOH to "assess how the use of the CDBG-DR funds and its planning decisions will impact vulnerable populations, protected classes under fair housing and civil rights laws, and underserved communities that were economically distressed prior to the disaster." PRDOH worked with HUD to determine how the required analysis could be applied to the context of energy-grid-level repairs under the ER1 program and began stakeholder meetings with HUD and participants of the cost-share program to begin the required analysis.

On October 7, 2022, PRDOH submitted a working draft of Appendix H.1 of the CDBG-DR Electrical Power System Improvements Action Plan for HUD's courtesy review. The purpose of the Appendix H.1 was to provide detailed analysis, budgets, maps and methodology regarding how the ER1 program will consider vulnerable populations, as requested by HUD in its partial approval letter dated March 25, 2022. The approach considered guidance received from HUD in collaborative work sessions with HUD and LUMA Energy.

On October 26, 2022, PRDOH received feedback from HUD stating that the appendix achieved what was required for ER1 Program Approval. PRDOH included the feedback that was provided by the HUD Office of Fair Housing and Equal Opportunity (FHEO) and prepared it for web posting as part of the first substantial amendment to the Electrical System Enhancements Action Plan (APA1) for a 30-day public comment period as required by HUD. The APA1 was published on November 15, 2022 and is currently under the 30-day public comment period that ends on December 16, 2022. PRDOH will submit to HUD the revised APA1 once the public comment period ends and comments are duly considered. HUD will then have a 60-day review period for approval.

Question 5. There has been a dramatic surge in housing prices in Puerto Rico. The sale of homes saw an increase of 30.2% in 2021, the highest since 2011 according to the Puerto Rico Office of the Commissioner of Financial Institutions. The increase results in the highest housing prices in more than a decade. Many experts attribute this increase in mortgage prices and rents to an increase of wealthy investors lured in by Puerto Rico's generous local tax exemptions, the shortage of affordable housing, and the rising of an unrestrained short-term rental industry. How does your government intend to ensure the residents of Puerto Rico can stay in the place they've always called home?

Answer. PRDOH has implemented programs and initiatives to make housing affordable to the citizens of Puerto Rico. A Program that aids to expand on affordable rentals is CDBG-DR Gap to Low Income Housing Tax Credit Program (LIHTC). A total of 851 affordable rental units will be made available across the island by the end of 2023, and an additional 2,000 units are expected to be made available through this Program. Another program that aids homebuyers to acquire a home and stay in Puerto Rico, especially in these times of high-interest rates, is the Homebuyer Assistance Program (HBA). Eligible homebuyers can obtain an award of up to $60,000 for household members that are Critical Recovery Workforce, toward a down payment and closing costs of a new home purchase. More than 4,300 households have benefited from the HBA program thus far.

Seeing the big demand on housing and its related increases in costs, PRDOH is also in the design and initial implementation steps of two (2) distinct, yet related, initiatives to ensure the residents of Puerto Rico can stay in the place they've always called home. The first initiative is the Alternate Reasonable Sale Price Approach for New Construction Single-Family Housing Units. This initiative aims to solve the problem of current construction costs versus appraised value at the end of construction for independent home builders. PRDOH will establish reasonable cost for purchase prior to construction and guarantee the purchase price to the home builder if the unit is selected by a CDBG-DR or CDBG-MIT Applicant with a relocation voucher. The second, more aggressive initiative is, the Single-Family Housing Community Developments Initiative. Through this initiative the PRDOH is planning to purchase 1,000+ single-family homes distributed across the island. PRDOH will make these units available for purchase or relocation assistance at affordable prices to impacted households.

Questions Submitted by Representative Westerman

Question 1. How much of the CDBG funds have you been able to distribute for Hurricane Maria recovery? What have been your challenges in distributing funds?

Answer. As of November 30, 2022, PRDOH has disbursed $1.3 billion not only to rebuild damaged homes, help small business or repave damaged roads, but to rebuild families and communities and create a long-term investment in the Island's capital, strengthen the economy and set the foundations to modernize and improve infrastructure for decades to come. There are $5.8 billion obligated funds for these efforts and $3.2 billion in process to be obligated.

Regarding challenges in disbursing these funds, the CDBG-DR Second Grant Agreement significantly altered the dynamic of PRDOH's progress by including detailed conditions that needed to be met prior to PRDOH gaining access to the full allocation of funds. PRDOH had designed the program budgets, launch schedules, procurements, contract executions, and program performance and implementation with access to the full $8.2 billion allocation in mind. These roadblocks included in the Second Grant Agreement, which imposed a tranche funding mechanism that required several levels of approval (by Financial Oversight and Management Board (FOMB) and the Federal Fiscal Monitor) and a 12-month process to request additional funds, slowed the process of disbursing funds for impactful programs such as the Homebuyer Assistance (HBA) Program and the CDBG-DR Gap to Low Income Housing Tax Credits Program (LIHTC), as well as affected program delivery, and increased administrative burden and expenditures.

After grant restrictions were lifted in May 2021, and PRDOH was able to receive access to most of the funding budgeted in the CDBG-DR Action Plan, the disbursement of funds accelerated and allowed PRDOH to directly serve the people of Puerto Rico through the implementation of these disaster recovery programs. HUD has even reclassified Puerto Rico's expenditure rate from "slow spender" prior to the restriction removal to "on pace" as of its January 2022 expenditure report.

However, additional external barriers and challenges in the procurement processes, limited housing market, continued disaster events, and more, have delayed the timely disbursement of funds. The LIHTC Program, which focuses on promoting the construction or rehabilitation of homes for families and elderly people, was behind schedule due to negotiations with lenders, and the need for additional resources to perform technical feasibility studies and cost evaluation of all construction hard costs, and to perform other related duties for the program. The HBA Program applicants encountered many challenges when selecting a home, specifically with the high housing prices due to the current market conditions and the limited stock of properties available and eligible under the CDBG-DR requirements. The continued disasters events such as 2019–2020 Earthquakes, and Tropical Storm Isaias, have produced additional difficulties which PRDOH has been committed to resolve in benefit the people of Puerto Rico.

On March 21, 2022, in consideration of these challenges, PRDOH submitted to HUD a Grant Expenditure Deadline Extension Request for grants B-l7-DM-72-0001 and B-18-DP-72-0001. PRDOH provided HUD with data on how the constraints of the labor market, including contractors, developers, services, and materials, among other external issues, have been detrimental to the CDBG-DR program timelines. PRDOH anticipated that, without an extension, it was going to be difficult to engage more contractors and subrecipients in the recovery efforts. On April 19, 2022, HUD denied the extension requested stating that an extension, 4 years prior to the expenditure deadline, was too premature.

On November 30, 2022, PRDOH submitted, on behalf of Municipalities, Subrecipients, and other stakeholders a 2nd Request for Extension of CDBG-DR Grant Expenditure Deadline (B-l7-DM-72-0001, B-18-DP-72-0001, and B-19-DP-72-0001). The letter, among other things, explained that the current Grant Expenditure deadline of September 20, 2026, is causing a chilling effect in potential contractors who decide not to offer in procurements in fear that the delivery of extremely complex construction projects may extend beyond the expenditure deadline, causing them to be unable to recover incurred costs and expenses.

Question 2. Thinking about the work of the Puerto Rico Department of Housing after Hurricane Maria and then more recently after Fiona, what does your department need to improve, in areas including, but not limited to: distribution of funds, technical support, navigators that can help claimants, review of claims to prevent waste, fraud, and abuse? What plan is in place for COR3 to review their systems and work toward improvement?

Answer. PRDOH has implemented multiple initiatives to expedite the disbursement of funds. PRDOH intentionally continues working on minimizing the time frame for invoice processing for Programs and Subrecipients to continue executing Disaster Recovery activities steadily. PRDOH has also provided financial trainings and technical assistance to Subrecipients which have proven to be efficient to the overall disbursement process.

Project underwriting and selection processes have been improved to expedite program implementation, which will in turn increase the distribution of funds. Program design has been aligned with input from subrecipients and stakeholders to ensure Programs' success and fulfill communities and participant's unmet recovery needs. We have implemented policies and procedures to constantly evaluate program design, considering all available options and assess effectiveness to recalibrate the program approach and priorities as needed.

PRDOH recognizes that there are still opportunity areas and is constantly revising its policies and procedures accordingly. Lessons learned from the experience gathered through these years of disaster recovery efforts show that program success is partially dependent on the proactive collaboration between the federal awarding agency and the grantee. The extent of the grants PRDOH manages to recover from unprecedented disasters such as Irma and Maria presents complexities that require dedicated support from the awarding agency that provides oversight, yet flexibility to implement recovery initiatives in an accelerated manner while alleviating the inherent complexity of a program of this nature. PRDOH continues to foster its relationship with HUD to reduce administrative barriers and to obtain HUD's responsive, consequential, and efficient guidance.

Question 3. What was the pace of recovery efforts of the Department of Housing, after Hurricane Fiona and how that compared to the response after previous disasters? What did you see that was better than what has happened in the past?

Answer. PRDOH has yet to receive an allocation to address the damages caused by Hurricane Fiona. Nevertheless, we are confident that the experiences and lessons learned in the administration of CDBG-DR funds in Puerto Rico by PRDOH and HUD will carry forward to current and future disaster recovery allocations allowing for a more streamlined process to expedite disaster recovery assistance.

Questions Submitted by Representative González-Colón

Question 1. Secretary Rodríguez, in your written statement you discussed the need to streamline processes and simplify bureaucracy. You brought the example of the low- and moderate-income (LMI) requirement. As you explain, HUD is currently requiring the Puerto Rico Department of Housing to establish—by budget line item and to the smallest area possible—how each individual project under your agency's energy programs will benefit specific low- and moderate-income (LMI) populations. You argue that this is a redundant administrative process given the Island's overall high-poverty makeup.

Question 2. Has the Puerto Rico Department of Housing requested HUD a waiver or that electrical projects that benefit the electrical system be recognized as meeting the low- and moderate-income requirement? If so, what has been the agency's response?

Answer. PRDOH has proposed HUD to allow an island-wide benefit for the purpose of the LMI national objective while advancing the recovery, improvement, and enhancement of the Puerto Rico Energy Grid. HUD has previously granted this area-wide benefit approach for the State of Maine, to allow the state to use its entire grant to assist private utilities with uninsured service restoration.[1] In the context of a 2006 allocation for the State of Mississippi but referring to the previously mentioned situation with the State of Maine, at 71 FR 62372 HUD stated that "Logically, a utility grid or service area cannot be restored for one income group alone, and this type of disaster affects everyone in an area, regardless of income. There [is] no practical methodology in this example for allocating costs among income groups."

The Adjusted LMI Data for Puerto Rico results in 77% of the local population being considered LMI, and 93% of the overall population residing in LMI census tracts, resulting in a high likelihood that projects that improve the Puerto Rico Energy Grid, which is mostly interconnected across the whole island, will meet the LMI Area Benefit (LMA) national objective. An island-wide benefit for purposes of

[1] Federal Register Notice, Vol. 71, No. 205 (October 24, 2006), 71 FR 62372, 62373.

LMI National Objective would greatly reduce the time spent documenting projects to the smallest extent feasible thereby speeding up our ability to fund energy projects to be carried out by public and private utilities in Puerto Rico. Requirements that PRDOH demonstrate how each individual project will benefit LMI communities to the smallest level would only delay the rehabilitation, improvement, and enhancement of the already fragile and at-risk electrical grid and serve no statutory purpose since almost the entirety of Puerto Rico is LMI and the grid serves the Island as a whole.

PRDOH reiterated its request during a technical assistance (TA) session held on October 28, 2021. However, HUD directed PRDOH to make every effort to go the smallest level practicable for area benefit for LMI. HUD also expressed that PRDOH would have to properly justify on a case-by-case basis a request for Puerto Rico to be considered as LMI island-wide. HUD has continued to direct PRDOH to the smallest-unit geography approach, as demonstrated by their letter of partial approval of the Energy Action Plan dated March 25, 2022, where they state that for the Energy Grid Rehabilitation and Reconstruction (ER1) Cost-Share Program, "PRDOH must indicate whether its proposed programs and projects under this activity will provide electrical power system improvements to communities with concentrations of vulnerable populations, including low-income rural areas, racially and ethnically concentrated areas as well as concentrated areas of poverty."

Question 3. Recent press reports have indicated concern about deadlines for use of CDBG-DR funds allocated during the aftermath of Hurricane Maria. It is my understanding that, by law, these funds are to be available until expended.

Question 4. Could you please clarify if this is a deadline set by HUD through cooperative agreements for the distinct CDBG-PR programs currently available for Island Residents? How can we help make sure you retain the funds until they are fully spent?

Answer. The period of performance for each allocation is established by HUD first in the applicable Federal Register notices, and then in each grant agreement. For the CDBG-DR grants, the period of performance began on September 20, 2018, and ends on September 20, 2026. All funds must be expended before the period of performance end date as established by HUD in the grant agreements. See below a table with the current CDBG-DR and CDBG-MIT allocations being managed by PRDOH and their corresponding periods of performance:

FEDERAL REGISTER (FR)	ALLOCATION	GRANT NUMBER	PERIOD OF PERFORMANCE
83 FR 5844	$1.5B CDBG-DR First Allocation	B-I7-DM-72-0001	09/20/2018 – 09/20/2026
83 FR 40314	$8.2B CDBG-DR Second Allocation	B-18-DP-72-0001	09/20/2018 – 09/20/2026
85 FR 4681	$277M CDBG-DR Infra Unmet Needs	B-19-DP-72-0001	07/7/2021 – 07/7/2027
85 FR 4676	$8.2B CDBG-MIT	B-18-DP-72-0002	05/12/2021 – 05/12/2033
86 FR 32681	$1.9B CDBG-DR Energy	B-18-DE-72-0001	08/5/2022 – 08/5/2028
86 FR 569	$36.4M CDBG-DR Earthquakes	B-19-DF-72-0001	01/5/2022 – 01/5/2028

Considering the delays experienced during the first stages of the grants' life cycles, which were detrimental to most of the CDBG-DR program timelines, on March 21, 2022, PRDOH submitted a grant expenditure extension request to HUD. PRDOH explained that, without an extension, funds not expended by the deadline would be subject to recapture or return to the Federal Government, projects could remain unfinished, and recovery needs unmet. A more realistic expenditure projection is necessary to facilitate and help engage more contractors, subrecipients, and the public for the recovery efforts to be implemented effectively. This request was denied by HUD on April 19, 2022.

On November 30, 2022, PRDOH renewed its grant expenditure extension request to HUD. PRDOH relayed the concerns of the Puerto Rico Mayors Federation and the Puerto Rico Mayors Association, in representation of the 78 Municipalities of Puerto Rico, about the numerous procurements for construction services that had no bid process or were without competition due to lack of offerors, as well as difficulty in hiring due to lack of professional services and skilled labor. The Puerto Rico Mayors also expressed concerns regarding the grant expenditure deadline which, taking into consideration the complexity of projects, raises their risk profile

due to potential disallowed costs if the projects are not completed within the performance period.

An expenditure deadline extension is not extraordinary, as they have been granted in the past to other grantees like Texas, New York State, and New York City, allowing them to exceed their original expenditure deadlines that have aged as long as 14 years.[2] Additionally, the billions of dollars for Hurricane Katrina recovery were unrestrained, as ". . . the Appropriations Act for these grants directs that these funds be available until expended . . .".[3] An expenditure deadline extension is necessary to ensure that funds are adequately and completely spent in order to deliver an impactful and efficient recovery for Puerto Rico.

The CHAIRMAN. Thank you, sir. Let me now turn to Dr. Shay Bahramirad.

Could you say it correctly for me so that I don't butcher it?

Dr. BAHRAMIRAD. Of course. Shay Bahramirad.

The CHAIRMAN. Thank you very much. I apologize. Vice President of Engineering, Asset Management, and Capital Projects at LUMA Energy. You are recognized for 5 minutes, Doctor.

STATEMENT OF DR. SHAY BAHRAMIRAD, VICE PRESIDENT OF ENGINEERING, ASSET MANAGEMENT, AND CAPITAL PROJECTS, LUMA ENERGY

Dr. BAHRAMIRAD. Thank you, sir. Good afternoon. My name is Dr. Shay Bahramirad, and I am Senior Vice President of Engineering, Asset Management, and Capital Program at LUMA. With me today is also Mr. Mario Hurtado, LUMA's Chief Regulatory Officer, who will be available to answer questions.

We would like to thank Chairman Grijalva, Ranking Member Westerman, and members of the Committee for the invitation to appear to discuss the progress we have made to build a better energy future for Puerto Rico, as well as the ongoing challenges the 3,958 men and women of LUMA, including 1,696 members of the IBEW union, continue to face due to the years and decades of operational and maintenance neglect under the previous operator.

Before I begin, I would like to acknowledge three additional members of the LUMA team: our Director of Strategic Initiatives, Ms. Kathy Roure; Regional Manager of Lines, Ms. Maurice Torres Rivera; and Regional Manager of Lines, Mr. Andy Andreu. Kathy, Maurice, and Andy are proud members of LUMA who worked for the former operator of the Puerto Rico Electric Power Authority. These LUMA workers are examples of the thousands of amazing utility workers, including many who once worked for PREPA, who are now helping lead the energy transformation in Puerto Rico and confronting the challenges we face head on.

One of the most significant challenges was Hurricane Fiona, a Category 1 hurricane that included 100-mile-per-hour winds, 30 inches of rain, and widespread flooding which impacted critical parts of the electric grid and generation facilities across Puerto Rico. Because of the tireless work of LUMA workers, we were able to restore power to over 90 percent of our customers in 12 days, a historic rate of restoration that has never been seen before in Puerto Rico.

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[2] These are 14 years ($3.1B, B-08-DI-48-0001), 8 years ($4.4B, B-13-DS-36-0001), and 8 years ($4.2B, B-13-MS-36-0001), respectively.

[3] Federal Register Vol. 71, No. 29 (February 13, 2006), 71 FR 7671.

As significant as the response to Hurricane Fiona was, we continue to confront a brutal reality that cannot be denied. Specifically, the electric system LUMA inherited 17 months ago was one of the worst electric systems, when measured in industry operational standards. This is a fact that cannot be ignored.

As the samples of the photographic evidence we provided show, the energy system was plagued by numerous issues from, as I stated earlier, years and decades of neglect. While LUMA cannot erase decades of operational and maintenance failure in 17 months, our LUMA teams continue to work hard every day to confront and overcome these legacy challenges. To date, our LUMA teams have made undeniable and significant progress, whether it is replacing thousands of poles, repairing substations, addressing vegetation issues, or improving customer service.

We are also proud of our efforts to empower clean energy revolution in Puerto Rico, having connected more solar customers in 17 months than were connected in 10 years under PREPA.

With respect to the more fundamental transformation of the electric grid, LUMA has advanced federally funded FEMA project at a historic pace. Specifically, in 17 months we have initiated 251 projects, with FEMA representing over $6 billion in federally funded projects, with 23 already under construction compared to zero FEMA projects under the past operator.

It is important for the Committee to also know that these FEMA projects will be guided by clear planning, sound engineering and science, and strict fiscal oversight.

With the continued support of FEMA and the Department of Energy, as well as COR3, LUMA will build on the progress we have made today and will continue moving forward to build a more reliable and resilient energy system.

While all of us can be proud of the significant progress that has been made, we cannot discount the real day-to-day challenges that exist due to the fragility of the electric system, challenges such as outages and ongoing generation-related outages. That is something that must be addressed, and we will continue to work with our Puerto Rican and Federal agency partners to confront them.

In closing, I hope we all can agree that it is more important than ever that we build on the progress that has been made, focusing on the future and not allow ourselves to be prisoners to a failed energy past.

Let me be very clear. LUMA remains committed to Puerto Rico, to our 1.5 million customers, and to building an energy future that will make our customers, our local and Federal partners, and the members of this community proud. All of us at LUMA, including the thousands of IBEW union members who are on the front line of this effort, will not waver from the goal of building a more reliable, more resilient, and cleaner energy future for the people of Puerto Rico.

Thank you, and I look forward to your questions.

[The prepared statement of Dr. Bahramirad follows:]

PREPARED STATEMENT OF DR. SHAY BAHRAMIRAD, SENIOR VICE PRESIDENT ENGINEERING, ASSET MANAGEMENT, CAPITAL PROGRAMS AT LUMA

I. INTRODUCTION

Chairman Grijalva, Ranking Member Westerman, and members of the Committee:

Thank you for the invitation to appear this morning to discuss the most urgent matter facing the people of Puerto Rico: post-disaster reconstruction and development of Puerto Rico's power grid.

All of us at LUMA, the over 3,000 men and women who work hard every day, and who have dedicated countless hours to restoring power to our customers following the most recent hurricane to make landfall in Puerto Rico: Hurricane Fiona are determined to overcome the profound challenges we inherited from the prior operator and build a more reliable, more resilient, and cleaner energy future for the 3.1 million people we are fortunate to serve.

Throughout this testimony, we will provide the members of this committee with more information on LUMA's preparation and response to Hurricane Fiona, the status of FEMA projects and permanent works, and our ongoing collaboration with the Department of Energy ("DOE") which is accelerating project construction, grid modernization and the transition to sustainable, renewable energy sources.

Furthermore, we will share with you some initiatives we have undertaken to provide further support to our customers, such as LUMA's support for and participation in the Power Stabilization Task Force.

In addition, I will discuss key facts and information regarding the electric grid's historically poor condition prior to our commencement of operations on the island; LUMA's commitment to rebuilding the electric system to higher standards for greater resilience; recommendations for future reconstruction efforts; and our pledge to develop the Puerto Rican workforce who will rebuild the island's energy grid.

Moreover, we will focus on the challenges that have emerged following decades of mismanagement by the Puerto Rico Electric Power Authority, which filed for bankruptcy relief in July 2017. The dispute over $9 billion of outstanding debt, which is still ongoing after 5 years, has severely limited the ability to fully transform the electric system.

Lastly, all of us at LUMA fully embrace the profound responsibility we have to respond to emergency situations and build a more resilient electric grid. With the support of FEMA, the Puerto Rican government, Congress, and other partners, we will build the energy future that the people of Puerto Rico deserve.

II. EMERGENCY PREPAREDNESS AND THE RESPONSE TO HURRICANE FIONA

LUMA's emergency response to Hurricane Fiona follows a 15-month effort to overcome years—if not decades—of profound operational neglect and lack of maintenance by the previous operator. Even before starting operations, LUMA focused intensely on preparing for an event like Hurricane Fiona, ensuring that personnel received over 10,000 hours in emergency response training on FEMA's National Incident Management System and fully outfitting field crews with proper safety equipment and roadworthy vehicles—conditions that were absent under the previous operator.

On and around September 14, 2022, LUMA activated its emergency operations center and began formal preparations for what became a powerful and devastating Category 1 hurricane, that included 100 mph winds, over 30 inches of rain, severe flooding, and widespread damage to local infrastructure and electric infrastructure. LUMA's advance work and close coordination with Puerto Rico and federal emergency response agencies, as well as local communities, allowed a restoration of electric service to 90% of customers within 12 days of Hurricane Fiona making landfall—a restoration timeline never seen before in Puerto Rico for a hurricane, and on par with restoration times for similar events in other jurisdictions in the continental US.

These preparations included the following:

- Activating the LUMA Emergency Operations Center and deploying company representatives to the central government's Emergency Operations Center, as indicated in LUMA's Emergency Response Plan (ERP);
- Mobilizing 1,300 field workers, including lineworkers and substation technicians, who are trained and available to respond to serious emergencies;
- Maintaining our 1,800 fleet units fueled and ready to deploy for emergency response;

- Keeping the $130 million inventory of transmission and distribution material available and on-hand to respond to emergency events (more than five times the inventory that was on the island immediately prior to Hurricane Maria);
- Deferring all planned reliability work in order to prioritize and dedicate all available resources to storm response;
- Coordinating with the Puerto Rico Emergency Management Bureau (PREMB), the Puerto Rico Electric Power Authority (PREPA), FEMA, the U.S. Department of Energy Support Function #12 Annex (ESF #12 Annex) and other government agencies to coordinate a unified response;
- Conducting proactive outreach to essential service providers like hospitals;
- Coordinating restoration work to prioritize Community Lifelines, including health, safety, transportation and communications facilities; and
- Pre-deploying equipment and resources in Puerto Rico to respond to possible impacts from the storm and maintaining contact with mutual aid providers so that in the event of the need for additional response resources, the Caribbean Electric Utility Services Corporation (CARILEC), the Edison Electric Institute (EEI) and the American Public Power Association (APPA) can provide assistance with restoration efforts.

The grid in Puerto Rico, already fragile, was severely damaged by Hurricane Fiona, especially in the Ponce, Mayagüez and some of the central highland regions that suffered severe damage to roads and critical infrastructure. As you know, the electric system consists of 1) energy generation, which is the responsibility of third parties, including PREPA, and 2) the transmission and distribution of energy, which is the responsibility of LUMA.

On the transmission and distribution system:

- 30% of transmission line segments sustained damage
- 54% of distribution feeders sustained damage
- Seven substations experienced severe flooding (submerged in water) or were rendered inaccessible
- The result was an island-wide blackout leading to more than 1.4 million customers experiencing outages

LUMA deployed more than 2,500 utility workers and more than 2,500 vehicles, including seven helicopters, to restore the grid. These helicopters performed over 239 total flight hours, flying over 12,000 miles of coverage area.

- These workers included LUMA's normal workforce, seven local contractor companies, and those LUMA was able to leverage from Quanta Services, one of its parent companies, which deployed 221 employees, 56 bucket trucks, and 22 diggers.
- These workers were directed from six regional operations centers, which were overseen by a centralized LUMA Emergency Operations Center, which coordinated with the System Operations Control Center in San Juan and a mobile emergency operations center in Guayanilla on the southern coast.

As part of a coordinated communications strategy, LUMA kept the public informed throughout the emergency by providing the following:

- 435 total updates, including press releases, official statements, and interviews on television and the radio, on hurricane response and disaster recovery efforts
- 1,759 announcements on radio
- 1,135 social media updates
- 34 videos posted online showing extent of damages and ongoing recovery efforts
- All of this work led to restoring 90% of customers within 12 days of hurricane landfall

In addition, as part of our commitment to transparency, on October 21, 2022, LUMA publicly provided a document titled *Hurricane Fiona Response and Restoration Event Summary*, with responsive statistical information regarding the response to the emergency related to the passing of Hurricane Fiona through Puerto Rico. We believe that this summary represents the most comprehensive collection of restoration information ever provided to the public so soon following a hurricane in Puerto Rico.

III. STATUS OF FEMA FUNDED RECONSTRUCTION PROJECTS

When LUMA assumed operations of Puerto Rico's transmission and distribution system, one of our highest priorities was to work together with FEMA, the Puerto Rico Energy Bureau, the Puerto Rico Public-Private Partnerships Authority, the Central Office for Recovery, Reconstruction and Resiliency (COR3), and the Puerto Rico Electric Power Authority (PREPA) to develop and advance a series of federally funded infrastructure improvement projects to transform and modernize Puerto Rico's energy system.

During the past 17 months, LUMA has been able to advance FEMA projects in Puerto Rico at a historic pace—a stark comparison to the previous five years under the prior operator.

A. FEMA Reconstruction Projects

As of November 1, 2022, LUMA has initiated 251 projects with FEMA, representing more than $6.2 billion worth of federally funded projects. In contrast, only 37 project submissions had even been made (and not one project had a preliminary design) before LUMA assumed operations on June 1, 2021.

- **Obligated FEMA Projects.** LUMA has received, to date, FEMA approval for 38 critical infrastructure projects [1] including:
  - — Twenty-eight local distribution projects that will address critical infrastructure, such as streetlights and pole replacement, targeting the municipalities of San Juan, Arecibo, Mayaguez, Caguas, Bayamón and Carolina to reduce outages and increase the reliability of the electric system.
  - — Four regional transmission reconstruction projects that will help improve the high-voltage critical energy infrastructure that delivers energy across the island.
  - — Five substation modernization projects that will address the pivotal role played by substations in helping deliver energy to communities across Puerto Rico beginning in the municipalities of San Juan, Vieques, Culebra, Manatí, and Guayanilla.
  - — One critical Emergency Management System (EMS), which is the first phase of transforming the system operations control center with state-of-the-art technology and software to modernize the way Puerto Rico's energy grid is monitored and managed.
- **FEMA Projects Under Construction.** LUMA has started construction on 23 FEMA-funded projects across Puerto Rico including:
  - — Six initial streetlight projects as part of LUMA's $1 billion Community Streetlight Initiative in the municipalities of Guánica, Lajas, Aguada, Maunabo, Luquillo, and Villalba, where in less than three months, LUMA has installed over 15,000 streetlights.
  - — One critical transmission line repair project to improve the grid's resiliency.
  - — Sixteen distribution pole replacement projects to increase the reliability of the electric grid.

In addition to the projects initiated, approved, and under construction, LUMA has also taken the following FEMA-related actions:

- Received approval for $656 million to procure material that requires long lead times for manufacturing and delivery, mainly grid equipment including breakers, transformers, and reclosers.
- Developed four proposals for Hazard Mitigation for non-damaged infrastructure under Section 404 of the Stafford Act which would represent $900 million for grid modernization, including an advanced metering infrastructure, an advanced microgrid project, and mobile microgrids to enable renewable energy and make communities more resilient in the face of system-wide disturbances.
- Working with FEMA to get support for the immediate addressing of Fiona-related damages with permanent work.

Taken in totality, over the coming months and years, FEMA-funded projects that are being directed by LUMA will be not only the largest capital energy program in Puerto Rico's history, but also the largest ever funded by the federal government to repair and rebuild an electric system across any state and/or territory. As a

result, LUMA is excited by the significant progress that has been made to date that will, as more FEMA projects begin construction, provide Puerto Ricans with a stronger, transformed energy grid.

B. Working Closely with FEMA on Emergency Preparedness

In addition to moving forward critical federally funded infrastructure projects, LUMA continues to prioritize emergency preparedness and taking the necessary steps and actions to be able to respond to hurricanes and other emergencies.

Given the historic impact of recent hurricanes and the lasting effects it has had on the people of Puerto Rico, LUMA has made preparing for emergency events a daily and year-round priority.

As part of our emergency preparedness efforts, we have worked closely with FEMA, PREMB, DOE ESF 12, and other partners to establish and adopt industry emergency preparedness standards. Among the actions we have taken include the following:

- **Establish Emergency Response Plan**. In May, LUMA submitted its 2022 Emergency Response Plan (ERP) to the Puerto Rico Energy Bureau as part of its continuous effort to plan, prepare for and respond to the major emergencies and the 2022 hurricane season.
  - — LUMA's 2022 ERP outlines the actions LUMA takes in an emergency event and helps direct the company's response, recovery, and restoration efforts.
  - — More specifically, the ERP addresses how LUMA responds to any emergency, including hurricanes, earthquakes or any other major event that impacts the electric power system.
- **Adopt Industry Best Practices**. The LUMA ERP follows industry best practices for emergency response and follows the National Incident Management System as established by FEMA.
  - — The National Incident Management System framework establishes a standardized Incident Command System (ICS) which is used across industries and is the basis for LUMA's ERP.
- **Emergency Preparedness, Training & Readiness**. LUMA has undertaken extensive efforts to improve preparedness, training, and readiness, including:
  - — Emergency Preparedness:
    - Three emergency preparedness tabletop exercises completed with FEMA and DOE/ESF 12/PREPA/PREMB and other local stakeholders.
    - Procuring and maintaining a fleet of more than 1,800 vehicles available to support emergency response efforts.
    - Installing equipment in the LUMA Emergency Operations Center and purchasing supplies for emergency operations.
  - — Emergency Training:
    - Completing more than 10,000 hours of ICS training.
    - Completing an Emergency Operations Center mock drill based on Category 4 Hurricane making landfall on May 12, 2022, with 75 attendees.
  - — Emergency Readiness:
    - To date, LUMA maintains a total on-hand inventory of T&D equipment and materials available for daily operations and emergencies amounting to $130 million including:
      - — 19,000 poles
      - — 18 million feet of cables
      - — 2,545 transformers
      - — 53,000 LED luminaries
      - — 135,000 insulators
      - — 7,800 switches/breakers
      - — 30,100 crossarms

- As part of our more than 3,000 employees, LUMA has 1,300 transmission and distribution workers across Puerto Rico who are trained and available to respond to serious emergencies, in addition to resources from contractors and mutual aid.
- We also have established mutual aid agreements with the CARILEC, EEI and the APPA for response to critical events in cases where additional resources for restoration and response become necessary.
- We have also been working with US DOE on development of a Storm Damage Prediction Tool for estimating material needs. The Storm Damage Prediction Tool helps forecast storm damage to transmission and distribution infrastructure.

C. Collaboration with DOE, FEMA, and COR3 in Accelerating Reconstruction

As part of our commitment to immediately addressing the lack of sufficient, dependable power generation in Puerto Rico, LUMA is participating and actively supporting the Power Stabilization Task Force led by FEMA. Together with federal and Puerto Rico agencies, we have been working to improve performance on a series of critical areas.

- *Global/Flexible Match*
  - — The US DOE is collaborating with FEMA and HUD, to issue a letter to COR3 that would formally approve the use of funds to provide projects that would serve as cost share in terms of a global and flexible match
  - — Ongoing collaboration efforts are being discussed to evaluate how several individual projects can serve a larger goal
- *Working Capital Advance*
  - — We're working with COR3 to be able to leverage additional FEMA funds in order to purchase equipment ahead of time and mitigate any potential supply chain problems that may arise
  - — LUMA is also working with FEMA and COR3 to increase the proportion of project cost that could be provided in advance from the current 25% to 50%
- *Environmental and Historical Preservation (EHP) Review Process Efficiencies*
  - — We are working with FEMA and our partners in the Puerto Rico government, to align on ways to streamline the EHP process, including better aligning of the EHP reviews with existing processes at the federal and territorial level and supporting reciprocity between different governmental agencies
  - — Additionally, we are collaborating with FEMA on conducting the EHP review on a programmatic level where applicable, rather than on individual projects
- *Hazard Mitigation Strategy*
  - — We are currently undertaking efforts with FEMA and stakeholders to recognize the importance of "vegetation reset" as a hazard mitigation strategy, which can have a transformational impact on the reliability and resiliency of the grid, as well as limit future damages on grid equipment
  - — We are also looking more broadly for a holistic, island-wide perspective on leveraging Section 406 hazard mitigation funds to maximum effect
- *Community Development Block Grant-Disaster Recovery (CDBG-DR) Electric Power Reliability and Resilience Program (ER2)*
  - — We are working with stakeholders as well as the Puerto Rico Department of Housing, COR3, DOE, and HUD, to finalize program guidelines to enable the most impactful deployment of distributed technologies, including microgrids
  - — We are supporting advanced microgrid projects to serve areas such as the Centro Medico, which represents critical customers for San Juan and the entire island

IV. HISTORICAL PERSPECTIVE OF PUERTO RICO'S ELECTRIC GRID

To understand the dynamics surrounding our mission to transform Puerto Rico's transmission and distribution system one must first start to analyze the electric grid's condition prior to LUMA beginning operations on the island. As has been documented publicly, Puerto Rico's electrical grid suffered from years and decades of neglect and mismanagement under the past utility operator. These profound operational failures severely impact all areas of the energy system and represent an ongoing challenge that LUMA remains determined to confront and overcome.

With respect to the state of infrastructure that LUMA inherited 17 months ago, the following are just some examples of the conditions that were faced:

- **Poor Substations:** 30% of transmission and distribution substations, key nodes in the electric grid, were estimated to require safety and hazard mitigation to reach remediation.
- **Poor T&D Assets:** An estimated 20% of transmission and distribution line assets, including poles and wires, required safety and hazard mitigation to reach remediation.
- **Public Safety Hazards:** Approximately 50,000 streetlights, more than 10% of all of the streetlights on the island, were estimated to be physical and public safety hazards.
- **Lack of Sound Engineering & Planning:** Processes for engineering functions such as distribution planning, transmission planning, protection and coordination were lacking and not following industry standards. For example, a proper simulation model for the Island's transmission system did not exist to properly design the system.
- **Antiquated EMS:** The Energy Management System (EMS), a primary technology to facilitate the stable grid operations, had been purchased in the mid-1990s, poorly maintained and was no longer supported by the vendor. We found that PREPA had procured spare parts from eBay.
- **Lack of Safety Requirements:** The entire ground and air fleet used for utility operations did not meet U.S. Department of Transportation safety requirements.
- **Lack of Critical Maintenance:** Recommended baseline maintenance of transmission and substation assets were not completed, and manufacturers' guidelines were not followed.
- **Poor Vegetation Management:** Vegetation management was often delayed by PREPA, and vegetation was present and evident when visiting substations, as well as lines and feeders.
- **Lasting Impact of Hurricane Maria:** Hurricane Maria accelerated this deterioration and highlighted the flaws in legacy design, operation, and maintenance activities. Some customers didn't have power for more than a year after Hurricane Maria, which is unacceptable.

These facts, while significant in scope and impact, do not come close to fully capturing the truly weakened and deteriorated state of the electric grid. As LUMA has documented through photographic evidence that has been provided to the Committee, the T&D system inherited by LUMA was weakened by years, if not decades, of poor design, maintenance, lack of proper inspections, and other profound failures that continue to impact the stability and reliability of the energy system.

As a measure of the fragile and weakened nature of the energy grid, Puerto Rico has experienced a number of large-scale outage events since 2016—five of which preceded a similar large outage event on April 6 of 2022:

- September 21, 2016—Due to fire at Aguirre Power Generating Plant
- April 12, 2018—Due to vegetation
- April 18, 2018—Due to transmission repairs
- January 7, 2020—Due to earthquake on the island
- July 28, 2020—Due to vegetation / equipment failure

Each of these events affected more than 500,000 customers and restoration efforts lasted for longer than three days. This history of such events underscores how deeply fragile and severely vulnerable Puerto Rico's electric grid and critical infrastructure has been because of the failures of the past operator and reinforces the need for LUMA to remain focused on the fundamental improvements needed to modernize and transform the energy system.

V. LUMA'S COMMITMENT TO COMPLETE REPAIRS TO UPGRADED STANDARDS AND IN A PERMANENT MANNER

Given the need to address these past infrastructure failures and overall fragility of the energy grid, LUMA takes very seriously the need to improve the reliability and resiliency of Puerto Rico's transmission and distribution system. Accordingly, we have implemented a markedly different approach that is grounded in data, rigorous engineering, sound planning aligned with modern industry standards, and transparency about the progress being conducted and the challenges that are being faced. Given this approach, and in spite of the challenges we have faced, LUMA has made substantial progress across key areas, including:

- **Improving Reliability (Reducing the Number of Outages Experienced):**
  - — The System Average Interruption Frequency Index (SAIFI), or the number of outages that an average customer experiences in a year, has been reduced by 30% (improvement from a PREPA baseline of 10.6 to 7.6).
  - — What this means is that instead of an average customer experiencing 10.6 outages in a year, they're experiencing 7.6.
  - — 15% fewer substation events than in PREPA's last year.
  - — Restored and re-energized two transmission lines that were out since Hurricane Maria, and two additional lines that were out since before Hurricane Maria, representing 43 miles of transmission lines.
  - — Restored and re-energized 5 substations that had been out since Hurricane Maria.
  - — Restored and re-energized 496 pieces of equipment, including in substations and on the transmission and distribution systems.
- **Empowering the Growth of Solar/Clean Energy/Renewables:**
  - — Before LUMA began operations, there was a severe backlog of customers who had applied for inclusion in PREPA's solar net-metering program and were waiting to install rooftop solar.
    - We have successfully reduced this backlog and have now integrated more than 36,000 customers to the program, which is more than the previous ten years under PREPA.
    - In a little over a year, LUMA added more customers to the residential solar program than PREPA ever did over a full decade. Average time for approval of interconnection has dropped to under 30 days.
  - — Completed studies to support the interconnection of more than 1300 MW of renewable utility-scale generation and completed solar hosting capacity analyses.
  - — Completed cutting-edge optimization analysis to identify locations in the system with zero network upgrade cost for affordable and economical renewable energy integration.
  - — We have gone from approximately 450 distributed generation interconnections monthly to approximately 2,200 interconnections per month. Through our accelerated program, LUMA added more residential solar for customers in 15 months than the previous operator did over a whole decade.
  - — Reenergized transmission line that was out of service since Hurricane Maria connecting a 27 MW wind farm to the system.
- **Improving Customer Service:**
  - — 1.5 million customers have been provided support by LUMA, through more than 5 million calls, 400K+ e-mails, 650K+ direct messages on social media
  - — The average wait time of customers on the phone decreased from more than 10 minutes while under PREPA to approximately 5 minutes under LUMA.
  - — The rate of call abandonment declined from more than 50% with PREPA to 18% under LUMA.
  - — 750,000+ downloads of MiLUMA application.

- **Improving Workplace Safety & Trainings:**
  - — Developed procedures to support the operation of interconnected generation resources, the reliable dispatch of power, black start[2] and restoration, as well as numerous other critical operations. These procedures did not exist prior to our arrival as operator of the T&D system.
  - — We have renewed the service fleet with 1,200 new or repaired vehicles, fully compliant with safety and transportation requirements.
  - — Graduated the first class of Puerto Rican electric line workers from LUMA Technical College, with subsequent graduating classes during the last year.
  - — Total recordable injury rate went from 8.63 under PREPA to 2.88 under LUMA.

    Injury severity rate declined from 62.9 under PREPA to 11.64 under LUMA.

VI. LUMA'S INVESTMENT & COMMITMENT TO WORKFORCE DEVELOPMENT THROUGH LUMA TECHNICAL COLLEGE

From the very beginning of this process, LUMA has demonstrated a unique commitment to (i) training and knowledge transfer, as evidenced by LUMA's pledge to build and manage, at its cost and expense, a lineworkers college in Puerto Rico (the "LUMA Technical College").

Founded by Quanta Services and ATCO, LUMA College for Technical Training is modeled after Quanta's educational institution Northwest Lineman College. The Northwest Lineman College (NLC) is an industry-leading educational institution that provides safety and certification training in the power delivery, natural gas, and telecommunications industries. NLC offers complete solutions from entry-level career programs to advanced industry training and has remained committed to doing what's best for the student for more than 25 years.

The LUMA Technical College offers a 13-week Utility Lineworker Program. Through this 13-week pre-apprentice training program, trainees acquire the knowledge, skill and behaviors that prepare them to be a highly valuable entry-level lineworker. Using the Three-Phase Educational Model, LUMA Technical College focuses on education around three domains of learning: Knowledge, Skill and Behavior. Each academic course, skill competency, and behavior expectation is shaped by this model.

VII. LUMA'S COMMITMENT TO ENERGY AFFORDABILITY VS. RISING GENERATION FUEL COSTS AND DETERIORATING DEPENDABILITY OF GENERATION FLEET

It is important to make clear that LUMA has NEVER proposed an increase to the base rate that covers the operation of the T&D system. While there have been increases in electricity rates approved by the PREB over the past year, it is important to understand that these increases have been solely due to increases in generation fuel costs.

LUMA's base rate has not changed, and spending has not increased since June 2021. In general, customers' charges are composed of the following:

1. **Base Rate**—These revenues fund the O&M and non-federally funded capital costs for the T&D System and Generation. Revenues fund LUMA and PREPA's operating and capital costs.
2. **Fuel Charge**—These revenues fund PREPA's fuel purchases. This fuel is purchased for PREPA's generating plants and EcoEléctrica. This is reconciled quarterly. Revenues fund fuel suppliers for fuel delivered to PREPA.
3. **Purchased Power Charge**—These revenues fund payments required under Purchase Power Agreements between PREPA and Independent Power Producers. This is reconciled quarterly. Revenues fund Independent Power Producers for electricity provided to the T&D System.
4. **Subsidies, Contribution in Lieu of Taxes**—These revenues fund subsidy programs and power provided to municipalities in lieu of taxes. This is reconciled annually.

As part of LUMA's responsibilities under the T&D OMA, LUMA submits calculations for any adjustment to customers rates, regardless of what expenses the

[2] Black start refers to restarting the grid after an island-wide blackout. The other procedures referenced above are related to managing energy generation to provide reliable power.

revenues fund. The PREB reviews and approves all rate changes before they are implemented.

As part of the above requirement, LUMA files calculations related to Fuel and Purchased Power on a quarterly basis and calculations related to Subsidies and Contribution in Lieu of Taxes on an annual basis (in June of every year).

Since June 2021, LUMA has not applied for changes to the Base Rate, the only source of revenue for LUMA managed expenses. In other words, LUMA has NEVER proposed a rate increase at any time since taking over operations.

As previously mentioned, the sole driver of electricity rate increases since June 2021 has been related to generation related fuel prices used by PREPA and other generators to produce electricity. While some have suggested otherwise, the fact is that LUMA, as we have stated repeatedly in regulatory filings and in public statements, does not generate energy, is not responsible for rate increases associated with generation, nor have we ever proposed a change to the T&D base rate.

As is well documented, global fuel prices have materially increased since June 2021. West Texas Intermediate (WTI) has increased 76% from $65.17/bbl in May 2021 (before LUMA commenced O&M Services) to $114.84/bbl in June 2022 and Henry Hub (HH) increased 165% from $2.91/MMBtu in May 2021 (before LUMA commenced O&M Services) to $7.70/ MMBtu in June 2022.

Please note procurement of fuel and management of fuel costs are managed by PREPA. All revenues collected from FCA go to pay fuel costs incurred by PREPA—and are not associated with LUMA.

VIII. OUTAGE REDUCTION EFFORTS

All of us at LUMA share our customers' frustration with outages and the reliability of Puerto Rico's fragile electric system, which has suffered from years—if not decades—of mismanagement and neglect.

To address these sincere concerns, LUMA has undertaken a series of additional actions to build on the progress we have made, reduce the impact of outage events, and improve our response when such outages occur. Among the actions include:

- **Increased utility and vegetation crew numbers** by onboarding 201 additional highly trained utility workers to help improve overall outage response and target areas for reliability improvement.
- **Installed 64 new automation devices** all across Puerto Rico. These are innovative devices used to detect outages within milliseconds, shorten outage duration and reduce the number of customers that experience an outage.
- **Cleared hazardous vegetation** from 400 miles of critical lines identified as impacting frequent outages, in addition to the 900 miles cleared of vegetation this year across transmission and distribution powerlines.
- **Completed critical aerial inspections and thermal imaging of 262 miles of key lines** using special thermography equipment used to inspect key equipment.
- **Completed inspections and performed thermal imaging of 341 critical substations.**

In response to Hurricane Fiona and ongoing infrastructure challenges, LUMA will continue to take additional actions and expand on current programs and efforts in order to improve the reliability of the energy grid.

The legal framework for the electric sector in Puerto Rico establishes clear roles for different participants in the electric sector. Generators, including PREPA and independent producers, are responsible for operation and maintenance of the power plants, while LUMA is responsible for the operation of the transmission and distribution system as well as overall system coordination, planning and analysis. To be clear, LUMA's customers are critically dependent on the performance of PREPA's power plants that make up over 70% of the generation fleet to meet expected customer demand.

The challenges posed by the poor state of the generation assets have long impacted—and continue to impact—the reliability of the energy grid. For example:

- As a result of PREPA's poor and declining generation plant reliability, the Puerto Rico electrical system had less than the minimum required reserve margin during 33 percent of the time during the past year.
- Though the minimum industry benchmark target standard for planning is that generation should result in load being shed, or customers losing power, 0.1 days per year, a resource adequacy analysis found that in Puerto Rico, after the damage of Hurricane Fiona, the expectation is that without mitiga-

tion, it could occur on 50 days per year, which is 500 times higher than the planning standard for North American utilities.

- Generation has caused load shed on 37 separate days since LUMA commenced service.

IX. CONCLUSION

Looking forward, it is more important than ever that all of us work together to achieve what the Puerto Rican people deserve given the many hardships they have suffered from poor financial and operational stewardship under the past operator: a better energy future that moves Puerto Rico forward. In the face of ongoing challenges, all of us at LUMA—the more than 3,000 women and men of our workforce—remain more committed than ever to this goal.

By working together, we believe that the energy future that LUMA is building in Puerto Rico will, over the coming months and years, close the chapter on the failures of the past operator and usher in a new era in which the energy grid is not only more reliable and more resilient, but serves the energy needs of Puerto Rico for generations to come.

QUESTIONS SUBMITTED FOR THE RECORD TO DR. SHAY BAHRAMIRAD, SENIOR VICE PRESIDENT, ENGINEERING, ASSET MANAGEMENT, CAPITAL PROGRAMS LUMA ENERGY

Introduction

This letter is in response to your questions for the record dated December 1, 2022 (the "Letter" or "QFRs") in relation to our testimony at the hearing on "Puerto Rico's Post-Disaster Reconstruction & Power Grid Development" held by the Natural Resources Committee on November 17, 2022.

All of us at LUMA, the over 3,000 men and women, were grateful for the invitation to testify before the committee on the profound challenges we inherited as we work hard every day to build a more reliable, resilient, and cleaner energy future for the 1.5 million customers we are fortunate to serve.

Throughout this response letter, we will provide the members of this committee with key facts and information regarding the status of reconstruction projects that have been submitted to FEMA; hurricane preparedness and emergency response planning; as well as key information on the power outages that stem from the fragile state of the system LUMA inherited and is working hard to improve.

Questions Submitted by Representative Grijalva

Question 1. There are ongoing concerns that LUMA may not have enough line workers in the field to efficiently repair and update the grid. In March 2021—Less than 3 months before taking over operation of Puerto Rico's electricity transmission and distribution grid, LUMA CEO Wayne Stensby testified to the Puerto Rico House of Representatives that LUMA would need about 800 line workers to effectively manage the grid. According to workforce documents provided to the committee by LUMA, LUMA employed 541 line workers in September of this year, just before Hurricane Fiona.

Please provide evidence that a shortage of line workers is not the reason for significant improvements in the frequency of outages and declines in the duration of outages.

Answer. After reviewing previous testimonies by Mr. Stensby to the Puerto Rico Legislature, our team was unable to locate the instance in which he testified to needing 800 line workers to effectively manage the grid. According to data provided to the Committee recently, as of September 1, 2022, there were more than 1,300 field workers as part of LUMA's total workforce. LUMA's "field team" includes not only line workers, but also system operators, protection engineers, mechanics, substation technicians, and repair crew dispatch operators. In addition, LUMA has more than 500 workers contracted that focus on vegetation management, an important aspect of improving reliability in Puerto Rico. LUMA is constantly evaluating these and other resources to best fit the needs of the system.

In spite of the significant challenges inherited due to the operational and maintenance failures of the previous operator, our utility team have made progress across the system, including in the area of outages. For example, the System Average Interruption Frequency Index (SAIFI), or the number of outages that an average

customer experiences in a year, has been reduced by 30% (improvement from a PREPA baseline of 10.6 to 7.6). In other words, instead of an average customer experiencing 10.6 outages in a year, they're experiencing 7.6. Additionally, we recorded 15% fewer substation events when compared to those occurred during PREPA's last year operating the T&D system.

We have also restored and re-energized two transmission lines that were out since Hurricane Maria, and two additional lines that were out since before Hurricane Maria, representing 43 miles of transmission lines. Furthermore, we restored and re-energized 5 substations that had been out since Hurricane Maria as well as restoring and re-energizing 496 pieces of equipment, including in substations and on the transmission and distribution systems.

All of this progress is possible thanks to our field team members, who are well prepared, trained, and have the resources needed to complete the job at hand. LUMA has adequately staffed and prepared its field team workforce, which has resulted in a decrease in the frequency of outages and completion of critical repair work.

As part of LUMA's commitment to build the next generation of highly trained utility crews, LUMA and its owners have also invested over $10 million in workforce development in Puerto Rico, opened the LUMA Technical College, that is training and preparing LUMA workers and others so that Puerto Rico has the workforce to rebuild and modernize the grid. LUMA Technical College has the first journeyman line worker program in Puerto Rico certified by the U.S. Labor Department, where this week [15] new journeyman line workers received accreditation.

Question 2. The written testimony of Dr. Bahramirad cited that the frequency of outages was down 30% compared to PREPA's operation—from 10.6 outages per year to 7.6 under LUMA. However, performance data LUMA provided to the committee shows that PREPA's rolling 12-month SAIFI for its last year of operation (June 2020 through May 2021) was 8.07. Using this calculation, LUMA's improvement is much smaller—less than 6%.

How did LUMA calculate PREPA's 10.6 SAIFI? Why did LUMA choose to compare its annual SAIFI to this 10.6 calculation instead of the 8.07 SAIFI representing final year of PREPA's operation? Is it not more appropriate to compare LUMA's annual performance to PREPA's final year of operation?

Answer. We would like to clarify that PREPA's 10.6 SAIFI is a figure established in accordance with the Puerto Rico Energy Bureau's ("PREB") Resolution and Order of May 21, 2021.[1] Through its Resolution and Order, the PREB established baselines and benchmarks for the SAIFI and SAIDI metrics. Accordingly, we believe it is appropriate to use the data provided by the PREB for purposes of the SAIFI comparative analysis.

While we can't speak to the accuracy and validity of PREPA, independent reviews scored PREPA overall as one of the worst performing utilities across multiple operational measures.

Question 3. According to LUMA's performance data reported in its June 20 Motion Submitting Quarterly Performance Metrics submitted to PREB, it failed to meet its baseline performance metrics outlined in Annex IX the Operations and Management Agreement for the duration of outages. Notably, LUMA's annual SAIDI and CAIDI fell short of established baseline performance metrics. Furthermore, the duration of outages has been significantly longer than during PREPA's final year of operation. According to performance data that LUMA provided to the committee, the monthly SAIDI during PREPA's last year averaged to 102 minutes, compared to LUMA's first year average of 138 minutes—an increase of 35%. Similarly, PREPA's monthly CAIDI during its last year averaged 153 minutes, compared to LUMA's first year average of 236—an increase of 55%. Furthermore, the data shows that durations remain high in the months leading up to Hurricane Fiona.

What accounts for the severity and persistence of these outages, and what is LUMA doing to improve its performance? What is LUMA's projected timeline for meeting its baseline performance metrics for the duration of outages?

Answer. To understand the dynamics surrounding our mission to transform Puerto Rico's transmission and distribution system ("T&D") one must first start to analyze the electric grid's condition prior to LUMA beginning operations on the island. As has been documented publicly, Puerto Rico's electrical grid suffered from

[1] See, Resolution and Order, Puerto Rico Energy Bureau, May 21, 2021 (Available at: https://energia.pr.gov/wp-content/uploads/sites/7/2021/05/Resolution-and-Order-NEPR-MI-2019-0007.pdf).

years and decades of neglect and mismanagement under the past utility operator. These profound operational failures severely impact all areas of the energy system and represent an ongoing challenge that LUMA remains determined to confront and overcome.

With respect to the state of infrastructure that LUMA inherited 18 months ago, the following are just some examples of the poor operational and infrastructure conditions that were faced, and which continue to pose significant and ongoing challenges:

- **Poor Condition of Substations:** 30% of transmission and distribution substations, key nodes in the electric grid, were estimated to require safety and hazard mitigation to reach remediation.
- **Poor Condition of T&D Assets:** An estimated 20% of transmission and distribution line assets, including poles and wires, required safety and hazard mitigation to reach remediation.
- **Public Safety Hazards:** Approximately 50,000 streetlights, more than 10% of all of the streetlights on the island, were estimated to be physical and public safety hazards.
- **Lack of Sound Engineering & Planning:** Processes for engineering functions such as distribution planning, transmission planning, protection and coordination were lacking and not following industry standards. For example, a proper simulation model for the Puerto Rico's transmission system did not exist to properly plan and design the system.
- **Antiquated EMS:** The Energy Management System (EMS), a primary technology to facilitate stable grid operations, had been purchased in the mid-1990s, poorly maintained and was no longer supported by the equipment manufacturer. We found that PREPA had procured spare parts from eBay.
- **Lack of Safety Requirements:** The entire ground fleet used for utility operations did not meet U.S. Department of Transportation safety requirements.
- **Lack of Critical Maintenance:** Recommended baseline maintenance of transmission and substation assets were not completed, and manufacturers' guidelines were not followed.
- **Poor Vegetation Management:** Vegetation management was often delayed by PREPA, and overgrown vegetation that interfered with safe operation of the system was present and evident when visiting substations.
- **Lasting Impact of Hurricane Maria:** Hurricane Maria accelerated this deterioration and highlighted the flaws in legacy design, operation, and maintenance activities. Some customers didn't have power for more than a year after Hurricane Maria, which is unacceptable.

The above-referenced facts, while significant in scope and impact, do not come close to fully capturing the truly deteriorated state of the electric grid. As LUMA has documented through photographic evidence that has been provided to multiple Congressional Committees, the T&D system inherited by LUMA was weakened by years, if not decades, of poor design, maintenance, lack of proper inspections, and other profound failures that continue to impact the stability and reliability of the energy system.

As a measure of the fragile and weakened nature of the energy grid, Puerto Rico has experienced a number of large-scale outage events since 2016—five of which preceded a similar large outage event on April 6th of 2022:

- September 21, 2016—Due to fire at Aguirre Power Generating Plant
- April 12, 2018—Due to vegetation
- April 18, 2018—Due to transmission repairs
- January 7, 2020—Due to earthquake on the island
- July 28th, 2020—Due to vegetation/equipment failure

Each of these events noted above occurred prior to LUMA taking over operations, affected more than 500,000 customers and restoration efforts lasted for longer than three days. This legacy of system-wide events underscores how deeply fragile and severely vulnerable Puerto Rico's electric grid and critical infrastructure have been because of the failures of the past operator and reinforces the need for LUMA to remain focused on the fundamental improvements needed to modernize and transform the energy system.

Given the need to address these past infrastructure failures and overall fragility of the energy grid, LUMA takes very seriously the need to improve the reliability

and resiliency of Puerto Rico's transmission and distribution system. Accordingly, we have implemented a markedly different approach that is grounded in data, rigorous engineering, sound planning aligned with industry standards, and transparency about the progress being conducted and the challenges that are being faced. With this approach, LUMA has made substantial progress across key areas in spite of the challenges we have faced, including:

- **Improving Reliability (Reducing the Number of Outages Experienced):**
  - — The System Average Interruption Frequency Index ("SAIFI"), or the number of outages that an average customer experiences in a year, has been reduced by 30% (improvement from a PREPA baseline of 10.6 to 7.6).
- **Empowering the Growth of Renewables:**
  - — Before LUMA began operations, there was a severe backlog of customers applying for inclusion in PREPA's solar net-metering program.
    - We have successfully reduced this backlog and have now integrated more than 36500 customers to the program, which represents more than double the number of customers than before.
    - In a little over a year, LUMA added more customers to the residential solar program than PREPA ever did over a full decade. Average time for approval of interconnection has dropped to under 30 days
  - — Completed studies to support the interconnection of more than 1300 MW of renewable utility-scale generation and completed solar hosting capacity analyses.
  - — Completed cutting-edge optimization analysis to identify locations in the system with zero network upgrade cost for affordable and economical renewable energy integration.
  - — We have gone from approximately 450 distributed generation interconnections monthly to approximately 2,20 interconnections.
  - — Reenergized transmission line that connected a 27 MW wind farm to the system that was out of service since Hurricane Maria.
- **Improving Customer Service:**
  - — 1.5 million customers have been provided support by LUMA, through more than 5 million calls, 400K+ e-mails, 650K+ DMs on social media
  - — The average wait time of customers on the phone decreased from more than 10 minutes while under PREPA to approximately 5 minutes under LUMA.
  - — The rate of call abandonment declined from more than 50% with PREPA to 18% under LUMA.
  - — 750,000+ downloads of the MiLUMA customer application for smartphones.
- **Improving Workplace Safety & Trainings:**
  - — Developed procedures to support the operation of interconnected generation resources, the reliable dispatch of power, black start[2] and restoration, as well as numerous other critical operations. These procedures did not exist prior to our arrival as operator of the T&D system.
  - — We have renewed the service fleet with 1,200 new or repaired vehicles, fully compliant with safety and transportation requirements.
  - — Graduated the first class of Puerto Rican electric line workers from LUMA Technical College, with subsequent graduating classes during the last year.
  - — Total recordable injury rate went from 8.63 under PREPA to 2.88 under LUMA.
  - — Injury severity rate declined from 62.9 under PREPA to 11.64 under LUMA.

In addition to improved operational performance as crews execute using enhanced procedures, LUMA is executing infrastructure improvement programs to address the

[2] Black start refers to restarting the grid after an island-wide blackout. The other procedures referenced above are related to managing energy generation to provide reliable power.

underlying challenges. LUMA's corrective actions are addressed in part within the System Remediation Plan (SRP), where specific improvement programs were developed to improve LUMA's delivery of safe, reliable, and resilient electric service, including:

- **Transmission and Distribution Pole & Conductor Repair:** The effect of high-risk findings during the high-level assessment of the distribution poles, hardware, and conductors, continues to be mitigated. After the completion of required repairs and replacements of distribution poles, structures, and conductors, LUMA will have established a system that is more resilient to severe weather with higher service reliability and has assets with an extended life span.
- **Transmission and Distribution Line Rebuild:** This program replaces damaged or ineffective overhead and underground lines. Line rebuilds increase service continuity and reliability to customers by replacing and upgrading facilities that have poor reliability performance and adding and completing facilities that allow for alternate feeds. LUMA is developing loop schemes to increase backups where possible.
- **Transmission and Distribution Substation Reliability Improvements:** This program reinforces and upgrades the existing and aging system infrastructure to improve system reliability. This program continues to facilitate safety improvement by replacing equipment prone to failure and enhancing protection systems to properly de-energize failed equipment. This reduces safety risks for both employees and the public and reduces the impacts of major forced outages due to aged equipment.
- **Distribution Automation:** This program addresses equipment for distribution automation, including the deployment of intelligent switches, such as single-phase and three-phase reclosers. Distribution automation deployment is being prioritized based on reliability performance. These efforts include the installation of technologies to serve as line segmentation and/or protection devices, midline, cutout mounted protective devices, and fault indicators, aimed at enabling the rapid isolation of system faults and isolation of customers not directly on the faulted section of the line.
- **LUMA Vegetation Strategic Approach:** LUMA is shifting to a more systematic reclamation of the right-of-way, thus reducing the frequency of tree-caused outages. This transition is happening as the frequency of unplanned outage events continues to decrease, allowing vegetation management to adopt a more proactive stance.

Question 4. Please provide a copy of the agreement extending LUMA's supplementary contract period that was set to expire on November 30, 2022.

Answer. See copy of the agreement attached.

Questions Submitted by Representative González-Colón

Question 1. The Contractors Association and others have claimed that when contracting for LUMA work, they are forced to commit that the Project Labor Agreement terms for LUMA contracts (especially worker pay) must be then offered to all work in all projects of all their customers not just LUMA's.

Is this true? Does LUMA in any way bind its contractors to offering the same condition to all their workers in all their projects outside LUMA, or not?

Answer. Since our first day of operations, LUMA has made clear that it fully supports our employees' labor rights. To be clear, LUMA does not select the union that represents our employees. LUMA employees choose which union they will be represented by. Furthermore, LUMA does not, in any way, bind its contractors to offering the same condition to all their workers on all their projects outside LUMA.

Currently, the majority of our employees are represented by the International Brotherhood of Electrical Workers (IBEW)—the largest union in the world representing electrical and utility workers. Prior to LUMA, there were approximately five different labor unions that represented PREPA's workers. One of the largest unions under PREPA, UTICE, chose to amalgamate with the IBEW and engaged in negotiations with LUMA. Others, like UTIER, chose not to engage in negotiations and actively urged their members to not apply for open positions at LUMA.

We are incredibly proud of our relationship with the IBEW and have negotiated a labor agreement that prioritizes worker safety and training. This agreement also

helps enhance the economic development of the local region, cultivate and further develop a highly skilled local construction workforce and helps create exciting opportunities that build the next generation of Puerto Rican line workers that are training up to industry standards. The highly trained workforce will enable a faster and more efficient installation process, resulting in higher quality standards. We share IBEW's strong values for training and safety, and along with IBEW, LUMA is building the best-trained utility workforce in the history of Puerto Rico.

The modern labor agreement with IBEW ensures all major transmission and distribution capital programs use the best-trained workforce, and that this critical work is done safely and efficiently. **To be clear, the use of well-trained and qualified workers for capital improvement work will not result in an increase to customer rates.**

We have no doubt that the committee shares in our belief in strong labor rights, that the IBEW is the best and most respected utility union in the workforce, and that contractors who perform work for LUMA should and must provide a safe and highly trained workforce.

Question 2. Puerto Rico law directly empowers mayors to perform rebuilding of infrastructure after a disaster, with the right to be reimbursed if the work is complying to code. Municipalities in Puerto Rico have repair teams that can do limited work on local distribution lines, like raising poles and reconnecting lines to customers. Many of these are made of former PREPA employees and other trained personnel.

Is LUMA making agreements to allow this work to proceed and committing to pay? If not, why not? (We have heard repeated reports that LUMA meets with the mayor, says "we'll work together" then sends a letter saying all they can do is pick up debris.

Answer. As the operator of Puerto Rico's transmission and distribution system, LUMA and its qualified and trained utility crews are responsible for the repair and restoration of the electric grid following any natural disaster. During hurricane Fiona's response, we deployed over 2,500 utility workers representing more than 660 crews working in the field across Puerto Rico to restore and reenergize the electric system.

While we share the desire to restore power as quickly as possible, power restoration must be done safely and right, according to electrical standards.

Nowhere in the United States, Canada, or any modern nation, are untrained or uncertified utility workers permitted to work on utility lines because of the threat it poses to public safety and the system. Untrained workers expose themselves, the public and our LUMA crews to significant safety risks. We raised concerns regarding the images that were shared of individuals working on power lines without proper safety gear and without proper safety training.

One fact that stood out as part of Hurricane Fiona's response is that repair work must be done right, safely and be highly coordinated with our generation partners, otherwise it complicates, delays and endangers power restoration efforts across all of Puerto Rico.

We are committed to working together with municipalities to expedite restoration efforts. What we can't stress enough is that work on the transmission and distribution system must be performed by LUMA's trained and qualified field crews. Many of the workers hired directly by the municipalities have not worked at PREPA nor have they received training and completed proper certifications in over a year. As such, we urge those municipal leaders to immediately work with us and not endanger the lives of others or the people they serve.

Question 3. Reminder of information requested to be submitted at the hearing:

1. *Status of projects to be performed with recovery funds*
2. *Breakdown of how many projects have been submitted and how much funding they require*
3. *Planned rebuilding timeline: outline of projected milestone dates for submissions, starts of work and expected completions per the presented Action Plans and expected times (year at least) to reach them. For example: When will all the transmission lines be up and operational? At what point do we expect half the substations that need replacing to be replaced? Three quarters? All?*
4. *Costs of subcontracting and consulting for LUMA*
5. *The comparison of the cost differences between the cost of the contract work in Fiona vs. what would have been the cost of using A.P.P.A. support*
6. *The profit earned by LUMA in its first year as operator*

Answer.

1. Status of projects to be performed with recovery funds

2. Breakdown of how many projects have been submitted and how much funding they require

As of November 1, 2022, LUMA has initiated 251 projects with FEMA, representing more than $6.2 billion worth of federally funded projects. In contrast, only 37 project submissions were submitted to FEMA (and not one project had been designed) before LUMA assumed operations on June 1, 2021.

Obligated FEMA Projects. LUMA has received, to date, FEMA approval for 38 critical infrastructure projects including:

- Twenty-eight local distribution projects that will address critical infrastructure, such as streetlights and pole replacement, targeting the municipalities of San Juan, Arecibo, Mayaguez, Caguas, Bayamón and Carolina to reduce outages and increase the reliability of the electric system.
- Four regional transmission reconstruction projects that will help improve the high-voltage critical energy infrastructure that delivers energy across the island.
- Five substation modernization projects that will address the pivotal role played by substations in helping deliver energy to communities across Puerto Rico beginning in the municipalities of San Juan, Vieques, Culebra, Manatí, and Guayanilla.
- One critical Emergency Management System (EMS), which is the first phase of transforming the system operations control center with state-of-the-art technology and software to modernize the way Puerto Rico's energy grid is monitored and managed.

FEMA Projects Under Construction. LUMA has started construction on 23 FEMA funded projects across Puerto Rico including:

- Six initial streetlight projects as part of LUMA's $1 billion Community Streetlight Initiative in the municipalities of Guánica, Lajas, Aguada, Maunabo, Luquillo, and Villalba, where in less than three months, LUMA has installed over 15,000 streetlights.
- One critical transmission line repair project to improve the grid's resiliency.
- Sixteen distribution pole replacement projects to increase the reliability of the electric grid.
- Launch of Puerto Rico's federally funded Substation Modernization Initiative (SMI) with the modernization and reconstruction of the Manatí Substation in the municipality of Manatí.

In addition to the projects initiated, approved, and under construction, LUMA has also taken the following FEMA-related actions:

- Received approval for $656 million to procure material that requires long lead times for manufacturing and delivery, mainly grid equipment including breakers, transformers, and reclosers.
- Developed four proposals for Hazard Mitigation for non-damaged infrastructure under Section 404 of the Stafford Act which would represent $900 million for grid modernization, including an advanced metering infrastructure, an advanced microgrid project, and mobile microgrids to enable renewable energy and make communities more resilient in the face of system-wide disturbances.
- Working with FEMA to get support for the immediate addressing of Fiona-related damages with permanent work.

Taken in totality, over the coming months and years, FEMA-funded projects that are being directed by LUMA will be not only the largest capital energy program in Puerto Rico's history, but also the largest ever funded by the federal government to repair and rebuild an electric system across any state and/or territory. As a result, LUMA is excited by the significant progress that has been made to date that will, as more FEMA projects begin construction, provide Puerto Ricans with a stronger, transformed energy grid.

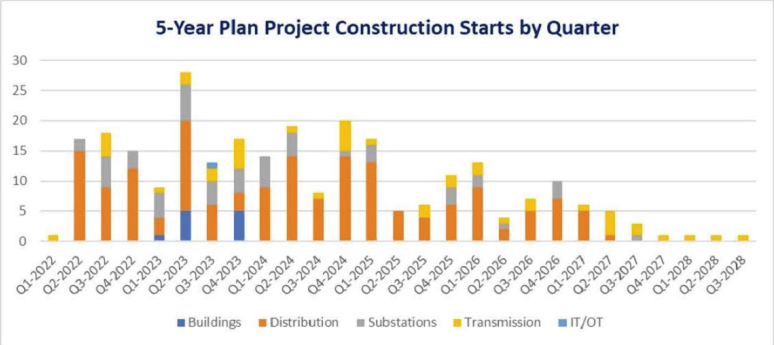
3. Planned rebuilding timeline: outline of projected milestone dates for submissions, starts of work and expected completions per the presented Action Plans and expected times (year at least) to reach them. For example: When will all the transmission lines be up and operational? At what point do we expect half the substations that need replacing to be replaced? Three quarters? All?

In May 2022 LUMA submitted a 5-Year Plan to COR3 and FEMA to provide LUMA's anticipated timing for sending detailed scopes of work to COR3 and FEMA for evaluation and review. This 5-Year Plan is a living document based on the best information available to LUMA at the time of submission. LUMA expects this plan to evolve over time as new information becomes available and conditions impacting the electric grid change.

Additionally, the 5-Year Plan provides an overview of the current list of projects LUMA plans to initiate over the next five years (2022–2026) and their schedules for submitting detailed SOWs to COR3 and FEMA for review. The majority of these projects are near-term projects identified by LUMA. The list will continue to grow as mid- and long-term projects are identified.

The table below provides information on the number of projects currently planned to initiate Engineering Design in each of the years 2022–2026. As the table shows, LUMA has initiated 85 projects as of the date of the 5-Year Plan (May 4, 2022) and plans to initiate another 185 through to 2026. It is important to note that LUMA continues to identify new projects across all categories and will add them to the portfolio over time.

Asset Category	# Projects In Flight	# Remaining Projects To Reach Milestone #1					Total Projects
	Current	2022	2023	2024	2025	2026	
Transmission	22	20	0	0	1	0	43
Distribution	37	44	24	27	18	14	164
Substations	24	19	5	3	0	0	51
Buildings	0	11	0	0	0	0	11
IT/OT	1	0	0	0	0	0	1
Total	84	94	29	30	19	14	270



For a complete list of individual projects included in the 5-Year Plan, see Attachment B.

4. Costs of subcontracting and consulting for LUMA

With respect to legal and consulting expenses, LUMA works through a strict expense review process that is independently audited and approved by third-party actors who reviewed all expenses and invoices related to the transition between LUMA Energy and PREPA.

5. The comparison of the cost differences between the cost of the contract work in Fiona vs. what would have been the cost of using A.P.P.A. support

Although the American Public Power Association ("APPA") manages a mutual aid program to facilitate restoration work following storms and other disasters, it would be speculative to come up with an estimate of any specific rates that would have applied on the days following the aftermath of Hurricane Fiona.

However, cost differences are not the only consideration present. Timing of response and availability to assist is of much greater importance. In that regard, had LUMA relied exclusively on external partners and their mutual aid programs, the response rate would have been much slower.

LUMA's emergency response to Hurricane Fiona followed a 15-month effort to overcome years—if not decades—of profound operational neglect and lack of maintenance by the previous operator. Even before starting operations, LUMA focused intensely on preparing for an event like Hurricane Fiona, ensuring that personnel received over 10,000 hours in emergency response training on FEMA's National Incident Management System and fully outfitting field crews with proper safety equipment and roadworthy vehicles—conditions that were absent under the previous operator.

On and around September 14, 2022, LUMA activated its emergency operations center and began formal preparations for what became a powerful and devastating Category 1 hurricane, that included 100 mph winds, over 30 inches of rain, severe flooding, and widespread damage to local infrastructure and electric infrastructure.

LUMA's advance work and close coordination with Puerto Rico and federal emergency response agencies, as well as local communities, allowed a restoration of electric service to 90% of customers within 12 days of Hurricane Fiona making landfall—a restoration timeline never seen before in Puerto Rico for a hurricane, and on par with restoration times for similar events in other jurisdictions in the continental US.

It is important to note and include as part of the analysis that on September 28, 2022, just 14 days after Hurricane Fiona impacted Puerto Rico, Hurricane Ian made landfall in southwestern Florida as a dangerous and powerful Category 4 storm. In the past, coetaneous or closely dated disaster events have dislocated and altered the response and availability of disaster recovery resources for the island of Puerto Rico. That was not the case under LUMA's recovery efforts from Hurricane Fiona.

Moreover, for more information regarding the response to the emergency related to the passing of Hurricane Fiona through Puerto Rico, see Hurricane Fiona Response and Restoration Event Summary, October 21, 2022, (Attachment C). We believe that this summary represents the most comprehensive collection of restoration information ever provided to the public so soon following a hurricane in Puerto Rico.

6. The profit earned by LUMA in its first year as operator

LUMA's service fee is authorized under Section 7.1 of the Transmission and Distribution System Operation and Maintenance Agreement (T&D OMA) and provides compensation for the performance of the O&M Services. The service fee for Fiscal Year 2022 was $117 million, in accordance with the terms of the T&D OMA. It is important to note that LUMA's service fee was determined as part of a competitive process overseen by the Puerto Rico Agency for Public Private Partnerships for the award of the T&D OMA. The Partnership Committee in charge of that process noted in their report that LUMA's fee was lower than that proposed by other proposals.

It is important to note that LUMA has NEVER raised or proposed raising customer rates.

LUMA has no control over how rising generation fuel prices may directly impact customer rates or bills—which are exclusively set by the Puerto Rico Energy Bureau (PREB). LUMA does not generate energy, nor does it financially benefit from any change or increase in generation fuel costs. **Since the beginning of 2021, there have been SEVEN increases to the rate customers pay for electricity due to the rising cost of generation fuel used by PREPA and other generators and there have been ZERO increases proposed to pay for any of LUMA's operations. Because some are unaware of the facts have suggested otherwise, we want to be very clear—LUMA has NEVER raised customer rates.**

As we have done over the last 18 months, the over 3,000 men and women are absolutely committed to building a better energy future for Puerto Rico and

overcoming the years and decades of operational and maintenance neglect by the past operator.

Attachments

[The Attachments for these responses can be viewed on the Committee Repository at:https://docs.house.gov/meetings/II/II00/20221117/115197/HHRG-117-II00-Wstate-BahramiradS-20221117-SD006.pdf]

The CHAIRMAN. Thank you, Doctor, I appreciate it. Let me now welcome Ms. Charlotte Gossett Navarro, Puerto Rico Chief Director of the Hispanic Federation.

Ms. Navarro, you are recognized.

STATEMENT OF CHARLOTTE GOSSETT NAVARRO, PUERTO RICO CHIEF DIRECTOR, HISPANIC FEDERATION

Ms. NAVARRO. Thank you, Chairman Grijalva, for inviting Hispanic Federation to speak today about what we have learned from our 5 years on the ground in Puerto Rico.

We congratulate this Committee for using its oversight authority to pursue a just disaster recovery for the archipelago.

Since Maria, Puerto Rico has experienced an ongoing state of crisis that has left residents traumatized and exhausted and forced hundreds of thousands to leave Puerto Rico. The recovery from Maria and subsequent disasters has been tragically slow. I say tragic because, at its best, it is a daily inconvenience, but at its worst it has resulted in additional preventable deaths for our most vulnerable residents, particularly due to the lack of electricity.

The widely accepted solution to our energy problems is distributed rooftop solar energy with storage. However, we have yet to see significant political will to adopt this solution. More than $12 billion in FEMA funding has been allocated for the energy grid, but only 3 percent of the funds are proposed for renewable energy. Congress must use its oversight authority to ensure that all of the Federal funds allocated for the optimization of the energy grid prioritize and deploy rooftop solar energy with storage, and meet Puerto Rico's local renewable energy policy goals without compromising agriculture and ecological lands.

According to the limited data published on the Puerto Rico Housing Department's CDBG-DR Transparency Portal, both the principal housing recovery program, known as R3, and the Principal Agriculture Recovery Program, known as Re-Grow, are failing to reach their goals. The R3 program received 27,000 applications, and of those only 4,398 houses have been repaired or reconstructed.

Applicants of the R3 program are particularly vulnerable households who have survived other disasters in the past 5 years while still waiting for the repairs to their homes. Geographically vulnerable populations such as Punta Santiago in Humacao, Loiza, and Culebra have had few to no homes repaired or rebuilt.

Hurricane Maria also devastated local agriculture production, and $92.5 million was allocated to the Re-Grow program to provide awards of $25 to $150,000 to local farmers and fishers. However, since its launch in 2021, out of Puerto Rico's more than 8,000 farmers and fishers, only 377 have received Re-Grow funds.

Puerto Rico has more than $3.7 billion available for school infrastructure. However, in their proposed plan the physical infrastructure changes that are needed to ensure continuity of education and structural safety and resiliency during and after a disaster are minimized. Congress and the President must ensure all Federal funds are effectively used by requiring radical transparency and civil society participation in all phases of decision-making processes. Democratization of the recovery is the best way to minimize inefficiency, corruption, fraud, and waste.

Since 2018, we have advocated for the creation of a Citizen Advisory Committee. And although the Housing Department committed to the creation of the committee in 2021, as of today it is still not operational. We welcome the creation of a CDBG-DR data transparency portal. However, significant improvements need to be made in the type and format of data collected and provided to ensure real transparency.

We have also been denied access to FEMA's individual damage assessment data that would allow us to make proper data-driven decisions.

Eliminating the barriers of reimbursement and matching fund requirements to access Federal funds will also promote equitable access and facilitate participation of community organizations and municipalities doing critical work, but who do not have the financial capacity to participate. It would also promote local business integration.

We support the call for the Biden administration to establish a recovery task force for Puerto Rico with transparent processes for inter-agency collaboration and civil society oversight.

We also support Chairman Grijalva's proposal to allocate an additional $5 billion for residential rooftop solar.

We also need legislation that brings Puerto Rico permanently and equitably into all Federal safety net programs, including Medicaid, SSI, SNAP, and a permanent exemption from the Jones Act. This will end these injustices and alleviate poverty and promote economic recovery.

Congress should return Puerto Rico to democratic self-governance by eliminating the Financial Oversight and Management Board and ensuring that debt restructuring does not compromise our basic needs and essential services.

An independent audit is also still needed.

A sustainable and just recovery is only possible if it is community driven by and for the people of Puerto Rico. Puerto Rico is on the front lines of climate change, and more than 100 years of systemic Federal discrimination have left us uniquely vulnerable. But despite that, the people of Puerto Rico are still standing in the trenches doing the work. Congress and the Federal Government must fulfill their responsibilities to the people of Puerto Rico.

Thank you for your time.

[The prepared statement of Charlotte Gossett Navarro follows:]

PREPARED STATEMENT OF CHARLOTTE M. GOSSETT NAVARRO, PUERTO RICO CHIEF DIRECTOR, HISPANIC FEDERATION

Introduction

Thank you, Chairman Grijalva, for inviting Hispanic Federation to speak today about what we have learned from our five years on the ground in Puerto Rico. Over the last five years we have invested over fifty-one million dollars and funded and collaborated with more than 140 local non-profit organizations all working toward a more sustainable, resilient, and just Puerto Rico. To that end, we congratulate this Committee for using its oversight authority to ensure a just disaster recovery for the archipelago.

It has been more than five years since Hurricane Maria created unprecedented destruction and resulted in more than 3,000 deaths. Over that time, Puerto Rico has experienced an ongoing state of crisis. According to recent Census data, 43.4% of the 3.2 million people in Puerto Rico live in poverty, including 6 in 10 children. Since 2017, Puerto Rico has experienced continued energy insecurity, major earthquakes, severe austerity measures enforced by a congressionally imposed and unelected Financial Oversight Management Board (FOMB), increasing income inequality, hundreds of school closures, the global pandemic, a collapsing healthcare system, food insecurity, continued exclusion from federal safety-net programs, and devastating tropical storms and hurricanes, like Hurricane Fiona. All together these conditions have left residents traumatized and exhausted and forced hundreds of thousands to leave.

The recovery from Hurricane Maria and subsequent disasters has been tragically slow, and I say tragic because at its best it has created daily inconvenience, but at its worst it has resulted in more preventable deaths for our most vulnerable residents. This is true particularly in the context of the electric grid recovery, which has increasingly experienced rolling blackouts leaving residents without power more often and for longer time than any US state. Just weeks before Hurricane Fiona our largest hospital lost power for 24 hours followed days later by the pediatric wing of another major hospital. The system's total collapse from a mere category 1 hurricane illustrates its precarity. The challenges accessing and distributing diesel to operate generators after Hurricane Fiona makes the shortcomings of the energy resiliency strategy clear.

Energy Recovery:

The widely accepted solution to this energy problem is distributed rooftop solar energy with battery systems, however, despite all the evidence and studies[1] in support, we have yet to see significant local political will to adopt this solution. For example, the federal government has allocated more than $12 billion in FEMA funding for the optimization of the energy grid, and the government of Puerto Rico is proposing to use only 3% of the funds for renewable energy with storage.[2] In addition, the Biden administration is investing significant resources into the two-year, interagency, intergovernmental PR100 study to model viable pathways for Puerto Rico to achieve its 100% renewable energy goals, however the Puerto Rico government has still not publicly committed to implementing the results of the study.

In 2019, Puerto Rico passed Act 17, known as the Puerto Rico Energy Public Policy Act, which, among other things, commits Puerto Rico to powering itself exclusively from renewable-energy sources by the year 2050. Congress must continue to use its oversight authority to ensure that all the federal funds allocated for the optimization of the energy grid are used to prioritize and deploy rooftop solar with storage and to meet Puerto Rico's local renewable energy policy goals. The federal and local government should not approve any proposals in which renewables and rooftop solar are merely incidental to the overall program. Creating a resilient, decentralized energy system in Puerto Rico is not just about reaching climate goals—it is literally a matter of life and death.

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[1] See, NREL 2020 study "Puerto Rico Low-to-Moderate Income Rooftop PV and Solar Savings Potential", December 17, 2020, demonstrating that rooftop solar can meet all of Puerto Rico's residential energy needs, https://www.nrel.gov/docs/fy21osti/78756.pdf.

[2] PR Electric Power Authority, proposing the use of only $35 million for rooftop solar, https://energia.pr.gov/wp-content/uploads/sites/7/2022/08/Motion-to-Inform-Reallocation-of-FEMA-404-HMPG-Funds-and-Request-for-Approval-of-Generation-Projects-NEPR-MI-2021-0002-1.pdf. LUMA proposing the use of $20.6 million for renewable energy microgrids, and $362.5 million for renewable energy utility scale storage, https://energia.pr.gov/wp-content/uploads/sites/7/2022/11/Motion-Submitting-Hazard-Mitigation-Grant-Program-Projects-and-Reques-for-Confidentiality-and-Support-Memorandum-of-Law-NEPR-MI-2021-0002.pdf.

We know firsthand that rooftop solar energy with batteries can create the resiliency Puerto Rico needs because we saw the success of our community solar energy projects after Hurricane Fiona.

For example, through Solar Saves Lives, a collaboration between Hispanic Federation, The Clinton Foundation, Direct Relief, and the Interstate Renewable Energy Council, we installed industrial scale rooftop solar energy and battery systems in multiple Federally Qualified Health Centers (FQHCs). After Hurricane Fiona, we contacted the four centers directly funded by Hispanic Federation and confirmed that they experienced uninterrupted power despite the blackout. At sites that relied only on generators with diesel, many FQHC's struggled to obtain the fuel needed to continue operating. This rooftop solar energy initiative protects the lives of thousands of families who depend on the healthcare services provided daily in these health centers.

Another successful example of how rooftop solar with storage provides resiliency are Hispanic Federation's solar energy projects at fisheries in Naguabo, Guayama, Guánica, and Peñuelas. Without energy, the artisanal fisherman based at these community fisheries are unable to refrigerate and sell their daily catch. At just one fishery in Naguabo, two months after Maria the fisherman and fish market reported they had lost more than $200,000 in combined profits. After Fiona, all the rooftop systems were operating with uninterrupted power. The small rooftop solar and battery systems save each these community fisheries up to $5,000 annually in energy costs, prevent loss of food and income, and serve as energy oasis to the surrounding communities during disasters, such as Fiona, when residents charged their cellphones and could refrigerate their critical food and medications. After Fiona, the 15 fishermen of Lajas explained to a reporter that their biggest challenge[3] getting back to work was the lack of electricity at their fishery and so two weeks later Hispanic Federation installed a rooftop solar energy with battery system[4] for them as well.

Housing Recovery:

After Hurricane Fiona, Hispanic Federation visited impacted communities and again witnessed the devastating results of the slow recovery. For example, in Santa Isabel in southern Puerto Rico, we met families whose homes had still not been repaired since Hurricane Maria and had to face Fiona's hurricane winds and 30 inches of rain without a secure roof. Another family who had been temporarily relocated by the Puerto Rico Housing Department while they awaited the repair of their damaged home through the government's CDBG-DR R3 housing program faced major flooding from Hurricane Fiona in their temporary housing and shared that their permanent home, which was still mid repair, had experienced significant damage as well.

According to the limited data published on the CDBG-Disaster Recovery funds Transparency Portal,[5] a digital dashboard created by the PR Housing Department in response to advocacy by Hispanic Federation and many other organizations, the Housing Repair, Reconstruction and Relocation Program[6] (R3) received 27,003 applications and has 17,528 currently active. Of those, only 4,398 houses have been repaired or reconstructed.

In comparison, Hispanic Federation, with less than $3 million in private philanthropic funding, was able to impact more than 400 homes in two and half years, from small repairs to complete ground up reconstruction. Our strategy was to partner with, and fund local community based non-profit organizations and utilize local contractors.

It is worth noting the applicants of the R3 program are particularly vulnerable households. More than 50% are of low to moderate income, 65 years or older, disabled, and/or with significant damage in their properties, including blue tarps.[7] Also, as reported in the "Community Study of Housing in Loiza" published by Taller Salud in 2022,[8] seven out of ten applicants under this program are women. Based on the data, most of these vulnerable households have been waiting for urgent aid

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[3] Pescadores de La Parguera denuncian que "nos tienen abandonados"—Primera Hora.

[4] Buenas noticias para los pescadores de Lajas: la villa prenderá con placas solares—Primera Hora.

[5] PR Housing Department, CDBG-DR Funds Transparency Portal, https://cdbg-dr.pr.gov/en/transparency-portal/.

[6] CDBG-DR R3 Program Transparency Portal, as November 15, 2022, https://cdbg-dr.pr.gov/en/transparency-portal/transparency-reports/housing-reports/r3-dashboard/.

[7] Id.

[8] Taller Salud, Estudio Comunitario de Vivienda en Loíza (2022), https://issuu.com/tallersalud/docs/web_estudio_vivienda_02_final.

for more than five years and had to survive other disasters, such as earthquakes, tropical storms, and Fiona, without a safe home. This is unacceptable.

In addition, geographically vulnerable populations, such as Punta Santiago in the municipality of Humacao, have been left behind. As of today, zero (0) homes, none, have been completed there through R3.[9] In the municipality of Loíza, of 190 active applications only 24 houses have been repaired or reconstructed.[10] In Culebra, only one house has been completed.[11] As you see, the recovery is too slow, and new emergencies and disasters, such as Fiona, too fast.

Even though we acknowledge the important creation of the data transparency portal, we are currently working with both HUD and the PR Housing Department to advocate for significant improvements in the type of data and the way and format that information is published to ensure real and effective transparency.

For example, the portal still does not provide the updated number of families living under blue tarps by municipality. In May 2021, during a PR legislative investigation (R. del S. 76), the PR Housing Department reported that 18,000 homes were still under blue tarps, and that only 34 had been repaired or reconstructed at that time. On page 347 of the CDBG-MIT Action Plan First Substantial Amendment, the PR Housing Department expressed that "as of May 2022, approximately 3,646 homes impacted by Hurricanes Irma and María still have a blue tarp as partial or whole roof".[12] The real time data on how many blue tarps remain by municipality is critical for the emergency preparation and recovery efforts of many stakeholders, such as mayors and local nonprofit organizations, and must be published.

Agriculture Recovery:

Puerto Rico's shrinking agriculture sector has resulted in a dangerously high dependence on imported food. In good times, Puerto Rico imports more than 85 percent of our food. After Hurricane Maria, some estimated this reached 95 percent. From 1998 to 2018, the amount of land used for agriculture has reduced by 43 percent and the number of independent farms decreased by more than 58 percent. Our farming sector is made up primarily of small-scale farms with most farmers over the age of 60 and generating less than $10,000 a year in sales. The average small-scale farm is just 57 acres (not all acres in production). By contrast, the average small-scale farm in the states is more than 450 acres.

Our agriculture sector has been particularly vulnerable to the effects of climate change. Hurricane Maria devastated local agriculture production and both tropical storms and Hurricane Fiona have had similar impacts. For example, the coffee sector, which is a main driver of the economy of the central mountain municipalities, lost 80 percent of the coffee trees after Hurricane Maria. After Hurricane Fiona, we lost almost the entire plantain production, another important crop for local production.

In response, the PR Department of Housing CDBG-DR Action Plan allocated $92.5 million to the Re-Grow PR Urban-Rural Agriculture Program (ReGrow), which launched in August 2020 to provide awards of $25,000 and up to agrobusiness including farmers.[13] The program was plagued with problems from the start due to its extensive and rigid eligibility requirements and a program design that did not respond to the realities of local agriculture and disadvantaged small-scale farmers. In addition, the original program design excluded the fishing industry. Since its launch, the program guidelines have been amended five times and the program administration has changed hands 3 times.

Although most of Puerto Rico's more than 8,000 farmers and fishers were affected by Hurricane Maria, more than two years after its launch, ReGrow only has 2,701 active applications and has only made 377 disbursements to applicants.[14] This means that less than 14% of the applicants have received any aid five years after Hurricane Maria.

In May 2021, a little less than a year after ReGrow's launch, Hispanic Federation conducted a brief telephone survey of 140 small-scale coffee farmers participating

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[9] CDBG-DR R3 Program Transparency Portal, as November 15, 2022, https://cdbg-dr.pr.gov/en/transparency-portal/transparency-reports/housing-reports/r3-dashboard/.

[10] Id.

[11] Id.

[12] CDBG-MIT Action Plan, First Substantial Amendment, October 17, 2022, https://cdbg-dr.pr.gov/en/download/cdbg-mit-action-plan-amendment-1-substantial-effective-on-october-17-2022/?ind=1666809692813&filename=1666809692wpdm_ADM_POLI_CDBG-MIT%20APA1%20(Substantial)_EN.pdf&wpdmdl=30002&refresh=6373c842f05651668532290.

[13] CDBG-DR Re-Grow PR Urban-Rural Agriculture Program Transparency Portal, as of November 15, 2022, https://cdbg-dr.pr.gov/en/transparency-portal/transparency-reports/economy-reports/re-grow-dashboard/.

[14] Id.

in our coffee initiative. Of these, 114 (81%) reported not having applied to the program. Of those 114, 83 (73%) specified that they had not applied because they had not heard of the program. Others reported not having applied for lack of documents or other reasons. This highlights the need to make the application process more flexible to achieve fair access to these aids and ensure that the funds reach small-scale farmers and fishermen.

Strengthening Puerto Rico's agriculture sector is both possible and urgent to attend to our food and economic security. After Hurricane Maria, Hispanic Federation led a multisector coffee revitalization effort that provided direct support to more than 2,200 small-scale farmers. The collaborative effort successfully produced and distributed more than two million coffee seedlings and provided training and technical assistance to bolster agronomic and climate smart practices. Our program was successful in part due to its multi sector approach, which included coffee farmers in all phases from design to implementation. The federal and Puerto Rico government can and should do the same.

Democratization of the Recovery:

Congress and the President must ensure all federal funds are effectively used by requiring radical transparency and civil society participation in all the phases of decision-making processes. Democratization of the recovery is the best way to minimize inefficiency, corruption, fraud, and waste.

That is why, since 2018, in collaboration with other local organizations, Hispanic Federation has advocated to HUD and the PR Housing Department for the creation of the Citizen Advisory Committee. Our hope for this committee is that it would be embedded in the PR Housing Department to work on recovery, provide valuable oversight and input in all stages of the recovery from planning, to program design and implementation. In addition, they would advise on appropriate public participation for each phase. Although the PR Housing Department committed to the creation of the committee in 2021, as of today, the committee is still not operational. Just this week, they finally announced the official members of the committee, which we hope means the committee will be active soon. In the meantime, and for the last five years, recovery decisions are being made without effective public input and oversight. In addition, they have arbitrarily reversed a decision and decided to only utilize the Committee for CDBG-Mitigation funding and excluded CDBG-Disaster Recovery funding.

Had there been effective public participation throughout the recovery process, we believe we could have avoided the serious public confusion and delays in implementation of programs such as R3, which had more than 10 guide revisions, and ReGrow, which had 5 revisions of the guides.

In addition to the CDBG transparency portals previously mentioned, we continue to struggle to access the necessary FEMA damage assessment data that would allow us to make proper data-driven decisions. Most funding allocation notices indicate the need to identify the "most affected and distressed communities and populations" to serve as the base of all program-design within CDBG-DR and CDBG-MIT Action Plans and ensure we are addressing unmet needs. However, in the case of Puerto Rico, all of Puerto Rico was identified as "most affected and distressed". However, not all communities were affected in the same way and funding should be prioritized to the most vulnerable, marginalized, and impacted communities.

The FEMA inspections process through the Individual Assistance Program is single-handedly the best data to promote informed, efficient, and responsible decisions—since it is the data used to calculate unmet need. This information is needed by all stakeholders including nonprofits, communities, municipalities and others not only for the design of programs, but also for its accountability processes, as well to direct and assign additional efforts in the recovery. FEMA has blocked access to this data because they have claimed their data gathering methodology does not allow them to share the data without also sharing personally identifiable information. In five years, they have not solved this data collection and access issue to ensure the data needed to promote the responsible use of federal funding and guarantee the link between funding, most affected communities and unmet needs. With each new disaster, this data problem repeats itself.

Another way to boost recovery is by eliminating bureaucracies that have created barriers to rebuilding and slowed community participation and access to funds. For example, the federal government should waive reimbursement and matching funds requirements to promote equitable access to funding and facilitate participation of local, community-based non-profit organizations and municipalities who are doing the critical work on the ground with the most affected communities but do not have the financial capacity to comply with such requirements. Waivers have been provided selectively after disasters in other US jurisdictions, and most recently a

temporary waiver was provided to Puerto Rico by the Biden administration for FEMA public assistance funding. All federal disaster recovery funding intended for low-income and historically marginalized communities should automatically have waivers. Policies and legislation should demonstrate an understanding of the realities of the island.

Congress should also help Puerto Rico return to democratic self-governance by eliminating the Financial Oversight and Management Board (FOMB) and ensuring the debt restructuring does not compromise basic needs and essential services.[15] President Biden must keep his campaign promises and hold the undemocratic Financial Oversight and Management Board (FOMB) accountable by reviewing the FOMB's austerity measures and auditing the debt to ensure no illegal or unconstitutional debt is paid. Hispanic Federation supports the "Territorial Relief Under Sustainable Transitions for Puerto Rico Act" (TRUST for PR Act: H.R. 7409) with amendments to ensure accountability for the FOMB. This would phase out the FOMB and put Puerto Rico in charge of its own economic future.

Additional Recommendations:

These are only some examples on how unfairly delayed the recovery process is happening. One of our main asks as part of our Take Action for Puerto Rico advocacy campaign[16] has been for Congress to exercise its oversight authority, as you are doing today, to ensure the money that you allocated is going to achieve its intended goals.

A sustainable and just recovery must focus on long-term solutions. Puerto Ricans and local nonprofits have shown their ability to come together and fill the gaps in the failure of the federal and local government's response. The key to their success is to listen, integrate, and work with the impacted communities.

The Biden administration took important steps early on to aid Puerto Rico's recovery. For example, under President Biden, HUD reached an agreement with the government of Puerto Rico to eliminate unique federal restrictions imposed on $8.2 billion dollars in CDBG-DR funds, but more is needed.

In order to ensure a holistic, effective deployment and alignment of federal programs and resources, Hispanic Federation supports the call from Chairman Grijalva, Senators Schumer and Gillibrand and Congressmembers Velazquez, Espaillat, Meng, and many others, for the Biden Administration to establish a Recovery Task Force for Puerto Rico. The task force must have transparent processes for interagency collaboration, and mechanisms for civil society oversight.

In a broader and holistic perspective of the recovery, Congress should pass legislation that brings Puerto Rico permanently and equitably into all federal safety-net programs, including Medicaid, Supplemental Nutrition Assistance Program (SNAP), Supplemental Security Income (SSI), among others not only to end second class treatment of the 3 million people living in Puerto Rico, but also to alleviate high rates of poverty.[17] Congress should also permanently exempt Puerto Rico from the Jones Act, which among other effects, increases the cost of food by as much as 151 percent.

Conclusion:

Recovery efforts must meet the needs of the present and future generations. Puerto Rico is on the front lines of climate change and the probability of severe weather events and other natural phenomena is only growing. Whether or not they become disastrous is up to how we as society prepare and respond. Part of that is ensuring a sustainable and just recovery today, which is only possible if it is community-driven by and for the people of Puerto Rico, especially those most vulnerable and marginalized. Congress and the federal government must have the political will to fulfill, with no further delay or excuses, its responsibilities with the people of Puerto Rico. Thank you for your time and service today. I am honored to take any questions.

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[15] Id.

[16] Hispanic Federation, Take Action for Puerto Rico, Policy Asks—5 Years Later How the Federal Government and Congress Can and Must Help Puerto Rico, https://static1.squarespace.com/static/614a7847232e3561abc4ad33/t/63252dfe683d3e6af95ce40a/1663380990211/POLICY+ASK-2022-REV-02.pdf.

[17] Hispanic Federation, Take Action for Puerto Rico, Policy Asks—5 Years Later How the Federal Government and Congress Can and Must Help Puerto Rico, https://static1.squarespace.com/static/614a7847232e3561abc4ad33/t/63252dfe683d3e6af95ce40a/1663380990211/POLICY+ASK-2022-REV-02.pdf.

The CHAIRMAN. Thank you very much. Let me now recognize Ms. Ruth Santiago, Community Environmental Lawyer.

Ms. Santiago, you are recognized.

[Pause.]

The CHAIRMAN. Ms. Santiago, I think you are on mute. If you could, unmute the apparatus there. We can't hear that. Ms. Santiago, I can go back to you and recognize you again if we get the technical issue fixed.

Let me now turn to Mr. Emilio Colón-Zavala, Board Member of the Puerto Rico Builders Association.

Sir, 5 minutes.

STATEMENT OF EMILIO COLÓN-ZAVALA, BOARD MEMBER, PUERTO RICO BUILDERS ASSOCIATION

Mr. COLÓN-ZAVALA. Chairman Grijalva, Ranking Member Westerman, Ranking Member González-Colón, and members of the Committee, thank you for giving me the opportunity to testify on Puerto Rico's post-disaster reconstruction and power grid development hearings.

The Puerto Rico Builders Association since 1951 has represented our real estate developers, builders, as well as related industry professionals. We are the Puerto Rico chapter for both the National Association of Home Builders and the Urban Land Institute. I come to you in my capacity as a former Chairman of the Association for the years 2018 and 2019, and in representation of current Chairwoman Vanessa de Mari.

On September 20, 2017, our vulnerabilities were exposed in a manner that we never thought would happen. Approximately 60,000 families lost their homes while our infrastructure was destroyed. Still today, we are struggling to provide basic necessities to our people.

The question must be how do we take the necessary steps so that we don't find ourselves in the same predicament? How do we finally solve our vulnerabilities? The opportunity is here to rebuild a resilient Puerto Rico.

The slow and bureaucratic process implemented by FEMA under Section 428 of the Stafford Act and 2 CFR 200.205 has created significant delays in Federal aid for permanent construction programs to start.

Typically, as required by the Stafford Act, FEMA has accepted recipients' cost estimates from professionally licensed engineers and validated them. In addition, FEMA has accepted applicant-prepared and certified fixed cost estimates in other jurisdictions, only not in Puerto Rico, where FEMA prepared all cost estimates.

Circumventing Congress requirements and deviating from its own implementation guidelines, FEMA elected not to consider certified cost estimates by professional licensed engineers mutually agreed between the administrator of FEMA and the Puerto Rico Government until 2020. Due to the magnitude of the disaster and FEMA's failure to expedite its own process, the result has been totally contrary to the reasoning provided in FEMA's guidance to not allow participants to submit cost estimates certified by their engineers as required by Section 428 of the Stafford Act. This

greatly impacted project formulation process and delayed PREPA's PW.

On September 18, 2022, due to Hurricane Fiona's impact in Puerto Rico, a total blackout once again occurred. Contrary to Maria's impact, our generation system suffered such damage that hindered initial recovery efforts. The need for disasters to be managed jointly is critical in order to reduce regulatory confusion.

The storm damage has dramatically increased the risk of customers experiencing load shedding events. Prior to Hurricane Fiona, customers were 88 times more likely to have a load shed event when compared to the average mainline electric consumer. They are now approximately 500 times more likely to have a load shed event.

The economic impacts to Puerto Rico have been estimated in $168 million this year and $700 million in 2023, unless mitigation measures are implemented. It is estimated that if current trend continues, power generation in Puerto Rico could be stabilized by March 2024. With the recent announcement of additional generation, hopefully this timeline will be accelerated.

One of the models of governance typically considered in reform process is that of privatization. Privatization, however, is not a magical measure with assured resource and a path free of pitfalls. Past experiences both inside and outside Puerto Rico also demonstrate that privatization is not a magical solution.

At the end of the day, substituting an inefficient public monopoly with an inefficient, privately-owned monopoly will not solve the power grid problems. Puerto Rico must increase its use of renewable sources, not as a quasi-religious mantra, but judiciously and intelligently bearing the cost, its reliability, integration, and accurate operation with existing traditional systems as its greatest north.

To achieve this, retrofit and reconstruction of existing transmission and distribution systems are needed to be accelerated.

Also, permitting challenges remain for projects to be executed. Streamlining of processes and elimination of duplicative tasks must be finally resolved. Title 5 of PROMESA, which established a streamlined permitting process for critical projects through the oversight board, especially for the energy sector, hasn't been fully implemented.

Finally, let's not forget the state of Puerto Rico's economy and its government's fiscal challenges. The Government of Puerto Rico did emerge from bankruptcy, but an economy predicated heavily in the use of appropriated Federal dollars for our reconstruction is not sustainable in the long run.

The recovery of our electrical power infrastructure has to be our No. 1 priority in order to restore economic stability and prosperity to our islands. It is, at the end of the day, a matter of national security.

I thank you again for the opportunity to share our views, and I am available for further collaboration in these efforts and to answer any questions you may have. Thank you.

[The prepared statement of Mr. Colón-Zavala follows:]

PREPARED STATEMENT OF EMILIO COLON-ZAVALA, PUERTO RICO BUILDERS ASSOCIATION

Thank you for the opportunity to present our views to the Committee on Natural Resources. The Puerto Rico Builders Association, since 1951, has represented our real estate developers, builders as well as related industry professionals. We are the PR Chapter for both the National Association of Homebuilders (NAHB) and the Urban Land Institute (ULI). I come to you in my capacity as a former Chairman of the Association for the years 2018–2019.

On September 20, 2017 our vulnerabilities were exposed in a manner we never thought would happen. This has been the biggest disaster on US territory. Approximately 60,000 families lost their homes while our infrastructure was destroyed. Still today we're struggling to provide basic necessities to our people. The saddest thing of all, is that we were warned almost twenty years ago. The same thing has happened before: from 1989 until this day.

It's a shame that we did not take the necessary steps to prevent today's predicament. Except for the adoption a new building code, we're still facing the same challenges in 2019. Nevertheless, Hurricane María represents the best chance we have to rethink and rebuild PR the right way; the canvas was left essentially blank. We need to start over.

The question must be: how do we take the necessary steps so that we don't find ourselves in this same predicament? How do we finally solve our vulnerabilities? These are true for the reconstruction after the hurricane as well as our eleven year old economic depression. The opportunity is here to rebuild a resilient Puerto Rico.

The slow and bureaucratic process implemented by FEMA under section 428 of the Robert T Stafford Act, and 2 CFR 200.205 has created significant delays in federal aid for permanent construction programs to start. On October 30, 2017, the Commonwealth of Puerto Rico elected to participate in alternative procedures for all large project funding for Public Assistance (PA) Categories C-G, pursuant to section 428 of the Stafford Act, for permanent work following Hurricane Maria. The Alternative Procedures Program is one in which grants for permanent construction projects after a disaster are based on fixed cost estimates during the project formulation process. This section, 42 U.S.C. 5189f, requires when determining eligible costs for repair, restoration, and replacement of damaged facilities under Section 406, in paragraphs (F) & (G), that cost estimates certified by qualified Professional Engineers be taken into consideration.

Typically, and as required by the Stafford Act, FEMA has accepted recipients' cost estimates from professionally licensed engineers and validated them. In addition, FEMA is accepting applicant prepared and certified fixed cost estimates in other jurisdictions. Only not in Puerto Rico where FEMA prepares all cost estimates.

FEMA issued guidance on implementing Public Assistance Alternative Procedures Program Guide for Permanent Work (PAAP-PW) last April 2018. Circumventing Congress' requirements, and deviating from its own implementation guidance, FEMA elected not to consider certified cost estimates by professionally licensed engineers mutually agreed between the Administrator and the Puerto Rico Government.

Due to the magnitude of the disaster, and FEMA's failure to expedite its own process, the result has been totally contrary to the reasoning provided in PAAP-PW to not allow applicants to submit cost estimates certified by their professionally licensed engineers as required by Section 428 of the Stafford Act. This greatly impacted project formulation process and delayed PREPA's PW.

On September 18 2022, due to Hurricane Fiona's impact to Puerto Rico, a total blackout again occurred. Contrary to Hurricane María's impact, our generation system suffered more damages than the Transmission & Distribution System. This is due to a concentration of generation plants in the Southern Region of Puerto Rico. Since then, there has been a shortage of electrical power generation in Puerto Rico.

The storm damage has dramatically increased the risk of customers experiencing load shedding events. Prior to Hurricane Fiona, customers were 88 times more likely to have a load shed event, when compared to the average mainland electric customer. They are now approximately 500 times more likely to have a load shed event (compared to the average mainland electric customer).

The economic impacts to Puerto Rico are estimated in $168MM this year and $700MM unless mitigation measures are implemented. It is estimated that, if current trend continues, power generation in Puerto Rico could be stabilized by March 2024. This is not an acceptable timeline for our private sector.

One of the models of governance typically considered in the reform process is that of privatization. It creates functionally separate units of the government in such a way that they cannot be easily pressed to pursue non-commercial goals through non-transparent actions. After privatization, the government no longer confronts a

conflict of interest between its role as owner of the public service company and its role as a public policy maker. The costs and benefits of the arbitrary use of the power to formulate public policy also change to the extent that the government now has an interest in the existence of rules that encourage investment and that should change only after considering the effects of such changes.

Privatization, however, is not a magical measure with assured results and a path free of pitfalls. First, it requires the government to make a credible commitment by favoring tariff schemes that cover costs (or a combination of tariffs and subsidies that cover costs). Otherwise, private investors will not acquire the state company. Second, new political problems are created. Some are corollaries of the economic benefits of privatization, namely, the claim of the company, now deprived of public service, to reduce costs through reductions in high levels of employability, theft prevention, among others. The unthinking opposition of some sectors of interest to privatization and, in particular, to the privatization of basic services, sometimes by foreign entities motivated by profit. Past experiences, both inside and outside of Puerto Rico, also demonstrate that privatization is not a magical solution. Substituting an inefficient public monopoly with an inefficient privately owned monopoly will not solve the power grid problems.

The Association views favorably the use of the vast resources of the federal Department of Energy and the Southern States Energy Board (SSEB) to assist in the development of what should be the new grid (grid) of Puerto Rico. Likewise, we understand that the expansion of the entities that are recognized can generate and sell electricity, such as cooperatives and municipalities.

The SSEB has indicated that its plan of work with the Governor and with the Legislative Assembly has as its goal: to establish a power grid system for Puerto Rico that is: reliable (reliable), affordable (affordable) and sustainable/sustainable (sustainable). Given Puerto Rico's dependence on fossil fuels, and the loss of fiscal resources that such expense entails, Puerto Rico's energy public policy must, first, pursue the greatest possible independence in energy sources. In this sense, although gas is an environmentally favorable alternative, its lack of production in Puerto Rico, except for its generation in landfills such as Fajardo, does not pay for that energy independence that is due, due to conditions of national security and economy, to pursue. However, the use in Puerto Rico of gas, as the coastal project of Aguirre should not entail fiscal commitments that make the wind, photovoltaic and water alternatives that depend on resources that we do have: wind, sun and water, go to a second flat.

Puerto Rico must increase its use of renewable sources, not as a quasi-religious mantra, but judiciously and intelligently, bearing the cost, its reliability, integration, and accurate operation with the existing traditional systems, as its greatest north.

It is essential to address the problem of politicization. We are concerned that the passed Act of Execution of the Reorganization Plan of the Public Service Regulatory Board of Puerto Rico maintains schemes that do not promote partisan political independence of the operation of the former Puerto Rico Energy Commission, now the Energy Bureau. The established model allows, in the long term, to detract from the professionalization and institutional development of an administrative entity with a fundamental mission in the future development of Puerto Rico.

The regulatory framework for Puerto Rico's energy infrastructure transformation into renewables was passed and adopted before the 2017 hurricanes impacted our island. Since then, damages from multiple disasters have left our grid in a state of greater vulnerability. Rolling blackouts occur frequently and the need to amendments to accommodate to immediate stabilization actions is urgently needed. These do not have to alter overall goals to move Puerto Rico into renewable energy but urgent and immediate needs need to be considered.

Finally, let's not forget the state of Puerto Rico's economy and its Government fiscal challenges. The Government of Puerto Rico did emerge from bankruptcy, but an economy predicated heavily in the use of appropriated federal dollars for our reconstruction is not sustainable in the long term. María, who had the most impact, was the most destitute. The deaths did not occur mostly among the most fortunate sectors materially. Decisions on partisan political bases today, affect the health, welfare, jobs, ability to earn a living, dignity and public safety of our brothers less fortunate in the future.

I thank you again for the opportunity to share our views and am available for further collaboration in these efforts.

QUESTIONS SUBMITTED FOR THE RECORD TO MR. EMILIO COLÓN-ZAVALA, BOARD MEMBER, PUERTO RICO BUILDERS ASSOCIATION

Mr. Emilio Colón-Zavala did not submit responses to the Committee by the appropriate deadline for inclusion in the printed record.

Questions Submitted by Representative Westerman

Question 1. Please further expand on your written testimony about how the expansion of entities that can generate and sell electricity, like cooperatives, could be beneficial to Puerto Rico. Please also include any reports, data, and first-hand knowledge that can help the committee understand your further discussion.

Question 2. Please further expand on your written testimony about how the requirements that FEMA put has and applies in Puerto Rico impacted projects getting off the ground after Maria. Are those hurdles still in place, and how is that currently affecting recovery efforts your members are involved in? Please also expand more on what solutions the Puerto Rico Builders Association would propose to help further recovery efforts for Puerto Rico.

Question 3. How have interruptions in the supply chain affected your members in Puerto Rico during past year? How do you expect any changes to the supply chain to affect recovery post-Fiona?

Question 4. Can you tell us more about how interruptions in electrical power affected you and your members both pre- and post-June 2021, when LUMA took over the grid?

Questions Submitted by Representative González-Colón

Question 1. What has been the greatest challenge for the contracting and construction sector in the general recovery process?

Question 2. How efficient have been the Federal, State and Local recovery agencies in processing claims and payments?

Question 3. What is the impact of the repeated consecutive disasters and emergencies and utility failures on the productivity of your workforce?

Question 4. Does the damage to roads and bridges limit access to construction equipment and supplies in the very same areas where it is most needed?

Question 5. How have your members been directly affected by the inconsistent power supply?

The CHAIRMAN. Thank you, sir. Next, we have Mr. Eduardo Pardo, President of the Puerto Rico Chapter, Associated General Contractors.

Sir, you are recognized.

STATEMENT OF EDUARDO PARDO, PRESIDENT, PUERTO RICO CHAPTER, ASSOCIATED GENERAL CONTRACTORS

Mr. PARDO. Good afternoon, Chairman and members of the Committee and everybody in the hearing. My name is Eduardo Pardo, a resident of Puerto Rico. I am President of the current Puerto Rico AGC, Associated General Contractors of America. Thank you for the invitation to appear before this Committee.

We can agree that the reconstruction process is taking much longer than expected, and that in some areas such as power, little progress has been made. Having said that, AGC Puerto Rico wants to state for the record that recently we have seen an increase in projects, offer bids, and in construction, such as the Puerto Rico Aqueduct and Sewer Authority is currently executing its plan to reconstruct, improve, and build new installations financed with a

mixture of funds, including FEMA. Different from other agencies, PRASA is communicating and working closely with local contractors and is issuing bids regularly. The Puerto Rico Department of Housing, which manages CDBG funds, has many projects in construction, in award process, and constantly provides projections for upcoming work.

Municipalities—Certain municipalities, after so many years and obstacles, have been able to access funds and issue bids. We are seeing more activity in the municipalities, especially due to the 25 percent working capital advance approved to expedite processes.

However, other areas are stuck, especially the electrical power grid. Rehabilitation and modernization of Puerto Rico's power grid should be the No. 1 priority for everyone. However, 5 years after Hurricane Maria, AGC of Puerto Rico doesn't know of any significant projects currently underway to achieve a resilient and modern network. In fact, the local contractors that we represent have been sidelined by LUMA and not been made part of the process.

Our main objective on today's testimony is bringing before this Committee our main areas of concern and solutions from the contractors' perspective: government, red tape, and bureaucracy.

The AGC welcomes appointment of the Secretary of Energy, Jennifer Granholm, to hopefully identify situations that are affecting the process of reconstruction work in all areas and implement solutions that bring transparency and efficiency, including the use of design, build, and maximization of our local contracting.

Priority projects—There are many priority needs in Puerto Rico, but none more important than being ready for the next storm. We in the AGC strongly recommend concentrating in 5 to 10 priority projects, with special emphasis on those reference to the power grid. These projects must be moved in front of the line and have the backing of all entities to get into construction as soon as possible.

Budgets—No matter what may be said on the how or why, the fact is that bids and proposals are coming in higher than budgets, which means projects cannot begin. To be able to undertake the projects that Puerto Rico needs based on expert analysis of agencies, the Federal and local government must expedite budget adjustments to address inflation.

Local contracting—Maximizing the participation of local contractors and suppliers to reconstruct the island's infrastructure is vital to Puerto Rico's economic recovery and progress. Local contracting will create wealth and well-paying jobs that will remain in Puerto Rico. Section 307 of the Stafford Act states that preference shall be given to firms operating in the area affected by disaster or the emergency—in this case, Puerto Rico. AGC Puerto Rico understands that the percent of preference shall be determined and included in the guidelines to ensure transparency and compliance.

Labor—Access to skilled labor is a major concern. AGC of Puerto Rico and the construction industry is proposing the implementation by executive order from the President for significant public benefit to allow non-citizens living currently in Puerto Rico with undefined migratory status to work in construction projects financed with FEMA disaster recovery funds. This will be a feasible mechanism to significantly expand the pool of workers in the time frame

needed without having to bring in workers from other jurisdictions. AGC Puerto Rico and our members have unsuccessfully tried using other mechanisms such as seasonal H-2B visas. H-2B visas were not designed and are simply not meant for the construction industry.

PLA requirements—Removing unnecessary requirements, such as the Project Labor Agreements established by LUMA and imposed on local contractors is fundamental. We have repeatedly stated that LUMA's imposition of PLA negotiated with a labor union outside of Puerto Rico will increase cost dramatically and significantly limit the number of projects that will be built.

Thank you for the opportunity.

[The prepared statement of Mr. Pardo follows:]

PREPARED STATEMENT OF ENG. EDUARDO PARDO, PRESIDENT, PUERTO RICO CHAPTER, THE ASSOCIATED GENERAL CONTRACTORS OF AMÉRICA

Good morning, Chairman Grijalva and distinguished members of the Natural Resources Committee of the U.S. House of Representatives. My name is Eduardo Pardo, I am a resident of San Juan and current president of the Puerto Rico Chapter of the Associated General Contractors of America. AGC Puerto Rico represents more than 300 companies from general and specialty contractors to subcontractors, suppliers, and industry related services.

Thank you for the invitation to appear before this Committee and the opportunity to present our testimony regarding the execution of Puerto Rico's Post disaster reconstruction and power grid development by the federal and Commonwealth governments and other key stakeholders, including LUMA. We deeply appreciate the efforts of the Committee to identify obstacles and implement solutions that will hopefully set forth more agile processes and accelerate the reconstruction and modernization of Puerto Rico's infrastructure.

Most of us can agree that the reconstruction process is taking much longer than expected and that in some areas, such as power, little progress has been made. Today, Puerto Rico's infrastructure is much weaker and more vulnerable than ever. As recent as Monday, 175,000 of PREPA's clients lost power for more than two hours, meanwhile traffic between Ponce and San Juan is experiencing major interruptions after gigantic rocks detached and impacted the lanes due to unusually heavy rainfall.

Having said that, AGC Puerto Rico wants to state for the record that recently we have seen much needed increased and ongoing activity in the use of federal funds and projects out for bid in certain areas, such as:

- The Puerto Rico Aqueduct and Sewer Authority, which is currently executing its plan to reconstruct, improve and build new installations financed with a mixed source of funds, including FEMA and own funds. Different from other agencies, PRASA communicates and works closely with local contractors and issues bids regularly.
- The P.R. Department of Housing, which manages CDBG funds, has removed hurdles and implemented more efficient processes to enable more bids and construction activity. They currently have various projects underway such as housing reconstruction and repairs and photovoltaic and water cistern installations. They are also implementing a design build mechanism, which in our opinion helps to accelerate projects.
- Certain municipalities, which after so many years and obstacles, have been able to access funds and are issuing bids for a diversity of projects of different magnitude and nature. Municipalities are using the design build approach to accelerate certain projects.

However, other areas are stuck, especially the electrical power grid. **Rehabilitation and modernization of Puerto Rico's power grid should be the NUMBER 1 PRIORITY for everyone on the island and the mainland. However, five years after Hurricane Maria, AGC Puerto Rico doesn't know of ANY significant projects currently underway to achieve a resilient and modern network. In fact, AGC Puerto Rico and its members, including leading energy contractors (both in terms of size and experience), have been sidelined by LUMA in the efforts to develop and execute the plans to**

invest the more than $10 billion in federal funds assigned by the U.S. government to significantly expand people's access to reliable and cost-effective energy services.

Our main objective of today's testimony is bringing before this Committee our main areas of concern and solutions, which are the following:

- Government Red Tape and Bureaucracy

Unnecessary steps and requirements by both the Federal and the Commonwealth governments are complicating, delaying, and increasing the costs of reconstruction. AGC-PR welcomes the appointment of Secretary of Energy, Granholm, to hopefully identify situations that are affecting the progress of reconstruction works in all areas and implement solutions that will bring transparency and cost and time efficiency, including the use of design build and maximization of local contracting.

- Priority Projects

The modernization and reconstruction of Puerto Rico's infrastructure is a monumental project that has no precedent in the history of the United States. To effectively address it, AGC Puerto Rico strongly recommends making a list of at least 5 priority projects in different areas such as the electrical grid, roads, water, schools, etc. These projects, which shall be designated for their significant contribution to resiliency, and quality and stability of services to the residents, shall have an expedited permit and construction procedures. Secretary of Energy Granholm shall lead the task of identifying the projects and developing procedures. AGC Puerto Rico has plenty of experience in streamlining processes, therefore we are available to collaborate.

- Budgets

Repair and reconstruction costs post hurricane Maria were estimated in 2018. Since then, construction costs have increased dramatically due to inflation, supply chain and demand factors. According to AGC of America, construction prices nationally jumped 19% year to year from 2020. In Puerto Rico, prices have experienced a larger increase, in some cases more than double, especially in labor. This has created a gap between estimates and actual costs. Currently, proposals are higher than budgets, which means that projects cannot begin. To be able to undertake the projects that Puerto Rico needs based on the expert analysis of federal and local agencies, the federal and local governments must expedite budget adjustments to address inflation.

- Local Contracting

Maximizing the participation of local contractors and suppliers to reconstruct the island's infrastructure is vital to Puerto Rico's economic recovery and progress. Local contracting will create wealthy and well-paying jobs that will remain in Puerto Rico, whereas outside contractors and employees will repatriate revenues aimed to have a local economic impact. Section 307 of the Stafford Act states that preference shall be given to firms operating in the area affected by the disaster or the emergency, in this case Puerto Rico. AGC Puerto Rico understands that the percentage of preference should be determined and included in the guidelines, to ensure transparency and compliance. (See Attachment 1—Section 307 of Stafford Act)

- Labor

Access to skilled labor is a major concern. At present, Puerto Rico has roughly 30,000 construction workers in the formal economy, and over 25,000 in the informal economy. AGC Puerto Rico and the construction industry is proposing the implementation, by Executive Order from President Biden, of a Parole for Significant Public Benefit to allow non-Citizens living in Puerto Rico with an undefined migratory status to work in construction projects financed with FEMA disaster recovery funds. (See Attachment 2—Proposal) This will be a feasible mechanism to significantly expand the pool of available workers in the time frame needed, without having to bring in workers from other jurisdictions. **AGC Puerto Rico and our members have unsuccessfully tried using other mechanisms, such as seasonal H2B visas. We must note that construction companies on the island have not received any construction workers under the H2B visa program in recent years, despite having applied. H2B visas were not designed and are simply not meant for the construction industry.**

- PLA Requirements

Removing unnecessary requirements, such as the Project Labor Agreements established by LUMA and imposed on local contractors, is fundamental for undertaking the transformation of the electrical grid. AGC Puerto Rico has repeatedly stated that LUMA's imposition of a PLA negotiated with a labor union outside of Puerto Rico will increase costs dramatically, and significantly limit the number of projects that will in fact be built. LUMA's chosen union, or any other stateside union, will not be able to supply the amount of construction workers that will be needed, instead they could reduce the limited resources that we have available. The U.S. Government, the Commonwealth and Puerto Rico's construction industry must work together and push for implementing innovative solutions to address the skilled labor issue and expand our pool of human resources significantly without adding unnecessary burden to the island's infrastructure, such as the abovementioned Parole for Significant Public Benefit.

AGC Puerto Rico thanks you for your time and urges the members of this Committee to include our recommendations in your report, so they can be implemented. We are available to answer your questions and to collaborate as you may deem necessary to accelerate the reconstruction and modernization of Puerto Rico.

QUESTIONS SUBMITTED FOR THE RECORD TO EDUARDO PARDO, PRESIDENT, PUERTO RICO CHAPTER, ASSOCIATED GENERAL CONTRACTORS

Questions Submitted by Representative Westerman

Question 1. Can you further expand on your testimony about the design-build system and how that has improved the timeline of projects your members have worked on?

Answer. The Design-Build delivery method has multiple benefits vs. the design-bid-build approach, including, among other:

- **Faster delivery and lower costs**, because the contractor and the design firm work together as a team and, in the process, they identify best construction methods, determine the availability of materials, reduce procurement of long-lead items, and promptly solve RFIs (Requests for Information) and site conditions.
- **Effective project and cost management**, because the designer and the contractor are working together through every phase of the project—from design to construction—the project is designed according to budget and design constructability, communication between the design build team and the owner tends to more fluid and transparent, and changes and cost estimates are discussed and revised in real time.

Question 2. How have interruptions in the supply chain affected your members in Puerto Rico during the past year? How do you expect any changes to the supply chain to affect recovery post-Fiona?

Answer. Given that Puerto Rico imports around 80% of the construction materials, our industry is extremely vulnerable to external market conditions over which we do not have any control. The Covid-19 pandemic and the war in Ukraine caused significant disruptions in the supply chain of construction materials worldwide, and Puerto Rico was no exception. Said situation have reduced the availability, increased the costs, and delayed the delivery of materials which has affected construction calendars. As public and private construction activity continues to increase during the next few years, demand for construction materials will remain high. Therefore, it is important to note that any unresolved issues in the supply chain will be a factor in our industry and the P.R. government's capacity to accelerate the pace of reconstruction projects. Furthermore, while the U.S. and foreign markets stabilize, it is important that the local and the federal governments identify how the application of current laws and regulations could be specifically aggravating the situation in Puerto Rico, such as local inventory taxes.

Question 3. From your experience and the experience of your members, can you tell us more about how interruptions in electrical power affected you and your members both pre- and post-June 2021, when LUMA took over the grid?

Answer. Puerto Rico's electrical power service has been unreliable and expensive for many years, even before the devastating hurricanes of 2017. Since 2017, Puerto Rico in general has suffered the effects of deteriorating customer services and continuous power outages.

- Under LUMA customer service has worsened. For example, if you call LUMA to request a new connection or a disconnection it takes them a long time to fulfill the request. This affects economic development and new investment.
- Moreover, as contractors we hoped and were looking forward to participating in the historic transformation of Puerto Rico's power grid under the strong leadership of a qualified private company with the ability to act outside of political affiliations. However, our expectations are very distant from the reality.
  - — First, LUMA has not been able to promptly identify issues and implement solutions, power outages continue to affect residential and business consumers island-wide, sometimes for hours and even days, electrical lines and posts are fragile, and communication with clients and stakeholders is highly deficient.
  - — Second, LUMA is limiting the participation of local contractors by imposing unnecessary conditions that have led to the cancellation of contracts with local contractors, and preference for mainland-based partners or affiliated companies. For example, in October 2021 LUMA wrote to major highly experienced electrical contractors in Puerto Rico announcing it had signed a PLA with IBEW, a mainland-based labor union, which would apply to all contractors, and subcontractors working with LUMA in the transformation of the electrical power grip.

    Furthermore, the letter stated that LUMA would be canceling the contracts of the companies that refused to sign the agreement. AGC-P.R. reiterates that said arbitrary and unnecessary condition will increase costs substantially and reduce the expected impact of the federal investment.

Question 4. Please further expand your experience of working with FEMA or COR3 on recovery and rebuilding efforts. What has the experience been like for your association and members?

Answer. AGC-PR's experience working with FEMA and COR3 has been one of effective communication and collaboration. Both agencies have diligently provided regular status updates of their plans, progress and upcoming projects and have paid attention to our concerns and recommendations. We acknowledge and must point that, in the process (since 2017), both agencies have faced significant challenges regarding procedures, funding approval, cost estimates, approvals, and implementation of guidelines, among other. Given Puerto Rico's fiscal reality (PROMESA, Oversight Board, Title III, etc.) and lack of qualified personnel in government agencies and municipalities to navigate the complexities of federal procurement and funding, we have significantly less ability to fund and procure projects vs. other mainland states, where reconstruction processes tend to move faster. Finally, we must note three things:

- the complexity and number of required procedures continues to affect the agility of the processes
- the recently implemented working capital advances are having a palpable positive impact
- the appointment of Jennifer Granholm to lead reconstruction efforts for the U.S. Government is a positive step

Questions Submitted by Representative González-Colón

Question 1. Can you discuss how increased costs due to inflation are impacting the rebuilding and reconstruction process in Puerto Rico?

Answer. Increased costs due to inflation in labor and material prices are severely impacting every construction project, both public and private. According to AGC of A the producer price index for nonresidential construction—not including added costs for delays in delivery schedule, raising wages rates and overtime pay, and financial costs associated with delays—has soared 11.2 year over year (from October 2021 to October 2022). For example, nationally the producer price index for diesel fuel soared 61.5 percent year over year, for cement rose year-over-year increase to 13.4 percent, and for architectural coatings, such as paint, surged 27.5 percent over

12 months. **The unforeseen and sudden increases in prices pose a major burden on projects with 428 FEMA funding that have fixed budgets established before 2020. Therefore, the budgets for projects with 428 FEMA funding need to be revised according to current price rates, because incoming bids are well above the established budgets halting the projects awards.**

Question 2. In your written testimony you briefly discuss how unnecessary steps and requirements by both the Federal and State government are complicating, delaying, and increasing the cost of reconstruction.

Answer. The federal funds assigned to Puerto Rico are very much appreciated and needed to address the drastic effects of Hurricane María, earthquakes, and housing and infrastructure needs. The processes established to use and disburse said funds have taken longer than expected in part due to FEMA's alternate use of Section 428 of the Stafford Act (based on fixed costs), lack of personnel with experience in said process, and the sudden and drastic inflation of prices during the last two years. AGC-PR understands that the following steps could be major game changers to expedite the pace of the reconstruction process:

- The appointment of Energy Secretary, Jennifer Granholm, to expedite decision making and resolve any potential impasse, such as the 25% Working Capital Advance, which was recently approved and implemented.
- The revision of the budgets previously approved for projects under Section 428 of the Stafford Act (fixed costs) to update the amounts to current market conditions, which is under the effects of a sudden inflationary wave that started two years ago.
- Consolidate funding programs (hurricanes Irma, María and Fiona, as well as earthquakes) to avoid further complications in the use and disbursement of funds.
- Prioritize improvements to the approval and revision processes for projects in FEMA's Accelerated Awards Strategy (FAAST), especially those related to environmental approvals.
- Allow using the small project definition approved for Hurricane Fiona (projects of $1 million or less) vs. the one required for Hurricane Maria (projects of $123,000 or less) to accelerate processing.

Question 3. In the discussion about the Project Labor Agreements, can you clarify what is the specific effect that this has upon the sector, and how is it that the effect happens? Is there an actual imposition of a binding requirement that IBEW labor terms be applied to all the contractors' workforce or projects, or is it more that the higher payments for LUMA contracts creates an increased market pressure on businesses?

Answer. First, there is an actual imposition because accepting the PLA between IBEW and LUMA is currently a binding requirement established by LUMA for contractors who want to participate in the transformation of the electrical grid. Said imposition will have several effects of significant importance that will affect both workers and companies:

- **Unionize thousands of employees** who are currently working in open shop projects under free market conditions to benefit one mainland-based union that will be expanding membership and monthly quotas at the expense of Puerto Rican workers and the investment of federal funds.
- **Take away workers' rights** to decide if they want to belong to a union and choose which union will represent them.
- **Increase costs and reduce the participation of local contractors and labor** who do not want to work under the imposed conditions, because they were negotiated by mainland-based parties and do not take into consideration Puerto Rico's specific needs and realities and the negative implications they will have in the transformation of the electric grid, and people's access to reliable service at competitive costs.
- **Disrupt free market conditions in Puerto Rico**, because effective in October 2021, LUMA arbitrarily and unilaterally canceled the contracts it had with all major local electrical contractors who did not accept the conditions established in the PLA without taking into consideration their expertise and capacity or the impact this unnecessary action would have on cost, and schedule.

- **Limit the participation of local contractors and the expected economic impact of federal reconstruction funds**, because LUMA is replacing local contractors for mainland-based partners and subsidiaries that will import their own resources and repatriate the profits instead of investing them in Puerto Rico to build a solid economic basis for future progress and sustainability.

Last, Puerto Rico-based contractors are asking to be given the opportunity to participate in LUMA's bids and show—with facts—our capacity to perform the required tasks for a lower price, on schedule and efficiently, outside of the PLA.

The CHAIRMAN. Thank you, sir. Let me now go back to Ms. Ruth Santiago, Community Environmental Attorney.

Ms. Santiago, if it is functioning, you have 5 minutes.

STATEMENT OF RUTH SANTIAGO, COMMUNITY ENVIRONMENTAL LAWYER

Ms. SANTIAGO. Thank you, Chairman Grijalva, good morning. Good afternoon to Chairman Grijalva and members of the House Committee on Natural Resources.

On behalf of the dozens of groups joining in this testimony, we appreciate the opportunity to testify on Puerto Rico's post-disaster reconstruction and power grid development. We advocate for a decentralized, distributed, solar-based electric system, and have substantial concerns with LUMA Energy's deficient operation of the electric system and LUMA's control over the historic amount of Federal disaster recovery funds.

The recent impacts of Hurricane Fiona brutally underscore the lessons that were not learned from Hurricane Maria. People in Puerto Rico experienced the fifth anniversary of Hurricane Maria without electricity or running water.

Fiona mostly skirted Puerto Rico as a tropical storm and a Category 1 hurricane as it entered the southwest corner of the archipelago. Yet, the hurricane downed the centralized and poorly operated and maintained electric transmission and distribution system, causing a complete power outage. Only households and businesses with rooftop solar or functioning generators had access to electric power.

Just as happened after Hurricane Maria, news reports indicate that deaths related to Hurricane Fiona, many of them due to lack of electricity, have been under-reported.

Since 2017, FEMA has allocated an unprecedented $14 billion for Puerto Rico's electric system and hazard mitigation. Yet, FEMA, LUMA, and local authorities have opted to rebuild the exact same system that repeatedly collapses.

The FOMB touts the LUMA contract as one of its foremost accomplishments. However, for residents, businesses, and institutions in Puerto Rico, the LUMA contract has been nothing less than a disaster. Electric service under LUMA has worsened. There are more power outages and voltage fluctuations which damage appliances, medical equipment, and other machinery that put life and property at risk, with adverse effects on public health, as hospitals, healthcare centers, and homes are left without service.

An IEEFA study concluded that voltage fluctuations increased within LUMA's first 2 months of operation. The duration of outages has increased from 1,340 to 1,649 minutes per year. The system average interruption frequency index has steadily risen from 0.5 in January 2022 to 0.7 in May 2022.

As a result of the April 6, 2022 general power outage related to LUMA's T&D operation, a group of restaurant chains filed a class action complaint against LUMA, seeking $310 million in damages. The increase in voltage fluctuations is so prevalent that it prompted the Puerto Rico legislature to allow the Independent Consumer Protection Office to file claims for damages to domestic appliances.

On the other hand, a resilient, reliable, and accessible electric system in Puerto Rico is possible. FEMA should prepare an Environmental Impact Statement that includes distributed renewable energy such as rooftop solar and battery energy storage systems for the investment of the historic amount of disaster recovery funds. Puerto Ricans with the means to do so are rapidly installing rooftop solar. If the FEMA funds are not used to provide rooftop solar and storage system for low and moderate-income residents, the majority of the population will be left behind with an expensive, dirty, and unreliable grid, and vulnerable to tropical storms and low-grade hurricanes like Fiona.

The Governor mentioned that he would be funding a small amount of rooftop solar projects. He mentioned 25,000. That does not go far enough, because we have 1.5 million ratepayers.

FEMA, LUMA, the Government of Puerto Rico, and the Puerto Rico Energy Bureau continue to push the reconstruction of a 20th century centralized electric system, new fossil generation, and utility-scale renewable energy projects, which took up to 15 months to reconnect to the grid after Hurricane Maria.

Now, PREPA is, I should say, also proposing to use a very small part of the disaster recovery funds for rooftop solar in remote mountainous communities. But that is certainly not enough, as we mentioned, because there are so many other ratepayers, low-income and middle-income ratepayers, that would be left behind.

The We Want Sun, Queremos Sol, civil society proposal urges the use of the FEMA funds to provide lifesaving, distributed renewable energy, primarily rooftop solar and battery energy storage, to enable universal access to resilient power to residents, businesses, and institutions. Puerto Rico need not be a place of unmitigated disaster. How many more people need to die for FEMA and the Government of Puerto Rico to invest in these alternatives?

We urge the Committee to investigate the LUMA contract and the role of the FOMB in the electric crisis. We ask this Committee to require FEMA to prepare an EIS in compliance with NEPA and consider distributed renewable energy and the use of FEMA funds for rooftop solar and storage systems that will provide lifesaving electric service to the residents of Puerto Rico.

The use of the FEMA funds will determine the viability of Puerto Rico for generations to come. Using FEMA funds to rebuild the centralized Puerto Rico grid, as proposed by LUMA and the Government of Puerto Rico is a terrible waste of taxpayer money.

Thank you.

[The prepared statement of Ms. Santiago follows:]

PREPARED STATEMENT OF RUTH SANTIAGO, COMMUNITY ENVIRONMENTAL LAWYER

Dear Chair Grijalva and Members of the House Committee on Natural Resources,

On behalf of the dozens of groups listed in the attachment to this letter, we appreciate the opportunity to testify and submit written comments on Puerto Rico's Post-Disaster Reconstruction & Power Grid Development. As further explained below, the groups joining in this testimony advocate for a decentralized distributed solar-based electric system in Puerto Rico. We also have substantial concerns with LUMA's deficient operation of the electric system since June 2021, and the control that LUMA Energy seeks to wield over the historic amount of federal funds for electric system work in Puerto Rico.

We urge the House Committee on Natural Resources to investigate the Transmission and Distribution System Operation and Maintenance Agreement between LUMA Energy, LLC and the Puerto Rico Electric Power Authority ("PREPA") and the role of the Fiscal Oversight and Management Board ("FOMB") in the imposition of the LUMA Contract and the Puerto Rico electric crisis. We ask this Committee to require the Federal Emergency Management Agency ("FEMA") to prepare an Environmental Impact Statement in compliance with the National Environmental Policy Act ("NEPA") that considers reasonable alternatives such as distributed renewable energy and the use of the historic and once-in-a-lifetime amount of funds allocated for the Puerto Rico electric system for rooftop solar and battery energy storage systems that will provide life-saving electric service to the residents of Puerto Rico. Attached is our October 4, 2021, testimony that we incorporate by reference to the current testimony.

I. Background: Hurricanes Fiona and Maria

The recent impacts of Hurricane Fiona brutally underline the lessons that were not learned from Hurricane María.[1] On September 20, 2022, many people in Puerto Rico experienced the five-year anniversary of Hurricane María without electricity and running water. While Maria was a Category 4 hurricane, Fiona was much less intense. Fiona mostly skirted Puerto Rico as a tropical storm and a Category 1 hurricane as it touched the southwest coast of the archipelago. Yet LUMA Energy's operation of Puerto Rico's centralized grid is so deficient that it caused a complete shutdown, even before Fiona made landfall. When Fiona passed just south of Puerto Rico on September 18, only households and businesses with rooftop solar or functioning generators had access to electric power.[2]

Just as happened after Hurricane Maria, news reports indicate that the deaths related to Hurricane Fiona have been under-reported.[3]

Since Hurricane María in 2017, FEMA has allocated an unprecedented $14 billion for Puerto Rico's electric system and hazard mitigation. Yet FEMA, LUMA and local authorities have opted to rebuild the exact same centralized system that repeatedly collapses. Hurricane Maria destroyed and damaged hundreds of thousands of homes, tore up roads, bridges, and other infrastructure and downed 80% of Puerto Rico's centralized grid resulting in a complete power outage that extended for nearly a year in some communities.[4]

More intense hurricanes, storms, wildfires and other climatic events increasingly are disabling delivery of energy through electric transmission and distribution (T&D) systems, i.e. lines, poles, towers, transformers, substations etc. From the Caribbean to the Gulf Coast, the eastern seaboard and along the West Coast of the United States communities are increasingly contending with power outages provoked by downed T&D infrastructure. Electric power lines are sometimes igniting or aggravating wildfires in California.[5] Last year, Hurricane Ida tore down the T&D

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[1] Ruth Santiago et al., *Another Hurricane Makes Clear the Urgent Need for Rooftop Solar in Puerto Rico*, NACLA (Sept. 21, 2020), https://nacla.org/hurricane-fiona-rooftop-solar.

[2] Josh Dzieza, *When Will Puerto Rico Have Power?*, The Verge (Oct. 26, 2022), https://www.theverge.com/c/features/23404252/puerto-rico-hurricane-maria-electric-grid-solar-panels-prepa-luma-fema; Maria Galluci, *Solar is lifeline in Puerto Rico after Hurricane Fiona knocks out power*, Canary Media (Sept. 19, 2022), https://www.canarymedia.com/articles/solar/solar-offers-lifeline-in-puerto-rico-after-fiona-knocks-out-power.

[3] Aumentan a 38 las muertes asociadas al huracán Fiona en Puerto Rico—Primera Hora.

[4] Nicole Goodkind, *Puerto Rico's Hurricane Maria Power Outage Is Now the World's Second Largest Blackout*, Newsweek (Apr. 12, 2018, 5:40 AM), https://www.newsweek.com/puerto-rico-power-hurricane-maria-blackout-882549.

[5] Richard Gonzales, *PG&E Power Lines Blamed For Northern California Wildfires*, NPR (June 8, 2018, 9:49 PM), https://www.npr.org/2018/06/08/618444388/pg-e-power-lines-blamed-for-northern-california-wildfires.

system in New Orleans and Hurricane Nicholas wreaked havoc on the electric grid in Texas.[6] Just weeks ago, Hurricane Ian knocked out power for more than 2.6 million Floridians—while Floridians with rooftop solar and microgrids were mostly unaffected.[7]

Civil society groups are increasingly holding rogue utilities, like Entergy in Louisiana, to account,[8] becoming "energy literate" and putting forth proposals for energy system transformation.[9] But, despite lofty renewable energy goals and zero emissions targets, government agencies that are in the grips of utility capture frequently fail to follow through on the energy transformation agenda and much less take assertive steps to facilitate community and civil society empowerment for critical, potentially life-saving measures for essential electric service. Puerto Rico is the poster case of energy injustice.

Puerto Rico's existing electric transmission and distribution lines run primarily from the south, where most of the power plants are located including the two most polluting fossil-fired power stations and transmit electricity to the north especially the to the San Juan metropolitan area. The power plants in the south are sited in low-income, low-wealth neighborhoods, home to many Afro descendant Puerto Rican families already dealing with environmental racism. Most people in southeastern Puerto Rico and in many other marginalized areas cannot afford the upfront costs to access resilient, clean sources of energy such as rooftop solar and battery energy storage systems.[10]

Electric service was still not fully restored nearly a month after Hurricane Fiona.[11] A cursory view of the electric system in Puerto Rico after the hurricanes casts a disappointing and potentially lethal tally. After Hurricane Maria, the centralized T&D system was stood up amid scandals of US-based companies like Whitefish and Cobra profiting handsomely from dubious work. A New York-based company called New Fortress Energy built an illegal, unaffordable, and unreliable liquefied "natural" methane gas terminal to import highly volatile methane gas; the Punta Lima Wind Farm was blown away by the hurricane as was a utility-scale, land-based solar array near where the storm made landfall; and the Virginia-based AES coal-fired power plant in Guayama, PR continues to spew toxins and contaminate the South Coast Aquifer.[12] The lessons from Hurricane Maria for the need to decentralize the grid and move quickly to distributed renewable energy were not learned. As a result, Puerto Rico experienced a complete power outage two months ago, after Hurricane Fiona. LUMA Energy, a joint venture created by Quanta Services and ATCO Canadian Utilities is performing even worse than Puerto Rico Electric Power Authority ("PREPA") while lobbying to rebuild the existing centralized, fossil-enabling T&D system with a historic amount of federal disaster recovery funds.

II. The Disastrous Performance of LUMA Energy

The Fiscal Oversight Management Board touts the LUMA Contract as one of its foremost accomplishments. (PREPA Fiscal Plan 2021). However, for residents,

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[6] *More Than 100,000 Texas Electricity Customers Without Power After Nicholas. Restoring it to Everyone Could Take Days*, The Texas Tribune (Sept. 14, 2021, 9:02 PM), https://www.texastribune.org/2021/09/13/texas-tropical-storm-nicholas-updates/.

[7] *This 100% solar community endured Hurricane Ian with no loss of power and minimal damage*, CNN, Rachel Ramirez (October 2, 2022, 11:53AM), https://amp-cnn-com.cdn.ampproject.org/c/s/amp.cnn.com/cnn/2022/10/02/us/solar-babcock-ranch-florida-hurricane-ian-climate/index.html.

[8] *Energy & Justice in New Orleans: Power to People!*, Deep South Center For Environmental Justice (Sept. 14, 2021), https://www.dscej.org/the-latest/energy-justice-in-new-orleans-power-to-people.

[9] *Queremos Sol: Sostenible. Local. Limpio*, Queremos Sol (Feb., 2020), https://www.queremossolpr.com.

[10] *Id.*

[11] *Thousands still without power weeks after Hurricane Fiona hit Puerto Rico*, The Guardian (Oct. 12, 2022), https://www.theguardian.com/world/2022/oct/12/power-outages-puerto-rico-hurricane-fiona.

[12] *EPA Administrator Regan Announces Initial Actions to Protect Communities Following Puerto Rico Journey to Justice Tour*, November 4, 2022: "In response to community concerns about groundwater contamination stemming from coal combustion residuals (CCRs) from AES-PR, EPA will sample groundwater used as drinking water in areas in southern Puerto Rico where CCRs were historically placed. . . . EPA is also reviewing the company's plan to address elevated levels of metals found in groundwater. . . . In addition, EPA has issued notices of violation to AES-PR identifying potential violations under air and CCR laws or regulations, including the notice the Administrator announced during his July visit. . . . Enforcement actions will be taken, as appropriate, based on EPA's assessment to ensure the safety of the community and compliance with the law." https://www.epa.gov/newsreleases/epa-administrator-regan-announces-initial-actions-protect-communities-following-puerto.

businesses, and institutions in Puerto Rico, the LUMA Contract has been nothing less than a disaster.

Electric service under LUMA has worsened—since LUMA took over operation of most aspects of the electric system in June 2021, there are more power outages and voltage fluctuations, which damage appliances, medical equipment and other machinery and put life and property at risk.[13] LUMA's deficient operation of the grid has had adverse effects on public health, as hospitals, health care centers, and homes were left without service. The damage has spread to small and large businesses and essential institutions such as schools and food inventories, causing economic losses and dislocation in services to the population.[14]

A study by the Institute for Energy Economics and Financial Analysis carried out in August 2021, concluded that voltage fluctuations had increased within LUMA's first two months.[15] Measured by a rolling annual System Average Interruption Duration Index, the minutes per year of outages has increased since LUMA's June 2021 takeover, from 1,340 minutes to 1,649 minutes.[16] The System Average Interruption Frequency Index has steadily risen from 0.5 in January 2022 to 0.7 in May 2022.

As a result of the April 6, 2022, general power outage related to LUMA's T&D operation, a group of restaurant chains filed a class action complaint against LUMA. In the lawsuit, plaintiffs request that the court order LUMA and other co-defendants, "to pay for the economic damages caused to the businesses as Class A members, and to the residential clients as Class B members, which is estimated jointly in an amount of not less than $310,000,000.00.[17]

The increase in voltage fluctuations is so palpable that it prompted the Puerto Rico legislature to seek amendments to Act 57-2014 in order to allow the Independent Consumer Protection Office (ICPO), to file claims against LUMA on behalf of its clients, for damages to domestic appliances caused by voltage fluctuations.[18] The Puerto Rico House of Representatives also filed a measure requesting that LUMA follow up on complaints filed by citizens who have lost electrical appliances due to the blackout on April 6th, 2022.[19]

Prior to Hurricane Fiona, two major hospitals lost power for several hours, forcing doctors to cancel surgeries, routine medical treatment, and reschedule appointments. Carlos Díaz Vélez, president of the Puerto Rico College of Physicians, highlighted the dangers lurking behind the outages, saying, "all of these cases (outages) put the health, and in some cases, the lives of patients at risk. If the power goes out, the patient will either die or deteriorate."[20] Fernando Cabanillas, a leading hematologist in Puerto Rico, wrote a column about an outage that lasted over 20 hours at a major Puerto Rico hospital, specifically he mentioned that "the institution

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[13] Reuters, *Explainer: What Has Happened to Puerto Rico's Power Grid Since Hurricane Maria?*, VOA News (Sept. 20, 2022, 1:22 AM), https://www.voanews.com/a/explainer-what-has-happened-to-puerto-rico-s-power-grid-since-hurricane-maria-/6754784.html.

[14] Patricia Mazzei, '*Why Don't We Have Electricity?*' Outages Plague Puerto Rico, NY Times (Nov. 10, 2021), https://www.nytimes.com/2021/10/19/us/puerto-rico-electricity-protest.html.

[15] Cathy Kunkel & Tom Sanzillo, *Puerto Rico Grid Privatization Flaws Highlighted in First Two Months of Operation: LUMA Contract Has Led to Delays, Damages, and Poor Services for Puerto Rico Customers*, IEEFA 1, 3 (Aug., 2021), https://ieefa.org/wp-content/uploads/2021/08/Puerto-Rico-Grid-Privatization-Flaws-Highlighted-in-First-Two-Months-of-Operation_August-2021.pdf.

[16] In Re: The Performance of The Puerto Rico Electric Power Authority, Resolution and Order, at 12-Month Metrics Summary 1, App. 5, NEPR-MI-2019-0007, (Mar. 14, 2022), https://energia.pr.gov/wp-content/uploads/sites/7/2022/08/20220818-MI20190007-Resolution-and-Order.pdf.

[17] Wendico et al. v. LUMA Energy, LLC et al., Civil Nnm. SJ2022CV02868 (TPI, San Juan, May 13, 2022). This case has since been consolidated with a similar claim against LUMA, Herrero Domenech et al. v. Luma Energy, LLC et al., Civil Num. SJ2022CV02868 (TPI, San Juan, April 13, 2022), https://document.epiq11.com/document/getdocumentsbydocket/?docketId=961746&projectCode=PR1&docketNumber=2913&source=DM. The consolidated case is now before the United States District Court for the District of Puerto Rico, Herrero Domenech et al v. Luma Energy LLC et al, 22-00050-LTS, (U.S.D.P.R. 2022), https://www.pacermonitor.com/public/case/45457686/Herrero_Domenech_et_al_v_LUMA_Energy_LLC_et_al.

[18] P. del S. 0845 of April 18, 2022, 3rd Ord. Sess., 19th Leg. Assem.

[19] *Presentan Resolución para Seguir Reclamos por Enseres Dañados por el Apagón*, Primera Hora (Apr. 9, 2022, 3:47 PM), https://www.primerahora.com/noticias/gobierno-politica/notas/presentan-resolucion-para-seguir-reclamos-por-enseres-danados-por-el-apagon/; *Legisladora Invita a Reclamar a LUMA por los Enseres Dañados por el Apagón y se Compromete a Dar Seguimiento*, Univision Puerto Rico (Apr. 10, 2022, 10:34 AM), https://www.univision.com/local/puerto-rico-wlii/como-reclamar-a-luma-por-enseres-danados-apagon.

[20] *Colegio de Médicos Dice Que Luma Fallo y Recuerda Qu Sin Luz la Vida de Pacientes Peligra*, NotiCel (Aug. 25, 2022, 1:29 PM), https://www.noticel.com/ahora/20220825/colegio-de-medicos-dice-que-luma-fallo-y-recuerda-que-sin-luz-la-vida-de-pacientes-peligra/.

did not have access to electronic files or telephones for 20 hours. [...] Deaths that are indisputably due to a blackout are those that occur immediately and are therefore indisputable, such as when a respirator fails due to lack of electricity, but in other cases the death may take days or weeks to manifest and may not be so obvious."[21]

LUMA will seek to place blame elsewhere and point to the age and condition of the transmission system—but the facts above demonstrate that LUMA's skeleton workforce is doing a **worse** job operating this system than PREPA's veteran, union workforce had been doing prior to June 2021.[22] LUMA has not provided basic maintenance to the electric system, such as pruning vegetation to avoid affecting the power lines (transmission and distribution system).[23] Vegetation impacts are a major cause of power outages and contributed to the Hurricane Fiona outage.[24]

LUMA has failed to provide information on the work to restore power to the millions of residents of Puerto Rico.[25] LUMA's Contract provides a cloak of secrecy and lack of transparency to LUMA who, in effect, has not responded to claims for access to information. This lack of transparency has been facilitated by the Public Private Partnership Authority ("P3A") and the Puerto Rico Energy Bureau ("PREB"). The lack of access to information and contractual provisions allows LUMA to create, as it has done in practice, an environment for corporate profiteering, subcontracting to its own affiliated companies, as well as their executives, who also receive excessive salaries. As a for-profit business, LUMA has shown that it only seeks to enrich itself and impose conditions to increase its profits, such as not hiring the workforce necessary to operate and maintain the system. LUMA's Contract has harmed the rights of the workforce and pensioners while hiring substitutes at well above the AEEPR's compensation rates, thus creating a system of labor inequality and injustice for Puerto Rican workers.

LUMA has exceeded the budget for the operation and maintenance of the electrical system functions under its charge. LUMA has not invested a single penny of its money in the electrical system. As laid out in our October 2021 testimony, the LUMA Contract grants inordinate control over disaster recovery funds to LUMA Energy.

The LUMA Contract provisions and operation negatively affect the legally mandated renewable energy goals.[26]

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[21] Fernando Cabanillas, *LUMA: Una Amenaza a la Salud Pública*, El Nuevo Día (Aug. 28, 2022), https://www.elnuevodia.com/opinion/consejos-de-cabecera/luma-una-amenaza-a-la-salud-publica/.

[22] In October 2022, UTIER filed a lawsuit against LUMA and others for defamation and cyber harassment, alleging that LUMA orchestrated a slanderous media campaign to discredit and blame the unions for PREPA's management failures. https://www.sanjuandailystar.com/post/utier-sues-luma-quanta-services-others-for-defamation-cyber-harassment.

[23] Felipe Gómez Martínez, *LUMA No Usa Fondos para Poda de Arboles y Vegetación en las Líneas Eléctricas*, Wapa TV, NotiCentro (Sept. 12, 2022), https://www.wapa.tv/noticias/locales/luma-no-usa-fondos-para-poda-de-arboles-y-vegetacion-en-las-lineas-electricas_20131122537926.html.

[24] Joshua Paltrow and Arelis R. Hernández, *Even Before Fiona, Puerto Rico's Power Grid Was Poised for Failure*, The Washington Post, (Sept. 19, 2022), https://www.washingtonpost.com/nation/2022/09/19/puerto-rico-blackout-hurricane-fiona/. See also August 1, 2022 letter from PREPA Executive Director Josúe Colón Ortiz to LUMA President Wayne Stensby, stating PREPA's concern with "the condition of several of the transmission lines of our electrical system, particularly the condition of the vegetation in the easements and their proximity to the lines, a situation that can be detected at first sight." https://twitter.com/jaramilloutier/status/1559953502310465536/photo/1.

[25] Cynthia López Cabán, *LUMA no sabe cuántos clientes tienen luz porque hace el cálculo de forma manual*, Jay Fonseca (Sept. 22, 2022), https://jayfonseca.com/luma-no-sabe-cuantos-clientes-tienen-luz-porque-hace-el-calculo-de-forma-manual/. LUMA also lied about flying helicopters to inspect the damage caused by Fiona. El Nuevo Día, on the other hand, obtained information that directly contradicted this. LUMA's chief pilot had resigned prior to the hurricane, so despite having four PREPA helicopters, LUMA was unable to fly them at the time of their statement. Manuel Guillermo Capella, *Lento el avance en la restauración del servicio eléctrico y de agua potable*, ENDI, (Sept. 22, 2022), https://www.elnuevodia.com/noticias/locales/notas/lento-el-avance-en-la-restauracion-del-servicio-electrico-y-de-agua-potable/.

[26] LUMA filed a motion with the PREB challenging the use of funds for interconnection of renewable energy projects. Urgent Motion Requesting Reconsideration of Energy Bureau's Resolution and Order of June 13, 2022, and Stay of All Directives Therein, Implementation of the Puerto Rico Electric Power Authority Integrated Resource Plan and Modified Action Plan, NEPR-MI-2020-00012, June 22, 2022, https://energia.pr.gov/wp-content/uploads/sites/7/2022/06/Urgent-Motion-Requesting-Reconsideration-of-Energy-Bureaus-Resolution-and-Order-of-June-13-2022-and-Stay-of-all-Directives-Therein-NEPR-MI-2020-0012.pdf.

III. A Resilient, Reliable and Accessible Electric System in Puerto Rico is Possible

FEMA should prepare an Environmental Impact Statement (EIS) that includes consideration of distributed renewable energy such as rooftop solar and battery energy storage systems for the investment of the historic amount of disaster recovery funds. The Federal government should require that the historic amount of disaster recovery funds be used to equip each residence, business, and institution with distributed solar energy systems, mainly on rooftops, parking lots or other suitable places together with energy storage systems (batteries). These funds should not be used to rebuild the same vulnerable, centralized power grid. Scarce land should not be impacted or sacrificed, especially agricultural and ecological land, to build industrial scale renewable energy projects that depend on vulnerable transmission lines. Utility scale renewable energy projects took 15 months to reconnect to the grid after Hurricane Maria.[27]

The transformation of the electric system toward a system based on distributed renewable energy mainly through rooftop solar energy systems will provide environmental justice to the communities most impacted by fossil fuel plants that pollute the air, land and water, and damage to public health.

Puerto Ricans with the means to do so are rapidly installing rooftop solar and storage systems for their own homes—Puerto Rico is projected to have 500 MW of rooftop solar and more than 1,100 MWh of rooftop storage by the end of next year.[28] If the historic amount of federal funds are not made available to provide rooftop solar and storage systems for low- and moderate-income Puerto Ricans, these folks will be left behind with an expensive, dirty, and unreliable grid and vulnerable to tropical storms and low grade hurricanes like Fiona.

FEMA, LUMA Energy, the government of Puerto Rico and PREB, continue to push the reconstruction of the 20th century centralized electric system that has failed after each hurricane and sometimes during lesser storms too and power purchase agreements for utility scale renewable energy projects that depend on centralized T&D.

Governor Pedro Pierluisi who took power with barely 32% of the vote is asking FEMA, with the blessing of political cronies at the PREB to hand over about $14 billion dollars to rebuild the centralized T&D system and add new methane gas-fired plants. One notable exception to this scheme is a recent request by PREPA to PREB to use a relatively small amount ($34M out of $14B) for rooftop solar in remote mountainous communities.[29]

In contrast, and as set out in the We Want Sun/Queremos Sol proposal,[30] civil society groups are calling on PREPA to not renew the LUMA contract and instead invest the historic amount of FEMA funds allocated for the electric system to provide life-saving distributed renewable energy, primarily rooftop solar and battery energy storage systems to enable universal access to resilient power to Puerto Rico residents, businesses and institutions. Queremos Sol also proposes a new governance model, that is public, depoliticized, inclusive and transparent.[31]

While various community groups and philanthropic organizations have built a few rooftop solar and battery energy storage projects throughout Puerto Rico, the pace and scale of these alternatives is dwarfed by the proposed rebuild of the centralized grid and the rollout of new methane gas plants. Higher income individuals are installing rooftop solar and storage systems but with close to a 44% poverty rate, most people in Puerto Rico cannot access the life-saving resiliency that these systems can provide. In Puerto Rico and we might add, the Gulf Coast and beyond, the investment of FEMA funds is a matter of equity and environmental, climate and energy justice. These funds should not be used to rebuild the same vulnerable, centralized electric system, powered by imported fossil fuels. Refusing this hazardous dependency and opting for a distributed alternative would also spare scarce land that should not be sacrificed to build industrial-scale renewable energy projects.

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[27] Ruth Santiago et al., *The Devastating Costs of Puerto Rico's "Solar Farms"*, NACLA (Feb. 17, 2022), https://nacla.org/puerto-rico-solar-farms.

[28] Frances Rosario, *Nuevo "Boom" en Venta de Placas Solares*, Primera Hora (June 13, 2021, 11:45 PM), https://www.primerahora.com/noticias/puerto-rico/notas/nuevo-boom-en-venta-de-placas-solares/. Projection based on numbers found in the 2021–2022 metrics released by PREB. Puerto Rico Energy Bureau, *supra* note 16, at app. 5.

[29] Motion to Inform Reallocation of FEMA 404 HMGP Funds and Requests for Approval of Generation Projects, In RE: Review of the Puerto Rico Electric Power Authority's 10-Year Infrastructure Plan—December 2020, NEPR-MI-2021-0002, Aug. 2, 2022, https://energia.pr.gov/wp-content/uploads/sites/7/2022/08/Motion-to-Inform-Reallocation-of-FEMA-404-HMPG-Funds-and-Request-for-Approval-of-Generation-Projects-NEPR-MI-2021-0002-1.pdf.

[30] We want sun/Queremossol (queremossolpr.com).

[31] Section V of the Queremos Sol Proposal, https://www.queremossolpr.com/project-4.

Agricultural and ecological land must be reserved for other purposes, including for cultivating food sovereignty and reclamation efforts.

Puerto Rico need not be a place of unmitigated disaster. The people of the archipelago already have mapped out—and in some places built—solutions to these challenges, that refuse the centralized, fossil-fired system. Fourteen-billion dollars are already earmarked to save residents' lives. How many more people need to die for FEMA and the Government of Puerto Rico to invest in rooftop solar alternatives?

The Biden-Harris administration must make good on its commitment to tackle the climate crisis and center environmental, climate, and energy justice by positioning Puerto Rico as an example of what recovery funds can do to transform the electric system. It is past time for the reimaginings provided by our communities to be taken seriously to create new systems that transform power and advance justice. Puerto Rico needs energy justice now!

IV. Conclusion

For the reasons summarized in this written testimony, we urge the House Committee on Natural Resources to investigate the LUMA Transmission and Distribution System Operation and Maintenance Agreement and the role of the Federal Oversight and Management Board in the imposition of the LUMA Contract and the Puerto Rico electric crisis. We ask this Committee to require FEMA to prepare an Environmental Impact Statement in compliance with NEPA and consider reasonable alternatives such as rooftop solar and battery energy storage systems. That analysis will show that the best use of the historic amount of FEMA funds allocated for the electric system would be rooftop solar and storage systems, which are already providing life-saving electric service to the residents of Puerto Rico. We also ask for an inquiry on the proposed use of FEMA funds for electric system work to ensure that they are invested in a cost-effective manner to provide accessible, affordable, renewable, reliable and resilient electric energy. The use of the historic amount of FEMA funds allocated for the electric system will determine the viability of Puerto Rico for generations to come. Using FEMA funds to rebuild the centralized Puerto Rico grid is a terrible waste of taxpayer money.

Attachment

List of Puerto Rico and Stateside organizations joining in testimony presented by Ruth Santiago, Esq.

Organization Name Nombre de organizaciÃ³n	¿Your Name ¿Su Nombre	Username
Cleveland Owns	Jonathan Welle	jonathan@clevelandowns.coop
Fairbanks Climate Action Coalition	Kenzley Defler	kenzley@fbxclimateaction.org
Coalition to Protect New York	Maura Stephens	maurastephens1@gmail.com
People Power Solar Cooperative	Hannah Bouscher-Gage	hello@peoplepowersolar.org
Tallahassee Food Network	Dr. P. Qasimah Boston	projectfoodnow@gmail.com
Public Laboratory for Open Technology and Science	Jordan Macha	jordan@publiclab.org
Kinetic Communities Consulting	Daphany Rose Sanchez	DAPHANY@kc3.nyc
Institute for Local Self-Reliance	John Farrell	jfarrell@ilsr.org
Sane Energy Project	Kim Fraczek	kim@saneenergyproject.org
Coalition of Community Organizations	Reverend James L Caldwell	cocohoustonnow@gmail.com
Network for a Sustainable Tomorrow	Adam Flint	Adam@nynest.org
LULAC Council 7259	David Sinclair	Dsinclair47@gmail.com
Long Island Progressive Coalition	Lisa Tyson	rmadden@lipc.org
Solstice Initiative	Yesenia Rivera	yesenia@solstice-initiative.org
SolidarityINFOService	Michael Eisenscher	michael@solidarityinfoservice.org
The 11th Hour Project	Shanti Kleiman	shanti@11thhourproject.org
Western New York Region Chapter, The Climate Reality Project	Lynn Saxton	lbe_14569@yahoo.com
Catalyst Miami	Natalia Brown	nataliab@catalystmiami.org
People for a Healthy Environment	Doug Couchon	dcouchon@gmail.com
Public Laboratory for Open Technology and Science	Jordan Macha	jordan@publiclab.org
Kinetic Communities Consulting	Daphany R Sanchez	DAPHANY@kc3.nyc
Unitarian Universalist Association	Rachel Myslivy	Rmyslivy@uua.org
Greenbank Associates	Alice Sung	asung1@gmail.com
Institute for Local Self-Reliance	John Farrell	jfarrell@ilsr.org
Southeast Climate & Energy Network	Alexander Easdale	amy@scen-us.org
Rachel's Network	Fern Shepard	info@rachelsnetwork.org
Greater Hartford Environmental Coalition	Xander Bayanilla	greaterhartfordtaskforce@gmail.com
Race Forward	Leah Obias	lobias@raceforward.org
Solar Design Associates	Haskell Werlin	hwerlin@solardesign.com
HealthLink	Lynn Nadeau	lynnnadeau@gmail.com
Our Climate Education Fund	Jasmine Davenport	jasmine@ourclimate.us
Jewish Climate Action Network-MA	RLynn Nadeau	legsandregs@jcan.com
Food & Water Watch	Mary Grant	mgrant@fwwatch.org
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Kinetic Communities	Daphany R Sanchez	DAPHANY@kc3.nyc
Church Women United in New York State	Mary Smith	smithmarym@yahoo.com

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The CHAIRMAN. Let me ask the Members, beginning with Mr. Stauber, if you have any questions.

Mr. STAUBER. Yes.

The CHAIRMAN. You are recognized for 5 minutes, sir.

Mr. STAUBER. Thank you very much, Mr. Chair. Just a few questions for Dr. Bahramirad.

Thank you for joining us today. Is LUMA in charge of energy generation, or is PREPA?

Dr. BAHRAMIRAD. Thank you, Congressman, for the question. LUMA is in charge of transmission and distribution, and PREPA is responsible for generation.

Mr. STAUBER. OK. Does LUMA have any control over skyrocketing energy prices?

Dr. BAHRAMIRAD. No, in fact, Congressman, I appreciate the opportunity to clarify, as this is an area of immense confusion. LUMA has never asked or received a rate increase. We have no control over that. And to be honest, this is an area that PREPA needs to address. It is hurting the people of Puerto Rico, and we have efforts that are implementing to mitigate that damage.

Since the beginning of 2021, there have been seven increases in the rate customers pay for electricity due to the rising cost of generation fuel used by PREPA and other generators, and there have been zero increases proposed to pay any of LUMA's operation. Less than 16 percent of the bill is related to LUMA's operation, and LUMA does not generate energy, nor does not financially benefit from any change or increase in generation fuel costs.

I should also mention that since August, twice there have been reductions in generation cost and rate, as well.

Mr. STAUBER. Thank you. How long did it take LUMA to return electrical service to Puerto Rico following Hurricane Fiona?

Dr. BAHRAMIRAD. As you heard in my testimony, Congressman, with the Category 1 Hurricane Fiona, we experienced 100-mile-per-hour wind and over 30 inches of rain in some areas. It took us 5 days to restore 52 percent of customers, and 12 days to restore 90 percent of customers.

That is a historic restoration for Puerto Rico that hasn't been seen in the past, and that is due to the fact that we have spent over 10,000 hours of training with FEMA. We have done a number of drills with the Federal Government, FEMA, Army Corp, COR3, Department of Energy, and many others to be prepared for such natural disasters.

In addition to that, our parent company has invested in assets and trucks, bucket trucks, and diggers in the island to be prepared for such events. And as a result of that, we have been able to restore 90 percent of customers in 12 days.

Mr. STAUBER. We also know that LUMA inherited a massive maintenance backlog. With my remaining time can you describe that backlog left by PREPA, and how many projects you have completed since you have had the contract?

Dr. BAHRAMIRAD. This is an excellent question. When we took over, we had to digitize rooms and rooms of paper, and to analyze them related to maintenance of equipment, substation transmission and distribution lines, and analyze them and prioritize the maintenance of them. We have made significant progress.

In addition to that, when we took over, there were over 270,000 work orders in the backlog that have been there since Maria. And right now, we have only 10,000 work orders in the backlog.

Mr. STAUBER. So, you went from 270,000 backlog orders to——

Dr. BAHRAMIRAD. To less than 10,000 in 17 months.

Mr. STAUBER. OK. I appreciate the opportunity and, Mr. Chair, I yield back.

The CHAIRMAN. The gentleman yields. Let me now turn to the gentleman from Chicago, Mr. García.

You are recognized for 5 minutes, sir, if you are available.

[Pause.]

The CHAIRMAN. I guess not. And Mr. Bentz, sir, you are recognized. Thank you.

Mr. BENTZ. Thank you, Mr. Chair. I have some questions for Mr. Pardo, if he can answer, if he can hear me.

My first question has to do with your report. You call out that—you suggest, actually, making a list of five priority projects in different areas. Your report would suggest that there hasn't been a

prioritization done. Is that true? Are you saying there was no prioritization?

If so, who decides what happens, which projects get done first?

Mr. PARDO. Well, I know that there are critical projects that the government has in mind, but think the most important factor here is the power grid and the big projects that really provide the resiliency needed before the next hurricane. Those projects have not started. So, those projects may be in FEMA's hands or in LUMA's hand. That is why the assignment of Jennifer Granholm is key to resolve those issues and put those projects out for construction.

Mr. BENTZ. So, I am going to pop around here a bit, because I don't have much time.

In the next part of your report you talk about skilled labor and that it is a major concern. I looked quickly at the population of Puerto Rico, which is 3.264 million. I looked at the demographics and in the unemployment rate. It appears that your unemployment rate is 8.27 percent. So, I am just wondering, do you have people in Puerto Rico that don't want to work, or what is going on? How come you are short labor when you have an 8.5 percent unemployment rate?

Mr. PARDO. Well, speaking for the construction sector, the current formal market is around 30,000 workers. It used to be, before the 15 years of it being a declining economy, that number used to be 60,000. We could manage around $6 million worth of work a year, but after 15 years of declining economy, we have lost that ability, and we need workers. We need workers to perform this reconstruction work as soon as possible. That is why we are proposing this initiative for Parole for Significant Public Benefit.

Mr. BENTZ. It appeared to me—and we have the same issue, by the way, although the unemployment rate appears to be around 3 percent here, so we have an incredible demand for the same visas you talk about, the H-2B and, actually, also H-2A visas. So, this seems to be a Western Hemisphere problem.

Let me go to your last paragraph, where you talk about the restrictions that labor unions have imposed upon—or the requirements that certain labor unions be used. And you say this increases cost dramatically and will significantly limit the number of projects that will, in fact, be built. LUMA's chosen union will not be able to supply the amount of construction workers that will be needed. Have you brought this to the Governor's attention?

Mr. PARDO. Yes, we have. Yes, we have.

Mr. BENTZ. And what is the response?

Mr. PARDO. The response has been that they are giving LUMA the priority to decide. Our point of view is that these are Federal funds for the benefit of Puerto Rico. We are very sure that when those projects go out to bid, pricing using those PLAs are going to be much higher than they need to be. And if there is any doubt, they can open it to the market, and we can compare pricing so we can make the best use of the funds available.

Mr. BENTZ. Right. Well, I could comment on this, but I won't. I have a last question.

You say that the U.S. Government, the Commonwealth, and the construction industry should work together to implement

"innovative solutions." Do you have one or two, some innovative solutions you would suggest?

Mr. PARDO. Yes, yes, thank you for your question. The Parole for Significant Public Benefit, that is a parole with a prerogative the executive branch can provide due to the hurricane in Puerto Rico. They can provide us with a parole using non-citizens currently living in Puerto Rico. It is not for people to come in. It is people that are currently living in Puerto Rico with an immigrant status, to provide them a formal way to work for these construction projects, much needed, and they can be provided a legal way to legalize their status.

Mr. BENTZ. Thank you, Mr. Pardo, very much.

I yield back.

The CHAIRMAN. Are any of our——

VOICE. Mr. Torres is here, Mr. Torres.

The CHAIRMAN. Mr. Torres, as you walk up, take a deep breath. You are recognized, sir, when you are ready.

Mr. TORRES. I have concerns about the manner in which LUMA reports outages to the public. So, instead of reporting the number of outages by municipality, LUMA reports outages by regions.

And here is the problem as I see it. Unlike municipalities, which are based in law and tradition, and which are familiar to the people of Puerto Rico, the six regions into which LUMA divides the island, those regions are arbitrary and artificial. LUMA's practice of reporting outages based on arbitrarily drawn regions, in my view, has led to more confusion than clarity.

So, for example, if LUMA reports that power has been restored in the region of Ponce, it gives the impression that power has been restored in the municipality of Ponce, even if that impression is false.

So, is LUMA willing to commit to reporting outages by municipality, rather than by these imaginary regions you have devised?

Dr. BAHRAMIRAD. Thank you for the question, Congressman. If it is OK, I would like to invite my colleague, Mr. Hurtado, to join me to provide details.

The CHAIRMAN. Please.

Mr. TORRES. Thank you, Mr. Chairman.

The CHAIRMAN. Please introduce yourself, sir, for the record, and your title.

Mr. HURTADO. My name is Mario Hurtado. I am the Chief Regulatory Officer for LUMA Energy.

The CHAIRMAN. Thank you.

Mr. HURTADO. Thank you, sir.

Congressman Torres, the regions that you mentioned, respectfully, are not arbitrary or artificial. They are based on the configuration of the electrical system. So, the systems that LUMA has that track outages by feeder or by distribution lines coming from the transmission system, that is how the system is organized. It is also organized so that we can organize the work efficiently with the different crews. And that is the way the regions are set up.

That said, your concern is very well taken, in terms of reporting and providing information to the public. The systems that LUMA inherited from PREPA are quite limited, specifically the outage

management system, which is the main tool that is used to track outages and to be able to report out. We have an improvement program that we have instituted to make improvements in that, but there is quite a bit of missing data. We have been rebuilding it, but it is a process that will take several years——

Mr. TORRES. I will rephrase the question. Is it—and I know it is—it may not be arbitrary to you, but to the people on the island it comes off as arbitrary. Like, reporting by municipality would seem more natural, more logical to residents on the island.

So, my question is, is it even possible for you to break down the reporting at the municipality level?

Mr. HURTADO. Congressman, where I was getting to in my answer is that is a goal that we have, and we are moving toward that. We are not there yet. As I mentioned, as I was trying to say, it is a multi-year process set for us to get there in terms of cleaning the data, making sure that it is reflecting the reality, and also being able to extend the data beyond just the feeders, but to the laterals that are many of the lines that come off of a main feeder to actual people's homes.

At this time, we don't have the granularity of data acquisition from the system to be able to report that way. So, we are really making calculations and estimates based on how many customers we believe are connected to certain feeders. So, that data, while it is the best data we have at the time, is not that accurate, and it is not organized around municipalities. That is part of the process that we are undergoing, and it is something that we are driving toward.

Dr. BAHRAMIRAD. Congressman, one thing I would add to it is the good news is that one of the most transformative projects that was recently approved by FEMA is modernization of our energy management system. And as we go through the process and install that, that is going to help us to get what you are asking, having more visibility to municipalities, and provide that information to our customers.

Mr. TORRES. I have a question for, I think, the housing representative. I spoke to the Governor earlier about the informal nature of much of the housing in Puerto Rico, and how do we ensure that we are not simply rebuilding in the same form, but that we are building back better. So, do you have the funding that you need from FEMA or HUD to rebuild the housing stock with greater resilience?

Mr. RODRIGUEZ. Yes. Thank you for the question, Congressman. Yes, we have the money from the DR. We got——

Mr. TORRES. How large is that pot?

Mr. RODRIGUEZ. Three billion.

Mr. TORRES. Three billion?

Mr. RODRIGUEZ. Yes. Currently, we have access to that money. Last year, we increased from 400 houses that we already either repair up to code or reconstruct, and now we have more than 4,000 houses——

Mr. TORRES. I just want to interject, because I see my time—$3 billion will lead to the rebuilding of how many homes? And that will be my final question.

Mr. RODRIGUEZ. Sorry?

Mr. TORRES. You said you have a pot of $3 billion to rebuild homes with greater resilience.

Mr. RODRIGUEZ. Yes.

Mr. TORRES. How many homes?

Mr. RODRIGUEZ. It will be 17,000 homes.

Mr. TORRES. Seventeen thousand?

Mr. RODRIGUEZ. Yes.

Mr. TORRES. Out of how many homes in Puerto Rico's housing stock?

Mr. RODRIGUEZ. One million.

Mr. TORRES. So, I think we have a distance to travel before——

Mr. RODRIGUEZ. Yes.

Mr. TORRES. Thank you, Chair.

The CHAIRMAN. Thank you, I appreciate it, and thank you for joining the Committee momentarily, I assume.

Let me now turn to the Commissioner of Puerto Rico, Miss González-Colón.

You are recognized.

Miss GONZÁLEZ-COLÓN. Thank you, Mr. Chairman.

First of all, I want to just recognize that this morning two officers were shot doing their job in the morning by CBP Patrol in the water in the southwest of the island. One of those CBP officers just passed away as a result of their injuries. So, I just want to acknowledge that and send our condolences to their families and all the people involved.

And regarding the hearing, I would like to request PREPA to submit a written statement regarding the reconstruction of the island, the power grid, and the generation because it is pertaining to this discussion today, if you allow that to happen, sir.

The CHAIRMAN. Without objection, and I think it is a good request.

Miss GONZÁLEZ-COLÓN. Thank you.

The CHAIRMAN. That could be disseminated to all the Members.

Miss GONZÁLEZ-COLÓN. Thank you, sir.

The next request will be requiring the action plan for the rebuilding of the power grid system to the Committee, including timelines and estimated years in which milestones are to be achieved by COR3 or the Government of Puerto Rico.

The CHAIRMAN. Again, without objection.

Miss GONZÁLEZ-COLÓN. Thank you. My questions now are going to be heading to LUMA and Dr. Bahramirad. Did I say that well?

Dr. BAHRAMIRAD. Yes, ma'am.

Miss GONZÁLEZ-COLÓN. OK, thank you. First of all, who will own title of the goods and equipment, such as tools, vehicles acquired by LUMA using Puerto Rico or U.S. Federal funding for the reconstruction of the electrical grid? Is it going to be under LUMA Energy, PREPA, the Federal Government, or the local government of Puerto Rico?

Dr. BAHRAMIRAD. People of Puerto Rico.

Miss GONZÁLEZ-COLÓN. Sorry?

Dr. BAHRAMIRAD. People of Puerto Rico, ma'am.

Miss GONZÁLEZ-COLÓN. So, they are going to be property of the Government of Puerto Rico?

Dr. BAHRAMIRAD. Correct.

Miss GONZÁLEZ-COLÓN. OK. The second question will be—and you can submit this for the record—I know that LUMA was hired to fix, of course, the situation of the electrical grid on the island, the defective system of the electrical grid on the island, and the Governor of Puerto Rico paid for this. How much has LUMA been paid over the last year?

Dr. BAHRAMIRAD. I would defer that to my colleague, Mr. Hurtado.

Mr. HURTADO. Congresswoman, good afternoon. LUMA's fee is approximately $100 million.

Miss GONZÁLEZ-COLÓN. During the last year?

Mr. HURTADO. Per year, ma'am.

Miss GONZÁLEZ-COLÓN. For 1 year. It has incurred in the profit or a loss during the last year.

Mr. HURTADO. Excuse me?

Miss GONZÁLEZ-COLÓN. It was profit or loss for LUMA during the last year?

Mr. HURTADO. For LUMA there was profit, based on the fee minus other expenses.

Miss GONZÁLEZ-COLÓN. How much subcontracting or consulting does LUMA do to its own parent companies and other affiliates of its parent companies?

Mr. HURTADO. LUMA has one contract. Actually, currently, LUMA does not subcontract to its subsidiary, to its parent companies at all. There is one contract that has been asked for on an emergency basis because of Fiona in order to be a subcontract there.

Miss GONZÁLEZ-COLÓN. OK. Let's do this. Can you provide the Committee a breakdown, including the justifications and the amount charged and paid for those affiliates of your parent companies, even including Hurricane Fiona?

My next question will be in the sense that during the Fiona recovery it was reported that LUMA did not call upon the other public utilities in the American Public Power Association for cooperation agreements to provide support, personnel, and equipment, but did everything using LUMA's own contractors. Is that true, yes or no?

Dr. BAHRAMIRAD. Yes, ma'am.

Miss GONZÁLEZ-COLÓN. OK, OK.

Dr. BAHRAMIRAD. We have been in constant communication with——

Miss GONZÁLEZ-COLÓN. OK, the answer is yes. So, how many local versus USA/Canada contractors used?

Dr. BAHRAMIRAD. During Fiona we had over 2,800 utility workers and over 2,500 vehicles deployed.

Miss GONZÁLEZ-COLÓN. OK. And how much did that cost versus what the public utility support will have cost?

[No response.]

Miss GONZÁLEZ-COLÓN. And if you don't have the answer, you can submit it later to the Committee.

Dr. BAHRAMIRAD. Sure. Yes, I don't have the comparison of the cost.

Mr. HURTADO. Respectfully, the aid from public utilities was not an option. There wasn't enough time for them to be able to do it.

Miss GONZÁLEZ-COLÓN. I don't have a question for you, sir.

The question now will be for the COR3 Director, and I know you have been asking for the Committee to expedite and approve more things to make it easier to get the money. Can you clarify how many electrical grid projects have been submitted, obligated, approved, and disbursed for, and what are the funding sources that you can give to the Committee? You can submit it in writing.

And I know you have been dealing with this for many, many months, and asking for some amendments that we are working on in another Committee, which is Transportation and Infrastructure. What will be your main request, aside for doing the Stafford Act amendment?

Mr. LABOY. Thank you, Congresswoman. I will say that, as of today, we have requested FEMA to streamline its process for this FAASt that we expressed before. All these energy projects for the reconstruction of the electrical grid, including generation, transmission, and distribution under the public assistance program, the $9.5 billion, they have to go through that national delivery model by FEMA. It means that they have to conduct Environmental and Historic Preservation Reviews, very thorough reviews, and also additional evaluations associated with extra dollars for hazard mitigation measures. It takes time.

And I have to emphasize the fact that the $9.5 billion was just a budget when it was announced, and it is based on reimbursement. So, every project has to go back to FEMA. Today, they are committed to streamlining that process, but it takes a lot of time to get authorization for construction.

And let me clarify it again, as I did in my oral statement: the $9.5 billion never authorized construction. The construction is authorized once the scope of work is obligated. As of today, and when the Governor also said it this morning, there are 51 projects obligated by FEMA. There are 43 right now pending approval by FEMA. Hopefully, we get to the 100 projects approval before the end of the year.

So, we ask FEMA, and they are actually doing that review to streamline that process. And, of course, then we have the rest of the asks that are included in our testimony.

Miss GONZÁLEZ-COLÓN. Thank you. My time already expired. I will submit the rest of the questions for the record.

Thank you, Mr. Chair, and I yield back.

The CHAIRMAN. Thank you very much, Commissioner.

The gentleman from Chicago, Mr. García, do you have any questions? You are recognized, sir.

[No response.]

The CHAIRMAN. Mr. García? You are recognized, sir.

Mr. GARCÍA. Thank you, Mr. Chairman. Sorry for that little glitch. As you know, Chair Grijalva, you are working to pass $5 billion in supplemental funding for rooftop solar and battery storage systems, which would go to low-income households and households with people with disabilities in Puerto Rico.

How could you recommend that programs be operationalized in order to best meet the needs of the people it is intended to serve? That is a question for Ruth Santiago, our community environmental attorney.

Ms. SANTIAGO. Thank you, Congressman. We fully support the Queremos Sol Coalition. We Want Sun Coalition fully supports the disaster supplemental bill for $5 billion for rooftop solar and storage.

As we mentioned in our written testimony, only high-income people have been able to access that type of lifesaving, resilient energy supply.

And we clearly saw after Hurricane Fiona that people who had rooftop solar were able to have power both during and after the hurricane. And our hope is that the bill will be passed and that Puerto Rico will become more viable as a place. I hope that that answers your question.

Mr. GARCÍA. Yes. Thank you very much.

A question for Ms. Bahramirad. Under the existing contract with the Government of Puerto Rico, your company is charged with the use of funds for the reconstruction of the grid. But FEMA establishes the relationship with PREPA and the Government of Puerto Rico as recipients of the funds. And, as we know, FEMA undertakes a recoupment process to get funds back when they are not used according to the guidelines or policies.

Is LUMA obligated under the existing program to pay back the recoupment of FEMA if the guidelines are violated?

Dr. BAHRAMIRAD. Go ahead.

Mr. HURTADO. Hi, Congressman. Mario Hurtado for LUMA. Under the operation and maintenance contract between the Government of Puerto Rico and LUMA, there are several provisions about the management of Federal funds.

You definitely stated correctly that the recipient is the Government of Puerto Rico, and in the case for electrical sector PREPA is the sub-recipient. LUMA, as a contractor for PREPA, has some specific duties there, including following all of the Federal laws and regulations in order to fully utilize all of the funds that Puerto Rico is entitled to rebuild the grid.

And we have to follow a specific procurement plan for that and other rules, and that is overseen also by the Public-Private Partnerships Authority, and they have the ability to check all of our work, as, obviously, FEMA does, as well. So, we do have the responsibility to spend those funds within the guidelines and within the rules.

Mr. GARCÍA. OK. And will LUMA respond to the Government of Puerto Rico if money is recouped as a result of your reconstruction work?

Mr. HURTADO. If money is recouped, sir?

Mr. GARCÍA. Yes, as a result of your reconstruction work.

Mr. HURTADO. If I understand your question, is LUMA responsible to the Governor of Puerto Rico for how it spends those funds and the reimbursement of those funds? The answer is yes, we are.

Mr. GARCÍA. OK. Thank you very much.

Mr. Chairman, I yield back.

Mr. LABOY. Mr. Chairman, if I may add one quick comment, if I may, about that last question, I need to clarify also for the record that COR3 is the recipient and administrator of all FEMA obligated funding. So, therefore, COR3 serves as the entity in front of FEMA and the Federal Government to ensure that all funding

is used and disbursed properly. And we have all the controls, the policies, and procedures to ensure that every penny that is disbursed is done in full compliance and transparency with Federal requirements. So, we are that watchdog.

The CHAIRMAN. OK.

Mr. LABOY. Thank you.

The CHAIRMAN. Thank you, sir.

Doctor, and—I am sorry to the other person that was called up to the table for LUMA—one general question.

There is a contract called the Operations and Maintenance Agreement. There is currently also a supplemental agreement that delays the full implementation of the Operations and Maintenance Agreement. The full Operations and Maintenance Agreement and all of its contract provisions are supposed to begin on December 1, or after the debt is figured out. Is that an accurate way to summarize it? Yes?

Mr. HURTADO. Approximately, Chairman.

The CHAIRMAN. Approximately yes?

Mr. HURTADO. Approximately yes, yes.

The CHAIRMAN. And the contract sets incentives for good performance. But currently, neither the contract nor the supplemental agreement has any financial penalties for poor performance, is that correct, as well, or approximately correct?

Mr. HURTADO. No. The contract has significant consequences for not meeting certain performance metrics. Specifically, there are key performance metrics that are designated——

The CHAIRMAN. Does it involve financial penalties?

Mr. HURTADO. Well, it would put in jeopardy the contract, and it would give the ability of the Government of Puerto Rico to cancel the contract. If key performance metrics are not met for 3 years in a row, the Government of Puerto Rico may cancel the contract.

The CHAIRMAN. But there could be poor performance 2 out of 3 years, but you would meet 1 out of 3, correct? Or is that just——

Mr. HURTADO. Well, that is the terms of the contract as they were negotiated and presented with the Government of Puerto Rico.

The CHAIRMAN. OK, I appreciate it. That was approximately maybe. I don't think it was entirely a yes.

But I mention that because I think financial penalties are essential, and we will dig into how that is in the contract. It is the question I asked the Governor, and there is some confusion as to the interpretation. We will follow up on it, because I really believe that is the main mechanism for accountability. And if it is not strong enough, then there are no consequences, and the people of Puerto Rico could, potentially, and have suffered.

But, anyway, as I mentioned in the statement, my colleagues and I, including the Resident Commissioner, are proposing an energy resilience measure focused on those that need it most after a disaster. After this disaster, we are requesting $5 billion in emergency supplemental that would provide rooftop solar and battery storage to low-income households and households with people with disabilities.

In answer to Mr. García's—part of an answer is that that is the targeted population, and that would be the control mechanism in terms of the disbursement they would have to qualify under that.

And the market for rooftop solar and batteries in Puerto Rico is one of the most active in the country right now, in part because people need to keep their lights on and their refrigerators humming during and after a disaster. Hurricane Fiona hit Puerto Rico in September. We saw that those with solar and batteries got to keep their lights on and that function. But the only people getting these resilience tools are the ones that can afford it, quite frankly. And those that can't are denied that very basic need. And for some, it is a matter of life and death.

So, I want to ask a couple of you, and I was going to ask Ms. Santiago, but I think you responded to that question already with Congressman García. Do you support the proposal that the Department of Energy provide $5 billion for rooftop solar and storage solutions for Puerto Rico in this new emergency appropriations bill?

Ms. Gossett, do you support that proposal?

Ms. NAVARRO. Yes, absolutely. We are 100 percent in support of that proposal and think it is absolutely necessary.

After Hurricane Fiona we had to rapidly deploy both solar energy systems to different communities, and also, unfortunately, generators. But the generators that we were deploying to the homes of people with disabilities who require them for respirators, for dialysis, there was no diesel then to support them. So, solar really is the answer, and I think your proposal is fantastic.

The CHAIRMAN. And Mr. Emilio Colón-Zavala, your reaction. Do you support that proposal?

Mr. COLÓN-ZAVALA. Yes, we do support that program.

The CHAIRMAN. I appreciate that. And now, Doctor, if the proposal covered the technology necessary to be compatible with the existing grid, would that be helpful to LUMA's operations?

Dr. BAHRAMIRAD. Thank you, Chairman, for the question. It is an opportunity for us to reiterate that we are supporting the public policy in Puerto Rico, and the people of Puerto Rico have chosen 100 percent renewable. And in the past 17 months, the record shows that we have connected 36,500 more than the past decade, and we do support it.

In terms of a specific question that you asked, the impact of renewable into the grid, as well as the cost in buildings, in order to retrofit the roof and making upgrades in buildings that they do not meet the safety codes, as long as it is incorporated into the bill we definitely support that.

The CHAIRMAN. It is in there. And the Governor—and thank you—has already expressed his support, and I am very grateful. My colleagues, Senator Menendez, Senator Gillibrand got 13 signatures in a letter of support urging that that be included. There is a letter from various groups from the island, including the Puerto Rico Chamber of Commerce, which supports it, and the Secretary of Energy, who has spoken favorably of it. So, this is an idea with good appeal.

I think it can do a lot for families. And while it is not the substantive, total structural answer to the questions that we have

been dealing with here today, it became a prevalent question and concern to us, given the reactions we were getting after Fiona. So, we are going to urge people to support that, and I want to thank all of you for your support.

Before I thank the witnesses and close up the meeting—I know nobody wants to leave, but I am going to have to break this up—I wanted to say something. I think this whole discussion, and much of the discussion that has occurred has been around trying to address the issue of disparity and these emergencies, the reconstruction and energy delivery on the island, I think, there has to be a balance and an equity going forward. And we need to address that.

And the accountability and transparency that is necessary, particularly in making as a commitment, as the good doctor said, the commitment that Puerto Rico has in policy to 100 percent renewable, I think that is important.

And one of the areas that I brought up with the Governor, and it has also been a discussion point among the Members here on both sides of the aisle, are the two critical areas of reconstruction that continue to be a priority—and we will continue to ask, regardless of who is in that chair, of the progress on that—is school reconstruction and the medical facilities reconstruction.

And I think the point was made by various witnesses, and that is the community collaboration and the substantive inclusion of that community in planning for the goal of 100 percent renewable and alternative energy, particularly at the local community level, which I think will go a long way.

One of my trips, one of the early trips to Puerto Rico to look at the energy, we went into a small community *allí en las montañus*, and they had, through a non-profit, situated themselves with battery storage and energy, and were able to, during the worst points in Maria, sustain themselves in those homes. There weren't many, but they were able to sustain themselves. And that left an impression with many of us, an impression that, with this $5 billion, we are trying to provide a good example of what can be done and how community collaboration can help us do that.

I want to thank you. We will continue to monitor, to follow, to provide oversight and, as we are doing with this supplemental, continue to urge that we reach that balance and begin to close the disparity gap with our fellow citizens in Puerto Rico.

With that, thank you very much. The meeting is adjourned.

[Whereupon, at 4:13 p.m., the Committee was adjourned.]

[ADDITIONAL MATERIALS SUBMITTED FOR THE RECORD]

Statement for the Record

Ingrid M. Vila Biaggi MS, PE
President CAMBIO

November 17, 2022

I. PROMESA has failed in bringing about the necessary electrical system transformation

Six years after its passage, it is clear that PROMESA is not furthering the necessary transition toward an affordable and financially stable electricity system. PROMESA gives the Financial Oversight and Management Board the power to certify fiscal plans and budgets for the Puerto Rico Electric Power Authority (PREPA). As established by Section 201(b) of PROMESA, the fiscal plans are supposed to provide a path for PREPA to "achieve fiscal responsibility and access to the capital markets." They are required to "improve fiscal governance, accountability, and internal controls" and "enable the achievement of fiscal targets."[1] PROMESA further gives the FOMB the power to ensure that any law passed by the Puerto Rico legislature is consistent with an approved fiscal plan, including, if necessary, taking the Legislature to court to prevent the enforcement of the law.[2]

In practice, these provisions of PROMESA have enabled the FOMB to impose its own vision of the transformation of Puerto Rico's electrical system—namely, privatization—with no published analysis of how this will put the electrical system on a path toward fiscal health. It is noteworthy, that despite the Board's active opposition to many Commonwealth laws, the Board approved of the passage of Puerto Rico Law 120-2018. This law, which set forth the framework for the privatization of the electrical system, was fiscally irresponsible: it eliminated the requirement for cost-benefit evaluations for any electrical system privatization contract, it allowed for the sell-off of generation assets to private parties, which would restrict the use of federal funds and drive-up costs.[3] It also allows for the displacement of workers which have to be absorbed by other government entities, putting additional pressure on an already overburdened central government budget.[4,5]

CAMBIO noted in 2019, in our testimony at a House Natural Resources Committee listening session, that privatization was likely to raise rates and that, at that time, neither the Puerto Rico government nor the FOMB had published any study to demonstrate that privatization would lower or maintain electricity prices which were, at that time, 23 cents/kWh.[6] Since that time, no economic justification of privatization has been provided.

Unfortunately, the predictions in CAMBIO's 2019 testimony have come to pass. As discussed later, electrical service has deteriorated under the private operator LUMA, and—largely due to the failure to transition away from fossil fuels—rates are now nearly 30 cents/kWh. After seven PREPA fiscal plans, Puerto Rico is further than ever from having a resilient, reliable, clean and affordable electrical system.[7]

CAMBIO's analysis of the most recent 2022 PREPA Fiscal Plan shows that, despite these failures, the Board continues to (1) push for further privatization of the electrical system, and (2) overstate the amount of money potentially available to bondholders, thereby jeopardizing the future financial health of the system. The 2022 Fiscal Plan calls for the privatization of PREPA's power plants, without any cost-benefit analysis and without any analysis of the cost or savings from the first phase of electrical system privatization, the LUMA contract. The continued inclusion of privatization in the fiscal plans dramatically limits the Puerto Rico

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[1] Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA), Pub. L. No. 114-187 § 201(b)(1) (2016) PROMESA.

[2] PROMESA, § 204(a).

[3] Puerto Rico is now moving forward with a concession model for the privatization of the generation assets, apparently because no buyer could be found for the existing plants.

[4] https://sincomillas.com/la-transferencia-de-empleados-de-la-aee-a-otras-agencias-le-va-a-costar-al-gobierno-mas-de-200-millones-anualmente/?print=print.

[5] https://ieefa.org/resources/ieefa-us-poor-decisions-luma-contract-put-puerto-ricos-workers-and-communities-risk.

[6] Testimony of Ingrid M. Vila Biaggi, U.S. House of Representatives Committee on Natural Resources Listening Session, March 15, 2019.

[7] https://cambiopr.org/wp-content/uploads/2022/08/CAMBIO_Informe_plan_fiscal_JCF_AEE_08_22.pdf.

legislature from preventing further privatization of the electrical system (which would be a logical response to the problems caused by LUMA), given that the FOMB would almost certainly take the legislature to court to invalidate any such legislation.

Our analysis of the Fiscal Plan further shows that the Board has created an unrealistic expectation of the amount of money potentially available to service PREPA's debt, primarily by underestimating PREPA's fuel budget. The Board acknowledges that its projections of dramatic future declines in fuel prices are partially due to changes in its modeling assumptions that have no basis in the actual operation of the system.[8] If the Board puts forward another PREPA debt proposal to unsustainably raise rates to pay off the debt, it will perpetuate the continued underinvestment in system maintenance and labor that were a major cause in driving the system to its current state of near physical collapse.

While the 2022 Fiscal Plan does call for some initiatives, including greater investment in energy efficiency and renewable energy, that are needed to lower and stabilize electrical system costs, the Board's actions show where its priorities lie. The Board and its consultants have been deeply involved in the privatization process, to the point where the Board's contract with financial consultant CitiGroup includes a bonus of $21.5 million for upon the consummation of electrical system privatization transactions.[9] There is no indication that the Board has undertaken any similar efforts to further renewable energy or energy efficiency on the island.

The Board has further lost credibility as a result of the conflicted advice that it has received from McKinsey, one of its lead consultants. As a direct result of recent federal legislation, it was revealed that McKinsey's consulting clients also include Quanta Services (one of LUMA's parent companies) and New Fortress Energy, which received a major LNG contract in Puerto Rico under questionable circumstances in 2019 and is poised to be granted the generation privatization contract.[10,11,12]

Furthermore, PROMESA established an inherent conflict of interest by allowing the Board the ability to be deeply involved in the negotiation of contracts, as they were in the LUMA contract, and then approving the final contract.

In short, the Board has failed to achieve its fundamental purpose of restoring PREPA to financial health. The only things the Board has to show for its six years of work on the electrical system are a failed privatization initiative and a failed debt restructuring agreement. In the following sections, I will provide more detail on the flawed privatization process that resulted in the LUMA contract, the failure of this contract to transform the electrical system, and recommendations for an alternative model that would result in lower rates and a more resilient system.

II. The LUMA contracting process raised many red flags

The process undertaken by the Puerto Rico Public-Private Partnerships Authority (P3 Authority) to select LUMA Energy as the contractor to operate the non-generation services of Puerto Rico's electrical system (including operation of the transmission and distribution systems, power dispatch, customer service and billing) raised numerous questions about how and why LUMA was ultimately selected for this contract.

The privatization process was governed by Puerto Rico Law 120-2018 and Puerto Rico Law 29-2009, which together create a non-transparent process with no public participation for the development of concession contracts for the operation of Puerto Rico's electrical system. Indeed, the selection of LUMA was not publicly known until after the contract had been fully negotiated and signed. Unfortunately, this process facilitates exactly the sort of politically-driven contracting that was well-known to be a major problem under PREPA's operation of the system.

Subsequent to the signing of the contract, CAMBIO undertook a public records request to obtain documents related to the bidding and bid evaluation process undertaken by the P3 Authority.[13] A review of those documents showed that the 5-member committee appointed to review and evaluate the bids acted with a highly inappropriate level of coordination in their evaluations. Committee members were asked to evaluate and score the bids according to 38 separate criteria. Four of the

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[8] https://cambiopr.org/wp-content/uploads/2022/09/letter-to-FOMB-PREPA-Fiscal-Plan-8-10-22.pdf.

[9] https://drive.google.com/file/d/12AFC-M4W7h9B12UQiP-XiaVxhiDY_TtO/view.

[10] https://www.wsj.com/articles/mckinsey-clients-won-puerto-rico-contracts-as-firm-advised-government-11656334801.

[11] https://ieefa.org/media/90/download?attachment.

[12] https://www.elnuevodia.com/negocios/economia/notas/luma-compara-chinas-con-elefantes-dice-el-representante-del-consumidor-torres-placa/.

[13] These documents are available on CAMBIO's website, https://cambiopr.org/resources/.

five members of the committee arrived at identical scores in each of 37 of the 38 categories evaluated. The scores related to financial metrics, which accounted for 50% of the total score, appeared to have been copied directly from a report from FTI Consulting, a consultant to the P3 Authority. It is unclear how the rest of the identical scores were arrived at, but the high level of coordination between the committee members raises serious questions about the independence of the process and how the decision to choose LUMA was actually made.

It is also important to note that one of LUMA Energy's parent companies, Texas-based Quanta Services, conducted federal lobbying during the same time period that it was bidding for the transmission and distribution system contract. Quanta's federal lobbying disclosures report the topic of its lobbying simply as "PREPA." The P3 Authority's regulations prohibit bidders from undertaking lobbying related to an ongoing bidding process, unless such lobbying is expressly approved by the P3 Authority.[14] This raises the question of whether (a) the P3 Authority did approve Quanta Services' federal lobbying related to PREPA and, if so, why; or (b) Quanta Services violated the P3 Authority's regulations, with no apparent consequences.

Finally, it is noteworthy that the Chairman of the Puerto Rico Energy Bureau, the island's energy regulator, played a dual role during the LUMA Energy contracting process. Chairman Aviles was one of the members of the 5-member committee established by the P3 Authority that selected LUMA and negotiated the contract. Then, in his role at PREB, he voted in favor of the PREB's approval of the contract.

It is important to recall these irregularities in the contracting approval process because they provided early indications that the LUMA contract—far from depoliticizing the electrical system, as promised by the FOMB—was the result of yet another politically-driven bidding process. As the next sections will show, LUMA's performance in its first 17 months of operations demonstrate that the company has not been up to the task of operating Puerto Rico's electrical system and, indeed, that privatization has not achieved any of the transformative goals that its backers promoted.

III. After more than a year of operations, LUMA has exceeded its budget and provided worse service

In CAMBIO's prior testimony to this committee's hearing on "The Transformation of the Puerto Rico Electric Power Authority" on August 6, 2020, we raised concerns about several contract provisions that favored LUMA and that would leave the government of Puerto Rico with little recourse if LUMA failed to meet key publicly stated objectives of the transformation. Specifically, we noted that the contract imposed no obligation on LUMA to meet any rate affordability targets, nor did it provide any metrics for achievement of Puerto Rico's renewable energy targets—despite the fact that LUMA would be receiving billions of dollars in federal funds for the reconstruction of the grid. We also noted that the contract imposed no penalties, nor did it threaten cancellation of the contract, if key performance metrics were not achieved.[15]

In the first seventeen months of operations, LUMA has indeed not been penalized for its failure to perform. During this period there have been widespread complaints from citizens and mayors regarding longer and more frequent power outages, as well as voltage fluctuations that damage home appliances and have even provoked fires. On multiple occasions, substation fires have caused widespread blackouts.[16] Recent testimony from the executive director of PREPA to the Puerto Rico House of Representatives included a list of events in which disturbances in the transmission and distribution system caused power plants to go offline as a protection measure, which resulted in major blackouts.[17]

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[14] Section 4.13(a) of the P3 Authority's Regulation for the Procurement, Evaluation, Selection, Negotiation and Award of Partnership Contracts and Sale Contracts for the Transformation of the Electric System Under Act No. 120-2018.

[15] Ingrid M. Vila-Biaggi and Luis E. Rodriguez-Rivera, Written statement for the U.S. House of Representatives Committee on Natural Resources, "The Transformation of the Puerto Rico Electric Power Authority," August 6, 2020.

[16] https://www.elnuevodia.com/noticias/locales/notas/una-averia-en-costa-sur-provoca-un-apagon-general-en-puerto-rico/; https://www.elnuevodia.com/noticias/locales/notas/explosion-en-la-subestacion-de-luma-energy-en-jayuya-deja-sin-luz-a-todo-el-municipio/; https://www.elnuevodia.com/noticias/locales/notas/fuego-en-subestacion-de-monacillos-miles-de-abonados-continuan-sin-luz/.

[17] Testimony of Josue Colon before the Puerto Rico House of Representatives Committee on Economic Development, Planning, Telecommunications, Public-Private Partnerships and Energy, September 5, 2022. (https://www.youtube.com/watch?v=1Heyn-OLuj8, starting at 2 hour, 37 minutes).

LUMA's poor performance was highlighted by Hurricane Fiona. Even though Fiona affected the southwest portion of Puerto Rico as a Category 1 Hurricane the entire island was left without power. This impact of Fiona cannot be compared to the island-wide devastation caused by Category 4 Hurricane María, therefore it is not clear what was the cause of the electric system failure. Limited information has been disclosed by LUMA as to their preparation prior to the storm. However, it was reported that they underspent on vegetation management and did not use the budget allocated for inspecting powerlines.[18]

As of September 26, more than a week after the storm, power had been restored to only 60% of customers; in the San Juan area, which suffered little physical damage, more than 10% of customers were still without power.[19] By comparison, after the 1996 category 1 hurricane Hortenese, which had a similar trajectory to Fiona and caused similar flooding damage, 100% of power was restored within six days. The storm revealed poor prior coordination with island mayors; one mayor reported that LUMA did not arrive until 11 days after the storm and with only a single crew.[20] Other mayors sought to activate municipal workers to begin working on system restoration, as they had done after hurricane Maria, prompting LUMA to threaten the mayor of Isabela with legal action.[21] LUMA decided not to procure the assistance of the American Public Power Association (APPA) claiming it had enough personnel, yet they were not able to restore power to over half a million clients for over a week.

LUMA's inability to properly operate the system stems from another flaw identified early in the contract: its failure to require LUMA to hire PREPA employees or to offer them the same level of benefits.[22] LUMA's decision, allowed by the contract, to not respect the PREPA employee's collective bargaining agreement resulted in LUMA not being able to hire the vast majority of PREPA's skilled workforce and thereby losing hundreds of years' worth of accumulated experience with Puerto Rico's electrical system.

The Puerto Rico Energy Bureau recently published a report comparing LUMA's first year of performance to FY 2020, when the system was operated by PREPA. In two of the three industry standard grid reliability metrics (SAIDI and CAIDI), LUMA's performance is notably worse. Specifically, LUMA's CAIDI (Customer Average Interruption Duration Index) was 50% higher than the baseline PREPA year, and LUMA's SAIDI (System Average Interruption Duration Index) was 33% higher than the PREPA baseline. The Bureau further noted that LUMA has consistently had fewer employees than budgeted, indicating an ongoing difficulty in recruiting and retaining a qualified workforce.[23]

While the Energy Bureau has reported that LUMA has met or achieved baseline targets for 84% of metrics, this comparison is a mix of apples and oranges. It includes crucial reliability metrics (for which in many cases LUMA is not performing), but also other categories that are much less integral to the functioning of the system, such as the percentage of customers on AMI (Advanced Metering Infrastructure).[24] More importantly, some of these self-reported metrics are contrary to the experience lived on the island, such as response time to service and outage complaints for which LUMA self-reports 9 hrs on average. The Energy Bureau has also not required reporting on any metrics of power quality (frequency and voltage stability), despite the large number of customer complaints on this issue.

LUMA has been consistently over budget. During its transition year prior to taking control of the system on June 1, 2021, LUMA exceeded its budget by 20%. And during its first year of operation, LUMA exceeded its budget by $20 million. Despite its understaffed and underskilled workforce, LUMA was 20% over budget in its first year on labor costs, due to having to spend additional funds on training and on importing workers from the United States. As a result of the flawed

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[18] https://www.elvocero.com/gobierno/agencias/luma-gast-menos-en-el-manejo-de-vegetaci-n/article_08f4a690-3241-11ed-9456-e3ca602cb51b.html.

[19] Puerto Rico Emergency Portal System, preps.pr.gov, accessed 6pm on September 26, 2022.

[20] https://radioisla.tv/11luma-energy-llega-a-municipio-de-lajas-11-dias-despues-del-huracan-fiona-con-una-brigada/.

[21] https://www.elnuevodia.com/noticias/locales/notas/alcaldes-del-pnp-y-ppd-reprueban-la-gestion-de-luma-tras-fiona-no-han-sido-capaces-de-restablecer-el-servicio-electrico/.

[22] Ingrid M. Vila-Biaggi and Luis E. Rodriguez-Rivera, Written statement for the U.S. House of Representatives Committee on Natural Resources, "The Transformation of the Puerto Rico Electric Power Authority," August 6, 2020.

[23] https://energia.pr.gov/wp-content/uploads/sites/7/2022/08/20220818-MI20190007-Resolution-and-Order.pdf.

[24] https://energia.pr.gov/wp-content/uploads/sites/7/2022/08/20220818-MI20190007-Resolution-and-Order.pdf.

structure of the contract, and weak oversight by Puerto Rico government agencies, no penalties have been imposed on LUMA for its failure to meet budgetary or performance objectives.

IV. The LUMA contract did not transform the failed PREPA model

The 2021 PREPA Fiscal Plan anticipated that privatization would "depoliticize system management, improve the operational performance, competitive procurement utilization, management and maintenance of the T&D system, and the generation network, leading to tangible improvements in reliability, sustainability, compliance, and overall quality of service." [25]

However, the LUMA contract has not produced any of these benefits, and has instead replicated or, in some cases, worsened the flaws of the failed PREPA governance model. Governance of the electrical system continues to be politicized; the management of the system has not been professionalized; there is less transparency and opportunity for public participation than under PREPA; and renewable energy goals continue to fail to be met. And, as described in the previous section, reliability and quality of service have declined.

The operation of the grid continues to be a highly contentious and politicized process. As described above, the process of the award of the LUMA contract appeared to be highly political. Given that there are billions of dollars of federal funds at stake, electric rates are nearly 30 cents/kWh, and outages are frequent, it is unsurprising that the operation of the electrical system continues to be a high-profile political issue.

The operation of the grid also continues to be overly reliant on outside professional and technical consultants, who are unaccountable to the people of Puerto Rico and frequently unfamiliar with Puerto Rico's electrical system, despite the fact that privatization was supposedly going to bring an operator with in-house expertise. Specifically, CAMBIO has found that in fiscal year 2022, LUMA spent $103.5 million in technical and professional consulting and legal services, an increase of 55% relative to the $67 million that PREPA spent in fiscal year 2021 and 125% more than the $46 million spent by PREPA in 2020.[26] And this number will only increase for fiscal year 2023: LUMA has recently signed over $100 million in contracts related to engineering and project management, including $30 million in contracts with a company that was only created in 2019.[27] The government of Puerto Rico justified LUMA's privatization contract in part indicating that LUMA would come to reduce consulting contracts, and yet LUMA has come to increase costs and consultant contracts.

The privatization model has proven to be less transparent than PREPA. An arrest warrant was issued by a Puerto Rico judge against LUMA CEO last fall for failing to provide basic information on LUMA's staffing to a Puerto Rico House committee.[28] The results of a CAMBIO public records request to the P3 Authority show that LUMA failed to provide information, or provided only incomplete responses, to P3 requests for information regarding outage statistics, staffing and customer service.[29] And similar to PREPA, LUMA has not opened any opportunities for public participation regarding the future direction of the electrical system.

The privatization has not furthered the island's renewable energy goals. As noted previously, there are no renewable energy-related metrics in the contract, despite the fact that LUMA will be receiving billions of dollars in federal funds which it could, in theory, use to underwrite a massive deployment of renewable energy and storage and invest in the necessary grid upgrades to enable the integration of greater amounts of distributed renewable energy. Instead, Puerto Rico is far from meeting its 40% by 2025 renewable energy target. Indeed, as of 2021, utility-scale renewable energy was at 2.4%, with distributed solar bringing the total to 5%.[30]

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[25] https://drive.google.com/file/d/1dXFJldZpOIsAObMZDBd7T2P3j2xMPaal/view.

[26] https://www.periodicolaperla.com/actualidad/a-costa-del-pueblo-luma-dispara-gastos-en-consultores-y-servicios-legales/.

[27] Based on CAMBIO analysis of contracts filed with the Puerto Rican Comptroller office, LUMA's FY 2022 Annual Report, and PREPA budget-to-actuals reports.

[28] https://www.elvocero.com/anuncios/un-juez-ordena-el-arresto-del-presidente-de-luma-energy-y-dice-que-se-burla/article_—99d54bd8-4223-11ec-8475-67aff5c262ef.html.

[29] Documents available at https://cambiopr.org/resources/?aapp-luma.

[30] Utility-scale renewable energy data from PREPA's December 2021 Monthly Report to the Governing Board. Distributed solar data from filings in Puerto Rico Energy Bureau Case No. NEPR-MI-2019-0006, August 15, 2022.

Far from restoring the electrical system's ability to drive economic growth in Puerto Rico, the high rates and worsened service under LUMA have turned the electrical system into an even greater economic liability, driving companies out of business and contributing to decisions to leave the island.[31]

V. Queremos Sol provides an alternative model of electrical system transformation

CAMBIO has worked closely with community and environmental organizations, electrical system experts, and labor unions to develop an alternative pathway toward a resilient and affordable electrical system, based on public ownership. The Queremos Sol proposal calls for achieving 75% distributed renewable energy by 2035 and 100% by 2050, including an energy efficiency target of 25% by 2035. The proposal envisions the widespread deployment of rooftop solar and storage, including the deployment of small solar and battery systems for resiliency on every home on the island. This would be supplemented by distributed solar on commercial installations, closed landfills and other contaminated lands to achieve 75% by 2035.

In March 2021, CAMBIO published the results of a detailed grid modeling study, based on system data obtained from a public records request of PREPA, to analyze the feasibility of achieving 75% distributed renewable energy by 2035.[32] The modeling found that it is not only viable and cost effective but that assigned federal funds can accelerate implementation. Key results of the modeling include:

- Provide resiliency to 1 million homes via rooftop solar and storage installations (2.7kV PV with 12.6 kWh storage)
- The transformation would reduce fuel costs to $430 million per year.
- The use of $9.6 billion in federal funds to implement the transformation would reduce and stabilize electrical system costs at approximately 15 cents/kWh.
- This transformation can be undertaken without any new investment in natural gas infrastructure (in contrast to the Puerto Rico government's current plan to build a new 300 MW natural gas plant).
- CO_2 emissions would be reduced nearly 70%, putting Puerto Rico at the forefront of addressing climate change with urgency.
- Existing fossil fuel-based generation could be retired, starting with the AES coal plant and then the Palo Seco and Aguirre oil-burning plants. The remaining units would be used for very few hours of the year, if at all, with 75% renewable energy.
- The proposal would dramatically reduce dependence on the vulnerable south-to-north transmission system that catastrophically failed during hurricane Maria.
- The proposal would ensure that all communities would receive the resiliency benefits of distributed renewable energy.

Puerto Rican communities are rapidly moving in the direction of rooftop solar and storage, limited primarily by the high level of poverty on the island. More than 370 MW of distributed rooftop solar have been installed in Puerto Rico, with 112 MW of that amount installed just within the last year.[33] This rapid growth of rooftop solar is the only advance in renewable energy that has been made since Hurricane Maria; not a single MW of utility-scale solar has been deployed in the last five years. Meanwhile, rooftop solar kept the lights on during and after Hurricane Fiona, for those households fortunate enough to have access. Directing $1 billion in already assigned FEMA funds would allow installation of rooftop solar and storage to 100,000 households (2.7 kV systems with 12.6 kWh storage).

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[31] https://www.elvocero.com/economia/otros/el-aumento-de-la-luz-amenaza-al-sector-comercial/article_52d426ae-edcd-11ec-b405-87186b9013b1.html, https://www.elvocero.com/actualidad/otros/aseguran-que-la-crisis-de-vivienda-en-la-isla-empeora-con-la-inflaci-n/article_8211ca7a-00ba-11ed-a9ba-9316a335edf4.html.

[32] https://cambiopr.org/solmastechos/.

[33] Puerto Rico Energy Bureau Case No. NEPR-MI-2019-0006, Anejo 2 Datos-Energía-Renovable-NEPR-MI-2019-0016, August 15, 2022.

The Queremos Sol model proposes not only a technical transformation of the electrical system, but also a transformation of the governance model to one that is professional, transparent, democratic and accountable to the public.[34] This governance transformation includes the following components:

- The expiration of the LUMA contract November 30,2022 and the transition of transmission and distribution system responsibilities to a new public entity that prioritizes the recruitment, of former PREPA employees displaced by the contract.
- A new public business model for this new entity that centers conservation, energy efficiency and the integration of distributed rooftop solar and storage.
- A Board of Directors where the majority of members are democratically elected from different sectors, rather than serving at the will of the governor.
- A requirement for consultations or referendums before the Board is able to take certain decisions including, for example, signing contracts longer than 5 years.
- Establishing a much broader public participation process for the development of Puerto Rico's Integrated Resource Plan.
- Establishing a Citizens Advisory Committee that would incorporate public participation into Energy Bureau proceedings, analyze and present evidence and testimony on energy policies, and provide public education on energy-related topics.

VI. Federal funds are not being deployed to further the transition to a resilient, renewable-energy based grid

Finally, CAMBIO is deeply concerned over the use of the billions of dollars of FEMA and HUD funds destined toward Puerto Rico's electrical system. There has been no public participation in the deployment of the FEMA funds, which total more than $14 billion,[35] and no publicly available plan from PREPA or LUMA that provides a holistic explanation of how the different projects for which funding is sought will result in a reliable and resilient electrical system. What is clear is that almost none of this money is being directed toward renewable energy or storage. Indeed, the only renewable energy and/or storage projects that have been proposed for federal funding are (1) a $35 million rooftop storage initiative by PREPA to install residential rooftop solar and storage in three of the municipalities that experienced the longest blackouts after hurricane Maria, and (2) a $20.6 million renewable energy microgrid initiative by LUMA, and (3) a $362.5 million grid-scale storage initiative by LUMA—representing 3% of the funding available.[36] The remainder of the FEMA funds are destined toward hardening of the transmission and distribution system in a way that appears inconsistent with the IRP. The 2020 IRP approved only $911 million for distribution system upgrades over the next five years, while PREPA and LUMA's June 2021 Updated 10-Year Infrastructure Plan calls for LUMA to manage over $1.5 billion in federally funded distribution projects by 2023.[37]

This use of the FEMA funds squanders a unique opportunity for the federal government to help Puerto Rico become a model of electrical system decarbonization and climate change adaptation and mitigation. President Biden's January 2021 Executive Order calls for a "carbon pollution-free electricity sector no later than 2035", an ambitious goal that could be realized in Puerto Rico if the federal government were willing to ensure that grid reconstruction funds were used appropriately.

There are also $2.7 billion in HUD funds that will become available for electrical system work.[38] CAMBIO has publicly urged HUD to bulk purchase standardized,

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[34] Queremos Sol (We Want Sun): New Governance for Environmental and Energy Sustainability, October 2022. https://www.queremossolpr.com/_files/ugd/3debae_86a32a2fb68749e085074b54b9f36244.pdf.

[35] This includes approximately $12 billion in FEMA 428 and 404 funds, according to PREPA and LUMA's June 2021 Updated 10-Year Infrastructure Plan and more than $2 billion in FEMA 406 funds estimated in PREPA's March 2021 Updated 10-Year Infrastructure Plan.

[36] Puerto Rico Energy Bureau Case No. NEPR-MI-2021-0002, PREPA Motion to Inform Reallocation of FEMA 404 HMGP Funds and Request for Approval of Generation Projects, August 2, 2022.

[37] Puerto Rico Energy Bureau, Final Resolution and Order on the Puerto Rico Electric Power Authority's Integrated Resource Plan, August 24, 2020, paragraph 907.

[38] This includes $1.9 billion of CDBG-DR funds for Electrical System Enhancements, as well as $300 million in CDBGDR funds for community energy and water resilience installations and another $500 million in CDBG-MIT funds for community energy and water resilience installations.

small-scale rooftop solar and storage systems that could meet household critical needs during a grid emergency. The use of the $1.9 billion in HUD funds earmarked for "Electrical Power System Enhancements and Improvements" could result in the installation of approximately 140,000 systems by a combination of PREPA, municipalities and/or community organizations. This would radically transform the resiliency situation for more than 10% of households on the island, and should be done in a manner that prioritizes low-income communities that experienced the longest delays in service restoration after Hurricane Maria.[39]

In short rather than using the vast majority of the federal funds to rebuild a centralized system that has already catastrophically failed, CAMBIO urges that the majority of federal funds be allocated to facilitate the widespread deployment of rooftop solar and storage. This is the transformation that the people of Puerto Rico are demanding and, as noted above, those that can afford it are already "voting with their feet" by purchasing their own rooftop solar and storage systems. But with more than 44% of the population of Puerto Rico living below the federal poverty line, this alternative is out of reach for the majority of households, who are stuck with an increasingly expensive and unreliable grid. The use of federal funds to facilitate the widespread deployment of rooftop solar and storage is critical to allow low-income households, who currently are priced out of the private market for solar, to participate in the resiliency benefits of rooftop solar and storage. It would also allow installations to proceed at a lower cost, making use of economics of scale from bulk purchasing the components of residential solar and storage systems.[40]

VII. Conclusion and Recommendations

PROMESA has failed to enable the necessary electrical system transformation in Puerto Rico. The Financial Oversight and Management Board aggressively facilitated and then approved the LUMA grid privatization contract, which has been a costly disaster for the people of Puerto Rico. Service has worsened and we are no closer to PROMESA's goals of restoring the electrical system to financial stability and access to capital markets. Nor has substantial progress been made on the renewable energy transformation, which is essential for addressing climate change with urgency and for reducing and stabilizing electrical system costs. The federal government has not played the necessary role in ensuring that the billions of dollars of funds earmarked for Puerto Rico's electrical system will actually result in a more resilient and cleaner grid. Civil society organizations, including CAMBIO, have proposed the Queremos Sol alternative for a rapid transition to a decentralized electrical system, based on rooftop solar and a reformed, public governance model. This is the Plan B that Puerto Rico needs to put immediately in place.

CAMBIO presents the following recommendations:

- Congress needs to dissolve the FOMB and provide the government or Puerto Rico a dignified and viable debt restructuring process, and promptly provide the people of Puerto Rico with a mechanism to exercise its right to self-determination;
- This committee should urge the government of Puerto Rico to end the LUMA contract when it expires on Nov. 30. It should further investigate how the LUMA contract was awarded, and, in particular, the role of Quanta Services' federal lobbying in the award of the contract, as well as, the role of FOMB consultants McKinsey and Citi.
- This committee should ensure that federal funds are used to provide every household in Puerto Rico with rooftop solar and storage, prioritizing installation in low-income, vulnerable communities, consistent with climate change policy.

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[39] CAMBIO comments on the Puerto Rico Department of Housing's Draft Action Plan for CDBG funds for Electrical Power System Enhancements and Improvements, November 2021.

[40] https://cambiopr.org/wp-content/uploads/2022/01/CAMBIO-DER-Implementation-Roadmap-Report-01_22.pdf.

GOVERNMENT OF PUERTO RICO
PUERTO RICO FEDERAL AFFAIRS ADMINISTRATION

November 21, 2022

Hon. Raúl M. Grijalva, Chairman
U.S. House of Representatives
Committee on Natural Resources
Washington, DC 20515

Dear Mr. Chairman:

On behalf of the Governor of Puerto Rico, the Honorable Pedro R. Pierluisi, I want to thank you for holding the "Puerto Rico's Post-Disaster Reconstruction & Power Grid Development" hearing last week and giving the Government of Puerto Rico the opportunity to inform the members of the Committee on Natural Resources on the progress of the reconstruction and recovery process of our Island.

As requested, I'm enclosing a status summary of the federal funds for the reconstruction of public schools impacted by the multiple natural disasters. If you have any questions, please contact me via email at cfeliciano@prfaa.pr.gov or Zoé Valentín, Policy Coordinator and Special Assistant, at zvalentin@prfaa.pr.gov.

Regards,

CARMEN M. FELICIANO,
Executive Director

Enclosures: Puerto Rico Public Schools Federal Funding Summary

ENCLOSURES

GOVERNMENT OF PUERTO RICO
PUERTO RICO FEDERAL AFFAIRS ADMINISTRATION

Puerto Rico Public Schools Federal Funding Summary

OBLIGATED FEDERAL FUNDING

Fund Program	Program Name	Total Program Budget	Under Contract Investment	Schools Impacted	School in Planning
ARP	Short Column Program (Reduce Seismic Vulnerability)	$276M	$255M	425	178
ESSERII	Safety and Security Rehabilitation Program	$193.5M	$103M	325	200
FEMA-4339	Hurricane Maria Permanent Work (FAAST)	$2,294M	$12.0M	1	272
FEMA-4473	Earthquake Permanent Work	$240M	$535k	1	148

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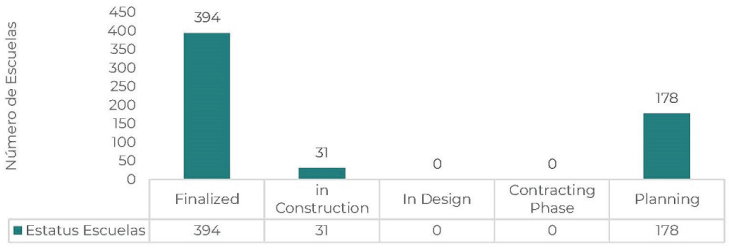
GOVERNMENT OF PUERTO RICO
PUERTO RICO FEDERAL AFFAIRS ADMINISTRATION

ARP SHORT COLUMN PROGRAM STATUS



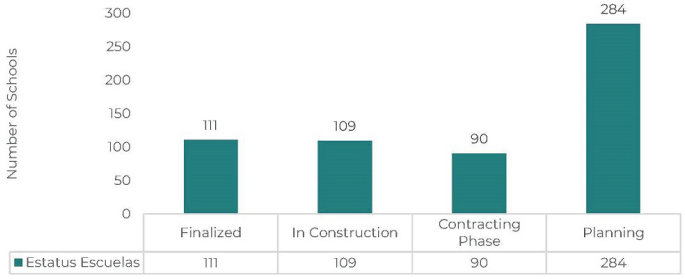
- Obligated: **$255,656,971.50**
- Pending Contract: $**21,151,620.45**
- Schools Under Contract: **425**
- Schools in Planning: **178**
- Short Columns Impacted: **39,887**

GOVERNMENT OF PUERTO RICO
PUERTO RICO FEDERAL AFFAIRS ADMINISTRATION

ESSERII - SAFETY AND SECURITY REHABILITATION PROGRAM

This initiative plans to impact 500 schools that need repairs to guarantee a safe a healthy environment for students that returned to in person learning after covid-19. For this PRDE has established a workplan with a current budget of $193.5M to impact close to 500 schools that need urgent roof sealing, mold remediation, and light repairs.

Estatus Escuelas - Iniciativa Sellado de Techos



TIMELINE – 178 SCHOOLS

	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23'	Jun-23	Jul-23'	Ago-23'
Bids per month	60	86	130	160	178				
Notice to Proceed			20	50	89	139	172	178	178
Completed Schools							15	35	65

GOVERNMENT OF PUERTO RICO
PUERTO RICO FEDERAL AFFAIRS ADMINISTRATION

TIMELINE – 284 SCHOOLS

	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23'	Jun-23	Jul-23'	Ago-23'
Bids per month	84	134	184	234	284				
Notice to Proceed		84	134	184	234	284			
Completed Schools					84	134	184	234	284

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GOVERNMENT OF PUERTO RICO
PUERTO RICO FEDERAL AFFAIRS ADMINISTRATION

FEMA- LONG-TERM RECONSTRUCTION PROGRAM

Under FEMA, the Puerto Rico Department of Education (PRDE) has two active grants that have obligated funds for permanent work:

1. **Hurricane Irma & Maria (FEMA-4339)-** PRDE has submitted to FEMA a total of 78 projects for review totaling an estimated investment of $192M dollars towards repair. To date, 43 projects have been approved for $110M.
2. **Earthquake (FEMA-4473)-** PRDE has submitted to FEMA a total of 149 projects for review totaling an estimated investment of $280M dollars towards repair. To date, 129 projects have been approved for $240M.

Currently, PRDE is publishing bids and has 1 school under contract for permanent work with another 7 schools in the contracting phase. Below is PRDE's estimated schedule for the publication of the approved projects.

	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23'	Jun-23	Jul-23`	Ago-23`
Bids per month	32	43	54	59	66	75	90	102	112
Notice to Proceed		32	43	54	59	66	75	90	102
Completed Schools							32	43	54

Submissions for the Record by Rep. Grijalva

U.S. HOUSE OF REPRESENTATIVES

December 5, 2022

Mr. Josué Colón
Executive Director, Puerto Rico Electric Power Authority
P.O. Box 364267
1324 Longworth House Office Building
San Juan, PR 00936–4267

Dear Mr. Colón:

On November 17, 2022, the U.S. House Committee on Natural Resources held a full committee oversight hearing on "Puerto Rico's Post-Disaster Reconstruction and Power Grid Development." During the hearing, Committee Members received testimony from key stakeholders regarding federal and local post-disaster reconstruction efforts in Puerto Rico following recent natural disasters, such as Hurricanes Irma, Maria, and Fiona, and the 2020 earthquakes, as well as the progress of the restoration and modernization of Puerto Rico's power grid.

During the hearing, Resident Commissioner Jenniffer González-Colón (PR) raised a request for information from the Puerto Rico Electric Power Authority (PREPA) in the form of a written statement regarding the status and development of Puerto Rico's electric system. I concurred with the request and ordered it without objection.

As the entity responsible for generating electrical energy for the people of Puerto Rico, PREPA's perspective on the status of Puerto Rico's electrical infrastructure and plans for repairing and upgrading the generation system are of great interest to the Committee. Therefore, I respectfully request that you submit to the Committee a statement detailing the status of PREPA's generation system, including:

- The status and outlook of the generation fleet.
- A summary of the plan for rebuilding and replacing the generation system, including timelines and estimated years in which each milestone is to be achieved.
- The parts of the generation fleet that are priorities for repair, upgrade, or replacement.
- The status and estimated costs of all projects that are planned or underway using federal recovery funds, including a breakdown of which projects have been submitted, approved, or started and what amounts have been disbursed.

Please provide the requested information electronically to Ivan Robles with the Committee's Office of Insular Affairs at Ivan.Robles@mail.house.gov by December 12, 2022.

Thank you in advance for your cooperation and I look forward to engaging with you further to ensure the people of Puerto Rico have access to a safe and reliable electrical energy system.

Sincerely,

RAÚL M. GRIJALVA,
Chair

GOVERNMENT OF PUERTO RICO
PUERTO RICO ELECTRIC POWER AUTHORITY

December 12, 2022

Hon. Raúl M. Grijalva, Chairman
U.S. House of Representatives
Committee on Natural Resources
Washington, DC 20515

Dear Chairman Grijalva:

We are in receipt of your letter of December 5, 2022, related to the November 17, 2022, oversight hearing on "Puerto Rico's Post-Disaster Reconstruction and Power Grid Development". In your letter, you indicated that during the hearing there were some requests for information related to PREPA, in the form of a written statement regarding the status and development of Puerto Rico's electric system, including:

- The status and outlook of the generation fleet.
- A summary of the plan for rebuilding and replacing the generation system, including timelines and estimated years in which each milestone is to be achieved.
- The parts of the generation fleet that are priorities for repair, upgrade, or replacement.
- The status and estimated costs of all projects that are planned or underway using federal recovery funds, including a breakdown of which projects have been submitted, approved, or started and what amounts have been disbursed.

Attached you will find PREPA's response to the request for information and supporting attachments. As you and the full Committee on Natural Resources will see from the response, PREPA has provided the details requested on PREPA's generation system. We also took the opportunity to provide the Committee on Natural Resources with additional context and information relevant to the November 17 hearing, erring on the side of submitting additional background and summaries of PREPA's many efforts (operational and financial) to keep the lights on during bankruptcy, tightening budgets, transition to renewable energy projects, limitations by the island's energy regulator, and ongoing efforts to expedite project approvals and permitting, among others.

We also include a summary of milestones achieved by PREPA management and its dedicated, though reduced, labor force—notwithstanding the historic and sequence of challenges posed by the impacts of hurricanes Irma (2017), Maria (2017), the earthquakes of 2020, the pandemic period (2020–2021) and most recently, hurricane Fiona (2022).

Thank you for the opportunity to present this information to the Committee on Natural Resources. We remain available to address any questions or comments you or the Committee may have now or in the future.

Sincerely,

JOSUÉ A. COLÓN-ORTIZ
Executive Director

PREPA's Response and Supplemental Filing to Committee Questions and Issues
December 9, 2022

I. Response to Requests in Committee Letter, dated as of December 5, 2022

1. The status and outlook of the generation fleet

Electricity is supplied to PREPA customers primarily by old and inefficient PREPA-owned generation plants and secondarily from independent power producers (IPPs) under power purchase and operating agreements (PPOAs). PREPA-owned power plants have 4,961 MW of installed generation capacity, IPPs consists of 984 MW from two conventional power plants and 254 MW from various renewable energy providers. PREPA-owned generation units have well-above industry average forced outage rates such that between 30% and approximately 40% of this capacity is typically out of service, including units that are indefinitely out of service and in need of significant overhaul. As a result, on average, only around 60 to 70% (3,000 to 3,500 MW) of PREPA-owned generation capacity is available for dispatch. Given the frequency of outages (whether caused by Generation or Transmission-Distribution incidents), it is often necessary to dispatch generation units with higher cost fuel. For example, the April 2019 maintenance-related transformer explosion and resulting loss of Aguirre Unit 2 for approximately 12 months (with average fuel cost of ~$130/MWh) was compensated by increasing generation from low efficiency diesel peaking units (with average fuel cost of ~$200/MWh).

PREPA generation units began experiencing even more frequent forced outage events during the summer months of 2021, July, August, and September. These outage events were due to various factors, including a combination of high peak demand and energy use, with unanticipated generator forced outages that resulted in very tight reserve margins, and at times, generation shortfalls that resulted in brown-out conditions as well as long load shedding events.

The availability of the system's generating units dropped by 17% from 2015 to 2020 and has consistently performed below peers. Forced outages of generating units have also seen an increase of 15% over the same period and underperformed peer units, exemplifying the unreliability of PREPA's legacy generating fleet. The net heat rate of generating units has also seen an increase of 377 Btu/kWh from 2016 to 2020. Today, PREPA's aging plants continue to deteriorate with worsening levels of performance. PREPA expects these trends to continue with growing inefficiencies and unreliability as these units continue to age until the completion of new generation system investments and major maintenance projects.

2. A summary of the plan for rebuilding and replacing the generation system, including timelines and estimated years in which each milestone is to be achieved

a. 5-year plan for rebuilding the energy system

PREPA's 5-Year Infrastructure Projection includes approximately $2.78 billion in investment needed for PREPA to rebuild Puerto Rico's Generation system, most of which qualify for FEMA funding under its 428 programs. This estimate includes only the cost associated with FEMA 428 funds, FEMA § 404 funds. It, therefore, excludes infrastructure hardening work that is eligible for funding through FEMA's 406 Public Assistance Mitigation (406) program. Please refer to the "PREPA 5-Year Infrastructure Projection May 2022" document attached for further details.

b. 10-year plan for rebuilding the energy system

The June 2021 version of the 10-Year Infrastructure Plan includes approximately $3.14 billion in investment that is needed to rebuild and transform Puerto Rico's electric generation portfolio and repair and restore its dams and hydro-electric generation and irrigation assets, most of which qualifies for FEMA funding under its 428 and 404 mitigation programs. The $3.14 billion includes funds to be requested from these programs, plus supplemental funding from PREPA's NME program. There are approximately 55 projects that are categorized as "near-term priority." These projects either have already begun preliminary architectural and engineering (A&E) design or are expected to do so in years 2021, 2022, and 2023. The in-scope estimated cost of projects expected to begin within this time horizon is $2.43 billion. The mid-term priority category is composed of 15 projects that are expected to begin preliminary A&E design in the years 2024, 2025, 2026, and 2027. The in-scope estimated cost of projects expected to begin within this time horizon is $707 million. The long-term priority category comprises 12 projects that are expected to begin

preliminary A&E design in 2028 and beyond. The in-scope estimated cost of projects expected to begin within this time horizon is $0.90 billion. Please refer to the "PREPA 10-Year Infrastructure Plan Update Final" document attached for further details.

3. The parts of the generation fleet that are priorities for repair, upgrade, or replacement

a. Black start Units

PREPA would like to clarify the congressional record about the need for more and better black start units—and to provide context on the RFP process that is currently being developed with FEMA support. Please refer to the PREB docket number: NEPR-MI-2022-0005 for further information on the regulatory proceeding on the RFP Process for New Black-Stait Systems at Costa Sur and Yabucoa.

A black-start process entails restoring a power station to operation without relying on the external electric power transmission network. These processes are done to recover from a total or partial blackout which may occur due to several unforeseen factors, including natural disasters, weather events like storms and hurricanes, technical failures and more. In general, all power stations need an electrical supply to start up: under regular operation, this supply would come from the transmission or distribution system; under emergency conditions, black-start stations receive this electrical supply from a small auxiliary generating plant located on-site. Once running, a large generating unit can be utilized to energize part of the local network and provide an energy supply for other units within its area. With this capability at several sites, electrical supplies can be efficiently re-established around the island. The need to restore the system after a blackout event makes the availability of small auxiliary generating plants all the more important for system reliability and restoration. Further, the Small Generating Units are needed to make available to PREPA a more diverse and readily available portfolio of generation units available in case a peak load needs to be met and PREPA's fleet is insufficient to serve it.

An initial SOW has been submitted to FEMA for the preparation of preliminary design and technical documents, required by PREPA to submit a funding application for preliminary and detailed engineering for the Engineering, Procurement and Construction (EPC) of 36 to 60MW of power per site at the existing Yabucoa Gas Plant and the Costa Sur Gas.

b. Summary of applicable Integrated Resource Plan approved by the PREB

PREPA filed its first IRP in 2015, which PREB approved in September 2016. As a result of Hurricanes Irma and Maria in 2017, Puerto Rico not only faced the unprecedented challenge of rebuilding the electric power system, but also had to rethink how to harden and modernize the grid to better equip Puerto Rico against future natural catastrophes, while diversifying fuel sources and increasing the grid's reliance on renewable energy resources.

On February 13, 2019, PREPA filed its initial proposed IRP for PREB's approval (Initial IRP). After reviewing the Initial IRP, PREB issued a motion with findings and requested PREPA to refile the Initial IRP after addressing certain items. On June 7, 2019, PREPA refiled its proposed IRP after making revisions required by PREB (Proposed IRP). PREB issued its Final Resolution and Order on PREPA's Proposed IRP on August 24, 2020.

PREB's Final Resolution and Order (Final Order) approved in part and rejected in part the Proposed IRP and ordered the adoption and implementation of a Modified Action Plan and Modified Preferred Resource Plan in lieu of PREPA's proposed Action Plan and Preferred Resource Plan (Approved IRP). The following three notable modifications to the grid were approved by PREB, which form the core elements of the Modified Action Plan and Modified Preferred Resource Plan for PREPA:

1. Increasing share of renewable generation and storage while retiring or converting existing coal and heavy fuel oil generation;
2. Enhancing grid resilience through hardening capital projects, including potential mini-grids and microgrids; and
3. Enabling customer choice through DG, EE, and DR programs.

Additional information on IRP core elements is provided in Appendix 1.

c. Renewable Energy and BESS Procurement—Tranche 1

PREPA launched the first tranche (Tranche 1) of several renewable energy generation and battery energy storage system (BESS) RFPs on February 22, 2021. This was done in compliance with legislative and regulatory mandates under Puerto Rico energy public policy to increase renewable energy generation in Puerto Rico.

In December 2021, PREPA submitted eighteen (18) solar PV projects (totaling 845 MW) and three (3) battery storage projects (4-hr) (totaling 220 MW) to PREB for evaluation and approval. On February 2, 2022, the PREB authorized the eighteen (18) PV project power purchase operating agreements (PPOAs) and instructed PREPA to finalize negotiations with those proponents. After LUMA completed the technical studies for the Tranche 1 projects, PREPA submitted executed PPOAs during June, July, and August 2022.

On September 1, 2022, the PREB published the independently computed portfolio of weighted average LCOE of $108.1/MWh for the eighteen (18) Tranche 1 solar PV projects, along with the real levelized cost of $85.4/MWh, in 2021 dollars.

d. Renewable Energy and BESS Procurement—Tranche 2 through 6

Following the receipt of bids during 2021 for Tranche 1 of the renewable energy and BESS procurement by PREPA (for 845MW of solar and 220MW of BESS), PREB issued a Resolution indicating that the remaining Tranches 2 through 6, would be led by PREB and a selected contractor (Independent Coordinator) to manage the remaining procurement processes.

The Tranche 2 procurement process, which was originally set to begin in June 2021, was launched on September 28, 2022 and published by the PREB's Independent Coordinator. The original deadline for filing responses was November 14, 2022. PREB recently announced an extension until December 5, 2022, for proponents to submit proposals. Tranche 2 seeks up to 1,000MW of renewable energy and 500MW of BESS projects.

Tranches 3 and 4 were supposed to be opened to receive proposals in December 2021 and June 2022, respectively. Both tranches are now delayed and PREB has not informed of any updates on the target release dates.

4. The status and estimated costs of all projects that are planned or underway using federal recovery funds, including a breakdown of which projects have been submitted, approved, or started and what amounts have been disbursed

a. Background and Responsibilities

In September 2017, Pue1to Rico's electric system was completely devasted by the landfall of Hurricanes Irma and Maria, resulting in the most prolonged electrical blackout in modern U.S. history. This paved the way for a historic obligation of federal funds from the Public Assistance program to Puerto Rico under the Federal Emergency Management Agency's (FEMA) Stafford Act § 428. Of these funds, over $9.5 billion are destined for the reconstruction of the Puerto Rico Electric Power Authority's (PREPA) electrical and water infrastructure. The $9.5 billion amount represents 90% of the total estimated cost of the permanent work to be executed and is complemented by a local cost share of 10%, which amounts to approximately $1 billion that will be funded by the Government of Puerto Rico, with up to $500 million in Community Development Block Grant Disaster Recovery (CDBG-DR) funds. Specifically, this funding will be utilized to design and build a more resilient and modern electrical infrastructure to provide sustainable and reliable power for the long-term future of Puerto Rico. Most of these funds are destined for transmission and distribution (T&D) infrastructure work.

In addition to the FEMA § 428 Funds, FEMA obligated approximately $1.5 billion under the Hazard Mitigation Grant Program (HMGP) authorized by the Stafford Act § 404 for PREPA's electrical generation and water infrastructure. These funds may be used to provide protection to undamaged parts of a facility and/or to prevent and reduce damages that future disasters could cause. Approximately $12.2 billion is currently assigned to reconstruct PREPA's electrical system and water infrastructure. This consists of FEMA § 428 and § 404 funds, insurance proceeds, and local funds. LUMA Energy is responsible for permanent reconstruction work related to the T&D infrastructure and PREPA is responsible for permanent reconstruction work related to its generation plants, including hydroelectric facilities, dams, and irrigation infrastructure.

b. Generation/Hydropower plants—federally funded projects, status, timelines, milestones. Federal Stabilization Plan

Please refer to the "Permanent Projects Tracker" attached.

c. Other related FEMA/COR3/HUD accomplishments by PREPA

The funding allocation described above underscores the need to repair Puerto Rico's generation system urgently. Puerto Rico currently lacks dependable power generation to supply the energy demand and requires temporary emergency generation, including peaking units and three new mobile generators at PREPA's Palo Seco power plant to meet the load. These three power units at Palo Seco were purchased after Hurricanes Irma and Maria, and FEMA reimbursed the amount related to diesel to operate the units.

In addition to the FEMA § 428 and § 404 funds assigned to the PREPA generation system and water infrastructure assets, PREPA requested approximately $300 million from the Puerto Rico Department of Housing for CDBG-DR funds for the retrofit of PREPA's hydroelectric generating units under "Electrical Power Reliability and Resilience Program (ER2)" of the CDBG Electrical System Optimization Action Plan. Please refer to the "Electrical Power Reliability and Resilience Program (ER2)" document attached for further information.

Under the Public Assistance program, FEMA approved 11 PREPA generation-related projects and obligated approximately $182 million through the FAASt process as of this date. The 11 projects submitted by PREPA and approved by FEMA include projects at the following power plants:

- Aguirre Power Complex
- Costa Sur Power Complex
- Palo Seco Power Plant
- San Juan Power Plant
- Mayagüez Power Plant and
- Cambalache Power Plant.

Further, the 11 projects, in turn, cover 65 scopes of work (SOWs) approved by the Puerto Rico Energy Bureau of the Public Service Regulatory Board (PREB), Puerto Rico's energy sector regulator, for repairs of PREPA's legacy generation units.

d. Peakers RFPs; overall status; project timelines for 1st RFP (4 units); 2nd RFP (7 units)

FEMA has obligated $853 million of FEMA § 404 funds that will be allocated to cover the cost of new turbines. PREPA is following its procedures and state regulatory regulations to acquire new-generation equipment. In November 2022, PREPA submitted to PREB a draft RFP to acquire four turbines with black-start capabilities. Following PREB's evaluation and approval, PREPA expects the RFP to be published in December 2022. A separate RFP to acquire seven new simple cycle gas turbines PREPA will be submitted to PREB in December 2022. PREPA estimates that PREB may complete its evaluation and grant approval by early-January 2023. PREPA will publish it as soon as PREB grants leave to do so.

II. Supplemental Information and Responses Arising from the November 17, 2022's Hearing

5. Summary of Permitting Issues for New Renewable Generation Projects

a. Title V Critical Project under PROMESA

PREPA has urged all approved renewable energy and BESS Project Sponsors in Tranche 1 to evaluate and seek, as appropriate, designation as a Title V Critical Project by the Fiscal Oversight and Management Board for Puerto Rico (FOMB).

Title V of the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA) adopts key provisions of Act 76-2000, the Puerto Rico Procedures for Emergency Situations or Events Act, and defines what a Critical Project means. The term "Critical Project" means a project identified under the provisions of Title V and intimately related to addressing an emergency whose approval, consideration, permitting, and implementation shall be expedited and streamlined according to the statutory process provided by Act 76-2000, or otherwise adopted pursuant to Title V. Governor Pierluisi has declared an energy infrastructure emergency under Act 76-2000 for purposes of expedited permitting, which is a process that applies to Puerto Rico permitting agencies.

Title V establishes project submission requirements for Project Sponsors, and in the case of energy-specific projects, has additional criteria related to fuel mix diversification, privatized generation, renewable energy, improved reliance, and performance. This language was specifically added by Congress knowing that the island's grid and generation assets were and continue to be in dire need of transformation and modernization.

As a Critical Project, the FOMB's Revitalization Coordinator has the authority (and mandate) to identify Points of Contact at each relevant federal permitting agency, to help prioritize the evaluation and permitting process for such projects.

Support from the FOMB/Title V designation and efforts to expedite permitting of energy projects can be enhanced with U.S. Department of Energy (DOE) Secretary Jennifer Granholm's Puerto Rico Grid Recovery Modernization Team, for support across federal resources, technical assistance, and additional help to repair and reconstruct the island's grid and to drive decisive progress on Puerto Rico's clean energy transformation.

b. Expedited permitting for energy projects under Puerto Rico Law

The governor of Puerto Rico has broad and specific authority, under Act 76-2000 to declare an emergency via executive order for the specific purpose and objective of addressing the declared emergency, expediting critical permitting for projects designed to address the emergency. Act 76-2000 was legislated precisely for the type of situation Puerto Rico is experiencing today with its energy grid and the obvious urgency, risk factors, overall sector transformation required under Puerto Rico's energy public policy, PREPA's fiscal plan, and safety and security concerns given the highly fragile T&D and energy generation infrastructure.

The governor activated the emergency procedures under Act 76-2000 on March 25, 2021 (EO-2021-024) for purposes of all infrastructure (including energy infrastructure) impacted by hurricanes Irma, Maria, and the earthquakes. This Executive Order was most recently renewed/extended via EO-2022-050 on October 5, 2022.

The legal effect of an executive order pursuant to Act 76-2000 for these strategic emergency projects is immediate and helps jumpstart and accelerate local permitting, and thus financing and related funding and pre-construction (design, modeling, procurement) work.

6. PREPA's efforts before the PREB regarding gasification and strategies to stabilize generation

a. Conversion of the San Juan Steam Units to Operate with Natural Gas

PREPA has submitted multiple requests (attached document with links to the "Conversion Motions" filed) to PREB to allow a limited update or amendment to the operative IRP to enable PREPA to convert the San Juan steam units 7, 8, 9 and 10 (San Juan Steam Units) to operate with natural gas as a primary fuel and be able to continue using no. 6 fuel oil as backup fuel. This amendment would help PREPA achieve compliance with the State Implementation Plan and convert 400 MW to become more economical and cleaner generation (two of these units are on long-term outage, and thus, not currently generating any power). However, PREB has given priority to procedural considerations, denying the request, and determining that LUMA is the only party that may request an amendment to the IRP (even for a generation matter, which is owned and operated by PREPA). The proposed conversions are a short to mid-term measure to increase environmentally compliant generation in the north, close to Puerto Rico's largest load centers—while new renewable energy and BESS projects and financed, developed, and become operational.

b. Efforts to provide adequate maintenance to the generation fleet

To maintain PREPA's generation units in operation and, more importantly, in reliable operation and service, these must receive their appropriate repairs and maintenance, as recommended by their manufacturers. On November 2021, PREPA asked PREB for leave to commence 10 projects to provide maintenance and repair the generation fleet and proceed with the corresponding applications and submissions to FEMA and COR3 for the reimbursement of all associated costs. However, after several procedural events and several motions filed by PREPA (attached document with links to the "Maintenance Motions" filed), PREB has not approved several projects that target the need to provide adequate maintenance to the San Juan units 8 and 10 and the Cambalache Unit 1. To date, four (4) SOWs for the funding necessary to conduct these works remain denied before PREB.

Additional detail on the foregoing can be found in Appendix 2.

c. Temporary Generation Initiative: summarize how PREPA had suggested this before the current instability period and explain why temporary generation is needed, to supplement maintenance schedules, etc. (General Requisition Form RF 113)

After Hurricanes Irma and María, part of the funds assigned to Puerto Rico was provided under the 404 Hazard Mitigation Grant Program (HMGP or FEMA 404). PREPA, as the sub-recipient of the federal funds, identified hazard mitigation projects that would be eligible under the HMGP requirements and purpose and, accordingly, proposed two (2) new generation resources that PREPA had included in its proposed 2019 Integrated Resource Plan (Proposed IRP) as infrastructure projects that could deliver hazard mitigation results. These projects were: a new combined cycle (CC) in the San Juan area, which would replace old thermal generation capacity, and the wholesale replacement of the entire PREPA peaking unit fleet ("Peaking Units"). The principle that supported PREPA's proposal for these projects as hazard mitigation projects was very targeted and came from lessons learned from hurricanes Irma and María, which were later confirmed by the most recent experience with Hurricane Fiona. More specifically, the formulation of these projects was driven by the understanding of what the hurricanes affected the most and the resources that, if available to PREPA when the hurricanes passed, would have mitigated damages and accelerated the restoration of power to Puerto Rico.

Usually, a major event leaves Puerto Rico without electric service, which requires having enough available generation capacity to restart the system. Puerto Rico electric system operates as an isolated system, which means it is not interconnected to other electric systems, so it greatly depends on the black start and peaking units to restart the system. These units are the first resources used to begin the system restoration. The black start and peaking units, combined with the base load units in the north and south, form electric islands through Puerto Rico, such as mini-grids, to provide reliable power in a continuous manner to utility's customers. When the major 230 kV and 115 kV lines are restored and operational, these electric islands are synchronized with each other until the entire system in connected. This restoration process is followed to preserve life, continue the restoration of the electrical service, and begin the economic activity after the passage of a major atmospheric event, like hurricanes and tropical storms.

The new CC project together with the wholesale replacement of the Peaking Units were proposed as the main sources of generation to supply the critical and priority loads of the mini-grids formulated in the Proposed IRP to operate in a resilient way after the passage of a major atmospheric event. By supplying the critical and priority loads only days after the passage of the major event, we can save lives and be effective and agile in the restoration of the electrical system. The main focus in this process is to preserve the lives of the residents of Puerto Rico. Regarding the project for the wholesale replacement of the Peaking Units, having new peaking units would allow PREPA to replicate what the U.S. Corps of Engineers (USACE) did in the aftermath of the hurricanes of 2017, placing emergency generators in different parts of the Island to create mini-grids and serve critical loads.

Furthermore, in the aftermath of Hurricane Fiona, PREPA's baseload generating units and peaking units suffered damages mainly due to the heavy and sustained rains during the passage of the hurricane. This event occurred in the middle of PREPA's repairs works on its generating units that started in November 2021. Hurricane Fiona had the main effect of significantly reducing the available dependable generating capacity, which was already limited before the event. Hence, to stabilize Puerto Rico's power system, on September 27, 2022, PREPA submitted a request (Form RF 113) to the Federal Emergency Management Agency (FEMA) for the installation of temporary generation, which would allow PREPA to continue repairing its generating units and, simultaneously, maintain enough dependable generating capacity to supply the electrical demand in a reliable and safe manner. Attached, copy of the Form RF 113 submitted by PREPA.

On October 12, 2022, the Governor of Puerto Rico submitted a formal request to the DR-4671-DR-PR Hurricane Fiona Federal Coordinating Officer requesting Direct Federal Assistance to stabilize the electrical grid, in accordance with recommendations that the Department of Energy and United States Army Corps of Engineers will be providing and the federal government appointed the Puerto Rico Power System Stabilization Task Force (Task Force) to plan, coordinate, and integrate efforts to execute power system stabilization in Puerto Rico due to impacts caused by Hurricane Fiona. The Task Force includes representatives from FEMA, the Department of Energy (DOE), the Environmental Protection Agency (EPA), and the USACE. Since the establishment of the Task Force, its members have conducted regular meetings with PREPA, LUMA Energy, LLC (LUMA), COR3, PREB, and

other local stakeholders. In addition, the Task Force members have visited and assessed all PREPA's power plants to determine their actual conditions and operational constraints. As a result of this assessment, the Task Force determined that the recommended course of action is to provide temporary generation to augment system capacity to complete priority emergency repairs to stabilize the system without significant interruption in service.

7. Responsibility for electric rate increases

PREPA would like to clarify for the congressional record, statements made by LUMA at the hearing indicating that it was not and is not responsible for electric customer rate changes.

Starting on June 1, 2021, LUMA began the Interim Service Period under the Supplemental Agreement to the T&D OMA, providing for LUMA to assume T&D operations while PREPA remains in Title III. These services and responsibilities include day-to-day operations and maintenance of the T&D system, long-term systems and resource planning, generation dispatch, asset management, operation and maintenance, community and media relations, reporting and record keeping, finance and accounting, and oversight and implementation of federally funded projects, among others specified in the T&D OMA Scope of Services.

Notably under LUMA's responsibilities is the filing of all rate rider update requests to PREB, including fuel and purchased power rate riders on a quarterly basis. These rate filings combine (a) forecast inputs from PREPA on fuel costs—which are based on market prices, and (b) LUMA's projection of the generation system dispatch. LUMA is responsible for both real-time generation system dispatch and forecasting of generation system dispatch and costs, both in the near term for rate adjustment requests and long-term projection for the IRP, which is also now the responsibility of LUMA before the PREB.

LUMA's response regarding its responsibilities about rate increases, may have left some room to interpret that it is not responsible for electric rate impacts or changes. While it is true that LUMA, like PREPA, has no control over global fuel market prices, LUMA does play an important and significant role as the party solely responsible for requesting and implementing rate and adjustment clauses changes approved by PREB. This is part of a crucial and entirely normal utility function of cost recovery and is performed by all mainland utilities. Further, generation dispatch, which is managed entirely by LUMA, does have an impact on fuel costs. Even though PREPA purchases fuels, and thus a PREPA expense, PREPA pays for the fuel that is consumed by the power plants that LUMA determines how to dispatch. Thus, PREPA doesn't have control over which fuels, the least or the more expensive, are used first.

8. Status of PREPA Vendor Payables and Debts

a. Summary of PREPA's status of debts with APPA utilities

i. NYPA

The total validated New York Power Authority (NYPA) invoiced amount for $2,204,995.90 is in accordance with the MOU. This payment authorization has been processed and sent to accounts payable for the corresponding disbursement. Additionally, there is an invoiced balance of $1,025,584.60 that is outside of the agreement. PREPA is unable to pay the balance if the project was carried outside of a period covered by a duly formalized agreement. In response to NYPA's arguments, a legal assessment was performed to see if it is possible to pay while maintaining compliance with the laws and regulations applicable to PREPA. The remaining approved balance of $1,638,405.62 must be paid in December.

ii. APPA MOUs

The total balance for the 32 companies that provided services to PREPA is $325.8 million per FEMA. The payment disbursed is approximately $303 million to 20 companies, and there is an outstanding balance of approximately $23.5 million to 12 companies. PREPA expects $23.0 million in reimbursement from FEMA, after which PREPA will reimburse the relevant 12 companies.

These invoices are validated and certified, but the outstanding balance claimed by the companies remains to be reconciled. LUMA's Accounts Payable department will perform the reconciliation. The following payments were made to companies in the last fiscal year:

- Duke—$7,661,916 on 7/2/2021
- Southern California—$635,291.49 on 10/15/2021
- PG&E—$910,960.94 on 8/12/2022
- AES—$47,884.90 on 8/18/2022

b. Summary of Work between PREPA, LUMA and APPA for Fiona; schedule of meetings held; PREPA's outreach to APPA (explaining that LUMA cannot reach out to APPA)

On September 14, 2022, APPA's Operations Services Manager, Mr. Giacomo Wray, contacted Maite Soto and Astrid Rodríguez from PREPA via email informing that they were monitoring the Tropical Depression Seven that was moving westward toward the Antilles at the time. APPA wanted to check in with PREPA to see if it had any concerns or any future needs for assistance or resources. In addition, APPA offered to schedule a call to discuss this matter.

PREPA and APPA agreed on having daily meetings starting on September 16, 2022, to discuss the possible activation of APPA's Mutual Aid, leaving one day for PREPA to reach out to LUMA and agree on a process for this activation. Discussing this process was needed because LUMA, as a private entity and contractor, is not a member of the APPA and, hence, cannot reach out directly to APPA for the activation of the Mutual Aid. The tropical depression converted to Tropical Storm Fiona on September 15, 2022, date when PREPA contacted LUMA via email requesting LUMA to inform if they need some assistance or resources from APPA, so PREPA can coordinate such assistance. LUMA answered the same date informing that they were in the process of evaluating resourcing needs and availability, including the potential need for Mutual Aid and asked to schedule a call to discuss and coordinate potential APPA support with their points of contact, Angel Silverio and Mervet Rodríguez.

PREPA and LUMA met the September 15, 2022's afternoon and discussed the need to activate Mutual Aid. LUMA informed that they were still evaluating resourcing needs and availability and, once they finish this evaluation, they will know if LUMA will need APPA support. On the morning of September 16, 2022, PREPA met with APPA and informed LUMA's response. APPA and PREPA agreed to include LUMA in the following daily meetings. During the afternoon of September 16, 2022, PREPA met with LUMA, who informed that, at the moment, LUMA foresaw that they could manage the Tropical Storm Fiona event with internal resources, but that were going to meet with PREPA and APPA the next day.

On September 17, 2022, the Governor of Puerto Rico declared an emergency due to the storm warning issued to Puerto Rico. During the afternoon of this date, PREPA, APPA, and LUMA had their first meeting together to discuss the possible activation of Mutual Aid. APPA's representatives explained the process of requesting Mutual Aid and answered LUMA's questions related to such process. It was explained that if LUMA needed to activate the Mutual Aid, it had to request such aid to PREPA, who in turn will request the aid to APPA. However, it was agreed to conduct daily meetings between APPA, PREPA, and LUMA to discuss the current needs of LUMA, so APPA and PREPA can respond on a timely manner to such needs. In addition, during the meeting, LUMA informed that they still foresaw that they could manage the Tropical Storm Fiona event with internal resources and local contractors. For reference, please see attached letters between APPA and PREPA.

Early on September 18, 2022, Tropical Storm Fiona converted to Category 1 hurricane and a hurricane warning was issued to Puerto Rico. APPA, PREPA, and LUMA attended their daily meeting and LUMA informed that they still foresaw that they could manage the Hurricane Fiona event with internal resources and local contractors. APPA stressed that the decision to activate their support should be done as soon as possible, because the coordination of moving resources to Puerto Rico take significant time. However, LUMA's representatives sent an email with a list of possible needs of materials, resources, and equipment (vehicles) that LUMA estimated to effectively address the restoration of electrical system. In its email, LUMA clearly stated that the communication sent was not a request, as its purpose was to advance the availability analysis process to be effective in the case of activating a request officially. PREPA forwarded this email to APPA the same date.

During the afternoon and evening of September 18, 2022, Hurricane Fiona made landfall in Puerto Rico.

On September 19, 2022, APPA, PREPA, and LUMA attended their daily meeting and LUMA informed that they were conducting assessments of the damages caused by the passage of Hurricane Fiona. LUMA informed that they will notify if they need the activation of the Mutual Aid once they completed the assessment of the damages. APPA reiterated that the decision to activate their support should be done as soon as possible, because the coordination of moving resources to Puerto Rico take significant time.

On September 20, 2022, PREPA sent an email to LUMA summarizing their daily calls, in particular that LUMA has informed that, so far, they have not had the need to activate Mutual Aid and that PREPA encouraged LUMA use APPA's resources, as they were less expensive than private contractors. That same date APPA, PREPA, and LUMA attended their daily meeting and LUMA informed that they were still conducting assessments of the damages caused by the passage of Hurricane Fiona, after which they will notify if they need the activation of the Mutual Aid. During the daily meeting on September 21, 2022, LUMA informed that the status was the same as the day before.

During the daily meeting on September 22, 2022, PREPA's representatives asked LUMA to clarify if they needed the APPA support, as it was not clear at that moment. During a meeting conducted later that same date, LUMA clarified that they were still assessing the damages caused by Hurricane Fiona and that they will notify PREPA if they need the activation of Mutual Aid.

On September 23, 2022, APPA, PREPA, and LUMA attended their daily meeting and LUMA informed that they will notify their decision on the activation of Mutual Aid the next day. In addition, LUMA informed that, if they requested APPA's support, the technical staff to be sent to Puerto Rico shall be members of the International Brotherhood of Electrical Workers (IBEW). APPA's representatives explained that this LUMA's requirement significantly limited the available resources to be sent to Puerto Rico for the restoration works. PREPA's representatives requested LUMA to evaluate an exception to that requirement, considering that current situation was an emergency and that APPA's workers have come in the past to help restore Puerto Rico's electrical system without any adverse result or violations to American codes and standards.

On September 24, 2022, APPA, PREPA, and LUMA attended their daily meeting and LUMA informed that they did not need the activation of Mutual Aid. PREPA confirmed this notification via email to LUMA. APPA and PREPA agreed to suspend their daily meetings from that day on.

c. Summary of Cobra debt

On October 19, 2017, after Hurricanes Irma and Maria impacted Puerto Rico, PREPA and Cobra Acquisitions LLC ("Cobra") entered into the Emergency Master Service Agreement for PREPA's Electrical Grid Repairs-Hurricane Maria, dated October 2017 (the"First Contract") for Cobra to perform emergency "storm restoration services" for $200 million. Through five subsequent amendments, the contract amount for the First Contract was increased to $945 million.

On May 26, 2018, PREPA and Cobra entered the Master Services Contract for PREPA's Electrical Grid Repairs-Hurricane Maria, dated May 26, 2018 (the "Second Contract," and with the First Contract, the "Cobra Contracts"), for Cobra to perform restoration and reconstruction services in addition to its emergency storm repair services under the First Contract, in the amount of up to an additional $900 million.

On September 30, 2019, Cobra filed a motion seeking (i) allowance of an approximately $216 million post-petition administrative expense claim, arising from various services provided by Cobra in connection with the Cobra Contracts, with interest accruing, and (ii) immediate payment of that asserted administrative expense claim. As of June 21, 2022, Cobra alleges approximately $123 million of interest has accrued in connection with non-payment of amounts due pursuant to the Cobra Contracts.

9. Other PREPA accomplishments and advances following Hurricanes Irma and Maria and during Title III bankruptcy proceedings

a. 2022 PREPA Fiscal Plan Key Accomplishments

- Successfully supported the 11-month Front-End Transition to the selected T&D OMA[1] Operator—LUMA Energy, LLC—for the privatization of the operation and maintenance of PREPA's T&D system.
- Completed the return-to-service repairs to Costa Sur power units 5 & 6 (~440MW), and necessary upgrades to the San Juan Power Plant units 5 and 6 for air quality control.
- Reduced customer call wait-times through call center outsourcing and increasing customer accessibility to e-billing platforms ahead of LUMA's onboarding.
- Secured a historic Global Settlement of $10.7 billion in funding from FEMA § 428, through the Central Office of Recovery, and Reconstruction and Resiliency (COR3) with FEMA, along with cost matching and other funds from insurance, FEMA § 404 and CDBG-DR, also ahead of LUMA's onboarding.
- Developed and worked toward implementation of the 10-year Infrastructure Plan for federally funded grid capital investments required by FEMA, and the implementation of the PREB-approved Modified Action Plan for PREPA's Integrated Resource Plan (IRP).
- Supported P3A, the Puerto Rico Fiscal Agency and Financial Advisory Authority (AAFAF, for its Spanish acronym) and FOMB in launching the PREPA Legacy Generation Asset procurement process for the selection of one or more private operator(s) to operate and maintain PREPA's legacy generation power plants.
- Fuel Procurement: At the beginning of FY 2022, PREPA issued RFPs for both diesel and bunker-C and completed the evaluation and selection process by the end of September and October, respectively. Both RFPs attracted considerable market interest and resulted in improved terms to PREPA when compared to prior agreements:
  - o On October 29, 2021, PREPA executed a $606 million fuel contract with Puma Energy Caribe LLC for bunker-C fuel. The contract price adder in the competitively procured agreement represented a ~33% price reduction compared to the previous bunker-C fuel supply contract.
  - o On November 18, 2021, PREPA executed a $265.5 million diesel fuel supply contract with Novum Energy Trading Inc. The contract price adder in the competitively procured agreements represented a 19% savings when compared to the terms provided by the previous diesel supplier, Puma Energy Caribe LLC, which was PREPA's sole provider of diesel fuel since 2014.

Additional detail on prior fiscal year accomplishments is provided in Appendix 3.

b. Budgetary/financial achievements based on approved budgets

PREPA is required under PROMESA to submit compliant budgets and abide by FOMB's financial and reporting requirements. FY2023 represents the sixth budget year for which PREPA achieved a certified budget. In coordination with FOMB, PREPA developed and implemented a budget to actual reporting process that has continued during and after the LUMA onboarding. Throughout the Title III process, PREPA has consistently proposed balanced budgets in which expenses are equal to or less than expected revenues.

For Fiscal Year 2021, FOMB modified PREPA's proposal and certified a budget that included a $126 million deficit based on the expected LUMA Front-End Transition costs of $135 million, which ultimately exceeded $180 million. This was the first and only year in which PREPA did not have a balanced budget, and budgets certified by FOMB for FY2022 and FY2023 were balanced.

[1] Transmission and Distribution Operating and Maintenance Agreement (T&D OMA) executed on June 22, 2020 amongst PREPA, the Puerto Rico Public-Private Partnerships Authority (P3A) and LUMA Energy, LLC and LUMA Energy ServCo, LLC (collectively, LUMA).

c. Status of PREPA audited financial statements

At the outset of the Title III proceeding, PREPA audited financial statements were delayed due to going concern issues raised by auditors. During the pendency of Title III (between 2017 and today), PREPA has completed the following audits and is working to complete the FY2021 and FY2022 statements.

—FY2015 audited financial statements issued on April 20, 2018

—FY2016 audited financial statements issued on December 12, 2018

—FY2017 audited financial statements issued on June 28, 2019

—FY2018 audited financial statements issued on October 6, 2021

—FY2019 audited financial statements issued on February 24, 2022

—FY2020 audited financial statements issued on September 30, 2022

d. Governor Briefs

Attached to this document, please find copy of the latest PREPA's report to the Governor of Puerto Rico regarding the status of PREPA's works.

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Appendix 1: Additional information on the Approved IRP

Increasing Share of Renewable Generation and Storage

In the Final Order, PREB ordered PREPA to develop a plan to procure 3,750 MW of renewable energy and 1,500 MW of battery storage by 2025. In addition, PREB approved the installation of up to 81 MW of local peaking capacity procured through a technology-agnostic, competitive bid Request for Proposal (RFP) process that is open to all single or aggregate sources of demand and supply-side options. PREB also approved the conversion of eight (8) retired steam plants to synchronous condensers to enable voltage stability following the installation of inverter-based renewable generation and battery storage. The Final Order clarified that the conversion plan w be subject to additional studies and coordinated with retirement schedules.

PREB rejected the development and construction of most proposed new fossil fuel generation resources, including the retirement and wholesale replacement of all eighteen (18) existing gas turbine peaking units, any new liquified natural gas infrastructure, and large-scale development efforts on a new combined cycle gas turbine unit at Palo Seco. PREB did authorize up to $5 million for preliminary economic, siting, permitting, and feasibility analysis at the Palo Seco site for a new fossil fuel-powered unit and fuel infrastructure, so long as it does not interfere with or delay the procurement of renewable energy or battery storage. Regarding fossil fuel-powered power purchase and operating agreements (PPOAs), PREB approved both the extension of the EcoEléctrica contract through 2032 and the cessation of the agreement for coal-fired AES units by the end of 2027, pursuant to Act 17-2019.

Finally, PREB approved the retirement of approximately 2.4 GW of existing fossil fuel units subject to the EPA's Mercury and Air Toxics Standards (MATS) rule.

Enhancing Grid Resilience

The Final Order found the Proposed IRP adequately established the need for (1) transmission system upgrades; (2) the expenditure of up to $2 billion for hardening of transmission infrastructure; and (3) the investment of $911 million in distribution system upgrades to enhance resiliency and support distributed generation. However, PREB ordered PREPA to seek PREB approval for specific T&D expenditures prior to making any final planning or investments. PREB also announced the opening of an optimization proceeding that will determine the optimal transmission investments for ensuring a more resilient electric power system, including assessing the ability for small-scale distributed resources—such as mini-grids—to contribute to resiliency.

As PREPA's successor in operating and maintaining the transmission & distribution grid, LUMA will be responsible for planning and implementing any grid resiliency measures, including seeking and acquiring the necessary approvals from PREB for future capital projects and expenditures.

Enabling Customer Choice

The IRP's Modified Action Plan enables further customer choice through various programs, including DG, EE, and DR. PREB ordered PREPA to further enable DG by ensuring all distribution system planning and expenditures support DG. With regard to DR, the Modified Action Plan requires PREPA to develop internal systems and external programs and offerings available to all customer classes to engage aggregators of DR resources to offer, dispatch, and be compensated for cost-effective DR resources. For EE, PREB ordered PREPA to take all necessary steps to support PREB's forthcoming EE Regulation and underlying objective of 30% EE savings by 2040 (compared to FY2019 net utility sales) as mandated in Act 17-2019, including providing support for program implementation, analysis, funding, and financing.

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Appendix 2: Additional information on PREPA's efforts before the PREB (w links of motions filed) regarding gasification and strategies to stabilize the generation grid

i. Conversion of the San Juan Steam Units to Operate with Natural Gas

1. Environmental considerations and the State Implementation Plan

As an electric utility, PREPA must comply with different environmental laws and regulations, including the Clean Air Act (CAA)[2] and the comprehensive federal law regulating air emissions from stationary and mobile sources. This law authorizes the EPA to establish National Ambient Air Quality Standards (NAAQS) to protect public health and welfare and regulate air pollutants, including hazardous ones.

Under Section 107(a) of the CAA, each state, territory, or local air district is responsible for submitting a SIP to specify how NAAQS will be achieved and maintained within each air quality control region. 42 U.S.C. § 7407(a). The CAA also requires that the U.S. Environmental Protection Agency (EPA) review and approve SIP that meet the requirements of the Act. In the case of Puerto Rico, compliance with the CAA requires the Department of Natural and Environmental Resources (DNER) to submit a SIP for EPA's approval concerning the 2010 1-Hour Sulfur Dioxide (SO2) NAAQS.[3]

The EPA designated the Guayama-Salinas and San Juan air districts as nonattainment areas for the SO2 NAAQS, effective April 9, 2018. EPA's nonattainment designation was based on SO2 modeling results from modeling performed on these air districts. On May 2016, the Government of Puerto Rico decided to use the EPA's approved air dispersion model as the strategy to demonstrate compliance with the SO2 NAAQS.

The air district of Guayama-Salinas includes part of the municipalities of Guayama and Salinas. In the case of the San Juan air district, it consists of the municipality of Cataño and part of the municipalities of San Juan, Guaynabo, Bayamón, and Toa Baja. These air districts cover the area where PREPA's Aguirre, San Juan, and Palo Seco steam plants are located.

Given the nonattainment designation by EPA under the CAA, the DNER must submit a final SIP for EPA approval, which shall provide for attainment of the 2010 1-Hour SO2 NAAQS in the Guayama-Salinas and San Juan nonattainment areas by April 9, 2023. The SIP was due to EPA by October 9, 2019. Because the DNER missed the October 9, 2019, deadline EPA issued the Findings of Failure to Submit (FFS) SIP Required for Attainment of the 2010 1-Hour Primary Sulfur Dioxide (SO2) NAAQS, with an effective date of December 3, 2020. 85 Fed. Reg. 69,504 (Nov. 3, 2020). The FFS triggers CAA deadlines for EPA to impose mandatory sanctions if EPA has not determined that Puerto Rico made a complete SIP submittal and starts a 2-year clock for EPA to issue a Federal Implementation Plan.

According to the current Puerto Rico SIP process, EPA should have determined that the DNER's final SIP submission was complete by June 3, 2022, to avoid the imposition of 2-to-1 offset sanctions in the nonattainment areas. Since DNER did not meet the SIP submission on that date, each new ton of SO2 emitted from any new or modified source in the nonattainment areas must be offset by a two-ton reduction. In addition to PREPA's power plants, the 2-to-1 offset sanction applies to all facilities considered emissions sources in the nonattainment areas. To achieve compliance with EPA's regulations, the 2-to-1 offset sanction would have required all the owners and operators of emissions sources in the nonattainment areas to implement emissions control measures for twice the emissions in comparison with their actual emissions. This sanction would have increased the operational and maintenance costs of operating industrial and commercial facilities in the nonattainment areas, affecting the economic development in these areas. Puerto Rico did not meet the initial October 9, 2019, deadline for filing its SIP and filed its final SIP on November 22, 2022. EPA deemed the submission complete on December 3, 2022. Puerto Rico now awaits EPA's determination on the November SIP submittal.

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[2] *Clean Air Act*, Public Law 95-95—August 7, 1977.

[3] On March 10, 2022, DNER opened a proceeding to evaluate the SIP and the amendments to the RCAP by publishing notices of public hearing regarding its intent to adopt a SIP and amendments to RCAP. On April 9, 2022, PREPA submitted written comments on this prior version of the proposed SIP, and on April 11, 2022, PREPA submitted additional comments during the public hearing. On August 26, 2022, DNER published notices of public hearing regarding (i) its intent to adopt the SIP and (ii) amendments to RCAP. On October 7, 2022, PREPA submitted comments to these documents.

As part of the development of the SIP, the DNER has modeled the SO2 emissions in the Guayama-Salinas and San Juan air districts and found that these areas cannot achieve attainment if PREPA continues using fuel oil no. 6 (Bunker C) and regular diesel fuels in the generating units of Aguirre, San Juan, and Palo Seco power plants, absent generating unit retirements. When modeling combustion turbines using ultra-low sulfur diesel (ULSD), the emissions are reduced but not enough for achieving attainment because of the emissions that are produced in the units that continue using fuel oil no. 6. In the absence of generation retirements, various modeling runs indicated that achieving attainment in the relevant air districts would require burning natural gas in existing steam units of Aguirre, San Juan, and Palo Seco power plants.

Looking for an environmental compliance strategy that allows PREPA's thermal units to remain operational while the reliable transition to new renewable energy resources is achieved, PREPA held several meetings with DNER and EPA staff during the first months of 2022. During these meetings, the DNER and PREPA agreed on the dual priorities of providing reliable electricity to the residents of Puerto Rico and meeting the NAAQS requirements for the benefit of the people's health and welfare.

Considering the priorities of providing reliable electricity and meeting the SO2 NAAQS, the DNER and PREPA identified the following action items as feasible strategies for achieving attainment:

- Integration of renewable energy as mandated by the operative IRP and Modified Action Plan.
- Substituting fuels used in existing thermal generating units.
- Development of an SO2 monitoring network within the designated nonattainment areas for demonstrating attainment with the NAAQS.

Consistent with these actions, in the short-term, PREPA will:

- Continue participating in the renewable energy and storage RFP tranches mandated in the Modified Action Plan.
- Substitute regular diesel with ULSD fuel at combined cycle units, combustion turbines, and the aero-derivative machines located at the San Juan, Palo Seco, and Aguirre Power Plants.
- Comply with the DNER's requirements for developing an SO2 monitoring network.

Regarding this short-term strategy, PREPA has already completed the Tranche 1 RFP process, is supporting the Tranche 2 RFP process (to the extent requested by the PREB), is taking steps for substituting regular diesel with ULSD fuel and is following the DNER's requirements to implement the SO2 monitoring network.

Given the renewable resources interconnection conditions, achieving Act 82-2010's[4] renewable portfolio standard's (RPS) goals safely and reliably are a long-term effort, given the renewable projects' completion date is not contemplated in the following year. Accordingly, the SO2 NAAQS SIP can't rely solely on implementing the new resources' integration mandated by the operative IRP and Modified Action Plan to attain the NAAQS. To adequately maintain a safe and reliable electric service for the people of Puerto Rico, PREPA will need to execute the necessary actions to keep its steam units operational and in compliance with environmental regulations. As explained, modeling results indicate that attaining the SO2 NAAQS would require burning natural gas at existing steam units. Thus, in the short- and medium-term, pursuing the substitution of fuel oil no. 6 with natural gas in the San Juan, Palo Seco, and Aguirre power plants would be an appropriate course of action.

This course of action will allow PREPA to keep the northern and southern base units online to guarantee the continuity and reliability of the electric service, operate with the reserve margins required by being an isolated electrical system and simultaneously comply with environmental regulations. However, on November 22, 2022, the DNER approved a SIP with a compliance strategy based on the retirement of base generating units during the next six years. PREPA is currently evaluating its next steps on this matter, as the proposed base units' retirement is not feasible nor practical. PREPA stresses that the short- and medium-term SO2 compliance of fuel oil no. 6 burning units can only be achieved by switching them to natural gas,

[4] *Public Policy on Energy Diversification through Sustainable and Alternative Renewable Energy in Puerto Rico*, Act. No. 82 of July 19, 2020, as amended, 22 LPRA §§ 8121-8136 (Act 82-2010).

because these units shall remain online until the new resources are fully operational.

Currently, there is no natural gas infrastructure on the premises of the Palo Seco and Aguirre power plants. This constraint, together with the delayed schedule for the integration of renewable resources, does not allow PREPA to establish an SO2 compliance strategy relying solely on the integration of renewables or natural gas fuel switching for the steam units at the Palo Seco and Aguirre Power Plants. PREPA will continue focusing on finalizing the construction of the Tranche 1 renewables and energy storage projects mandated by the operative IRP and Modified Action Plan. The SO2 limitations in the SIP cannot be met solely with the new resources' integration required by the operative IRP and Modified Action Plan. At the same time, PREPA needs to maintain a safe and reliable electric service for the people of Puerto Rico. To meet the limitations imposed, PREPA will execute the necessary actions to keep Palo Seco and Aguirre steam units operational and comply with environmental regulations. This would be done in consultation with the relevant regulatory entities, such as EPA, DNER, and PREB.

In the case of the San Juan power plant, there is natural gas infrastructure in place which is currently supplying the San Juan Combined Cycle units 5 and 6. This existing infrastructure can be used to provide natural gas to the San Juan Steam Units to achieve attainment with SO2 in the San Juan air district. Converting the San Juan Steam Units to generate energy with natural gas will allow them to remain in operation while in compliance with environmental regulations. At the same time, renewable resources must be safely integrated into the electrical system. Considering the above, PREPA has determined to pursue the conversion of San Juan Steam Units to combust natural gas to achieve attainment with the 2010 1-Hour SO2 NAAQS mandated in the CAA.

Since February 2022, PREPA has formally asked PREB to grant leave to commence the works directed to convert the San Juan Steam Units on more than four (4) occasions. This project, which is of paramount importance, will benefit the people of Puerto Rico in the following ways:

1. It is an essential step to achieving attainment with the 2010 1-Hour SO2 NAAQS in the San Juan air district and, consequently, helping the Government of Puerto Rico to avoid costly sanctions, especially those that represent losing federal funds for road and highway improvements.
2. Burning natural gas in the San Juan Steam Units will significantly reduce emissions of SO2 as well as other pollutants, which has a direct effect on the environment and health of the People of Puerto Rico, particularly those that live and work in the municipalities of San Juan, Guaynabo, Bayamón, and Toa Baja.
3. Converting the San Juan Steam Units to operate with natural gas as a primary fuel source will also achieve compliance of these units with the MATS required by EPA, 40 CFR Part 63 Subpart UUUUU—National Emission Standards for Hazardous Air Pollutants, which became effective on April 16, 2012. As such, several PREPA units were subject to the regulation on the Non-Continental Liquid Oil Fired Electric utility steam-generating unit. As an environmental and regulatory compliance strategy, PREPA effectively committed and completed the dual-fuel conversion of its Costa Sur units 5 and 6, adding natural gas to the operation and reducing the use of fuel oil no. 6. Similarly, PREPA is adopting this compliance strategy with the regulation by achieving the dual-fuel conversion project for the San Juan Steam Units.
4. Because natural gas is a much cleaner fuel than fuel oil no. 6 (Bunker C), the operations and maintenance costs of burning natural gas in the San Juan Steam Units would be lower than those of burning No. 6. This reduction in operations and maintenance costs results in savings that would be passed over to the customers.
5. Natural gas fuel market prices do not fluctuate much as those of petroleum derivatives, like diesel and no. 6 fuels. In addition, natural gas prices tend to be lower than diesel and no. 6 fuel prices. These economic aspects result in a more stable and lower fuel cost for the customers.

2. The conversion is feasible

The San Juan Steam Units' conversion to combust natural gas as primary fuel is feasible. This conversion was assessed in 2011 when PREPA conducted evaluations to convert Costa Sur steam units 5 and 6 to operate mainly on natural gas fuel. At that time, PREPA conducted evaluations, with the support of generating

units' original manufacturers, for the conversion to operate with natural gas fuel in the steam units at Costa Sur, Aguirre, Palo Seco, and San Juan. This resulted in a plan to convert these power plants' steam units to dual-fuel capability and operate mainly with natural gas. One of the primary purposes of this fuel conversion plan was to comply with MATS environmental rules.

In addition, the natural gas supply to the San Juan Steam Units is possible without building significant additional infrastructure. A natural gas supply station is located adjacent to the North side of the San Juan power plant, which already supplies natural gas to units 5 and 6. Further, PREPA has confirmed that there is availability to provide the natural gas volume needed for all the San Juan steam units once they are converted.

a. Added capacity and reliability

The conversion of the San Juan Steam Units would provide an added capacity of 400 MW, which will not be modified after the conversion works are finalized. Nevertheless, due to pending environmental restrictions and repairs, the available capacity of the San Juan Steam Units, units 7 and 9, is limited to 163 MW. Therefore, once the San Juan Steam Units are repaired and converted to burn mainly natural gas, the electric system will have an additional 237 MW to serve as baseload generation and will, in turn, be reliable generation compliant with the 1-Hour SO2 NAAQS and MATS. This added dependable generation capacity is essential for renewable energy's reliable and safe integration into the power system.

Given that the highest concentration of load in the north and the metropolitan area, the contribution of 237 MW from San Juan Steam Units and 440 MW from San Juan CC, will contribute significantly to the restoration of the electric system and the control of the northern voltage profile.

Operating with reduced or limited generation in the northern base units (San Juan and Palo Seco), where the highest concentration of load is located, may cause the operating margins of safety in a stationary regime to be reduced, and the electrical system is predisposed to voltage instability problems. The increase in the levels of real and reactive power transfer in the 230 kV and 115 kV circuits in the transmission system (especially in the main south-north links), due to the reduced or limited generation in the north, reduces the margins of transfer capacity to handle situations of outages, contingencies, and clearances.

Following PREB's reasoning when it approved the San Juan 5 and 6 steam units' conversion to operate with natural gas in January 2019,[5] and as the situation remains today, Puerto Rico needs reliable base load generation to provide much-needed stability for the system. In the case of Puerto Rico, given the lack of baseload from hydro or nuclear, and the projected retirement of coal-fired generation in 2027, the best option for environmentally compliant base load during the integration of renewable sources of generation would be natural gas-fired generating units. As with the San Juan 5 and 6 conversions, the conversion of the San Juan Steam Units will make available to PREPA necessary base load generation in a relatively short timeframe.

3. Schedule to complete the conversions

PREPA projects that the execution of the engineering, procurement, and construction (EPC) of the San Juan Steam Units conversion project and the completion of the environmental permits of all these units would take from five (5) to ten (10) years. It is estimated that the completion of each unit's environmental permits could take eighteen (18) to twenty-four (24) months. For illustration purposes only, assuming January 2023 as the effective date of the EPC contract, what follows is a hypothetical project schedule:

Unit	Project Start	Project Completion
San Juan 8	January 2023	December 2024
San Juan 10	January 2025	December 2026
San Juan 7	January 2027	December 2028
San Juan 9	January 2029	December 2030

[5] See Resolution and Order approving the conversion of San Juan 5 and 6 steam units to dual-fuel units, In Re: Request for Proposals for Conversion of San Juan Units 5 & 6 to Natural Gas, case no. CEPR-AP-2018-0001.

This schedule shows a period of eight (8) years for converting all SJ 7-10. However, a reasonable contingency period of two (2) years should be added to this schedule, considering that the conversion project could be affected by unforeseen and extraordinary events such as atmospheric disturbances or earthquakes, among others. Therefore, the San Juan Steam Units conversion project could take ten (10) years.

Nevertheless, PREPA has recommended that PREB approve that the conversions are done in a phased approach. First, PREPA would complete the conversion of units 8 and 10. These units are not currently in service; therefore, these would not have to be taken offline to perform the conversion works and, thus, will not affect the near-term forecasted available generation. Then, after units 8 and 10 are converted, and in service, PREPA would take units 7 and 9 offline to commence the conversion works. This phased approach strives to maintain the current generation available to the operator while the conversion works are performed.

4. Cost estimate of the conversion

PREPA can allocate $138.5M of 404 HMGP funds for this project. This cost-estimated is based on a previous fuel conversion study conducted for the San Juan Steam Units.

ii. Efforts to provide adequate maintenance to the generation fleet

The following chart shows the description of the project presented to PREB, and the cost that, should PREB grant leave to continue with the projects, would be funded by FEMA, not PREPA's customers.

FACILITY	PROJECT NAME	SCOPE OF WORK	PRESENTED ESTIMATE[6]
San Juan Power Plant	Unit 10 Rehabilitation	Provide parts and service for the open inspection and close of the steam turbine and generator. Also, in-shop repairs for due repairs and maintenance rotor and oil flush of the turbine.	$15.9
San Juan Power Plant	Unit 8 Rehabilitation (Turbine)	Inspect and replace the high-pressure, intermediate pressure and low-pressure rotors of the turbine and perform all the testing and commissioning of the equipment.	$10
San Juan Power Plant	Unit 8—Major Outage—Boiler Sections Replacement and Repairs & Auxiliary Equipment Repairs	Necessary repairs of deteriorated boiler tubes and assemblies and auxiliary equipment.	$8
Cambalache Power Plant	Unit 1 Rehabilitation	Perform the required inspections, repair the exhaust gas housing and GT enclosure and filter house, and replacement of all of the hot gas path components, turbo compressor and blades, and inspect and replace gas turbine no. 1. Also, conversion of the control system to blue-line similar to gas turbines 2 and 3, upgrade the combustor pulsation monitoring system, upgrade the automatic voltage regulator, and upgrade the opacity monitoring system.	$18

Unfortunately, the PREB repeatedly denies PREPA's request to move forward with these critical projects.

PREPA has repeatedly asked PREB for technical conferences to discuss these projects' benefits and further explain each's technical considerations. However, this conference has been constantly denied. Moreover, PREB insists that the operative IRP must be amended to consider these projects. Nevertheless, when PREPA requested the amendment on October 11, 2022, it was outright denied in less than twenty-four hours. PREB stated that LUMA was the only party with authority to make the request and denied the petition without analyzing the petition of the merits.

[6] Presented in millions of dollars.

When the current and operative IRP was presented and evaluated, it was forecasted that the load served by PREPA was expected to significantly decline due to a combination of expected base load reduction (driven by population and economic changes), energy efficiency gains and demand-side resources. These conditions of declining load forecast have not been met in the last three years, as the load demand has increased, and the projection is that the demand could increase near 3,000 MW in the following years, according to PREPA's certified 2022 Fiscal Plan approved by the Financial Oversight and Management Board.[7] Therefore, the generation system must have enough dependable capacity to supply the demand safely and reliably and, thus, avoid massive and frequent load-shedding events.

The reality mentioned above directly affects the feasible retirement schedule of PREPA's thermal units. PREPA fully supports the current public policy regarding renewable energy integration and transition. Notwithstanding, and especially considering that sufficient capacity of new renewable resources is not expected to be reliably interconnected with the power system at least during the following three to five years, it is imperative that PREB act following the undeniable reality and allow Puerto Rico's energy system to provide reliable energy to the People of Puerto Rico. For this purpose, PREPA's priority repeated request to PREB is that repairs are performed to maintain the gene rating units online with the primary purpose of providing the necessary resources to serve the growing demand projections and to provide continuity and reliability in the electrical service.

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[7] Available for review at https://oversightboard.pr.gov/fiscal-plans-2/.

Appendix 3: Further Detail on PREPA Accomplishments and Achievements

2021 PREPA Key Accomplishments

- T&D Operator Front-End Transition: To advance and support the Puerto Rico energy system transformation, PREPA coordinated with and supported Lum during its Front-End Transition period to achieve milestones and requirements contemplated by the T&D OMA. This included the formation of teams and development of plans to prepare the organization for financial, operational, and legal transition (e.g., radio licenses for telecommunications, setup access to PREPA offices, Governmental Approvals, etc.) Front-End Transition teams performed a significant number of deep dive assessments on PREPA's organization and assets to guide and develop transition plans and take over T&D operations and maintenance by June 1, 2021.
- Procurement Process for Legacy Generation Public-Private Partnership (P3): PREPA management and its advisory teams developed materials for and supporting the administration of the Request for Proposal (RFP) and bidder due diligence process for the Legacy Generation P3, which the Puerto Rico Public Private Partnerships Authority formally launched on November 10, 2020. The RFP was released to eight (8) highly qualified bidders with a target completion date for the second half of calendar year 2021. The goal of this project is to comply with Puerto Rico's energy policy as set forth by Act 17-2019 and the requirements of PREPA's certified fiscal plans, to transfer operation of the generation assets of PREPA to a private operator to significantly improve the operations of the legacy generation assets and achieve cost efficiencies.
- EcoEléctrica Power Purchase and Operating Agreement (PPOA) Renegotiation: The Title III Court authorized PREPA to assume the amended contracts for the renegotiated EcoEléctrica PPOA and long-term natural gas supply agreement for Costa Sur (Naturgy), which combined represent annual savings of up to $10–20 million over the next five (5) years. The PREPA Governing Board signed and ratified the new contract, which went into effect on October 22, 2020.
- Renewable PPOA renegotiation: PREPA renegotiated non-operating, shovel-ready, renewable PPOA contracts after obtaining approval from PREB and the FOMB for a total of 150MW of new renewable power generation. The proponents selected by PREPA, Xzerta Tec Solar 1, LLC—approved by PREB—and Ciro-One Salinas, LLC—would provide 60 MW and 90 MW of solar renewable generation capacity, respectively.
- Costa Sur Remediation: Damage from the January 2020 earthquakes necessitated substantial repair work on Units 5 and 6 of the Costa Sur power plant to improve grid reliability and regain a major capacity resource utilizing low-cost and emissions compliant LNG fuel. PREPA completed Unit 5 repairs by August 2020 and Unit 6 repairs by January 2021, under budget. The successful repairs of Costa Sur Units 5 and 6 put a total capacity of approximately 820MW back into service. The goal and benefit of this project was to reestablish the operations of PREPA's lowest cost generation units, increase system reliability, and reduce fuel purchase expenses.

2020 PREPA Key Accomplishments

- P3A Process for T&D operator: The most critical milestone for PREPA's energy system transformation is the transition to a world-class private O&M operator, selected through a competitive procurement process. During the last two fiscal years, PREPA's management and advisory teams played significant roles in developing materials for and supporting administration of the RFP and bidder due diligence process. On June 22, the P3A announced its approval of contract for a private T&D operator, along with approvals from the Oversight Board, PREPA governing board and PREB. Progress reporting on implementation of this P3 will be covered by Front-End Transition Initiative during FY2021.
- Expanded and fortified project management office (PMO): During FY2020, the PREPA PMO undertook a substantial reorganization that included significant improvements in contract procurement and management processes and capabilities. Findings and recommendations from this reorganization, as well as recommendations from the prior Contract Management Improvement Study will be incorporated into the Front-End Transition measure with the new T&D system operator and will also be expanded to all applicable PREPA

Directorates as part of the new Procurement Modernization project in FY2021.

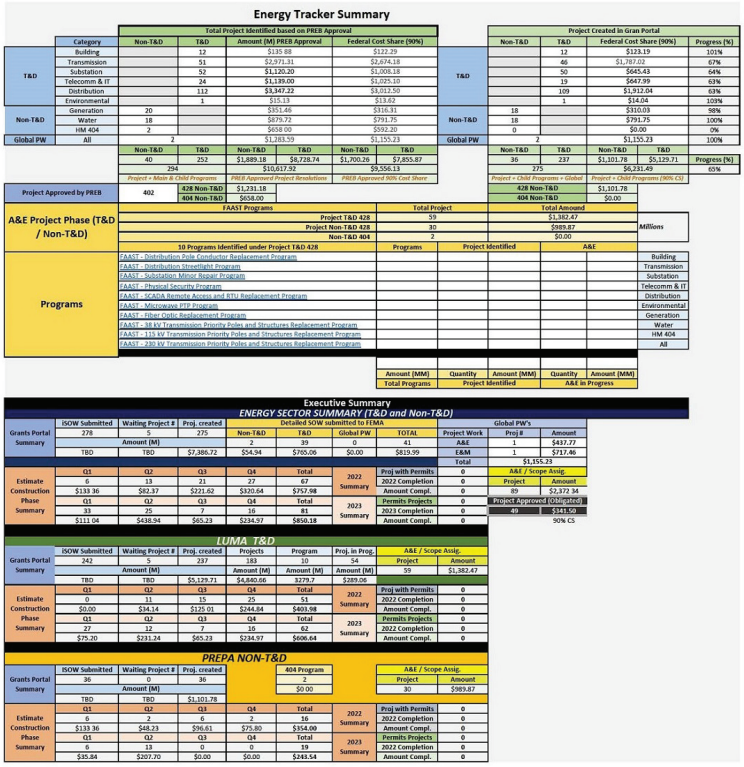
- Natural gas conversion at San Juan Combined Cycle (SJCC) Power Plant: In FY2020, PREPA successfully completed the land-based LNG import terminal and pipeline infrastructure in San Juan Harbor and conversion of the SJCC power plant to dual-fuel capability, after several delays. FOMB's expects that the project has the potential to save PREPA and its customers between $180 to $280 million during the 5-year term of the contract.
- Customer service improvements: In FY2020, PREPA successfully outsourced call centers under a competitive process to handle the overflow from PREPA's internal operations, reducing average call wait times from a 20–30-minute average to 3–5 minutes. It also achieved over 20% of customer penetration on the e-billing platform and has invested a concerted effort to encourage its customers to convert to e-billing since mid-March. This effort, which must continue, also helps mitigate the impact on collections from COVID-19 mobility restrictions.

2019 Key Accomplishments

- San Juan 5 & 6: Execution of San Juan 5 & 6 (conversion from diesel to natural gas) contracts after review and analysis of potential expense savings; construction commenced.
- Launch of P3 for T&D Privatization: T&D RFQ was issued in October 2018; qualified proponents were announced in January 2019; RFP was issued in early February 2019, together with a proposed term sheet and a due diligence data room; management meetings, site visits, and due diligence are underway.
- Debt Restructuring: AAFAF and FOMB announced and published definitive PREPA RSA with Ad Hoc Group of PREPA bondholders and Assured Guaranty on May 3, 2019, with an exchange rate of 67.5% for new Tranche A and 10% for new Tranche B bonds.
- Operational Initiatives: $54M in additional operational savings during FY2019 YTD
- Regulatory Framework: Successful enactment of Act 17-2019 setting forth a regulatory structure based on mainland structures and providing for private investment in the energy system.
- Liquidity: PREPA's cash-flow remained stable during FY 2019 as cash receipts met operating cash expenditures. The $300M Super priority Post-Petition revolving Credit Loan from the Commonwealth of Puerto Rico was repaid in March 2019.
- Budget to Actuals: Reporting on FY2019 Budget to Actual and variances prepared on a quarterly basis.
- FY2019 second quarter Budget to Actual report showed revenue targets were achieved.
- Restoration Work: Established dedicated Disaster Funding Management Office in March 2019.
- Received an estimated $451M emergency work in reimbursements from Federal Emergency Management Agency in FY2019.
- IRP: Submissions of the Integrated Resource Plan submitted to PREB in February and June 2019; regulatory approval underway and IRP still under revision.
- Independent Engineer Report: Draft of Independent Engineer Report providing an updated assessment of PREPA's infrastructure submitted to PREPA management for review on April 5, 2019; final version pending publication.
- Medical Benefit Reform: Prepared and executed a contract for employee healthcare plans, effective January 1, 2019. New plan for active employees and retirees met planned savings targets for FY2019.

Submissions for the Record from Manuel Laboy

APPENDIX 1



Energy Tracker Summary

	Category	Total Project Identified based on PREB Approval: Non-T&D	T&D	Amount (M) PREB Approval	Federal Cost Share (90%)	Project Created in Gran Portal: Non-T&D	T&D	Federal Cost Share (90%)	Progress (%)
T&D	Building		12	$135 88	$122.29		12	$123.19	101%
	Transmission		51	$2,971.31	$2,674.18		46	$1,787.02	67%
	Substation		52	$1,120.20	$1,008.18		50	$645.43	64%
	Telecomm & IT		24	$1,139.00	$1,025.10		19	$647.99	63%
	Distribution		112	$3,347.22	$3,012.50		109	$1,912.04	63%
	Environmental		1	$15.13	$13.62		1	$14.04	103%
Non-T&D	Generation	20		$351.46	$316.31	18		$310.03	98%
	Water	18		$879.72	$791.75	18		$791.75	100%
	HM 404	2		$658.00	$592.20	0		$0.00	0%
Global PW	All	2		$1,283.59	$1,155.23	2		$1,155.23	100%

Non-T&D	T&D	Non-T&D	T&D	Non-T&D	T&D	Non-T&D	T&D	Non-T&D	T&D	Progress (%)
40	252	$1,889.18	$8,728.74	$1,700.26	$7,855.87	36	237	$1,101.78	$5,129.71	
294		$10,617.92		$9,556.13		275		$6,231.49		65%
Project + Main & Child Programs		*PREB Approved Project Resolutions*		*PREB Approved 90% Cost Share*		*Project + Child Programs + Global*		*Project + Child Programs (90% CS)*		

Project Approved by PREB	402	428 Non-T&D	$1,231.18	
		404 Non-T&D	$658.00	
		428 Non-T&D	$1,101.78	
		404 Non-T&D	$0.00	

A&E Project Phase (T&D / Non-T&D)	FAAST Programs	Total Project	Total Amound	
	Project T&D 428	59	$1,382.47	Millions
	Project Non-T&D 428	30	$989.87	
	Non-T&D 404	2	$0.00	

Programs	10 Programs identified under Project T&D 428	Programs	Project Identified	A&E		
	FAAST - Distribution Pole Conductor Replacement Program					Building
	FAAST - Distribution Streetlight Program					Transmission
	FAAST - Substation Minor Repair Program					Substation
	FAAST - Physical Security Program					Telecomm & IT
	FAAST - SCADA Remote Access and RTU Replacement Program					Distribution
	FAAST - Microwave PTP Program					Environmental
	FAAST - Fiber Optic Replacement Program					Generation
	FAAST - 38 kV Transmission Priority Poles and Structures Replacement Program					Water
	FAAST - 115 kV Transmission Priority Poles and Structures Replacement Program					HM 404
	FAAST - 230 kV Transmission Priority Poles and Structures Replacement Program					All
		Amount (MM)	Quantity	Amount (MM)	Quantity	Amount (MM)
		Total Programs	Project Identified	A&E in Progress		

Executive Summary

ENERGY SECTOR SUMMARY (T&D and Non-T&D)

	ISOW Submitted	Waiting Project #	Proj. created	Detailed SOW submitted to FEMA: Non-T&D	T&D	Global PW	TOTAL	Global PW's: Project Work	Proj #	Amount
Grants Portal Summary	278	5	275	2	39	0	41	A&E	1	$437.77
	Amount (M)							E&M	1	$717.46
	TBD	TBD	$7,386.72	$54.94	$765.06	$0.00	$819.99	Total	$1,155.23	

	Q1	Q2	Q3	Q4	Total					
Estimate Construction Phase Summary	6	13	21	27	67	2022 Summary	Proj with Permits	0	A&E / Scope Assig.	
	$133 36	$82.37	$221.62	$320.64	$757.98		2022 Completion	0	Project	Amount
	Q1	Q2	Q3	Q4	Total		Amount Compl.	0	89	$2,372 34
	33	25	7	16	81	2023 Summary	Permits Projects	0	Project Approved (Obligated)	
	$111 04	$438.94	$65.23	$234.97	$850.18		2023 Completion	0	49	$341.50
							Amount Compl.	0		90% CS

LUMA T&D

	ISOW Submitted	Waiting Project #	Proj. created	Projects	Program	Proj. in Prog.	A&E / Scope Assig.	
Grants Portal Summary	242	5	237	183	10	54	Project	Amount
	Amount (M)			Amount (M)	Amount (M)	Amount (M)	59	$1,382.47
	TBD	TBD	$5,129.71	$4,640.66	$279.7	$289.06		

	Q1	Q2	Q3	Q4	Total			
Estimate Construction Phase Summary	0	11	15	25	51	2022 Summary	Proj with Permits	0
	$0.00	$34.14	$125 01	$244.84	$403.98		2022 Completion	0
	Q1	Q2	Q3	Q4	Total		Amount Compl.	0
	27	12	7	16	62	2023 Summary	Permits Projects	0
	$75.20	$231.24	$65.23	$234.97	$606.64		2022 Completion	0
							Amount Compl.	0

PREPA NON-T&D

	ISOW Submitted	Waiting Project #	Proj. created	404 Program	A&E / Scope Assig.	
Grants Portal Summary	36	0	36	2	Project	Amount
	Amount (M)			$0 00	30	$989.87
	TBD	TBD	$1,101.78			

	Q1	Q2	Q3	Q4	Total			
Estimate Construction Phase Summary	6	2	6	2	16	2022 Summary	Proj with Permits	0
	$133 36	$48.23	$96.61	$75.80	$354.00		2022 Completion	0
	Q1	Q2	Q3	Q4	Total		Amount Compl.	0
	6	13	0	0	19	2023 Summary	Permits Projects	0
	$35.84	$207.70	$0.00	$0.00	$243.54		2022 Completion	0
							Amount Compl.	0

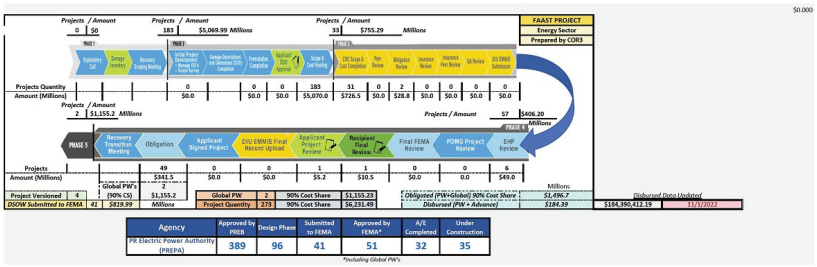
Energy Summary (T&D, Non-T&D & 404)					
PREB Approved (T&D & Non-T&D)	PREB Approved	389	$6,341.04		
	PREB Program	13	$3,611.47		
	Total (Proj. + Prog)	**402**	**$9,952.51**		
T&D / Non-T&D	Project Identified	278	$7,386.72	5	*Waiting for project number by FEMA to apply $$
	Programs	10	$3,279.70		
	Total (Proj + Prog)	**288**	**$10,666.42**		
T&D / Non-T&D	***Project in GP***	275	$7,386.72		
	Proj. in A&E	89	$2,372.34		
	2022 Constructions	67	$757.98		
Non-T&D - 404		**2**	**$0.00**		
		Projects	**Amount (M)**		

Resoluciones Approbadas del PREB							
Resolution Date	Non-T&D		T&D		Total PREB Approved		
	Project	Amount (M)	Project	Amount (M)	Project	Program / $	Amount (M)
10-Feb-21	24	$68.00			24		$68.00
8-Jun-21	6	$217.71	39	$1,023.06	45		$1,240.77
20-Aug-21			28	$1,789.58	28		$1,789.58
8-Sep-21	12	$718.97			12		$718.97
22-Sep-21			12 + 9 Prog.	$659.27	12	9 / 3225.9	$659.27
28-Sep-21	5	$80.81			5		$80.81
14-Oct-21			8	$117.47	8		$117.47
18-Oct-21			37 + 1 Prog.	$598.78	37	1 / 53.8	$598.78
1-Dec-22	11	$18.26			11		$18.26
20-Dec-21	27	$5.19			27		$5.19
4-Jan-22	104	$253.77			104		$253.77
18-Feb-22	7	$9.66			7		$9.66
28-Feb-22	12	$37.61			12		$37.61
9-Mar-22	19	$51.54			19		$51.54
15-Mar-22			3	$355.10	3		$355.10
13-Apr-22	21 + 4	$102.64			25		$102.64
4-Jun-22	5	$4.27			5		$4.27
11-Jul-22			1	$11.88	1		$11.88
11-Jul-22	1	$0.95			1		$0.95
21-Jul-22		$3.49			0		$3.49
25-Aug-22			3 + 3 Prog.	$544.80	3	3 / 331.77	$544.80
	258	**$1,572.86**	**128**	**$5,099.94**	**389**	**13 / 3,611.47**	**$6,672.80**
							$9,952.51

Region / Municipality	(All)
Non-T&D / T&D	T&D

Project Obligated - Under Construction	Total COST ($M)	DSOW Submitted
165209_FAASt-Substation 3801 Culebra (Substation)	1.459609	4/4/2022
165225_FAASt-Substation 2501 Vieques (Substation)	1.38742	4/4/2022
168226_FAASt San Juan 115kV Underground Transmission Loop (Transmission)	12.49603957	7/22/2022
169058_FAASt - Llorens Torres MC 1106 - Equipment Repair & Replacement - (Substations)	27.34	5/2/2022
169495_FAASt - Substations - Tapia GIS Rebuilt - Equipment Repair & Replacement	14.20	5/31/2022
169500_FAASt - Bayamon TC – MC-1711-BKRS-Y1- 230kV (Substation)	5.874937	7/25/2022
169896_FAASt - Costa Sur SP TC – Equipment Repair and Replacement (Substation)	23.251835	6/7/2022
174422_FAASt - Catano-Rebuild 1801(Substation)	23.255048	11/29/2021
179558_FAASt - Manati TC - BRKS 230 kV - (Substation)	1.59443	5/2/2022
334323_Distribution Pole and Conductor Repair- Ponce Group 1	0.392822	1/28/2021
334329_Distribution Pole and Conductor Repair- Ponce Group 2	0.380253	3/8/2022
334488_Distribution Pole and Conductor Repair-Caguas Group 4 under FAASt [Distribution Feeders - Caguas Short Term Group	0.153743	2/4/2022
334527_Distribution Pole and Conductor Repair-Caguas Group 8	0.123721	2/8/2022
542517_Streetlighting- Luquillo	8.810326	3/8/2022
542687_Streetlighting- Lajas	10.70466857	3/8/2022
542688_Streetlighting- Aguada	18.57171638	3/8/2022
542690_Streetlighting- Maunabo	6.44375784	3/8/2022
542756_Streetlighting- Guanica	10.058046	3/8/2022
542758_Substation Minor Repairs-Group B	3.394276	7/11/2022
542762_Distribution Pole and Conductor Repair-Arecibo Group 2	0.767868	1/28/2022
546370_Substation Minor Repairs-Group A	5.65	4/6/2022
546371_Substation Minor Repairs-Group C	3.650017	6/17/2022
549764_Physical Security - Group 2	2.350252	7/8/2022
550896_Transmission- Line 6700 Martin Peña TC to Villamar Sect. under Transmission Priority Pole Replacement – Line 6700	0.690703	6/24/2022
550910_Physical Security - Group 1	6.16	4/4/2022

Resolution	Project Approved	Amount
8-Jun	44	1240.67
8-Sep	14	1376.97
20-Aug	28	1789.58
22-Sep	25	3885.17
28-Sep	6	80.81
14-Oct	8	117.47
18-Oct	38	652.58
	163	9143.25
Items check		
Numbers of range A:4;B207		
include # Project and Process Status		
Verify the substration project for correct formula		
Check A&E Table project numbers and A&E formula		



Agency	Approved by PREB	Design Phase	Submitted to FEMA	Approved by FEMA*	A/E Completed	Under Construction
PR Electric Power Authority (PREPA)	389	96	41	51	32	35

*Including Global PW's

Summary	Non-T&D					T&D					Global PW		Project Summary	
	Project #	A&E Cost	PA Cost -	HM Cost	Total Cost	Proj. #	A&E Cost	PA Cost	HM Cost	Total Cost	Proj. #	Total Cost	Proj. #	Total Total Cost
	36	0.00	$1,101.78	$0.00	1101.78	237	73.61	$4,799.52	$330.20	5129.71	2	1039.71	275	$7,386.72
	TOTAL		$1,101.78			TOTAL		$5,129.71			Total	$1,155.23	TOTAL (PA+HM)	$7,386.72
Total Summary: Non-T&D / T&D / Gran Total	36		$1,101.78			237		$5,129.71			2	$1,155.23	275	$7,386.72

Public Assistance Process Step Summary	Summary Non-T&D Project	A&E PW	PA Cost	HM Cost	Total Cost	T&D Project	A&E PW	PA Cost	HM Cost	Total Cost	Global PW Project	Total Cost	Total Project	Total Total Cost
Global PW Obligated											2	1155.23	2	1155.23
Obligated	11	0.00	187.80	0.00	169.02	38	28.76	177.16	14.49	172.48			49	341.50
Pending Applicant project review						2	2.29	11.79	5.69	15.73			2	15.73
165268_FAASt Rio Grande Estate Substation CH-2306 (Substation)						1	1.39	7.10	4.59	10.52			1	10.52
673836_Distribution Pole and Conductor Repair-Bayamon Group 1						1	0.90	4.69	1.11	5.21			1	5.21
Pending EHP Review						6	8.42	49.90	4.51	48.97			6	48.97
Pending FEMA 406 HMP Completion						2	0.86	20.80	11.14	28.75			2	28.75
Pending CRC Project Development	2		61.04	0.00	54.94	4	0.53	1.75	0.80	2.30			6	57.23
Pre-Review to CRC						25	37.83	413.85	329.83	669.31			25	669.31
Pending Scope & Cost Completion by Applicant	23		975.36	0.00	877.82	160	3.10	4657.55	0.42	4192.17			183	5069.99
	36					237							275	

Version 20.0

Puerto Rico Electrical Power Authority Island Wide FAASt Project								Breakdown A&E Cost
Projects Obligated / Current Version					Project Cost		CRC Net Cost	A&E
673772 FAASt [Distribution Pole and Conductor Repair - Mayagüez Group 2] (Distribution) - $3,286,536.00					$3,286,536.00	*Distribution*	$3,286,536.00	$636,837.00
						Total	$3,286,536.00	$636,837.00

	Substation	Distribution	Transmission	Building	*NOTE Telecomm & IT	Water	Generation	A&E
Obligated Balance	$341,989,780.58	$5,021,010,866.05	$2,338,273,496.66	$119,404,535.47	$416,986,591.53	$821,807,080.66	$0.00	$459,665,374.94
Project Cost Deduction	$0.00	$3,286,536.00	$0.00	$0.00	$0.00	$0.00	$0.00	$636,837.00
New Balance	**$341,989,780.58**	**$5,017,724,330.05**	**$2,338,273,496.66**	**$119,404,535.47**	**$416,986,591.53**	**$821,807,080.66**	**$0.00**	**$459,028,537.94**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	$9,059,472,350.95	CRC Net Cost 100% Cost Share
Total Cost Deduction (100% Cost Share)	$3,286,536.00	
Sub-Total Balance	**$9,056,185,814.95**	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 20.0)	**$8,862,439,378.95**	

Version 19.0

Puerto Rico Electrical Power Authority Island Wide FAASt Project								Breakdown A&E Cost
Projects Obligated / Current Version					Project Cost		CRC Net Cost	A&E
673771 - FAASt [Distribution Pole and Conductor Repair - Arecibo Group 1] (Distribution) - $1,894,033.53					$1,894,033.53			$370,850.25
674088 FAASt [Distribution Pole and Conductor Repair - Caguas Group 3] (Distribution) - $1,412,368.00					$1,412,368.00	*Distribution*	$5,984,023.53	$267,370.00
674096 FAASt [Distribution Pole and Conductor Repair - Caguas Group 6] (Distribution) - $1,773,428.00					$1,773,428.00			$332,705.00
673843 FAASt [Distribution Pole and Conductor Repair-Bayamon Group 3] (Distribution) - $904,194.00					$904,194.00			$175,796.00
657300 FAASt [ENERGY MANAGEMENT SYSTEM (EMS)] (Telecommunication) - $48,941,484.00					$48,941,484.00	*Telecomm & IT*	$48,941,484.00	$175,796.00
669233 FAASt Aguirre Power Plant 002 Units 1 & 2 Projects (Generation) - $5,983,862.95 (See Scope Note 1)					$5,983,862.95	*Generation**	$16,750,680.75	$0.00
662957 FAASt [Palo Seco Power Plant –001 Units 3 & 4] (Generation) - $10,766,817.80 (See Scope Note 1)					$10,766,817.80	*Generation**		$0.00
673691 FAASt [Equipment and Materials] - $141,081,695.20 (See Scope Note 1)					$141,081,695.20	*Global PW**	$141,081,695.20	$0.00
						Total	$212,757,883.48	$1,322,517.25

	Substation	Distribution	Transmission	Building	*NOTE Telecomm & IT	Water	Generation	A&E
Obligated Balance	$341,989,780.58	$5,026,994,889.58	$2,338,273,496.66	$119,404,535.47	$623,760,451.48	$821,807,080.66	$0.00	$460,987,892.19
Project Cost Deduction	$0.00	$5,984,023.53	$0.00	$0.00	$206,773,859.95	$0.00	$0.00	$1,322,517.25
New Balance	**$341,989,780.58**	**$5,021,010,866.05**	**$2,338,273,496.66**	**$119,404,535.47**	**$416,986,591.53**	**$821,807,080.66**	**$0.00**	**$459,665,374.94**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	$9,272,230,234.43	CRC Net Cost 100% Cost Share
Total Cost Deduction (100% Cost Share)	$212,757,883.48	
Sub-Total Balance	**$9,059,472,350.95**	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 19.0)	**$8,865,725,914.95**	

Version 18.0

Puerto Rico Electrical Power Authority Island Wide FAASt Project								Breakdown A&E Cost
Projects Obligated / Current Version					Project Cost		CRC Net Cost	A&E
[674092] FAASt [Distribution Pole and Conductor Repair - Caguas Group 5] (Distribution): $441,308.00					$441,308.00	*Distribution*	$1,314,199.00	$523,866.00
[674072] FAASt [Distribution Pole and Conductor Repair - Caguas Group 1] (Distribution): $872,891.00,					872,891.00			$171,585.00
[668592] FAASt [Line 9800 Bayamon TC - Guaraguao Sect] (Transmission): $420,866.00					420,866.00	*Transmission*	$420,866.00	$43,984.00
[667744] FAASt [San Juan Power Plant - Auxiliary Infrastructure] (Generation): $647,000.00.					647,000.00	*Generation**	$647,000.00	$0.00
						Total	$2,382,065.00	$739,435.00

	Substation	Distribution	Transmission	Building	*NOTE Telecomm & IT	Water	Generation	A&E
Obligated Balance	$341,989,780.58	$5,028,309,088.58	$2,338,694,362.66	$119,404,535.47	$624,407,451.48	$821,807,080.66	$0.00	$461,727,327.19
Project Cost Deduction	$0.00	$1,314,199.00	$420,866.00	$0.00	$647,000.00	$0.00	$0.00	$739,435.00
New Balance	**$341,989,780.58**	**$5,026,994,889.58**	**$2,338,273,496.66**	**$119,404,535.47**	**$623,760,451.48**	**$821,807,080.66**	**$0.00**	**$460,987,892.19**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	$9,274,612,299.43	CRC Net Cost 100% Cost Share
Total Cost Deduction (100% Cost Share)	$2,382,065.00	
Sub-Total Balance	**$9,272,230,234.43**	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 18.0)	**$9,078,483,798.43**	

Version 17.0

Puerto Rico Electrical Power Authority Island Wide FAASt Project								Breakdown A&E Cost
Projects Obligated / Current Version					Project Cost		CRC Net Cost	A&E
673844 FAASt [Distribution Pole and Conductor Repair - San Juan Group 3] (Distribution) - $1,072,850.98					$1,072,850.98	*Distribution*	$11,263,387.03	$208,800.60
660239 FAASt [Streetlighting - Villalba] (Distribution) - $10,190,536.05					10,190,536.05			$2,630,719.00
672950 FAASt [FAASt Costa Sur Power Plant Permanent Repair CS-001] (Generation) - $42,299,738.54					42,299,738.54	*Generation**	$42,299,738.54	$0.00
						Total	$53,563,125.57	$2,839,519.60

	Substation	*NOTE Distribution	Transmission	Building	Telecomm & IT	Water	Generation	A&E
Obligated Balance	$341,989,780.58	$5,081,872,214.15	$2,338,694,362.66	$119,404,535.47	$624,407,451.48	$821,807,080.66	$0.00	$464,566,846.79
Project Cost Deduction	$0.00	$53,563,125.57	$0.00	$0.00	$0.00	$0.00	$0.00	$2,839,519.60
New Balance	**$341,989,780.58**	**$5,028,309,088.58**	**$2,338,694,362.66**	**$119,404,535.47**	**$624,407,451.48**	**$821,807,080.66**	**$0.00**	**$461,727,327.19**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	$9,328,175,425.00	CRC Net Cost 100% Cost Share
Total Cost Deduction (100% Cost Share)	$53,563,125.57	
Sub-Total Balance	**$9,274,612,299.43**	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 17.0)	**$9,080,865,863.43**	

Version 16.0

Puerto Rico Electrical Power Authority Island Wide FAASt Project								Breakdown A&E Cost
Projects Obligated / Current Version					Project Cost		CRC Net Cost	A&E
[550896] FAASt [Line 6700 Martin Peña TC to Villamar Sect.] (Transmission) - $690,703.00					$690,703.00	*Transmission*	**$690,703.00**	$133,416.00
[673818] FAASt [Distribution Pole and Conductor Repair - San Juan Group 1] (Distribution) - $621,804.00					621,804.00			$121,044.00
[673847] FAASt [Distribution Pole and Conductor Repair-Carolina Group 2] (Distribution) - $190,570.00					190,570.00	*Distribution*	**$2,644,736.00**	$37,242.00
[674083] FAASt [Distribution Pole and Conductor Repair - Caguas Group 2] (Distribution) - $1,747,929.00					1,747,929.00			$335,722.00
[674098] FAASt [Distribution Pole and Conductor Repair - Caguas Group 7] (Distribution) - $84,433.00					$4,433.00			$16,516.00
						Total	**$3,335,439.00**	**$643,940.00**

	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation	A&E
Obligated Balance	$341,989,780.58	$5,084,516,950.15	$2,339,385,065.66	$119,404,535.47	$624,407,451.48	$821,807,080.66	$0.00	$465,210,786.79
Project Cost Deduction	$0.00	$2,644,736.00	$690,703.00	$0.00	$0.00	$0.00	$0.00	$643,940.00
New Balance	**$341,989,780.58**	**$5,081,872,214.15**	**$2,338,694,362.66**	**$119,404,535.47**	**$624,407,451.48**	**$821,807,080.66**	**$0.00**	**$464,566,846.79**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	**$9,331,510,864.00**	
Total Cost Deduction (100% Cost Share)	$3,335,439.00	CRC Net Cost 100% Cost Share
Sub-Total Balance	**$9,328,175,425.00**	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 16.0)	**$9,134,428,989.00**	

Version 15.0

Puerto Rico Electrical Power Authority Island Wide FAASt Project								Breakdown A&E Cost
Projects Obligated / Current Version					Project Cost		CRC Net Cost	A&E
[673774] FAASt [Distribution Pole and Conductor Repair - Mayaguez Group 1] (Distribution) - $1,408,531.00					$1,408,531.00	*Distribution*	**$2,833,694.00**	$316,332.00
[673795] FAASt Distribution Pole and Conductor Repair - Mayaguez Group 4 (Distribution) - $1,425,163.00					1,425,163.00			$278,115.00
[169896] FAASt - Costa Sur SP TC – Equipment Repair and Replacement (Substation) - $23,251,835.00					23,251,835.00	*Substation*	**$23,251,835.00**	$4,734,912.00
[668583] FAASt [Line 13300 GOAB 13301C to Hato Tejas Sect] (Transmission) - $453,597.00					453,597.00	*Transmission*	**$453,597.00**	$81,996.00
						Total	**$26,539,126.00**	**$5,411,356.00**

	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation	A&E
Obligated Balance	$365,241,615.58	$5,087,350,644.15	$2,339,838,662.66	$119,404,535.47	$624,407,451.48	$821,807,080.66	$0.00	$470,622,142.79
Project Cost Deduction	$23,251,835.00	$2,833,694.00	$453,597.00	$0.00	$0.00	$0.00	$0.00	$5,411,356.00
New Balance	**$341,989,780.58**	**$5,084,516,950.15**	**$2,339,385,065.66**	**$119,404,535.47**	**$624,407,451.48**	**$821,807,080.66**	**$0.00**	**$465,210,786.79**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	**$9,358,049,990.00**	
Total Cost Deduction (100% Cost Share)	$26,539,126.00	CRC Net Cost 100% Cost Share
Sub-Total Balance	**$9,331,510,864.00**	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 15.0)	**$9,137,764,428.00**	

Version 14.0

Puerto Rico Electrical Power Authority Island Wide FAASt Project								Breakdown A&E Cost
Projects Obligated / Current Version					Project Cost		CRC Net Cost	A&E
673848 FAASt [Distribution Pole and Conductor Repair-Carolina Group 3] (Distribution). Amount: $43,725.00					$43,725.00			$13,181.00
673839 FAASt [Distribution Pole and Conductor Repair-Bayamon Group 2] (Distribution). Amount: $20,468.00					20,468.00	*Distribution*	**$348,542.00**	$10,125.00
673838 FAASt [Distribution Pole and Conductor Repair - San Juan Group 2] (Distribution). Amount: $284,349.00					284,349.00			$55,024.00
334460 FAASt [Line 2200 Dos Bocas HP to Dorado TC] (Transmission). Amount: $1,217,429.00					1,217,429.00	*Transmission*	**$1,217,429.00**	$242,850.00
						Total	**$1,565,971.00**	**$321,180.00**

	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation	A&E
Obligated Balance	$365,241,615.58	$5,087,990,186.15	$2,341,056,091.66	$119,404,535.47	$624,407,451.48	$821,807,080.66	$0.00	$470,943,422.79
Project Cost Deduction	$0.00	$348,542.00	$1,217,429.00	$0.00	$0.00	$0.00	$0.00	$321,180.00
New Balance	**$365,241,615.58**	**$5,087,350,644.15**	**$2,339,838,662.66**	**$119,404,535.47**	**$624,407,451.48**	**$821,807,080.66**	**$0.00**	**$470,622,142.79**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	**$9,359,615,961.00**	
Total Cost Deduction (100% Cost Share)	$1,565,971.00	CRC Net Cost 100% Cost Share
Sub-Total Balance	**$9,358,049,990.00**	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 14.0)	**$9,164,303,554.00**	

Version 13.0

Puerto Rico Electrical Power Authority Island Wide FAASt Project								Breakdown A&E Cost
Projects Obligated / Current Version					Project Cost		CRC Net Cost	A&E
[673006] FAASt Costa Sur 002 -Infrastructure projects (Generation)					$1,250,000.00	*Generator*	$1,250,000.00	$0.00
						Total	$1,250,000.00	$0.00

NOTE

	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation	A&E
Obligated Balance	$365,241,615.58	$5,088,949,186.15	$2,341,056,091.66	$119,404,535.47	$624,407,451.48	$821,807,080.66	$0.00	$470,943,422.79
Project Cost Deduction	$0.00	$1,250,000.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
New Balance	**$365,241,615.58**	**$5,087,699,186.15**	**$2,341,056,091.66**	**$119,404,535.47**	**$624,407,451.48**	**$821,807,080.66**	**$0.00**	**$470,943,422.79**

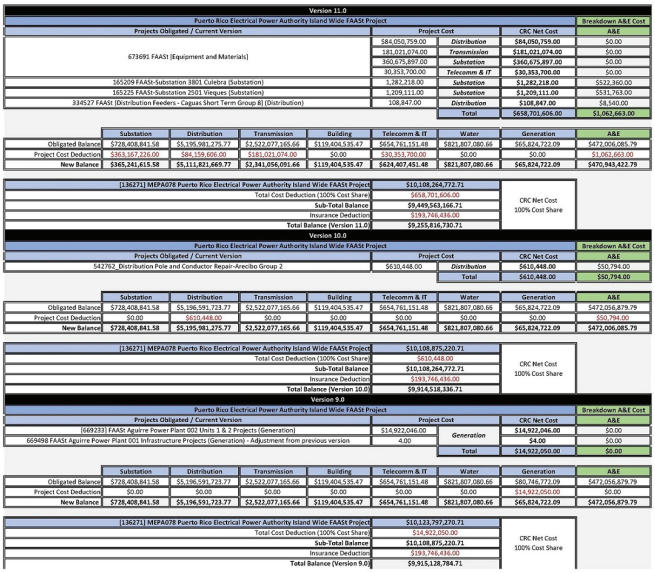
[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	**$9,360,865,961.00**	
Total Cost Deduction (100% Cost Share)	$1,250,000.00	CRC Net Cost 100% Cost Share
Sub-Total Balance	**$9,359,615,961.00**	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 13.0)	**$9,165,869,525.00**	

Puerto Rico Electrical Power Authority Island Wide FAASt Project								Breakdown A&E Cost
Projects Obligated / Current Version					Project Cost		CRC Net Cost	A&E
669815 FAASt [Aguirre Power Plant 013 Combined Cycle] (Generation). Amount: $5,405,870.36					$5,405,870.36		**$5,405,870.36**	$0.00
667744 FAASt [San Juan Power Plant - Auxiliary Infrastructure] (Generation). Amount: $1,721,247.00					1,721,247.00		**$1,721,247.00**	$0.00
662967 FAASt [San Juan 001 – Units 5 & 6] (Generation). Amount: $60,080,015.51					60,080,015.51	*Generation*	**$60,080,015.51**	$0.00
662957 FAASt [Palo Seco Power Plant -001 Units 3 & 4] (Generation). Amount: $18,007,604.84					18,007,604.84		**$18,007,604.84**	$0.00
671681 FAASt [Palo Seco 002- Auxiliary Infrastructure Projects] (Generation). Amount: $3,482,468.00					3,482,468.00		**$3,482,468.00**	$0.00
						Total	**$88,697,205.71**	**$0.00**

NOTE

	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation	A&E
Obligated Balance	$365,241,615.58	$5,111,821,669.77	$2,341,056,091.66	$119,404,535.47	$624,407,451.48	$821,807,080.66	$65,824,722.09	$470,943,422.79
Project Cost Deduction	$0.00	$22,872,483.62	$0.00	$0.00	$0.00	$0.00	$65,824,722.09	$0.00
New Balance	**$365,241,615.58**	**$5,088,949,186.15**	**$2,341,056,091.66**	**$119,404,535.47**	**$624,407,451.48**	**$821,807,080.66**	**$0.00**	**$470,943,422.79**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	**$9,449,563,166.71**	
Total Cost Deduction (100% Cost Share)	$88,697,205.71	CRC Net Cost 100% Cost Share
Sub-Total Balance	**$9,360,865,961.00**	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 12.0)	**$9,167,119,525.00**	



Version 11.0								
Puerto Rico Electrical Power Authority Island Wide FAASt Project								Breakdown A&E Cost
Projects Obligated / Current Version					Project Cost		CRC Net Cost	A&E
673691 FAASt [Equipment and Materials]					$84,050,759.00	*Distribution*	**$84,050,759.00**	$0.00
					181,021,074.00	*Transmission*	**$181,021,074.00**	$0.00
					360,675,897.00	*Substation*	**$360,675,897.00**	$0.00
					30,353,700.00	*Telecomm & IT*	**$30,353,700.00**	$0.00
165209 FAASt-Substation 3801 Culebra (Substation)					1,282,218.00	*Substation*	**$1,282,218.00**	$522,360.00
165225 FAASt-Substation 2501 Vieques (Substation)					1,209,111.00	*Substation*	**$1,209,111.00**	$531,763.00
334527 FAASt [Distribution Feeders - Caguas Short Term Group B] (Distribution)					108,847.00	*Distribution*	**$108,847.00**	$8,540.00
						Total	**$658,701,606.00**	**$1,062,663.00**

	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation	A&E
Obligated Balance	$728,408,841.58	$5,195,981,275.77	$2,522,077,165.66	$119,404,535.47	$654,761,151.48	$821,807,080.66	$65,824,722.09	$472,056,085.79
Project Cost Deduction	$363,167,226.00	$84,159,606.00	$181,021,074.00	$0.00	$30,353,700.00	$0.00	$0.00	$1,062,663.00
New Balance	**$365,241,615.58**	**$5,111,821,669.77**	**$2,341,056,091.66**	**$119,404,535.47**	**$624,407,451.48**	**$821,807,080.66**	**$65,824,722.09**	**$470,943,422.79**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	$10,108,264,772.71	CRC Net Cost 100% Cost Share
Total Cost Deduction (100% Cost Share)	$658,701,606.00	
Sub-Total Balance	$9,449,563,166.71	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 11.0)	**$9,255,816,730.71**	

Version 10.0								
Puerto Rico Electrical Power Authority Island Wide FAASt Project								Breakdown A&E Cost
Projects Obligated / Current Version					Project Cost		CRC Net Cost	A&E
542762_Distribution Pole and Conductor Repair-Arecibo Group 2					$610,448.00	*Distribution*	**$610,448.00**	$50,794.00
						Total	**$610,448.00**	**$50,794.00**

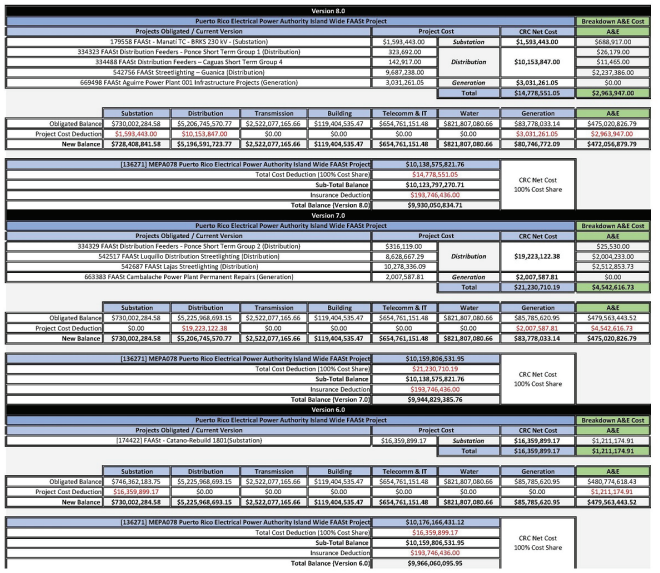
	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation	A&E
Obligated Balance	$728,408,841.58	$5,196,591,723.77	$2,522,077,165.66	$119,404,535.47	$654,761,151.48	$821,807,080.66	$65,824,722.09	$472,056,879.79
Project Cost Deduction	$0.00	$610,448.00	$0.00	$0.00	$0.00	$0.00	$0.00	$50,794.00
New Balance	**$728,408,841.58**	**$5,195,981,275.77**	**$2,522,077,165.66**	**$119,404,535.47**	**$654,761,151.48**	**$821,807,080.66**	**$65,824,722.09**	**$472,006,085.79**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	$10,108,875,220.71	CRC Net Cost 100% Cost Share
Total Cost Deduction (100% Cost Share)	$610,448.00	
Sub-Total Balance	$10,108,264,772.71	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 10.0)	**$9,914,518,336.71**	

Version 9.0								
Puerto Rico Electrical Power Authority Island Wide FAASt Project								Breakdown A&E Cost
Projects Obligated / Current Version					Project Cost		CRC Net Cost	A&E
(669233) FAASt Aguirre Power Plant 002 Units 1 & 2 Projects (Generation)					$14,922,046.00	*Generation*	**$14,922,046.00**	$0.00
669498 FAASt Aguirre Power Plant 001 Infrastructure Projects (Generation) - Adjustment from previous version					4.00		**$4.00**	$0.00
						Total	**$14,922,050.00**	**$0.00**

	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation	A&E
Obligated Balance	$728,408,841.58	$5,196,591,723.77	$2,522,077,165.66	$119,404,535.47	$654,761,151.48	$821,807,080.66	$80,746,772.09	$472,056,879.79
Project Cost Deduction	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$14,922,050.00	$0.00
New Balance	**$728,408,841.58**	**$5,196,591,723.77**	**$2,522,077,165.66**	**$119,404,535.47**	**$654,761,151.48**	**$821,807,080.66**	**$65,824,722.09**	**$472,056,879.79**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	$10,123,797,270.71	CRC Net Cost 100% Cost Share
Total Cost Deduction (100% Cost Share)	$14,922,050.00	
Sub-Total Balance	$10,108,875,220.71	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 9.0)	**$9,915,128,784.71**	



Version 8.0								
Puerto Rico Electrical Power Authority Island Wide FAASt Project								Breakdown A&E Cost
Projects Obligated / Current Version					Project Cost		CRC Net Cost	A&E
179558 FAASt - Manati TC - BRKS 230 kV - (Substation)					$1,593,443.00	*Substation*	**$1,593,443.00**	$688,917.00
334323 FAASt Distribution Feeders - Ponce Short Term Group 1 (Distribution)					$23,692.00			$26,179.00
334488 FAASt Distribution Feeders – Caguas Short Term Group 4					142,917.00	*Distribution*	**$10,153,847.00**	$13,455.00
542756 FAASt Streetlighting – Guanica (Distribution)					9,687,238.00			$2,237,386.00
669498 FAASt Aguirre Power Plant 001 Infrastructure Projects (Generation)					3,031,261.05	*Generation*	**$3,031,261.05**	$0.00
						Total	**$14,778,551.05**	**$2,963,947.00**

	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation	A&E
Obligated Balance	$730,002,284.58	$5,206,745,570.77	$2,522,077,165.66	$119,404,535.47	$654,761,151.48	$821,807,080.66	$83,778,033.14	$475,020,826.79
Project Cost Deduction	$1,593,443.00	$10,153,847.00	$0.00	$0.00	$0.00	$0.00	$3,031,261.05	$2,963,947.00
New Balance	**$728,408,841.58**	**$5,196,591,723.77**	**$2,522,077,165.66**	**$119,404,535.47**	**$654,761,151.48**	**$821,807,080.66**	**$80,746,772.09**	**$472,056,879.79**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	$10,138,575,821.76	CRC Net Cost 100% Cost Share
Total Cost Deduction (100% Cost Share)	$14,778,551.05	
Sub-Total Balance	$10,123,797,270.71	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 8.0)	**$9,930,050,834.71**	

Version 7.0								
Puerto Rico Electrical Power Authority Island Wide FAASt Project								Breakdown A&E Cost
Projects Obligated / Current Version					Project Cost		CRC Net Cost	A&E
334329 FAASt Distribution Feeders - Ponce Short Term Group 2 (Distribution)					$316,119.00			$25,530.00
542517 FAASt Luquillo Distribution Streetlighting (Distribution)					8,628,667.29	*Distribution*	**$19,223,122.38**	$2,004,233.00
542687 FAASt Lajas Streetlighting (Distribution)					10,278,336.09			$2,512,853.73
663383 FAASt Cambalache Power Plant Permanent Repairs (Generation)					2,007,587.81	*Generation*	**$2,007,587.81**	$0.00
						Total	**$21,230,710.19**	**$4,542,616.73**

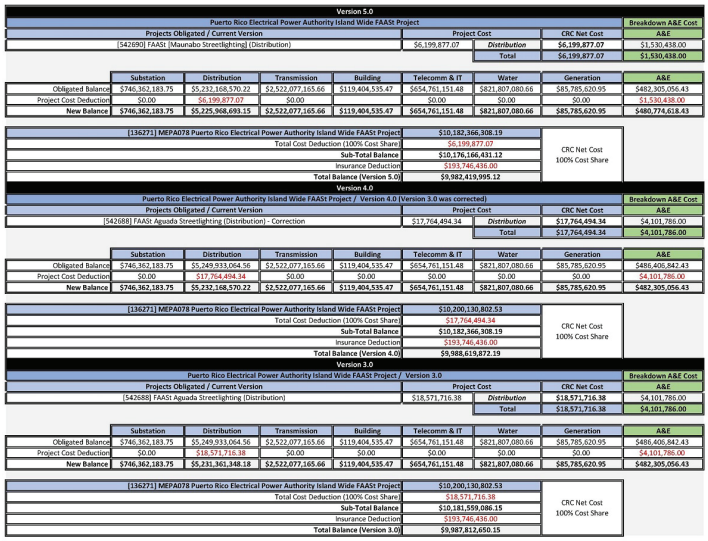
	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation	A&E
Obligated Balance	$730,002,284.58	$5,225,968,693.15	$2,522,077,165.66	$119,404,535.47	$654,761,151.48	$821,807,080.66	$85,785,620.95	$479,563,443.52
Project Cost Deduction	$0.00	$19,223,122.38	$0.00	$0.00	$0.00	$0.00	$2,007,587.81	$4,542,616.73
New Balance	**$730,002,284.58**	**$5,206,745,570.77**	**$2,522,077,165.66**	**$119,404,535.47**	**$654,761,151.48**	**$821,807,080.66**	**$83,778,033.14**	**$475,020,826.79**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	$10,159,806,531.95	CRC Net Cost 100% Cost Share
Total Cost Deduction (100% Cost Share)	$21,230,710.19	
Sub-Total Balance	$10,138,575,821.76	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 7.0)	**$9,944,829,385.76**	

Version 6.0								
Puerto Rico Electrical Power Authority Island Wide FAASt Project								Breakdown A&E Cost
Projects Obligated / Current Version					Project Cost		CRC Net Cost	A&E
[174422] FAASt - Catano-Rebuild 1801(Substation)					$16,359,899.17	*Substation*	**$16,359,899.17**	$1,211,174.91
						Total	**$16,359,899.17**	**$1,211,174.91**

	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation	A&E
Obligated Balance	$746,362,183.75	$5,225,968,693.15	$2,522,077,165.66	$119,404,535.47	$654,761,151.48	$821,807,080.66	$85,785,620.95	$480,774,618.43
Project Cost Deduction	$16,359,899.17	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$1,211,174.91
New Balance	**$730,002,284.58**	**$5,225,968,693.15**	**$2,522,077,165.66**	**$119,404,535.47**	**$654,761,151.48**	**$821,807,080.66**	**$85,785,620.95**	**$479,563,443.52**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	$10,176,166,431.12	CRC Net Cost 100% Cost Share
Total Cost Deduction (100% Cost Share)	$16,359,899.17	
Sub-Total Balance	$10,159,806,531.95	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 6.0)	**$9,966,060,095.95**	



Version 5.0								
Puerto Rico Electrical Power Authority Island Wide FAASt Project								Breakdown A&E Cost
Projects Obligated / Current Version					Project Cost		CRC Net Cost	A&E
[542690] FAASt (Maunabo Streetlighting) (Distribution)					$6,199,877.07	*Distribution*	$6,199,877.07	$1,530,438.00
						Total	$6,199,877.07	$1,530,438.00

	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation	A&E
Obligated Balance	$746,362,183.75	$5,232,168,570.22	$2,522,077,165.66	$119,404,535.47	$654,761,151.48	$821,807,080.66	$85,785,620.95	$482,305,056.43
Project Cost Deduction	$0.00	$6,199,877.07	$0.00		$0.00	$0.00	$0.00	$1,530,438.00
New Balance	**$746,362,183.75**	**$5,225,968,693.15**	**$2,522,077,165.66**	**$119,404,535.47**	**$654,761,151.48**	**$821,807,080.66**	**$85,785,620.95**	**$480,774,618.43**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	$10,182,366,308.19	CRC Net Cost 100% Cost Share
Total Cost Deduction (100% Cost Share)	$6,199,877.07	
Sub-Total Balance	**$10,176,166,431.12**	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 5.0)	**$9,982,419,995.12**	

Version 4.0				
Puerto Rico Electrical Power Authority Island Wide FAASt Project / Version 4.0 (Version 3.0 was corrected)				Breakdown A&E Cost
Projects Obligated / Current Version	Project Cost		CRC Net Cost	A&E
[542688] FAASt Aguada Streetlighting (Distribution) - Correction	$17,764,494.34	*Distribution*	$17,764,494.34	$4,101,786.00
		Total	$17,764,494.34	$4,101,786.00

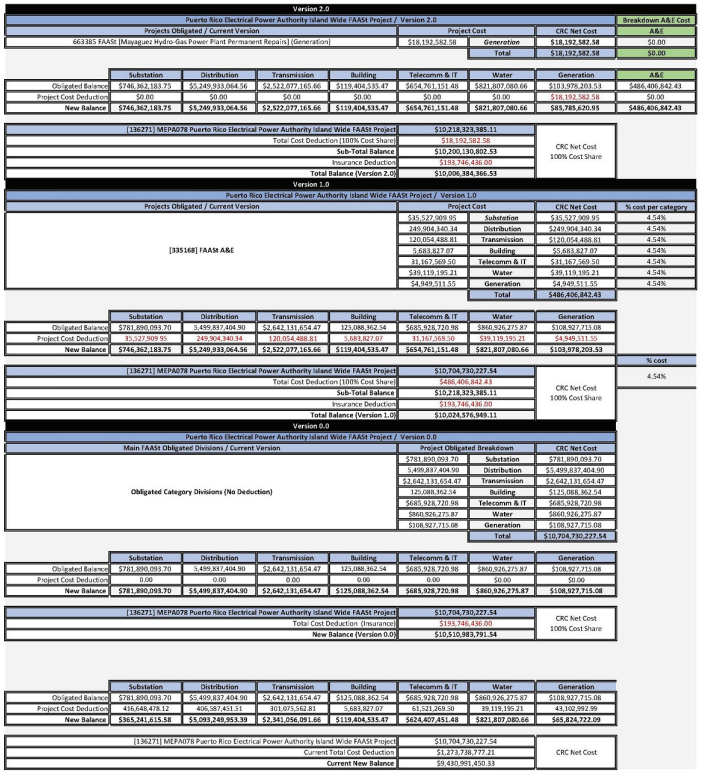
	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation	A&E
Obligated Balance	$746,362,183.75	$5,249,933,064.56	$2,522,077,165.66	$119,404,535.47	$654,761,151.48	$821,807,080.66	$85,785,620.95	$486,406,842.43
Project Cost Deduction	$0.00	$17,764,494.34	$0.00	$0.00	$0.00	$0.00	$0.00	$4,101,786.00
New Balance	**$746,362,183.75**	**$5,232,168,570.22**	**$2,522,077,165.66**	**$119,404,535.47**	**$654,761,151.48**	**$821,807,080.66**	**$85,785,620.95**	**$482,305,056.43**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	$10,200,130,802.53	CRC Net Cost 100% Cost Share
Total Cost Deduction (100% Cost Share)	$17,764,494.34	
Sub-Total Balance	**$10,182,366,308.19**	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 4.0)	**$9,988,619,872.19**	

Version 3.0				
Puerto Rico Electrical Power Authority Island Wide FAASt Project / Version 3.0				Breakdown A&E Cost
Projects Obligated / Current Version	Project Cost		CRC Net Cost	A&E
[542688] FAASt Aguada Streetlighting (Distribution)	$18,571,716.38	*Distribution*	$18,571,716.38	$4,101,786.00
		Total	$18,571,716.38	$4,101,786.00

	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation	A&E
Obligated Balance	$746,362,183.75	$5,249,933,064.56	$2,522,077,165.66	$119,404,535.47	$654,761,151.48	$821,807,080.66	$85,785,620.95	$486,406,842.43
Project Cost Deduction	$0.00	$18,571,716.38	$0.00	$0.00	$0.00	$0.00	$0.00	$4,101,786.00
New Balance	**$746,362,183.75**	**$5,231,361,348.18**	**$2,522,077,165.66**	**$119,404,535.47**	**$654,761,151.48**	**$821,807,080.66**	**$85,785,620.95**	**$482,305,056.43**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	$10,200,130,802.53	CRC Net Cost 100% Cost Share
Total Cost Deduction (100% Cost Share)	$18,571,716.38	
Sub-Total Balance	**$10,181,559,086.15**	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 3.0)	**$9,987,812,650.15**	



Version 2.0

Puerto Rico Electrical Power Authority Island Wide FAASt Project / Version 2.0								Breakdown A&E Cost
Projects Obligated / Current Version					Project Cost		CRC Net Cost	A&E
663385 FAASt [Mayaguez Hydro-Gas Power Plant Permanent Repairs] (Generation)					$18,192,582.58	*Generation*	$18,192,582.58	$0.00
						Total	$18,192,582.58	$0.00

	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation	A&E
Obligated Balance	$746,362,183.75	$5,249,933,064.56	$2,522,077,165.66	$119,404,535.47	$654,761,151.48	$821,807,080.66	$103,979,203.53	$486,406,842.43
Project Cost Deduction	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$18,192,582.58	$0.00
New Balance	**$746,362,183.75**	**$5,249,933,064.56**	**$2,522,077,165.66**	**$119,404,535.47**	**$654,761,151.48**	**$821,807,080.66**	**$85,785,620.95**	**$486,406,842.43**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	$10,218,323,385.11	CRC Net Cost 100% Cost Share
Total Cost Deduction [100% Cost Share]	$18,192,582.58	
Sub-Total Balance	$10,200,130,802.53	
Insurance Deduction	$193,746,436.00	
Total Balance (Version 2.0)	$10,006,384,366.53	

Version 1.0

Puerto Rico Electrical Power Authority Island Wide FAASt Project / Version 1.0				
Projects Obligated / Current Version	Project Cost		CRC Net Cost	% cost per category
[335168] FAASt A&E	$35,527,909.95	*Substation*	$35,527,909.95	4.54%
	249,904,340.34	Distribution	$249,904,340.34	4.54%
	120,054,488.81	Transmission	$120,054,488.81	4.54%
	5,683,827.07	Building	$5,683,827.07	4.54%
	31,167,569.50	Telecomm & IT	$31,167,569.50	4.54%
	$39,119,195.21	Water	$39,119,195.21	4.54%
	$4,949,511.55	Generation	$4,949,511.55	4.54%
		Total	$486,406,842.43	

	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation
Obligated Balance	$781,890,093.70	5,499,837,404.90	$2,642,131,654.47	125,088,362.54	$685,928,720.98	$860,926,275.87	$108,927,715.08
Project Cost Deduction	35,527,909.95	249,904,340.34	120,054,488.81	5,683,827.07	31,167,569.50	$39,119,195.21	$4,949,511.55
New Balance	**$746,362,183.75**	**$5,249,933,064.56**	**$2,522,077,165.66**	**$119,404,535.47**	**$654,761,151.48**	**$821,807,080.66**	**$103,978,203.53**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	$10,704,730,227.54	CRC Net Cost 100% Cost Share	% cost
Total Cost Deduction [100% Cost Share]	$486,406,842.43		4.54%
Sub-Total Balance	$10,218,323,385.11		
Insurance Deduction	$193,746,436.00		
Total Balance (Version 1.0)	$10,024,576,949.11		

Version 0.0

Puerto Rico Electrical Power Authority Island Wide FAASt Project / Version 0.0			
Main FAASt Obligated Divisions / Current Version	Project Obligated Breakdown		CRC Net Cost
Obligated Category Divisions (No Deduction)	$781,890,093.70	Substation	$781,890,093.70
	5,499,837,404.90	Distribution	$5,499,837,404.90
	$2,642,131,654.47	Transmission	$2,642,131,654.47
	125,088,362.54	Building	$125,088,362.54
	$685,928,720.98	Telecomm & IT	$685,928,720.98
	$860,926,275.87	Water	$860,926,275.87
	$108,927,715.08	Generation	$108,927,715.08
		Total	$10,704,730,227.54

	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation
Obligated Balance	$781,890,093.70	5,499,837,404.90	$2,642,131,654.47	125,088,362.54	$685,928,720.98	$860,926,275.87	$108,927,715.08
Project Cost Deduction	0.00	0.00	0.00	0.00	0.00	$0.00	$0.00
New Balance	**$781,890,093.70**	**$5,499,837,404.90**	**$2,642,131,654.47**	**$125,088,362.54**	**$685,928,720.98**	**$860,926,275.87**	**$108,927,715.08**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	$10,704,730,227.54	CRC Net Cost 100% Cost Share
Total Cost Deduction (Insurance)	$193,746,436.00	
New Balance (Version 0.0)	$10,510,983,791.54	

	Substation	Distribution	Transmission	Building	Telecomm & IT	Water	Generation
Obligated Balance	$781,890,093.70	$5,499,837,404.90	$2,642,131,654.47	$125,088,362.54	$685,928,720.98	$860,926,275.87	$108,927,715.08
Project Cost Deduction	416,648,478.12	406,387,451.51	301,075,562.81	5,683,827.07	61,521,269.50	39,119,195.21	43,102,992.99
New Balance	**$365,241,615.58**	**$5,093,249,953.39**	**$2,341,056,091.66**	**$119,404,535.47**	**$624,407,451.48**	**$821,807,080.66**	**$65,824,722.09**

[136271] MEPA078 Puerto Rico Electrical Power Authority Island Wide FAASt Project	$10,704,730,227.54	CRC Net Cost
Current Total Cost Deduction	$1,273,738,777.21	
Current New Balance	$9,430,901,450.33	

APPENDIX 2

COR3
CENTRO PARA LA
RECUPERACIÓN, RECONSTRUCCIÓN Y RESILIENCIA

RFR#	Applicant	Disaster	Request Type	PW#	Total Requested Amount	Total Validated Amount	RTBD	Total Disbursed Amount	Stage
RFR0019600	PREPA	4339	Working Capital Advance	10571	$682,034.64	$682,034.64	$682,034.64	$682,034.64	Payment Complete
RFR0019599	PREPA	4339	Working Capital Advance	10710	$147,622,821.75	$147,622,821.75	$147,622,821.75	$147,622,821.75	Payment Complete
RFR0019606	PREPA	4339	Working Capital Advance	10609	$783,555.30	$783,555.30	$783,555.30	$783,555.30	Payment Complete
RFR0019604	PREPA	4339	Working Capital Advance	10694	$281,250.00	$281,250.00	$281,250.00	$281,250.00	Payment Complete
RFR0020719	LUMA	4339	Working Capital Advance	10539	$4,178,636.19	$4,178,636.19	$4,178,636.19	$0.00	Initial Assessment
RFR0020671	LUMA	4339	Working Capital Advance	10496	$5,232,386.01	$5,232,386.01	$5,232,386.01	$0.00	Initial Assessment
RFR0020716	LUMA	4339	Working Capital Advance	10515	$1,982,323.21	$1,982,323.21	$1,982,323.21	$0.00	Initial Assessment
RFR0020721	LUMA	4339	Working Capital Advance	10538	$2,263,060.35	$2,263,060.35	$2,263,060.35	$0.00	Initial Assessment
RFR0020720	LUMA	4339	Working Capital Advance	10632	$358,524.68	$358,524.68	$358,524.68	$0.00	Initial Assessment
RFR0020722	LUMA	4339	Working Capital Advance	10624	$312,169.50	$312,169.50	$312,169.50	$0.00	Initial Assessment
RFR0020723	LUMA	4339	Working Capital Advance	10626	$328,412.03	$328,412.03	$328,412.03	$0.00	Initial Assessment
RFR0020726	LUMA	4339	Working Capital Advance	10773	$397,563.98	$397,563.98	$397,563.98	$0.00	Initial Assessment
RFR0020724	LUMA	4339	Working Capital Advance	10777	$403,676.33	$403,676.33	$403,676.33	$0.00	Initial Assessment
RFR0020727	LUMA	4339	Working Capital Advance	10788	$5,231,662.88	$5,231,662.88	$5,231,662.88	$0.00	Initial Assessment
RFR0020728	LUMA	4339	Working Capital Advance	10827	$474,853.95	$474,853.95	$474,853.95	$0.00	Initial Assessment
RFR0020729	LUMA	4339	Working Capital Advance	10857	$2,446,290.39	$2,446,290.39	$2,446,290.39	$0.00	Initial Assessment
RFR0020730	LUMA	4339	Working Capital Advance	10864	$313,214.60	$313,214.60	$313,214.60	$0.00	Initial Assessment

APPENDIX 3

COR3

FOLDER NAME	FEMA PROJECT #	FIPS #	Disaster	MUNICIPALITY	PROJECT TITLE	USI #	NAME	SECTOR - PA	Applicant Type	Status Intake	Obligated Amount	Current Status
4339-HM-HMGP-000888	4339-DR-PR-0010	000-UA2QU-00	4339		11 Simple Gas Turbines	404 Opportunity	Puerto Rico Electric Power Authority	Energy	Agency	FEMA Approved	$208,436.50	PREPA and COR3 to submit new SOW amendment or information in advance for FEMA review (USRP)
4339-HM-HMGP-000914	4339-DR-PR-0012	000-UA2QU-00	4339		EARLY WARNING SYSTEM (DAMS)	404 Opportunity	Puerto Rico Electric Power Authority	Energy	Agency	FEMA Approved		Pending to submit Deliverables - COR3 Pending revision on equipment specs by FEMA Pending Amendment to SOW by FEMA
4339-HM-HMGP-000916	4339-DR-PR-0005	000-UA2QU-00	4339		Palo Seco Power Generation Plant	404 Opportunity	Puerto Rico Electric Power Authority	Energy	Agency	FEMA Approved	$63,888.92	Waiting for decision of the PR Energy Bureau for project approval
4339-HM-HMGP-000925	4339-DR-PR-0011	109-96300-00	4339	Patillas	Patillas Dam	404 Opportunity	Patillas (Municipality)	Municipality	Municipalities	FEMA Approved		Under Design - 30% was submitted to FEMA Awaiting answer to RFI CPR (FEMA) Amm $817,864.80 in progress under evaluation by COR3
4339-HM-HMGP-000934	4339-DR-PR-0273	000-UL H00-00	4339		Ocean Thermal Energy Conversion Facility	404 Opportunity	PR Land Administration	Public Buildings	Agency	Submitted to FEMA		Submitted to FEMA on Batch 3 - Oct 28 2022 Weekly follow up on schedule
4339-HM-HMGP-002010	4339-DR-PR-0009		4339		El Yunque Undergrounding Project	404 Opportunity	El Yunque Undergrounding PREPA	Energy	Agency	Submitted to FEMA		Project on schedule to move to (PA - 406)
4339-HM-HMGP-002086	Pending		4339		PREPA Battery Project	404 Opportunity	PREPA Battery Project	Energy	Agency	In Progress		Pending Time Extension January 30 2023
4339-HM-HMGP-002043	Pending		4339	San Juan	Hato Rey Resilient Power Project (HRPP)	404 Opportunity	EDBI RN Cooling and Power Project	Energy	PNP	Submitted to FEMA		Submitted as a Backup project - 10/28/2022
4339-HM-HMGP-220	Pending		4339	Jayuya	Micro Grid for Critical Infrastructure	404 Opportunity-1332	Jayuya (Municipality)	Municipality	Municipalities	Submitted to FEMA		Submitted to FEMA on
4339-HM-HMGP-002072	Pending		4339		PREPA Guajataca FPV (floating photovoltaic)	404 Opportunity	PREPA Guajataca FPV (floating photovoltaic)	Energy	Agency	Submitted to FEMA		Submitted to FEMA on Batch 3 - Oct 28 2022 Weekly follow up on schedule
4339-HM-HMGP-002058	Pending		4339		Vieques and Culebra Microgrids and Advanced Metering-Vieques Diesel Generation Station	404 Opportunity	PREPA Vieques and Culebra Microgrids-Vieques Diesel Ge	Energy	Agency	Submitted to FEMA		Submitted to FEMA on Batch 3 - Oct 28 2022 Weekly follow up on schedule
4339-HM-HMGP-000988	Pending		4339		Retrofit of the Hydroelectric Turbines Fleet	404 Opportunity	Puerto Rico Electric Power Authority	Energy	Agency	Submitted to FEMA		Submitted to FEMA on Batch 3 - Oct 28 2022 Weekly follow up on schedule
4339-HM-HMGP-002005	Pending		4339	Culebra	Culebra Submarine Cable and Microgrid	404 Opportunity	Puerto Rico Electric Power Authority	Energy	Agency	Submitted to FEMA		Submitted to FEMA on Batch 3 - Oct 28 2022 Weekly follow up on schedule

Submissions for the Record from Eduardo Pardo

AGC
CAPÍTULO DE PUERTO RICO
LA ASOCIACIÓN DE LA CONSTRUCCIÓN

NOVEMBER 2022

Parole for Significant Public Benefit: Proposal Summary

Proposal: Parole for Significant Public Benefit

Proponent: Puerto Rico's construction industry (represented by trade associations, led by the Puerto Rico Chapter of AGC of America, and the Puerto Rico Chapter of the Home Builders Association).

Problem: Puerto Rico, a U.S. territory, needs to significantly expand construction workforce (by 50K+) during the next ten years to execute the infrastructure reconstruction and modernization program financed with federal funds assigned to address ($55 billion+, between FEMA and non-FEMA construction funds under the Bipartisan Budget Act 2018) the disaster caused by hurricane Irma and Maria (2017) and earthquakes (2020). The magnitude of the need requires more than one solution (existing and new). Given the urgency of the need, any additional solution must be efficient in terms of timing, and access to skilled employees.

Current Solutions: Construction labor training programs (with public and private academic institutions and several nonprofit organizations), apprenticeships, and H2-B visas. The combined potential of these initiatives is not sufficient to meet the anticipated labor needs within the required time frame.

Proposed Solution: Parole for Significant Public Benefit established by Executive Order of the President of the United States. Could add 20K+ skilled construction workers.

Legal basis: Section 212(d)(5) of the Immigration and Nationality Act (INA).

Definition of Significant Public Benefit under Section 212(d)(5): According to www.uscis.gov there is no statutory or regulatory definition of "significant public benefit". Parole based on significant public benefit includes, but is not limited to, law enforcement and national security reasons or foreign or domestic policy considerations.

Definitions of Terms Under the Proposed Parole:

- Beneficiary (recipient) of parole: an individual residing in Puerto Rico with indefinite migratory status who is skilled and available to work in construction.
- Petitioner: construction companies that demonstrate need for workforce to execute reconstruction projects covered under this initiative.
- Public: The more than 3 million US citizens living in Puerto Rico.
- Significant Public Benefit: Execution of the reconstruction and modernization of Puerto Rico's dilapidated infrastructure financed with FEMA and federal recovery funds.
- Sponsor: N/A Because the beneficiaries are currently living and working in Puerto Rico, they don't need a place to live and source of income.
- Length of Parole: Two years. Eligible for re-parole after the initial two-year term.

- Eligibility: individuals residing in Puerto Rico with indefinite migratory status on or before November 2020, who are skilled and available to work in construction.

Possible point of reference: For the creation of the proposed parole, a good point of reference could be the International Entrepreneur Parole. According to the USCIS, "under the International Entrepreneur Rule (IER), ***DHS may use its parole authority to grant a period of authorized stay, on a case-by-case basis, to foreign entrepreneurs who demonstrate that their stay in the United States would provide a significant public benefit through their business venture and that they merit a favorable exercise of discretion. Under this final rule, entrepreneurs granted parole will be eligible to work only for their start-up business. The spouses and children of the foreign entrepreneur may also be eligible for parole. While spouses may apply for work authorization once present in the United States as parolees, the children are not eligible to work. IER parole may be granted for up to three entrepreneurs per start-up entity.***"

https://www.uscis.gov/working-in-the-united-states/international-entrepreneur-parole

FAQ:

- Is this the same as a Parole in Place? *No. The Parole in Place is reserved exclusively for family members of the military. It is rarely used.*
- Where will workers come from? *Workers will be noncitizens living on the island on or before November 2020. The Parole will not be available for immigrants that entered the U.S. illegally after the established date.*
- Why not use the H2-B visa program to expand workforce? *the scope of H2-B visas is limited, in terms of the number of workers that can be allocated to Puerto Rico, duration of the visas granted (12 months maximum for one-time occurrences), and application schedule. The program is intended to meet anticipated seasonal employment demand, whereas labor needs in construction cannot be anticipated and occur any time during the year. H2-B visas need to be procured more than six months prior to need, a process that does not match construction bidding procedures. In FY 2020 and FY 2021, Zero H2-B visas were granted in Puerto Rico.*
- Concern: *This mechanism was tailored made for Puerto Rico. Any state or territory under an emergency declaration under FEMA can request a similar parole.*
- Concern: *This is a novel interpretation and use of Significant Public Benefit. Significant Public Benefit is not defined by Section 215(d)(5) of the INA Act, and a Parole based on significant public can be granted for, but is not limited to, law enforcement and national security reasons or foreign or domestic policy considerations. Therefore, a Parole for Significant Public Benefit can be used to address the potential construction labor crisis in P.R. that could halt the infrastructure reconstruction and modernization program.*
- Concern: *High political cost. The most significant cost would come from not doing anything to address the anticipated labor shortage that could delay and negatively impact the reconstruction process, increase construction costs, and hold back economic recovery and progress on the island.*
- Concern: *May cause too much administrative demand on Immigration personnel. Arrangements should be made for making Immigration Offices in Puerto Rico responsible of processing the Paroles, avoiding an overload on other Immigration offices.*

Sec. 305. Nonliability of Federal Government (42 U.S.C. 5148)

The Federal Government shall not be liable for any claim based upon the exercise or performance of or the failure to exercise or perform a discretionary function or duty on the part of a Federal agency or an employee of the Federal Government in carrying out the provisions of this Act.

Sec. 306. Performance of Services (42 U.S.C. 5149)

(a) UTILIZATION OF SERVICES OR FACILITIES OF STATE AND LOCAL GOVERNMENTS—In carrying out the purposes of this Act, any Federal agency is authorized to accept and utilize the services or facilities of any State or local government, or of any agency, office, or employee thereof, with the consent of such government.

(b) APPOINTMENT OF TEMPORARY PERSONNEL, EXPERTS, AND CONSULTANTS; ACQUISITION, RENTAL, OR HIRE OF EQUIPMENT, SERVICES, MATERIALS AND SUPPLIES—In performing any services under this Act, any Federal agency is authorized—

(1) to appoint and fix the compensation of such temporary personnel as may be necessary, without regard to the provisions of title 5 governing appointments in competitive service;

(2) to employ experts and consultants in accordance with the provisions of section 3109 of such title, without regard to the provisions of chapter 51 and subchapter III of chapter 53 of such title relating to classification and General Schedule pay rates; and

(3) to incur obligations on behalf of the United States by contract or otherwise for the acquisition, rental, or hire of equipment, services, materials, and supplies for shipping, drayage, travel, and communications, and for the supervision and administration of such activities. Such obligations, including obligations arising out of the temporary employment of additional personnel, may be incurred by an agency in such amount as may be made available to it by the President.

Sec. 307. Use of Local Firms and Individuals (42 U.S.C. 5150)

(a) CONTRACTS OR AGREEMENTS WITH PRIVATE ENTITIES—

(1) IN GENERAL—In the expenditure of Federal funds for debris clearance, distribution of supplies, reconstruction, and other major disaster or emergency assistance activities which may be carried out by contract or agreement with private organizations, firms, or individuals, preference shall be given, to the extent feasible and practicable, to those organizations, firms, and individuals residing or doing business primarily in the area affected by such major disaster or emergency.

(2) CONSTRUCTION—This section shall not be considered to restrict the use of Department of Defense resources under this Act in the provision of assistance in a major disaster.

(3) SPECIFIC GEOGRAPHIC AREA—In carrying out this section, a contract or agreement may be set aside for award based on a specific geographic area.

(b) IMPLEMENTATION—

(1) CONTRACTS NOT TO ENTITIES IN AREA—Any expenditure of Federal funds for debris clearance, distribution of supplies, reconstruction, and other major disaster or emergency assistance activities which may be carried out by contract or agreement with private organizations, firms, or individuals, not awarded to an organization, firm, or individual residing or doing business primarily in the area affected by such major disaster shall be justified in writing in the contract file.

(2) TRANSITION—Following the declaration of an emergency or major disaster, an agency performing response, relief, and reconstruction activities shall transition work performed under contracts in effect on the date on which the President declares the emergency or major disaster to organizations, firms, and individuals residing or doing business primarily in any area affected by the major disaster or emergency, unless the head of such agency determines that it is not feasible or practicable to do so.

(3) FORMATION OF REQUIREMENTS—The head of a Federal agency, as feasible and practicable, shall formulate appropriate requirements to facilitate compliance with this section.

(c) PRIOR CONTRACTS—Nothing in this section shall be construed to require any Federal agency to breach or renegotiate any contract in effect before the occurrence of a major disaster or emergency.

[LIST OF DOCUMENTS SUBMITTED FOR THE RECORD RETAINED IN THE COMMITTEE'S OFFICIAL FILES]

Submissions for the Record by Witnesses

—Visual presentation—LUMA Energy, Dr. Shay Bahramirad

—Written Testimony for Hearing on the PREPA Post Implementation of the LUMA Transmission and Distribution Contract—Ms. Ruth Santiago

Submissions for the Record by the Public

—Olga Mayoral Wilson, APR, Fellow PRSA, Letter to the Committee, September 26, 2022

—La Ruta de La Verdad Collective, Testimony, November 17, 2022 by Lorraine Liriano, Spokesperson, Ruta de la Verdad and Mujeres Contra LUMA

—Puerto Rico Not For Sale Campaign, Testimony, November 17, 2022 by Fermín Morales Ayala, Spokesperson

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