MANAGEMENT CRISIS AT THE PUERTO RICO ELECTRIC POWER AUTHORITY AND IMPLICATIONS FOR RECOVERY

OVERSIGHT HEARING

BEFORE THE

COMMITTEE ON NATURAL RESOURCES U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED FIFTEENTH CONGRESS

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OVERSIGHT HEARING ON MANAGEMENT CRI-AT THE **PUERTO** RICO **ELECTRIC** AUTHORITY AND **POWER IMPLICATIONS** FOR RECOVERY

Wednesday, July 25, 2018 U.S. House of Representatives **Committee on Natural Resources** Washington, DC

The Committee met, pursuant to notice, at 2:41 p.m., in room 1324, Longworth House Office Building, Hon. Rob Bishop

[Chairman of the Committee] presiding.

Present: Representatives Bishop, Young, Gohmert, Lamborn, McClintock, Thompson, Labrador, Tipton, LaMalfa, Denham, Westerman, Graves, Radewagen, González-Colón; Grijalva, Napolitano, Bordallo, Sablan, Tsongas, Lowenthal, Beyer, Gallego, Barragán, Soto, Clay, and Velázquez.

The CHAIRMAN. We welcome you all here today to our Natural Resources Committee hearing. We call this to order.

The Committee today is meeting on what is titled, "Management Crisis at the Puerto Rico Electric Power Authority and Implications for Recovery." I want to emphasize our goal is that last phrase, the implications for recovery.

I ask unanimous consent that Mr. DeSantis, Mr. Gutiérrez, and Mr. Serrano, if and when they show, be allowed to sit with the Committee and participate in the hearing.

Without objection, that will be so ordered.

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

I ask unanimous consent that any other Members' opening statements be made part of the hearing record if they submit them to the Committee Clerk by 5:00 p.m. today.

Once again, without objection, so ordered. Or without pausing, so

I would also like to submit for the record the statement from the Governor of Puerto Rico, who sent it last night and is unable to attend today's hearing.

Without objection, so ordered.

[The information follows:]

PREPARED STATEMENT OF THE HON. RICARDO ROSSELLÓ NEVARES, GOVERNOR OF PUERTO RICO

Governor Ricardo Rosselló Nevares of Puerto Rico submits this written statement for the record in connection with the U.S. House of Representatives Committee on Natural Resources oversight hearing entitled Management Crisis at the Puerto Rico Electric Power Authority and Implications for Recovery, scheduled for July 25, 2018. This statement covers (1) Puerto Rico's vision and the ongoing transformation process of the island's energy sector, (2) certain recent events that have stabilized

the management of the Puerto Rico Electric Power Authority ("PREPA"), and (3) the proper role of the Federal Government in facilitating the transformation and future of PREPA and the Puerto Rico energy sector.

As the Committee is well aware, I took office during an unprecedented fiscal and economic crisis that jeopardized the very future of Puerto Rico. The first 18 months of my Administration brought both expected and unexpected challenges, including two catastrophic hurricanes that left the island without power, water or communicatwo catastrophic nurricanes that left the Island without power, water or communication. Puerto Rico's efforts to recover from the hurricanes and address our financial issues have been, at times, complicated by the many layers of bureaucracy that come with an oversight board and emergency management personnel.

Despite these challenges, my Administration has worked diligently to address the myriad issues facing Puerto Rico. The results of those efforts are evident. For example, recent figures show an increase in the level of employment and a reduction in the level of the proposed with May 2018, when company with May 2018, process.

the level of unemployment for June 2018 when compared with May 2018, recent sales tax revenues appear to exceed pre-hurricane levels and the Federal Government, through FEMA recently signed the agreement to grant Puerto Rico access to Community Disaster Loans.

With regard to the electric sector, we have moved aggressively to be in a position to attract private investment for the island, modernize the island's energy grid and create a system that is more resilient and reliable. Through the transformation process, Puerto Rico has the opportunity to leapfrog into energy 2.0 and to create an energy grid that can serve as a model for the world.

I was encouraged by the recognition of our efforts in my recent meeting with U.S.

Treasury Secretary Mnuchin last week. In that meeting, we discussed the reconstruction of Puerto Rico and the transformation of the island's energy sector. Secretary Mnuchin expressed his view that PREPA has a very good short-term and long-term strategy to really transform the energy grid and that with the necessary adjustments and injection of Federal funds, Puerto Rico can become a success story.

PUERTO RICO'S VISION FOR THE FUTURE OF THE ENERGY SECTOR

On January 23, 2018, I announced a historic new vision for the transformation of PREPA and the island's energy sector. The envisioned transformation will achieve private participation in the electric sector in Puerto Rico and assure that the electric system is modern, reliable, resilient, sustainable and affordable to residential, commercial and industrial consumers. The transformed electric sector will serve as a major catalyst to sustained and long-term economic growth and job creation. Our "base case" model for the contemplated transformation transaction involves (1) private ownership and/or operation of generation assets with a focus on a diversified fuel mix, including clean energy sources and (2) private operation of the transmission and distribution ("T&D") system through a concession or similar model, that leaves the ownership of the T&D assets in public hands while the operation, maintenance and long-term capital improvement plan transitions to a private operator. Since that announcement, my Administration, in collaboration with the Financial Oversight and Management Board for Puerto Rico (the "Oversight Board"), has significantly advanced the transformation process, in compliance with the New Fiscal Plan for PREPA certified by the Oversight Board on April 19, 2018, as it is being implemented by the Government of Puerto Rico.

ONGOING PROCESS TO ACHIEVE ENERGY SECTOR TRANSFORMATION

The transformation of the island's energy sector is a complex process that involves developing new legislative and regulatory structures, integrated resource planning, updating the public private partnerships framework for the transaction, coordinating and complying with Federal disaster funding requirements, addressing legacy obligations and resolving ongoing bankruptcy proceedings at both PREPA and the Government of Puerto Rico. My Administration has developed and is implementing a plan to achieve the transformation of the energy sector taking into account all of those important and interrelated factors. In that respect, I believe that we have made substantial progress toward our goals and are optimistic about reaching our final objectives.

On June 20, 2018, I signed into law the *Puerto Rico Electric System Transformation Act* (the "Transformation Act"), which was a necessary legislative step toward the transformation of the energy sector. The Transformation Act contemplates the solicitation of private interest in the electric sector through the process set forth in the Puerto Rico Public Private Partnership Act (the "P3 Act") and under the direction of the Puerto Rico Public-Private Partnerships Authority. The P3 Act is a model public private partnership statute that provided the framework for the recent and successful development of public private partnerships of the Luis

Muñoz Marín International Airport and certain toll roads in Puerto Rico. The P3 Act provides a fair, transparent and verifiable framework for all relevant stake-holders. It also provides Puerto Rico with a powerful and proven tool—recognized by international and U.S. market participants—to implement the contemplated transformation transactions.

In addition to the passage of the Transformation Act, we recently completed our contemplated market-sounding phase, which is a component of the certified PREPA Fiscal Plan. The market-sounding phase solicited preliminary information from potential market participants on the contemplated base case, alternative structures and potential roadblocks to achieving the transformation of our energy sector. The feedback received from the market revealed substantial interest in participating in the transformation of the energy sector in Puerto Rico, as contemplated by our base case. The market-sounding phase also provided us data and information on how to improve the transformation process in order to achieve the best results for Puerto Rico. My Administration is working with the Oversight Board to incorporate the feedback into our transformation process going forward.

My Administration is also moving forward with development of the necessary regulatory framework to: (1) support and enhance the new vision for the island's energy sector, specifically the desired power sector transformation, (2) provide investor confidence, and (3) implement stable and accepted modes of regulation. Independent and stable regulation of the electric sector is essential to the transformation and modernization of Puerto Rico's energy sector, just as it is on the mainland. The Transformation Act contemplates development of that framework by early December through a process designed to bring together the best thinking from market leaders deeply knowledgeable in the energy regulatory space. In connection therewith, I recently announced the Blue-Ribbon Task Force. In addition, consultants to both my Administration and the Oversight Board are working to address anticipated regulatory issues recognizing that our regulatory transformation must maintain strong independent regulation while providing assurance that Puerto Rico's regulatory structure is consistent with broadly accepted and proven frameworks in other jurisdictions that support the desired changes in the island's energy sector.

Other activities necessary to facilitate the transformation are ongoing. Those activities include the updating of a 2015 integrated resource plan, as required by local law and standard industry practice, to develop an updated integrated resource plan for Puerto Rico, based on the island's new and adjusted realities resulting after the passage of hurricane Maria. In addition, those activities include, without limitation: (1) legal and financial preparation for the anticipated transaction(s); (2) coordination of and compliance with Federal funding requirements related to or impacted by transformation process; (3) functionalization and analysis of separation of common electric systems; (4) analysis and development of contract and transformation structures; and (5) claims analysis and title III planning.

Another critical issue in the transformation is the resolution of the legacy claims against PREPA. Congress designed PROMESA to give the Government the resources and tools necessary to address its fiscal crisis. Congress made clear that the purpose of PROMESA was to benefit the lives of 3.5 million American citizens living in Puerto Rico by resolving Puerto Rico's fiscal crisis and returning Puerto Rico to economic growth. The legacy obligations against PREPA must be resolved consistent with the intent of the statute.

PREPA MANAGEMENT AND OPERATIONS

Regarding PREPA management, on July 23, 2018, electrical engineer José F. Ortiz began his tenure as the new Executive Director and Chief Executive Officer of PREPA. Mr. Ortiz' credentials are unassailable and I believe his leadership will ensure significant improvements in PREPA operations leading into the transformation of the utility and the sector. Mr. Ortiz is a dynamic, results-oriented exection. utive with a history of driving organizational cultural change. He has held critical leadership roles within the Government of Puerto Rico under administrations of both major political parties on the island. In my view, he has demonstrated the capacity to put politics aside, exercise independent judgment and put the people of Puerto Rico first. I believe Mr. Ortiz is the right leader for PREPA at this critical

Mr. Eli Diaz Atienza and Mr. Ralph A. Kreil Rivera also recently joined the PREPA Board. Mr. Diaz Atienza is the Executive Director of the Puerto Rico Aqueduct and Sewer Authority ("PRASA") and worked successfully with the Federal Government on numerous projects during his tenure with PRASA. Mr. Rivera is a professional engineer with over 30 years of experience in that field in Puerto Rico and the Caribbean Region. Consistent with applicable legal requirements, I am also working on an expedited process to identify and name new independent directors. In addition, Todd Filsinger and the Filsinger Energy Partners team continue to provide PREPA with day-to-day operational support and support related to the transformation process

Given that Mr. Ortiz and the new PREPA Board members have just taken office, and the Committee hearing was announced with such short notice, unfortunately they were unable to participate in today's hearing. However, they will be available to engage in a productive conversation with the Committee as soon as next week

or anytime thereafter that the Committee deems appropriate

I understand that the committee deems appropriate.

I understand that the recent management changes at PREPA raised certain concerns but I assure you that those changes are not indicative of political interference with the management or operation of PREPA. PREPA is free to operate as its Board of Directors and executive management determine, within its public statutory mandate. It is improvement to the present of the prese date. It is important to recognize, however, that PREPA is a public corporation that is accountable to the people of Puerto Rico. Puerto Rico's citizens were vocal in their view that the proposed salary for PREPA's executive director, combined with certain public comments and expressions, were not acceptable to the people of the island. As the duly elected representative of those citizens, it was my view that the PREPA Governing Board should have reduced the salary and responded to the economic concerns raised by our citizenry. Notwithstanding, our progress toward the transformation of the energy sector has continued unhindered despite recent developments and nothing will stop it.

ROLE OF THE FEDERAL GOVERNMENT IN TRANSFORMATION

The Federal Government is a critical partner for Puerto Rico moving forward. Securing CDBG-DR-2018 funding for electric system improvement matching purposes will be key to transforming and reconstructing the electric grid system in Puerto Rico at a cost that its citizens and its economy can bear. We are working with the U.S. Department of Housing and Urban Development and the Puerto Rico Housing Secretary to assure access to and qualification for such funds so that the necessary projects to construct a more resilient and hardened electric grid can be achieved as soon as possible. In addition, we welcome any technical support from the U.S. Department of Energy and other Federal agencies of relevance in the energy sector transformation process. However, additional legislation vastly expanding the role of the Federal Government in this process is simply not warranted

As described above, my Administration is working closely with the Oversight Board in advancing the transformation process. Under the leadership of the P3 Authority, we have made substantial progress toward the transformation consistent with the schedule set forth in the certified New Fiscal Plan for PREPA. Further, the Government of Puerto Rico is providing periodic reports to the U.S. Treasury and FEMA to ensure the visibility and transparency that helps further the overall transformation objectives, together with the mentioned Federal Government support. The recent management changes at PREPA have not disrupted that progress. Our intent is to identify the right partners for Puerto Rico within 12-18 months an aggressive target given the complexities of the anticipated transactions. Our collective focus must be to support efforts that help complete the progress and avoid measures or processes that may interrupt that progress or impose new or additional levels of control or oversight that would simply delay or further complicate the transformation process.

In addition, the transformation of the energy sector in Puerto Rico is linked to the restructuring of Puerto Rico and its future economic growth. Any new or additional Federal intervention at PREPA could jeopardize or impair the ongoing restructuring of Puerto Rico and all of its agencies and instrumentalities. While I wish to emphasize that we appreciate the support from the Federal Government, the "federalization" of PREPA would be a mistake and Federal control of the transformation process is unnecessary and inappropriate.

CONCLUSION

It is my belief that critical policy choices that will impact the future of Puerto Rico for many generations should rightly be the decisions of the Government of Puerto Rico and residents rather than any other stakeholder, Federal or otherwise, who may unfairly influence the process. State governments are closest to the people and thus significantly better equipped to address the issues and challenges at the local level. I know the leadership of this Committee shares that political value. Therefore, I respectfully submit that we continue working together, collaborating and securing the necessary Federal and Congressional support to ensure timely and effective reconstruction and transformation objectives for our energy sector on the island.

The CHAIRMAN. Let me now recognize myself here for up to 5 minutes, if I could.

STATEMENT OF THE HON. ROB BISHOP, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF UTAH

The CHAIRMAN. I appreciate all of you who are here. In the year 1941, the Cubs—my Cubbies—went 70 and 84, and for the 33rd consecutive year failed to get in the World Series. Joe DiMaggio also set a record of 56 consecutive games in hitting, and PREPA too was established to try to come up with affordable electrical energy for the citizens of Puerto Rico.

Fast forward to today—the Cubs do have a World Series trophy now; DiMaggio still has his hits; and PREPA, unfortunately, is now something that is considered to be bankrupt and mismanaged and politically dominated, and has all sorts of problems that desperately need to be solved for the sake of the citizens of Puerto Rico, the American citizens who live down there.

We are now in another hurricane season. We are in the midst of another political controversy with PREPA. We have now had three CEOs in a matter of weeks, and when simple questions like who is actually in charge of the grid cannot be answered, that is something that needs to change, definitely.

Today, my hope, in this particular hearing, is identifying the need of change, the problems that we have with the status quo. We recognize the status quo is not working. But more than that, I also hope our witnesses can lead us beyond that point to come up with specific sets of steps that need to be taken to solve this problem and to make sure that we are very effective.

I don't know if the Committee staff has the one print, the one from the Governor we can put up on the board.

[Slide.]

The CHAIRMAN. Those objectives are what the Governor says are his objectives for PREPA. I don't think there is anyone in this room that disagrees with those objectives. The question is not whether those objectives are appropriate or not; the question is how do we get there from here. How do you get from A to B?

And, I am sorry, right now you can't get from A to B. And that is one of the things I hope this hearing comes to, in some way.

So, contrary to what I have heard as the goals I have for this particular hearing, we are not talking about federalizing anything. I am not talking about selling assets to the highest bidder. We are not talking about making Puerto Rico a fossil fuel island. To the contrary, this is about the health, safety, and the future of the millions of Americans who live in Puerto Rico, and our obligation we have to these citizens to secure their needs and a path to a better future by making sure that electrical generation is effective and is efficient and is getting to where it is needed.

So, twofold hope: identifying the status quo problems; more importantly, identifying some steps that can help solve those particular problems.

[The prepared statement of Mr. Bishop follows:]

PREPARED STATEMENT OF THE HON. ROB BISHOP, CHAIRMAN, COMMITTEE ON NATURAL RESOURCES

Today, the Committee is meeting to discuss the "Management Crisis at the Puerto Rico Electric Power Authority and Implications for Recovery." This is the fourth hearing this Committee has held on Puerto Rico this Congress, and it will likely not be the last.

Now, I'd like to begin by providing a bit of a history lesson. The year is 1941—the Cubs would go 70 and 84, finishing sixth in the National League and marking the 33rd of a 108 year World Championship drought. Joe DiMaggio has set a record for the most consecutive games with a hit at 56, and, yes, the Puerto Rico Electric Power Authority was founded with a goal of electrifying Puerto Rico in its entirety. Fast forward to today, and the Cubs won the World Series in 2016, DiMaggio's record still stands, and while PREPA "substantially completed" its goal in 1981, it is now a harkrupt mismanged and politically dominated number. Although we

is now a bankrupt, mismanaged, and politically dominated puppet. Although we have had a number of conversations about the future of PREPA in this hearing room for the past 2½ years, it is now clear many of the promises made were mere platitudes to a future PREPA that cannot be realized by the island's government.

I know many of my colleagues saw firsthand the devastating consequences of last year's hurricane season, which led to the loss of so many of our fellow Americansmany of whom would still be alive had they had access to the reliable electric service we expect and demand within our own states. Unfortunately, since the passage of those hurricanes, we have not seen a revitalized PREPA—rather, all we have seen on the island is greater infighting about the outstanding debt and pension liabilities, a dramatic increase in politicization of the utility, and repeated attacks on the fledging Puerto Rico Energy Commission.

We are now in the midst of yet another hurricane season, and PREPA, itself, is in the midst of yet another political controversy, as it sees the appointment of its third CEO in as many weeks. When simple questions such as "Who is in charge of the grid?" cannot be answered, something needs to change.

Identifying that change is the purpose of today's hearing—indeed, I hope we can begin to discuss possible legislative solutions that will facilitate the transformation and reformation of PREPA into a resilient, independent utility that will provide Puerto Ricans with reliable and affordable energy.

This hearing is not about the complete federalization of PREPA, the selling of assets to the highest bidder, nor the solidifying of Puerto Rico as a fossil fuel island.

And I believe there are bipartisan solutions that will lead to a de-politicized PREPA, a consensual and fair resolution to outstanding pension obligations and the legacy debt, the creation of a strong and independent regulator, and yes, eventual privatization for the utility.

Under the Property Clause of the Constitution, we in Congress have the power to "dispose of and make all needful Rules and Regulations" for the territories; and with such power we have a duty to ensure our fellow American citizens have the opportunity to thrive and fulfill the American dream within the territories.

The CHAIRMAN. With that, I would like to yield back and recognize the Ranking Member, or-well, if you want to yield, you can do what you want to do.

Mr. GRIJALVA. Thank you. Thank you for your indulgence, Mr. Chairman. I would like to yield a period of time to my esteemed colleague, Nydia Velázquez from New York, for the opening comment, and also, in turn, to my colleague from Florida, Mr. Soto.

[The prepared statement of Mr. Grijalva follows:]

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

We are here today to discuss the future of the PREPA—the embattled Puerto Rico Electric Power Authority. I want to begin by welcoming our witnesses. I look forward to hearing your thoughts on how best to rebuild PREPA for the benefit of the people of Puerto Rico.

The question for today is: what is the best way to guarantee that PREPA will be rebuilt so that it can withstand future extreme weather and provide the people of Puerto Rico with reliable and inexpensive power. After what they have been through this past year—they deserve nothing less.

For the entirety of if its existence, PREPA has struggled with poor management, graft and corruption, lack of maintenance and upkeep, and mounting debt. Then hurricanes Irma and Maria brought the utility to its knees last year with the

largest blackout in the history of our country.

The blackout has been far more than just an inconvenience. This past May, Harvard's School of Public health published a study on the number of deaths caused by Hurricane Maria in Puerto Rico. The study found that approximately 4,645 residents are estimated to have died as a result of the storm. Most regrettably, the study also found that roughly 10 percent of the deaths were said to be caused by the need for breathing equipment requiring electricity.

Recently, we have seen PREPA's leadership in turmoil following the decision by

Recently, we have seen PREPA's leadership in turmoil following the decision by current executive director Walter Higgins to step down after 4 months on the job. His replacement, PREPA board member Rafael Diaz-Granados subsequently resigned, along with four other members of the seven-member board after the Governor criticized a \$750,000 annual salary for Diaz-Granados. Last Wednesday, the Governor named Jose Ortiz, a former PREPA board chairman as the new CEO.

In the wake of this dysfunction, the Majority has raised the idea of introducing legislation to "de-politicize" PREPA and develop a "credible plan" for the utility's

transformation.

We look forward to the opportunity to review such proposals from the Chairman. We are optimistic that there could be a bipartisan path forward. However, if there continues to be an insistence on privatization of the utility as well as persistent bashing of PREPA's union, bipartisanship will likely not be possible.

Nevertheless, we strongly believe and would insist, that any legislation providing for a direct Federal role in rebuilding PREPA must include the following:

- First, the interest of PREPA's creditors must not be a primary concern.
- Second, renewables must become the primary energy source in PREPA's future power generation so that the long-term cost of producing power will be reduced for ratepayers.
- Third, any Federal takeover of PREPA must come with sufficient funding to provide for a modern, efficient and reliable electric grid and most importantly, must have local support and buy-in.
- And fourth, PREPA must be overseen by a strong, fully independent regulator.

That said, I want to emphasize that it is not just the problems surrounding PREPA that warrant our attention, but also the suffering that continues to be faced by all of Puerto Rico—more than 10 months after the storms. The people of Puerto Rico still need our assistance and support, even today.

Hurricane Maria ripped apart homes on the island, brought the economy to a screeching halt, and drastically accelerated an exodus of young families and jobs from the island.

The island has seen dozens of closed schools, it still faces among the highest rates of drinking water contamination in the United States, and it is trying to recover from several years of dramatic cuts to basic safety net programs.

Puerto Rico's healthcare system was chronically underfunded even before the hurricane, which has contributed to the epidemic of Zika-linked illness and mental health problems.

The recovery in Puerto Rico is not proceeding smoothly. Recent developments—including a report that concludes that the Puerto Rico electric grid is in even worse shape today than before the storm—make a strong case for additional congressional action.

Even FEMA, in an after-action report released recently, acknowledged what we already knew—that it failed to be prepared for what nature delivered to Puerto Rico last year.

Thousands of Puerto Ricans still do not have a ceiling covering their homes and hundreds still don't have electricity—10 months after the storms hit.

So, while reform of PREPA is important, we must not stop there. We must also do the oversight on the recovery spending that needs to be done to ensure that the basic needs of American citizens on Puerto Rico have been met.

I look forward to hearing from our witnesses.

STATEMENT OF THE HON. NYDIA M. VELÁZQUEZ, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Ms. Velázquez. Thank you, Ranking Member Grijalva, for this opportunity, and I want to thank you, Chairman Bishop, for convening this hearing.

Make no mistake, I will not sit here and try to sugarcoat the failures we have seen at PREPA. Everyone in this room knows about Whitefish, about the resignation of PREPA's entire board, and what has become a constantly rotating CEO job. And most of all, we know that PREPA has one of the highest costs per kilowatt hour in the United States without quality of service to match.

However, these undeniable mistakes and overwhelming challenges do not mean that the Federal Government should take over PREPA. And I am extremely glad to hear that that is not the intention. Today, on the 120th anniversary of the U.S. invasion of Puerto Rico, we cannot start down yet another path of misguided and ill-defined control.

To be sure, Puerto Rico needs our help, but it does not need another layer of bureaucracy. To this point, I would like to stress five principles that I believe are essential for a strong foundation as this conversation continues.

First, any proposal must have local buy-in. The lack of true community engagement will jeopardize any and all efforts.

Second, it is imperative that Congress provide financial resources and technical assistance to design and build a modern, efficient, and reliable electric grid.

Third, there must be a strong, fully independent regulator that protects consumers from fraudulent practices and irresponsible decisions. We have repeatedly heard how PREPA embedded into its operational structure schemes to benefit certain stakeholders at ratepayers' expense. That must end, and we need full transparency, going forward.

Fourth, as Puerto Rico's distribution and generation systems operated, the use of renewable energy must be maximized. It will be nothing short of tragic if, as Puerto Rico rebuilds, we continue the island's dependence on fossil fuels that must be transported across, as President Trump said, big water by ship and barge, rather than make use of the very resources available on the island.

The last principle I will identify is this: under absolutely no circumstances should this Committee cut a deal for PREPA predators. Many of us in this room, including Chairman Bishop, supported PROMESA, which laid out a comprehensive process for debt restructuring. This process is now well underway, and is close to achieving its goal. It makes no sense to undo what is already working, just to bail out PREPA predators.

That is what the courts are for, not the halls of Congress.

On that note, I look forward to hearing from you all today, and I want to thank the Chairman and the Ranking Member again, and I yield back to Mr. Grijalva.

Mr. GRIJALVA. I yield the remaining time to Mr. Soto. Thank you.

STATEMENT OF THE HON. DARREN SOTO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. Soto. Thank you, Mr. Chairman and Ranking Member. We know PREPA has fallen behind over the last couple of years, over decades, really. An investment on the grid in reliability and vulnerability is now the case for the entire grid. But Hurricane Maria then was a big wake-up call. It led to the longest blackout in U.S. history since we have had power among any Americans.

I want to outline three goals that I think are important as we go forward. First is resiliency, followed by renewables, and reform.

Resiliency in making sure that we have the funding, the invest-

ment, and the structure to invest in hardening the grid.

Second, renewables. Puerto Rico can be an experimental workshop for solar and wind and also biofuels to help generation on the

island and help the economy.

And last, reform. To make the system look more like most states with municipal-owned utilities, investor-owned utilities, and rural co-ops, ensuring greater competition and rates that are low, and investment for the long term, while still safeguarding critical labor agreements and pensions, and also having new providers take on a portion of the debt.

And I know that all three parties in Puerto Rico are working together to try to push these reforms forward. Whatever we do here today, we should make sure is in concert with those efforts to make

sure that we have a long-term, sustainable system.

With that, I yield back. Mr. Grijalva. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you. I would be remiss at this stage not to allow the remainder of my time to go to Miss Colón-Representative González—sorry, I am getting mixed up here. I had about $2\frac{1}{2}$ minutes, if you would like to take that time.

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

Miss González-Colón. I want to begin by thanking you, Chairman Bishop and Ranking Member Grijalva, for having this vitally important hearing regarding PREPA. This is not the first time the Committee is having hearings about the power grid on the island. But this time we need to try to solve and prepare the resources for the island.

We already allocated more than \$2 billion during the last budget after the hurricane, but we need to provide also not just the resources, but the technology, and the assistance in order to provide transparency to the process that has been taken in PREPA.

With that, I want to thank you again for your steadfast leadership and commitment to the island recovery before, during, and

after the impact of Hurricane Maria.

Today's hearing presents a great opportunity to look forward to the future and avoid the mistakes of the past. Today is an opportunity to look at and ensure a solid energy future for the people of Puerto Rico. And the need to reconsider PREPA's future has been known for the last year, because of the devastation of Hurricanes Irma and Maria.

All sides in Puerto Rico have agreed that an obsolete and expensive energy system is the obstacle to economic progress on the island. And the debate has been on how to fix it. That has not been changed. And I think we all agree that privatization is the only option of the following first the control of the first three first thre

tion to the future for the energy grid on the island.

The 2017 disaster just unveiled the precarious state of our energy grid, and all communities with the lack of power for many months, through the lack of maintenance, are a testimony of that. Instead, we need to focus on rebuilding a more resilient energy grid in Puerto Rico, not just a matter of reconstruction or patching up,

but a matter of building toward the future.

On January 22 of this year, the governor of Puerto Rico announced the transformation of our energy system by the creation of the public-private partnership. This is the first time ever that Puerto Rico was actually allowed to build a public-private partnership by law to provide a rigorous process of transparency and flexibility to frame negotiations that result in a financially viable electricity system with a focus on consumer welfare and a privatization process. We need to see that that actually happens at the end of the year.

So, this is the critical point in any process of that transformation: transparency in the processes, and being able to offer certainty to the investors and businesses as to what will be the policies and the costs that they can make plans accordingly to build Puerto Rico.

In that, I will say that we need the efforts to include resiliency, fuel source diversification, including renewables, and both public and private investment. I look forward to hearing our speakers today.

Thank you, Chairman.

The CHAIRMAN. Thank you. All right. We will now introduce our witnesses. And you are all going to have to help me with your names.

First, Bruce Walker—actually, you don't have to help me with that one.

[Laughter.]

The CHAIRMAN. I got through that one OK. He is the Assistant Secretary, Office of Electricity in the Department of Energy, here in Washington, DC.

David Svanda—Svanda?

Mr. SVANDA. Svanda.

The CHAIRMAN. Svanda, who is the Principal from Svanda Consulting, here in Clarksville, Maryland.

Eduardo Bhatia—close?

Mr. Bhatia. Close.

The Chairman. OK. Sorry. If it was German, I would have got it.

He is a Minority Leader in the Senate of the Territory of Puerto Rico, from San Juan.

Thank you for being with us.

Mr. Bhatia. Thank you.

The CHAIRMAN. James Spiotto?

Mr. Spiotto. Yes.

The CHAIRMAN. I got it?

Mr. Spiotto. Yes.

The CHAIRMAN. He is the Managing Director of Chapman Strategic Advisors from Chicago, Illinois.

And Thomas Emmons, who is Partner in Pegasus Capital

Advisors in New York City.

Let me remind the witnesses that, under our Committee Rules, this is oral testimony that is limited to 5 minutes each. And I will

be pretty Draconian on the gavel when it comes to that.

Just so you know, the microphones in front of you are not automatic. If you have not been here before, and I think all of you have, the green light means that you have plenty of time going. The yellow light means you have 1 minute left. And the red light is when the time has expired.

However, your entire written testimony is part of the record, and you don't need to add anything to that. That is already there. This

is just in addition to that.

With that, we will go from left to right here. We will start with Mr. Walker. You are recognized for 5 minutes to testify.

STATEMENT OF THE HON. BRUCE WALKER, ASSISTANT SECRETARY, OFFICE OF ELECTRICITY, DEPARTMENT OF ENERGY, WASHINGTON, DC

Mr. Walker. Thank you. Chairman Bishop, Ranking Member Grijalva, and distinguished members of the Committee, I appreciate the opportunity today to discuss Puerto Rico's electric infrastructure and the future operation of the grid.

I would like to highlight just a small portion of the work with

DOE's involvement in Puerto Rico's recovery.

A strong recovery and revitalization is important to Puerto Rico, as well as the Nation. Maintaining and enhancing the affordability and resiliency of the electric grid at fair and reasonable cost will

provide service and value to the region.

Yet, no single investment in energy infrastructure at any one point in time will achieve resiliency. The energy infrastructure of Puerto Rico must be designed, built, managed, and maintained in such a way to withstand likely stresses, ameliorate disruptions when they inevitably occur, recover quickly, and incorporate lessons learned into post-event planning and operations.

The long-term resilience and reliability of Puerto Rico's electric grid will require capable leadership, strategic investment, workforce development and training, a strong culture of safety, and a well-defined regulatory oversight. To this end, DOE continues to work in partnership with PREPA to support Puerto Rico's recovery efforts. I will speak to three key initiatives to help PREPA.

First, strategizing electric energy policy and regulatory framework. The Southern States Energy Board, in association with DOE, is working in coordination with the Governor and the Legislature of Puerto Rico to establish a reliable, affordable, and sustainable electric energy grid system, and to advise on policy and regulatory framework for possible privatization efforts.

SSEB's advisory role is explicitly described in Puerto Rico's Act 122018, which provides the legal framework for privatization of PREPA's functions. SSEB will collect data and perform an analysis of the economic, financial, and insurance impacts of PREPA's

potential privatization to inform the development of the regulatory framework models.

They will also identify components of PREPA's privatization economics, including the generation, transmission, distribution, rate structure, feasibility studies, and transparency acts to balance the need of the Puerto Rican Government with the interests of the private investment community.

Additionally, SSEB will establish a blue-ribbon task force and solicit input from the task force on the possible regulatory framework models that provide Puerto Rico with a transparent and robust reg-

ulatory regime.

Second, the DOE report on energy resiliency solution for the Puerto Rico grid was published just recently. The report provides recommendations to FEMA and PREPA that reflect principles of resilience, and are intended to inform investments in energy infrastructure in Puerto Rico. Recommendations address near-term actions and potential long-term actions that will require further analysis to make optimal investment decisions.

Although some of the additional analysis necessary to support those resilience principles is underway, recommendations proposed in our report to improve the performance of the system include: (1) updating and establishing effective mutual aid agreements; (2) training and utilization of the incident command system during emergency response; (3) undertaking a study to determine and enforce safe loading requirements of distribution poles carrying both electric and telecommunication infrastructure; (4) replacement of temporary electricity transmission towers with potential steel monopolies; (5) finalization of microgrid installation regulation; and (6) drafting of an updated energy assurance plan.

Our third major initiative involves long-term modeling support. Our efforts, working closely with PREPA, are to develop a near real-term dynamic model that is used for operational purposes, as well as planning. This modeling effort will provide technical insight into the resiliency objectives, allowing for coordination and communication of potential solutions across stakeholder groups, and facilitate significant investment in installation of renewable energy

resources.

Several potential DOE recommendations to support grid modeling require further analysis prior to finalization. However, this analysis will be conducted in conjunction with PREPA, and should include the following: regarding (1) power flow; (2) production cost and expansion; (3) microgrids energy storage and system segmentation; and (4) cross-sector infrastructure into dependencies.

In conclusion, DOE is committed to working with FEMA and other Federal agencies and the Commonwealth of Puerto Rico and PREPA to incorporate its near- and long-term recommendations into local infrastructure projects. Over the next several months, DOE's primary focus will continue to work with our partners to support and strengthen the power grid and the critical infrastructure for the island.

Thank you, and I look forward to your questions. [The prepared statement of Mr. Walker follows:]

PREPARED STATEMENT OF ASSISTANT SECRETARY BRUCE J. WALKER, OFFICE OF ELECTRICITY, U.S. DEPARTMENT OF ENERGY

Chairman Bishop, Ranking Member Grijalva, and distinguished members of the

Committee, I appreciate the opportunity today to discuss the status of Puerto Rico's electric infrastructure and the future operation of the grid.

The U.S. Department of Energy (DOE) is the lead for providing energy-related expertise to the Federal Emergency Management Agency (FEMA), interagency partners, and the Administration as part of DOE's emergency response activities. DOE serves as the coordinating agency for Emergency Support Function #12—Energy (FEE 12), under the Nettonal Response. (ESF-12) under the National Response Framework and as the Sector-Specific Agency for Energy under Presidential Policy Directive 21. In addition, DOE is a primary agency for the Infrastructure Systems Recovery Support Function under the National Disaster Recovery Framework. As the lead for ESF-12, DOE is responsible for providing information and analysis about energy disruptions and for helping to facilitate the restoration of damaged energy infrastructure.

DOE INVOLVEMENT IN PUERTO RICO RESPONSE AND RESTORATION

DOE'S Office of Electricity and Office of Cybersecurity, Energy Security, and Emergency Response have led DOE and ESF-12 response and restoration efforts for Hurricanes Irma and Maria in Puerto Rico. Restoration efforts continue and as of July 23, approximately 99.96 percent of customers (1.47 million) are restored, according to the Puerto Rico Electric Power Authority (PREPA), the island's electric

Over the course of the 2017 hurricane season, the Department provided numerous personnel to support response and recovery efforts. These included bilingual public information personnel to provide life safety and life sustaining communications, subject matter experts as part of FEMA's Incident Management Assistance Teams, technical advisors in electrical distribution, transmission, generation, energy efficiency, renewable energy, and related topics to advise the United States Army Corps of Engineers, and personnel to support the National Response Coordination Center, several Regional Response Coordination Centers, and state emergency operations centers

DOE continues to maintain close coordination with FEMA and Puerto Rico. The Department has deployed responders under the National Disaster Recovery Framework to support ongoing energy sector recovery activities.

DOE INVOLVEMENT IN PUERTO RICO RECOVERY

A strong recovery and revitalization is important to the territory, as well as the Nation. Maintaining and enhancing the affordability and resilience of the electric grid, at fair and reasonable costs, will provide service and value to the region. Yet, no single investment in energy infrastructure at one point in time will achieve resilience. The energy infrastructure of Puerto Rico must be designed, built, managed, and maintained in such a way to withstand likely stresses, ameliorate disruptions when they inevitably occur, recover quickly, and incorporate lessons learned into post-event planning and operations. This is a continual process of improvement, one involving a reassessment and adaptation of solutions and technologies to address changing needs.

The long-term resilience and reliability of Puerto Rico's electric grid will require capable leadership, strategic investments, a strong culture of safety, and well-defined regulatory oversight. While PREPA leadership has changed over the last few weeks, and continues to be in a state of transition, DOE will continue to work in partnership with them to support Puerto Rico's recovery through several efforts.

Strategizing an Electric Energy Policy and Regulatory Framework

The Southern States Energy Board (SSEB), in association with DOE, is working in coordination with the Governor and Legislature of Puerto Rico to establish a reliable, affordable, and sustainable electric energy grid system, and to advise on a policy and regulatory framework for possible privatization efforts. SSEB's advisory role is explicitly described in Puerto Rico Act 12-2018, signed into law by Gov. Rosselló on June 20, 2018, which provides a legal framework for privatization of PREPA's functions.

SSEB will collect data and perform an analysis of the economic, financial, and insurance impacts of PREPA's potential privatization to inform the development of regulatory framework models. They will also identify components of PREPA's

¹ http://status.pr/.

privatization economics, e.g., generation, transmission, distribution; priority; rate structure; feasibility; and transparency aspects to balance the needs of the Puerto Rico government with interest from the private investment community. Additionally, SSEB will establish a Blue-Ribbon Task Force and solicit input from the Task Force on the possible regulatory framework models that provide Puerto Rico with a transparent and robust regulatory regime.

DOE Report on Energy Resilience Solutions for the Puerto Rico Grid

DOE has completed its Report on Energy Resilience Options and Potential Solutions for the Puerto Rico Grid. This report provides recommendations to FEMA and PREPA that reflect principles of resilience and are intended to inform investments in energy infrastructure in Puerto Rico. Recommendations address near-term actions and potential long-term actions that will require further analysis to make optimal investment decisions.

The interdependencies across sectors, assessment of potential alignment, and sequencing of funding across different agency programs that support various sector infrastructures will require significant coordination. The report also notes where the results of analysis are needed to articulate resilience-related, investment-grade suggestions regarding the design and specification of the electricity system in Puerto Rico.

Although some of the additional analysis necessary to support those resilience principles is underway, recommendations proposed in our report to improve the performance of the system are as follows:

- The Governor and PREPA should immediately ensure that updated, effective mutual aid agreements are primed to quickly provide support during the next event.
- To align with the objectives of the National Incident Management System, incident command, control, and coordination should follow the Incident Command System (ICS). All possible parties will train in ICS and use it during a response.
- The Puerto Rico Energy Commission (PREC) should coordinate a joint study
 with the Puerto Rico Telecommunications Board to determine and enforce
 safe loading requirements of distribution poles carrying both electric and telecommunications infrastructure.
- 4. Electricity transmission towers installed specifically for temporary emergency restoration should be considered for replacement, potentially by monopoles—many of the round monopole structures survived the 2017 storms.
- 5. The PREC should finalize microgrid regulations, and establish effective and efficient interconnection requirements and wheeling regulations with PREPA. These regulations will allow customers to design their systems to add reliability and resilience to PREPA's system.
- 6. The Commonwealth Energy Public Policy Office, in coordination with other appropriate Commonwealth agencies, should consider drafting an updated Energy Assurance Plan, which will provide for an Incident Management Team as well as other important components. Besides preparing for the next hurricane season, acting immediately will allow for leveraging the presence of Federal staff in the Joint Field Office and the Federal data collection efforts that have been underway since September. Finally, the SSEB may be able to facilitate peer-to-peer information sharing and lessons learned among Puerto Rico's neighboring governments and utilities.

Near-Term and Long-Term Grid Modeling Support

Another DOE effort is through grid modeling to support the rebuilding of a more resilient electric power grid system in Puerto Rico. This endeavor will develop a near real time dynamic model of the Puerto Rico power system that will be used not only as an operational tool, but also for planning purposes. This modeling effort will provide technical insight into the resiliency objectives, allowing for coordination and communication of potential solutions across stakeholder groups. As PREPA and the Commonwealth plan financial investments to strengthen Puerto Rico's power grid and increase disaster resilience, DOE, FEMA, and the U.S. Department of House and Urban Development will remain their supportive partners.

Several potential DOE recommendations to support grid modeling require further analysis prior to finalization. However, the analysis should be conducted, to the extent practicable, with the support and engagement of PREPA, and is best suited as follows:

- Power Flow—assesses power system operations, including generator dynamics and protective relay coordination [used to identify power system needs, evaluate technology options, and help prioritize resilience investments, e.g., transmission enhancements]
- 2. Production Cost and Capacity Expansion—informs economic dispatch strategies and long-term planning [used to understand how resource investments, system costs, and load are impacted by key policy and technology sensitivities]
- 3. Microgrids, Energy Storage, and System Segmentation—identifies where clusters of generation and load provide maximum community benefit [used to identify prepositioning of emergency generation, local hardening of infrastructure, and adjustment of emergency procedures]
- 4. Cross-Sector Infrastructure Interdependencies—characterizes reciprocal relationships within the energy sector, e.g., electricity-petroleum; electricityliquefied natural gas, as well as cross-sector infrastructure such as telecommunications and/or water [used to investigate supply disruption impacts and identify mitigation approaches]

DOE is committed to working with FEMA, other Federal agencies, the Commonwealth of Puerto Rico, and PREPA to incorporate its near and long-term recommendations into local infrastructure projects. The end goal is a modern and resilient energy system that can serve as the robust engine for Puerto Rico's economic revitalization.

CONCLUSION

I am proud of the work we are doing to address the long-term restoration and recovery efforts in Puerto Rico and grateful for the hard work of DOE's emergency responders during the 2017 hurricane season. We have made progress, but there is still more to do. Over the next several months, DOE's primary focus in Puerto Rico will continue to be working with our partners to support the mission of strengthening the power grid and critical infrastructure for the island.

Thank you, and I look forward to your questions.

QUESTIONS SUBMITTED FOR THE RECORD TO BRUCE WALKER, ASSISTANT SECRETARY, OFFICE OF ELECTRICITY, DEPARTMENT OF ENERGY

Questions Submitted by Rep. Young

Question 1. In seeking to improve the resiliency of the grid in Puerto Rico, does DOE encourage the use of improved materials (e.g., composites) versus traditional wood utility structures? As you know, P.L. 115–123, Sec. 20210(a)(1)(C) allows, specifically for Puerto Rico, actions to mitigate vulnerabilities to future extreme weather events and natural disasters. It is my hope that the Department is encouraging the use of materials that lessen our vulnerabilities by improving resiliency versus simply replacing an element that failed with the same material.

Answer. DOE is focused on ensuring that investments made into the Puerto Rico Electric Power Authority (PREPA) system add resiliency and reliability. Accordingly, we continue to investigate opportunities to improve the use of various designs and materials to identify the best capabilities available to improve overall system resilience.

There are several recommendations related to utility structures including discussions and recommendations on the materials used. DOE's Energy Resilience Solutions for the Puerto Rico Grid report includes several recommendations relative to utility poles.

In the area of electricity distribution infrastructure, there were significant failures including many failed wood poles. The DOE team's assessment of these failures concluded that many of the failures were likely caused by overloading due to telecommunication system attachments to these poles. The DOE team was uncertain of

the extent to which the telecommunication industry providers were required to conduct structural loading assessments of these attachments.

The DOE team also surmised that there was deferred maintenance associated with testing the integrity of the poles associated with the distribution infrastructure. DOE recommended that PREPA follow industry best practices for a comprehensive testing program to identify and replace wood poles that are in need of replacement. In addition, there should be careful consideration of cost-effective alternatives to wood as a material for distribution poles. Specific recommendations for the electricity distribution infrastructure relative to utility structures include:

- All replaced poles and towers should be of a design and material to survive 150 mile-per-hour sustained winds. If funds are available, electricity transmission towers installed specifically for temporary emergency restoration after Hurricanes Irma and Maria should be considered for replacement as soon as practicable, potentially by monopoles. Many round monopole structures rode through the storm effectively.
- The Puerto Rico Energy Commission should coordinate a joint study with the Puerto Rico Telecommunications Board to determine and enforce safe loading requirements of distribution poles carrying both electric and telecommunications infrastructure. Federal agencies can participate as necessary and appropriate.
- Consider additional legislation and regulation that may improve reliability
 and resilience including, without limitation: regulations that prescribe design
 and installation standards for all transmission and distribution towers and
 poles to withstand 150 mile-per-hour wind speeds, regardless of material.

Questions Submitted by Rep. Westerman

Question 1. Does the Department have any involvement over the letting of contracts by PREPA to contractors doing restoration or repair work, including evaluating the contractor's qualifications to perform the work?

Answer. No, the Department does not have any involvement over the letting of contracts by the Puerto Rico Electric Power Authority (PREPA) to contractors doing restoration or repair work. PREPA's contracting process is governed by Puerto Rican law.

Question 2. Does the Department have any involvement in the reimbursement of contractors or the distribution of Federal funds to the government of Puerto Rico?

Answer. No, the Department does not have any involvement in the reimbursement of contractors during the Federal Emergency Management Agency's (FEMA's) response for emergency restoration. During the FEMA recovery phase DOE has supported the Department of Housing and Urban Development (HUD) with subject matter experts supporting Community Development Block Grants Disaster Recovery assistance, but no Federal funding has yet been disbursed through HUD.

Questions Submitted by Rep. Graves

Question 1. Mr. Walker, can you please identify all the components (including HUD and FEMA) of disaster funds available and/or spent (including obligated) for the restoration, near and long-term reconstruction of the Puerto Rico power system? Also, please include and specifically identify the \$6B referenced relative to restoration during the hearing. A response in the form of columns which show disaster funds available and spent which identifies where they are derived and notes any restrictions on use would be helpful.

Answer. No, I cannot identify the total amount of funds allocated to the Puerto Rico power system. Congress allocated funds to Puerto Rico, including loss revenue funding, emergency restoration funding, supplemental funding with a minimum funding amount, recovery funding from the Federal Emergency Management Agency (FEMA) for emergency restoration and recovery (which has yet to be determined), and the Department of Housing and Urban Development (HUD) Community Development Block Grant Disaster Recovery funding. However, the overall amount for the Puerto Rico power system is contingent on decisions that have yet to be made. The Department of Energy (DOE) is ready, willing, and able to support technical requirements necessary for recovery.

DOE defers to FEMA and HUD for information regarding their funding of activities associated with Puerto Rico. DOE's Electricity Delivery and Energy Reliability appropriation received \$13.0 million under the Further Additional Supplemental Appropriations for Disaster Relief Requirements Act, 2018, which represents DOE's disaster funding associated with Puerto Rico and the U.S. Virgin Islands. The status for this DOE funding is shown in the table below.

	(dollars in thousands)			
Agency	Appropriations	Obligations (as of 10/22/2018)	Restrictions	
Department of Energy	\$13,000	\$11,552	Funding was provided for necessary expenses related to the consequences of Hurricanes Harvey, Irma, and Maria, including technical assistance related to electric grids.	

The CHAIRMAN. Thank you. I appreciate your testimony. Mr. Svanda, you are next. Five minutes.

STATEMENT OF DAVID SVANDA, PRINCIPAL, SVANDA CONSULTING, CLARKSVILLE, MARYLAND

Mr. SVANDA. Chairman Bishop, Ranking Member Grijalva, and members of the Committee, I appreciate very much the opportunity to testify about regulatory aspects of the energy crisis facing Puerto Rico, and make some suggestions that will enable a more affordable, efficient, reliable power system for the U.S. citizens of Puerto Rico.

I have served in various roles in the utility regulatory profession, including as Chairman of the Board and President of the National Association of Regulatory Utility Commissioners, or NARUC, while serving as a Michigan Commissioner.

Like many Americans, I sat in horror as I witnessed the devastation of Hurricane Maria in Puerto Rico, leaving the lives of Puerto Ricans in shambles. I recently spent time on the island, where I saw the destruction that remained 8 months after the storm. I saw impassible roads, mountains of debris, and, importantly, electrical lines literally nailed to trees. That is not a criticism of the hardworking teams trying to restore electricity; it is, however, evidence that there was no comprehensive emergency response plan, and that there has been no strong, independent agency requiring the utility to take appropriate actions to manage their assets.

There has been widespread concern in Puerto Rico about the possibility of exchanging the government-owned monopoly for a private-sector monopoly. What is missing in Puerto Rico, though, is an effective, well-functioning, independent regulator. The solution for Puerto Rico is to create, empower, and embrace such a regulatory agency.

For most utility infrastructure assets, a monopoly actually makes sense. The capital investment required to provide power to a large area and many customers is extensive. By having a monopoly overseen by a strong regulatory commission, redundant investment can be avoided and the monopoly made to be responsive to the needs of the customers.

If we left mainland U.S. citizens without power for 6 months, companies would be fined and executives could face prosecution.

Such accountability was not possible in the Commonwealth's version of a government-run monopoly. In fact, in its recent rate review order, the Puerto Rico Electric Commission issued a scathing indictment of the politics pervading the institutions and culture of PREPA, and those are included in my written statement.

PREC was only established 4 years ago, and through no fault of its own remains woefully ill-equipped to meet its assigned responsibilities. It is possible to achieve this by leveraging regulators and staff from the mainland, simultaneously providing an opportunity for Puerto Rico-based commissioners and staff to be both trained and developed to eventually take responsibility. NARUC routinely

conducts this type of training.

Crucial reforms must be made in Puerto Rico. Foremost among these is allowing physics, engineering, economics, fairness, and transparency to be the drivers of decision making, rather than politics. With the appropriate reforms in place, Puerto Rico could expand renewable generation on the island. That is a laudable goal. However, renewable power and other forms of distributed generation have limitations when it comes to meeting the immediate electricity demands of the island. I would be glad to discuss this further during questioning.

Planning for Puerto Rico's energy future will take a multidisciplinary coordination and effort. Throwing Federal dollars at the problem and into the hands of the under-regulated PREPA will

produce the same situation that has prevailed for decades.

In addition to establishing an independent and qualified regulatory body, Congress should take action to make the island investable. When PREPA emerges from bankruptcy, its credit rating will likely be below investment grade. Lending institutions will find that unacceptable and be unwilling to participate in the financial structure. A Federal backstop in the form of a fund guarantee or a financial vehicle will provide the assurance that is required.

One critical perspective is that when a modern, efficient, affordable, resilient power system is created on the island, we must not hand the shovel back to those who dug this hole. PREPA must be replaced. There must be a sustained and fundamental change in culture, behavior, and results. Congress must initiate this change.

I will short-circuit the remainder of my comments to simply say that we have all seen how Maria and an unchecked monopoly unleashed a perfect storm on the people of Puerto Rico. None of us can control the forces of nature, but Congress can correct past abuses and enable the construction of a 21st century power system.

[The prepared statement of Mr. Svanda follows:]

PREPARED STATEMENT OF DAVID SVANDA, SVANDA CONSULTING

Chairman Bishop, Ranking Member Grijalva and members of the Committee, my name is David Svanda and I appreciate the opportunity to testify about regulatory aspects of the energy crisis facing Puerto Rico, and make some observations and suggestions that will help point the way to a more responsible, affordable and reliable power system for the U.S. citizens of Puerto Rico.

During the past 22 years, I have served in various roles within the utility regulatory profession. From 1996 to 2003, I served as a Commissioner at the Michigan Public Service Commission. During my tenure at the PSC, I served as Chairman of the Board and President of the National Association of Regulatory Utility Commissioners (NARUC). I also served on NARUC's executive committee and board

of directors and was Chairman of NARUC's Finance and Technology Committee and its Mentoring and New Member Services Committee. I was a member of the Emerging Issues Policy Forum Board, past president of the 15-state Mid-American Regulatory Conference (MARC), and have served on the Keystone Energy Board and as trustee of the NARUC Education and Research Foundation. I was also a member of the Federal Communications Commission's (FCC) Local and State Government Advisory Committee.

Prior to my time as a Commissioner in Michigan, I served as Director of Administrative Services for Michigan Governor John Engler, and as Director of the Governor's Northern Michigan Office. Prior to that, I was a City Manager and have

served on many national, state, regional and local boards.

I am presently a regulatory consultant, serving clients focused on energy, telecommunications and water issues at the state, regional and national levels. Since founding my regulatory and strategic consulting practice in 2003, I have successfully advised a broad list of clients from all segments of the public infrastructure sector, including numerous corporate, non-profit, financial, international, and association interests.

Like many Americans I sat in horror as I witnessed the devastation of Hurricane Maria as it moved across the Caribbean and her Category 4 winds bore down on Puerto Rico and delivered a devastating strike to the island's energy, telecommunications and other critical infrastructure which left the island cut off from the

outside world.

Also, this past May I spent 5 days in Puerto Rico, where I saw firsthand the devastation that remained even 8 months after Hurricane Maria. I saw impassable roads, mountains of debris and electrical lines literally nailed to trees. That is by no means a criticism of the hardworking people who were trying to restore electricity to the citizens of Puerto Rico as quickly as possible.

It is, however, evidence of the destruction wrought and the lack of execution on a comprehensive emergency response plan. In addition, it is clear there has been no independent voice requiring the utility to take appropriate actions to manage the utility's assets, or a guardian of the PREPA emergency restoration accounts that prior to the storm were reallocated by the Puerto Rico Government to pay for other services

There has been a great deal of concern expressed in Puerto Rico about the possibility of exchanging the government-owned monopoly for a private sector monopoly. Unfortunately, this logic is missing a critical element—an effective, well-functioning regulator. It is understandable that Puerto Rico thinks 'monopolies are bad' since

they have never seen one which is balanced by an appropriate regulator.

For most utility infrastructure assets, a monopoly makes sense. The capital investment required to provide power to a large area and many customers is extensive. By having a monopoly, redundant investment can be avoided—actually, in many situations, the lack of a monopoly, and therefore the lack of assurance that the investor will be confident in their investment, can result in no one making the

investment in the first place.

In general, the role of a utility regulator is to stand in the place of 'competition'. The regulatory agency, over time, acquires a wealth of experience and knowledge to ensure stable, economically sound and efficient decision making. The regulator provides an appropriate balance between needs and service of the customer and the fair and predictable treatment of the utility. The confidence provided by the regulator to the utility is what incentivizes the long-term planning and significant capital investment required. This is also important to the customers as only a financially healthy utility is able to perform its critical function to serve the needs of their customers. A properly functioning regulatory agency ensures that neither the

customer nor the utility is unduly advantaged nor harmed.

What our fellow Americans in Puerto Rico have been going through for nearly a year is unacceptable. By comparison, as Hurricane Irma moved north of Florida on September 11, 2017 it left approximately 6 million Floridians (2/3 of the state) without power. Within 11 days, power was restored to all but 13,337 Floridians (only 1 percent of the population). On September 20, 2017, Hurricane Maria made landfall on Puerto Rico. But 3 months later, as families prepared for Christmas, PREPA was unable to report on how many customers were without power. Instead, they reported on their peak load—only 65.4 percent after 3 months! In fact, in February of this year, news reports indicated that PREPA hoped to restore power to 90 to 95 percent of residents by the end of March. If we left this many mainland U.S citizens without power for 6 months, companies would be fined and executives could face prosecution.

There is no doubt that Hurricane Maria was a devastating storm that would strain the resources of any of our 50 states. However, as those other states

recovered from their natural disasters, it became clear that the havoc and destruction that Maria brought to Puerto Rico was different. The massive destruction that laid waste to Puerto Rico exposed the consequences of years of fiscal mismanagement, and disregard for the maintenance of the facilities. This dereliction of duty, and failed maintenance standards by the PREPA Board and elected officials of the island directly played a role in the destruction of their electric grid. By fiscally mismanaging PREPA and driving the utility into bankruptcy by acquiring more than \$9.2 billion of debt, it left the utility without the proper resources to maintain and operate a 21st century grid (or even a 20th century grid). It is this failure of regulatory oversight and financial mismanagement that I would like to address today, and hopefully provide my expertise in creating a framework that will assist in the creation of a new entity that will be more efficient in its capabilities, resilient in sustaining the next natural disaster, and more consumer friendly in providing cleaner, low cost electricity to the island.

Early in my professional career in city and county management, I managed critical infrastructure utilities and understand effective management. In my 22 years of professional regulatory experience of working with regulated energy and tele-communication utilities, I have never seen a system as "unique" as PREPA. It is an example of a long-gone era where local governments manipulated their utility's operations to benefit a few, at the cost of many. In no other state does the utility serve as the generator, transmitter and distributor of electricity with no regulatory oversight. In no other state does the utility give free power to municipalities—and leave the citizens to pay the cost. It's a perfect example of the fox guarding the hen house. PREPA's governing board and Executive Director are all appointed by the island's governor, and remain in their roles or are replaced in accordance with the whims of each new administration. Similarly, the members of the Puerto Rico Energy Commission (PREC)-newly formed as of 2014, inexperienced and understaffed-are also governor appointees and subject to removal and replacement with each new administration.

Unfortunately, it is my understanding the plan to privatize only exacerbates this problem by allowing local politicians and the PREPA board—hand-picked by the Governor-to determine customer rates and the sale of assets. For example, the plan states PREPA assets can be disposed of "without having to comply with any process, requirement, approval or revision of PREC or any other regulatory commission." This is a recipe for disaster and will inflict continuing poverty, disadvantage and sub-standard living conditions on the people of Puerto Rico.

In no way do I believe anyone should suffer the tragedy and the magnitude of destruction as witnessed by Hurricane Maria. However, it is clear that there is a moral obligation to reset the management of the utility and the outdated culture of an unregulated monopoly. With this clean slate I would offer a few core principles that can be the foundation for an independent regulatory entity that can set fair

and justifiable rates for all Puerto Rican consumers.

I have freely used the word "independent" when describing what is needed on the island in the form of regulatory body. However, in the case of Puerto Rico it should be looked upon as de-politicizing the rate making process by removing the legislature and Governor's interference in that process. Once the regulatory body has the confidence that it can exercise its responsibilities in a fair and professional manner it can move forward in the process of creating a robust and competent regulatory framework that will benefit all consumers on the island. These steps include: depolitization, planning and approval, cost controls, fair rates, and recovery of nonbypassable costs.

De-politicization

In a challenging environment, the regulator's key duty should be to appropriately balance the interests of all stakeholders. Unfortunately, this is not the case in Puerto Rico. For most of PREPA's 70-year existence it has operated as an unregulated monopoly overseeing its own operations, management and rates. Equally unfortunate, when the PREC was finally established to regulate and monitor PREPA's operations in 2014, it was made toothless by the territory's legislative bodies. It is this political infighting that must be rooted out, if the utility can be expected to truly serve its citizen customers and to attract the necessary financial investments. Amazingly, the last time PREPA raised rates (not withstanding fuel charges) was 1989, which is part of the reason why they still use bunker oil, and have inefficient generation and dilapidated infrastructure. Who would want to invest into this type of organization?

In fact, in its recent rate review order, PREC put its finger on the problems when it stated:

"The quadrennial turnover of managers with each new political administration, the political pressures from elected officials to avoid necessary rate increases, the failure of government agencies to pay their electric bills on time, the irresponsible initiation and termination of expensive capital projects, the high levels of electricity theft, the work rules that prevent efficient use of well-paid employees, the poor recordkeeping and antiquated administrative procedure, the compensation schemes that keep PREPA from recruiting and retaining qualified and experienced personnel—all this must come to a halt, to be replaced by universal commitment to the good of the Commonwealth." (Rate Review Order, pp. 23—24)

A typical utility regulator has Commissioners with various, but appropriate backgrounds. Most importantly, they are supported by experienced staff with decades of cumulative institutional knowledge in how the regulatory structure and process functions, the long-term needs of the system and how to balance the needs of both utility customers and the utility(s) themselves and decisions are made based on a documented public record. As many congressional members might admit, particularly in the first few years of their tenure—having an experienced staff supporting their efforts is the difference between being effective or not.

PREC was only established 4 years ago. The Commissioners were not experienced in regulating an electric utility, nor did they have staff with sufficient experience and background to support them. Through no fault of their own, the PREC is woefully ill-equipped to serve its assigned role and responsibilities. Puerto Rico, and more importantly, Puerto Ricans, need a regulator that can immediately serve these critical roles. It is possible to achieve this by leveraging regulators and staff from the mainland while simultaneously providing an opportunity for Puerto Rico based Commissions and staff to be trained and developed to take over those responsibilities when they are ready. I have laid-out one potential approach to doing so at the end of this written testimony.

Planning and Approval

Had PREPA had regulator-required disaster recovery plans in place, the Whitefish scandal would have been avoided, mutual assistance agreements would have been in place, and recovery would have begun in earnest at least a month sooner, and progressed in a more organized manner. A well developed disaster recovery plan would have ensured that PREPA had a materials management process in place to assist its procurement of materials and services immediately after the Hurricanes. Due to lack of regulator-required planning, what took 11 days in Florida took 8 months in Puerto Rico.

Cost Controls

As a regulator and as President of NARUC I saw many variations of strong independent regulatory bodies and how they can drive efficiencies and benefits for customers. Nowhere does this structure work better than in the electric utility industry. Ratemaking is not simply an exercise in applying mechanical formulas and "crunching numbers" to calculate the lowest possible level of rates for the short-term. Rather, regulators must set policies that will operate in the long-term interest of consumers, utilities and ultimately the state or territory in which they are employed. Maintaining a financially healthy electric utility benefits customers over the long term by maintaining credit ratings, lowering financing costs, and providing access to the capital necessary to finance current and future infrastructure and environmental investments timely and efficiently. Ratemaking is not a zero-sum game where maintaining financially healthy utilities can only come at the expense of ratepayers over the long run.

Fair Rate Setting

The regulator is the voice for the citizens on the island in this process. The regulator protects them from rate shocks, and ensures that the price they pay is as fair as possible and equitable for today's citizens and future generations of citizens.

Recovery of Non-Bypassable Costs

The regulator should have the authority to determine whether to impose non-bypassable charges on customers who elect to "disconnect" from the T&D system in order to socialize system benefit costs among all island residents.

A FOUNDATION FOR RENEWABLES

Integrating renewable resources is an important planning consideration, however, given the current state of the grid, providing a solid foundation of grid-scale generation and strong, reliable transmission and distribution will be the most effective means to cost-effectively leveraging renewables. It will also be the quickest path to the resiliency so critical to the people and businesses on the island to minimize dis-

ruption from future weather events.

Increasing the use of renewable power is a laudable goal, and in some parts of the island it will play a key role in providing electricity to customers. But, renewable power is a laudable goal, and in some parts of the island it will play a key role in providing electricity to customers. But, renewable power of distributed generation have severe limit able power, microgrids, and other forms of distributed generation have severe limitations when it comes to meeting the immediate electricity demands of the island. The first limitation being it is extremely cost prohibitive to most of the island's residents where the average median income is less than \$22,000 per year. In addition, each individual that leaves the "grid" by either utilizing roof-top solar or individual power sources means that other residents that can't afford solar panels, or whose roof is still held together by a blue tarp does not have the flexibility to utilize these resources.

Last, the physical size of Puerto Rico and its topography limits the potential for resource allocation methods that you may find in a larger geographic area, such as a Regional Transmission Organization (RTO) in the Midwest. The island just isn't large enough to sustain major wind farms or solar arrays which take up hundreds of acres for a minimal amount of generation.

A CREDIBLE PATH FORWARD

Unfortunately, the current privatization proposal, and recently passed territorial statute do not follow this accepted and time-tested formula. Their plans are an extension of the past that keep the territory's government in charge of an unregulated monopoly by providing rate making authority, and the approval or denial process of any sales of assets and equipment. This is proven recipe for disaster, and will only be exacerbated by some form of massive waste of Federal dollars that props the state waster that the property of the propert up this state-owned monopoly. Simply throwing billions of Federal dollars at this problem and into the hands of the under-regulated PREPA Board will only produce the same untenable situation that the island currently suffers. It will only perpetuate the bankruptcy of this failed entity, and every time there is a natural disaster the Federal Government will once again be called on to bail out PREPA and its political controllers.

For Puerto Rico to recover, and once again become the "Jewel of the Caribbean," Congress must act to provide a reliable, resilient and efficient electric grid system for our fellow citizens on the island. It must break PREPA free from the political forces that have driven it into the ground, and can do so by creating a strong independent board, free from the restrictions of the political class of San Juan. As with all mainland states, an impartial regulator will fairly and deliberately evaluate the generation and transmission needs of the island. While this has long been the goal of many on the island, it will take the firm hand of Congress to effectuate this change. Only through Federal legislation will Puerto Rico be able to change its regulatory course, and set out on a new path that will bring needed investment, management expertise and technological advancements that can drive efficiencies and lower

ment expertise and technological advancements that can drive efficiencies and lower the cost of power for all consumers.

An experienced, well-functioning commission could be developed in a relatively short time while simultaneously providing a strong training ground for incoming commissioners and staff. In the United States, individual states have been creating commissions and developing utility regulatory agencies since 1861. Thus, there is ample knowledge and experience from these 50 laboratories of democracy regarding how these agencies can be organized and function. These are tried and tested functioning models, each with their own nuances. The lessons learned by the mainland states can be readily applied to create a well-functioning independent and states can be readily applied to create a well-functioning, independent, and sustaining regulator for the people of Puerto Rico.

Organizations such as NARUC can be utilized to identify human, educational and

other resources which can be used to comprehensively empower the new regulatory agency. Such an agency would likely include five commissioners and capable staff which would provide for continuity and both breadth and depth of purview to the commission dynamic. Mainland organizations could also assist a Federal Administrator with establishing minimum criteria and qualifications for appointing Commissioners and hiring full-time staff.

Areas of needed staff specializations include: economists, accountants, financial analysts, engineers, and attorneys. Building upon those areas of technical expertise, there is extensive training available to help these professionals apply their skills specifically to utility regulation. That training is available through NARUC, EEI,

and other reputable industry organizations.

To ensure the optimal effectiveness of the agency (Commissioners and staff), it is critical to provide a sufficient budget to attract and develop staff quickly. Commissioners and staff will need to process large amounts of multi-disciplinary information to render solid, credible decisions for the people of PR. The precedents established by this initial set of Commissioners will build the foundation on which trust and confidence in the agency will rest. It is critically important that the foundation is as strong as in the mainland states. The sooner such a structure can be put in place, the sooner there will be development of institutional knowledge for future generations of Commissioners and staff.

FINANCIAL CONSIDERATIONS

In addition to establishing an independent and qualified regulatory body,

Congress should take action to make the island "investable."
When PREPA emerges from its Title III bankruptcy proceeding, its credit rating, and that of the island, will likely be below an investment grade rating. Furthermore, if the exodus of Puerto Rico's residents continues, there will not be a stable rate base from which to recover the costs of service and system improvements. Until the electric system and the service it provides to Puerto Rico improves significantly, the rate base will likely continue to decline. Any entity that would look to invest in Puerto Rico will require a certain amount of financing of its investment. However, lending institutions' willingness to extend credit at reasonable rates requires confidence that borrowers will be able to generate revenues necessary to repay their debt. For that reason, the Federal Government should provide some means to assure financing institutions that the island's electricity providers will be able to recover their costs and pay the expenses incurred in providing service to PREPA's customers. A Federal financial "backstop," in the form of a fund, guarantee or other financial vehicle, would provide such assurance.

Simply put, there is a role the Federal Government can play—not as a utility owner-operator, but—as a provider of financial assurance to "backstop" the billions of dollars of private capital that will be required to modernize Puerto Rico's electric

A time-limited financial assurance would bolster investor confidence as the stateowned utility is unwound from its political past while Puerto Rico also rebuilds its basic credit capacity. Such a program would not be a loan guarantee, but could be structured as "risk sharing" between the Federal Government and private investors. The objectives would be to smooth privatization and ensure regulatory independence takes hold and population flight from the island is staunched.

Investment and development would occur on a phased schedule over a period of years. Properly structured, the government would never be exposed to the full value of the private capital investment required to rebuild the electric system, but the

assurance would make Puerto Rico investable again.

Once the regulator is in place, and investors have confidence they will be treated fairly and impartially, Puerto Rico will begin to regain its footing in the financial markets. Let us not forget that Puerto Rico is still in bankruptcy and its short-term economic situation is bleak at best. For the island to move away from "vulturefunds," and other greedy investors only looking to turn a dollar—the Federal Government should commit a limited amount of resources to ensure the financial viability of the island. We saw the Treasury Department offer assistance to NYC after the September 11 terrorist attacks, and again after super-storm Sandy savaged the East Coast. These backstops, and having strong state regulators provided the confidence needed for institutional investors to rebuild NYC and the surrounding area.

A NEW STEWARDSHIP

One critical perspective is that when a modern, efficient, affordable, and resilient power system is stood up on Puerto Rico, we must not hand the shovel back to those who dug this hole. PREPA must be replaced. There must be sustained and fundamental change in culture, behavior, and results that this entity has proven chronically incapable of delivering.

It is time to start anew, with a privatized system wherein electricity customers are paramount. Puerto Rican households and businesses deserve transparent, accountable, reliable, and affordable electric service. I believe the geography and logistics of the island would best be served by a comprehensive power system capable of delivering economies of scale and that a competent, apolitical, independent regulatory authority can ensure that stakeholder interests are protected.

In summary, the key ingredients for rebuilding the efficient, affordable power grid of the future on Puerto Rico are:

- An independent and experienced regulator, who will protect consumers while
 overseeing the transition to affordable baseload fuel source and modern efficient generation, and a resilient, effective transmission and distribution
 system, and
- 2. Due to the financial situation of the island, Federal assurance for rate protection and investment will likely be required.

Members of the Committee, we have all seen how Maria and an unchecked, uncontrolled monopoly unleashed a perfect storm on the people of Puerto Rico. Going forward, none of us can control the forces of nature, but Congress can correct the past abuses of the monopoly, and enable the construction of a 21st century power system for a brighter future.

Thank you for listening, I look forward to your questions.

The CHAIRMAN. Thank you. Sorry to short circuit you there.

Señor Bhatia—Bhatia, right?

Mr. Bhatia, yes.

The CHAIRMAN. Thank you. From now on I will turn to you for every announcement.

Sir, you are recognized for 5 minutes.

STATEMENT OF EDUARDO BHATIA, MINORITY LEADER, SENATE OF PUERTO RICO, SAN JUAN, PUERTO RICO

Mr. Bhatia. Thank you so much, Chairman Bishop, Ranking Member Grijalva, members of the Committee. Thank you for inviting me to testify on this important matter.

Access to energy is a life or death issue for all of us. But Puerto Ricans died in the aftermath of Hurricane Maria due to lack of electricity.

What brings us here today is essentially one question, just one question: How do we use our legislative resources and authority to create a robust, resilient, and cost-efficient energy system in Puerto Rico?

We are not here today, and should not be here today, discussing how to fix PREPA. If PREPA wants to exist, it should compete on equal terms with modern, clean, cheaper providers of energy.

The time must come for a coalition of forces to jointly do three

things.

First, privatizing PREPA without realizing the enormous opportunity to create a new, open energy market is akin to privatizing a payphone company in the 1990s. New technology has replaced the need for PREPA. A well-regulated, open energy market must be created in Puerto Rico, where innovation, cost, structure, and choice work in favor of the consumer.

Citizens have been hostages for too long with an outdated stateowned monopoly. They deserve to be liberated. And Congress can help. But that liberation cannot happen if we substitute the control of the state by a privately-owned monopoly.

The island must be divided into manageable, independent interconnected microgrids. Emphasis should be placed in the abundant sun and water that Puerto Rico has as a source of energy. The time has come to evolve from fossil fuels into solar and hydroelectric energy. There must be an organized phase-in/phase-out process. Here in the mainland United States, there are over 900 rural energy co-ops that could very well serve as a model for the future energy system of Puerto Rico. Our co-ops on the island are robust

and very well managed.

I encourage this Committee to study a proposal to assign a portion of the Federal funds to the green energy fund created in Puerto Rico. The idea is to appropriate significant funding to assist low- and moderate-income families gain access to solar energy and storage. Let's make Puerto Rican families prosumers—consumers and producers. That is, consumers and producers of energy, just like Airbnb or Uber.

Second, as I mentioned earlier, that new energy market must be well regulated. The Puerto Rico Energy Commission was established under Act 54 in 2014. It was my bill, as a very first non-partisan, independent energy regulator with fiscal autonomy from the government. And its results have been excellent. It angers me that the Puerto Rico Fiscal Oversight and Management Board has found the existence of this independent regulator somewhat of a problem. Just 3 weeks ago, the operating budget of the Puerto Rico Energy Commission was reduced from \$7 million in 2017 to \$1.8 million in this new budget, a reduction of over 70 percent of its budget.

And third, the reckless governance of PREPA and the lack of serious leadership as we move forward has been the issue. Since 2017, PREPA has had five executive directors and two different governing boards. Forget that PREPA is an elected utility. No company in the world, not even the Boy Scouts, private or public, is able to operate with efficiency while undergoing similar frequent and erratic changes in leadership.

The current management crisis at PREPA is a direct consequence of deviating from the energy reform process that we initiated in 2004. For more than a year, the government failed to appoint the chairman of the Puerto Rico Energy Commission. That

must change.

Finally, I must address possible rumors and proposals for a possible Federal takeover of PREPA. I understand the frustration of this Committee and other stakeholders with the lack of proper governance at PREPA. I share it and live it every day. However, I do not support a takeover of PREPA by the U.S. Department of Energy.

I submit that the Department of Energy and FERC should commit themselves to a more active role of jointly developing specific mandates and deadlines for the transformation of PREPA. My ask here is for Congress to work closely with the Senate of Puerto Rico, the U.S. Department of Energy, the Southern States Energy Board, the Rocky Mountain Institute, the Institute of Competitiveness and Economic Sustainability, the Puerto Rico Manufacturers Association, the College of Engineers, and others.

In closing, I will just say that there is also a very serious issue of democracy and self-government in this whole process, and I hope the Committee addresses it soon. Thank you.

[The prepared statement of Mr. Bhatia follows:]

PREPARED STATEMENT OF SENATOR EDUARDO BHATIA, MINORITY LEADER, SENATE OF PUERTO RICO

Chairman Bishop, members of the Committee, thank you for inviting me to testify on this important matter. My name is Eduardo Bhatia. I am a former president of the Senate of Puerto Rico (2013–2016), and currently its minority leader. I have spent years addressing poverty issues and carefully crafting, advocating and promulgating energy policy for the people of the island.

Access to energy is a life or death issue. Hundreds of Puerto Ricans died in the aftermath of hurricane Maria due to the lack of access to electricity. Thousands more developed medical conditions after drinking unsanitary water. Lack of access to reliable and affordable energy is also a "life or death" issue for business and

industry.

What brings us here today is essentially one question: how do we use our legislative resources and rulemaking authority to create a robust, resilient and cost-efficient energy system in Puerto Rico. We are not here today, and should not be here today, discussing how to fix PREPA. If PREPA wants to exist it should compete on equal terms with modern, clean, cheaper providers of energy. The time has come for a coalition of forces to jointly do three things:

First: Privatizing PREPA without realizing the enormous opportunity to create a new open energy market is akin to privatizing a pay phone company in the 1990s. New technology has replaced the need for PREPA. A well-regulated open energy market must be created in Puerto Rico where innovation, cost structure and choice work in favor of the consumer. Citizens have been hostages for too long of an outdated state-owned monopoly. They deserve to be liberated. And Congress can help. That liberation cannot happen if we substitute the control of the state by a privately-owned monopoly. PREPA is the largest public electric utility in the United States. Its size and centralized control over 1 million plus customers make it an unbearable company to run when so many mistakes can and have disrupted the energy service to everyone for days and even months. Among public utilities in the United States, PREPA is Number One in served customers and Number One in revenues. Also Number One in the size of its debt.

- The island must be divided into manageable, independent yet interconnected microgrids. The establishment of personal, cooperative, community-based and third party microgrids, as recently allowed by the Puerto Rico Energy Commission, must be encouraged.
- Emphasis should be placed in the abundant sun and water that Puerto Rico has as a source of energy. The time has come to evolve from fossil fuels into solar and hydroelectric energy. We are already working locally on a clear schedule to phase in renewable energy and phase out fossil fuels. I am sure the local public policy being designed in the Puerto Rico Senate by a group of local legislators will include such transition. Puerto Rico should be the showcase in America—la vitrina—of renewable energy.
- Hawaii is a great model for this Committee to understand the nuances of island challenges. The Hawaii 2045 energy plan does exactly what I have just proposed. I encourage you to hold a serious dialogue with Hawaii's policy makers and stakeholders to understand their evolution.
- One of Puerto Rico's economic strengths today is its cooperatives and the power of private, yet sustainable economic structures through a democratically controlled enterprise. Here in the mainland United States there are hundreds of rural energy cooperatives that could very well serve as a model for the future energy system of Puerto Rico. The nation's consumer-owned, not-for-profit electric cooperatives are unique within the \$391 billion U.S. electric utility industry. More than 900 cooperatives in 47 states provide electric service to almost three-quarters of the Nation's landmass. Co-ops serve more than 19 million businesses, homes, schools, churches, farms, irrigation systems and other establishments in 2,500 of 3,141 counties in the United States. They are governed by a board of directors elected from the membership which sets policies and procedures that are implemented by the cooperatives' management. A bipartisan bill filed in the Puerto Rico Senate by Senator Larry Seilhamer and myself (S.B. 984) will be considered soon to enable local legal recognition for electric cooperatives.
- Recent technological innovations have transformed multiple industries in the United States and the world. Citizens are no longer just consumers, but the new, open economy is allowing them to be small producers. Think of taxis and Uber; think of hotels and Airbnb; think of payphones and new cell phone

technology. Consumers have assets that can be used to produce and obtain revenues. The new term is PROSUMER. Well, energy innovations with photovoltaic devices and semi-conductors are now allowing consumers to use their rooftops as solar energy producers and/or solar farms to produce energy at a smaller scale. Batteries for energy storage have also evolved and are now affordable. An interconnection of these prosumers in Puerto Rico could very well create in the future an abundant amount of energy without the need for large investments in massive generators and a desire to get off the grid.

- Since Congress and the Administration are and will continue to appropriate resources for Puerto Rico's recovery, I encourage this Committee to study a proposal to assign a portion of those funds to the "Green Energy Fund" created under Puerto Rico's Act 83–2010. The idea is to appropriate significant funding to assist low- and moderate-income families gain access to solar energy. Through green energy credits, the Department of Energy should work with Puerto Rico officials to open the market for the innovation and participation of thousands of local renewable energy prosumers. We have the rooftops, we have sun: what we lack are the resources. Distributed generation is key to transform our energy model.
- Wheeling must be regulated soon by PREC. It is a key element for the industrial sector, but it could also be useful for the development of a distributed model for other private generators. For years, PREPA ignored the mandate of Act No. 73–2008 to regulate wheeling. Act 57 transferred that responsibility to PREC. It is time to act.

Second: As I mentioned earlier that new energy market must be well-regulated. I am the author in 2014 of the law that created the first ever energy utility regulator in the history of Puerto Rico. Let me be clear: many of the problems that PREPA has come from decades of internal decisions that went unquestioned. The Puerto Rico Energy Commission ("PREC") was established under Act 57 as the very first non-partisan, independent energy regulator, with fiscal autonomy from the government. Notwithstanding its limited budget and resources, PREC has done an amazing job as an independent regulator. In 4 years, PREC:

- Approved the utility's first ever integrated resources plan (IRP);
- Presided over its first ever rate case;
- Provided significant and strong oversight over PREPA, against their will, and even challenged in the courts;
- Approved a "transition charge" to deal responsibly with PREPA's "legacy" debt;
- Initiated inquiries and investigations on key operational, performance, and financial issues at PREPA;
- Enacted new net metering regulation standards;
- Presided over customer disputes against PREPA and private energy companies;
- Enacted the first ever regulation on microgrids in the United States;
- Congress, under Title V of the PROMESA Act, delegated on PREC the authority to determine if energy projects which aspire for "critical project" designation are compatible with the IRP.

I respectfully submit that PREC must be strengthened with additional resources. Its budget must be doubled, and recent passed legislation which appears to limit their oversight powers must be further reviewed. Independent energy regulation is here to stay.

It angers me that the Puerto Rico Fiscal Oversight and Management Board has found the existence of this independent regulator somewhat of a problem. Just 3 weeks ago the Oversight Board reduced the budget of the PREC from \$7 million in 2017 to \$1,836,00 in the new budget, a reduction of over 70 percent of its budget. The most absurd part of this decision is that the budget of PREC does not come from the struggling state general fund on the island, but from a formula based on the regulated entities. We designed it that way in 2014 to avoid this problem. My ask is that this decision must be reversed. A well-funded, robust and independent PREC is essential in the development of the new energy market in Puerto Rico.

Third: The reckless governance of PREPA and the lack of serious leadership as we move forward has been the issue. It is what brings us here today.

The Puerto Rico Electric Power Authority (PREPA) was created in 1941. Its main objective was to provide access to reliable, cost effective electricity to the people of

Puerto Rico, as well as manufacturing and retail. During its heyday, PREPA was

the "jewel of the crown" of all locally state owned public corporations.

While achieving its initial objectives (by providing full access to electricity), its identity as a government-owned corporation exposed PREPA to the negative dynamics of bureaucracy, patronage, corruption, political intervention, and special interests in key procurement areas such as oil purchase, legal, financial and other types of consulting services. Both majority parties in the Island are active and organized inside PREPA, and its employees have raised thousands of dollars for political campaigns. PREPA's corporate culture is adamant in failing to embrace innovation and change. Lack of transparency has characterized PREPA's day-to-day operations and decision making. PREPA assumed, for years, that laws and regulations on energy policy were mere "suggestions," not legal mandates. For decades, PREPA accumulated an obscene amount of political power which made effective oversight impossible by the local legislature. Also, significant energy decisions were taken, for decades, from the Governor's Office, using the utility's governing board and executive directors as mere proxies.

In the summer of 2013, I summoned PREPA to an oversight hearing in the

Senate. Back then, PREPA announced what would become their last bond issue before they became insolvent (for \$673 million). To my knowledge, the legislature had never questioned PREPA over a bond issue. Testimony from PREPA officials convinced me that they were lying. Right there and then, I decided that the time was ripe for significant change and reform of the utility, as well as the energy policy of Pucto Rico.

After significant opposition from PREPA's management, its union leaders, the then minority party (now majority party), and even members from my own political party, we approved what became known as Act No. 57–2014, the "Puerto Rico Energy Transformation and Relief Act" ("Act 57").

Amongst other pieces of legislation to transform our energy system and the utility itself, we also approved Act No. 4–2016, known as PREPA's "Revitalization Act"

("Act 4").

As the sponsor of Act 57, and as a champion of energy reform, I am convinced that the years between 2014 and 2016 were the period of most significant change in energy policy since the creation of PREPA in the 1940s. Since we are discussing the current management crisis at PREPA, I must stress the fact that legal mandates and institutions created during that period were designed precisely to transform PREPA's governance. The main concept of Act 57 is that PREPA and other energy stakeholders on the island must conduct themselves in accordance with approximately accordance with a constant plicable energy policy and regulation; *not* by the seasonal wishes or "public policy of the administration from any political party in power.

Act 57 also created an independent energy consumer advocate ("OIPC", its acronym in Spanish), a proposal from the AARP, and strengthened the state energy

office of the Commonwealth.

Pursuant to Act 4, the legislature included several mandates that go to the heart of the management crisis at PREPA, the subject of this hearing. First, PREPA's governing board was reorganized in order to be composed of independent, nonpartisan, members, and the elected representatives of the customers. This, to pursue the path toward getting politics out of PREPA's decision-making processes. The independent members of the board would be selected by the Governor from a list of candidates prepared by an executive research firm. In fact, the Senate confirmed those independent members to PREPA's board in December 2016.

Second, and this is crucial: Act 4 contained a strong mandate to prohibit all kinds of political intervention in PREPA. Inspired by the Federal "Hatch Act," Act 4 prohibits political intervention in appointments, management decisions, contracting, and other internal matters of the utility. It even prohibits the political and fundraising activities of the so-called "Energeticos" (political organizations which operate

inside PREPA, representing both majority parties).

The process for the transformation of PREPA's governance was on its way.

Fast forward to 2018. A year and a half after a new administration took office in Puerto Rico, PREPA has had five (5) executive directors and two (2) different governing boards. Forget that PREPA is an electric utility: no company in the world, private or public, is able to operate with efficiency while undergoing similar fre-

quent and erratic changes in leadership. Who's in charge?

I respectfully submit that the current management crisis at PREPA is the direct consequence of deviating from the energy reform process initiated in 2014. First, in November 2016, the chairman of the transition committee characterized the energy regulator as an "obstacle" to the "interconnection of renewable energy, energy diversification, and the Aguirre Gas Port project" (a \$500 million boondoggle promoted by PREPA for years, which the PREC severely questioned its financials for years). For more than a year, the government failed to appoint the chairman of the PREC. Also, legislation was filed to dismantle PREC or significantly reduce its role as an

energy regulator.

Further, legislation was enacted in early 2017 to dissolve the short-lived governing board of PREPA, appointed in 2016, and composed by independent directors and elected representatives of its customers. Act 37-2017 expressly stated on its Statement of Motives that PREPA's governing board had to be composed by members committed to implement "the public policy dictated by the current Administration." Hence, the new governing board would include, as happened before Act 4, members from the government of Puerto Rico. This was the same PREPA board which failed to prevent the Whitefish mess during the aftermath of Maria; approved controversial salaries and illegal bonuses for a former executive director; approved multi-million dollar consulting fees (even when the utility is undergoing bankruptcy), and which recently resigned en masse after a public controversy over its approval of a \$750,000 yearly salary for its executive director.

Governance at PREPA must be completely revamped. After a year and a half of

erratic decisions, the government of Puerto Rico must be encouraged to reverse decisions which deviate from the mandates of Act 57 and Act 4. As stated, PREC must be strengthened, and the design of the governing board of PREPA must return to the independent model of Act 4. Also, I encourage this Committee to insist on PREPA doing a full, comprehensive report, on possible violations, since 2016, to the "Hatch Act" provisions of Act 4, which prohibit political intervention and political activism inside the utility. Let's drain the swamp, and finally extract politics from PREPA's management and decision making.

Locally we are in that process. Puerto Rico Law 120 of 2018 orders that as we prove making the process property making the process.

Locally we are in that process. Puerto Rico Law 120 of 2018 orders that as we create an energy market, a new energy public policy with specific mandates be instituted on the island. Under this bipartisan initiative, the local Senate has 180 days to finish the process before opening up the phase of request for proposals in an open market for generation. My ask here is for Congress to work closely with the Senate of Puerto Rico, with the U.S. Department of Energy, with the Southern States Energy Board, with the Rocky Mountain Institute, with the Institute of Competitiveness and Economic Sustainability, with the Puerto Rico Manufacturers Association, with the College of Engineers and Land Surveyors of the island, with university professors, with cooperatives, with non-government organizations like Casa Pueblo, and with a broad range of stakeholders who are now part of the ongoing discussions. ongoing discussions.

Finally, I must address possible rumors and/or proposals for a possible Federal takeover of PREPA. I understand the frustration of this Committee, and other stakeholders, with the lack of proper governance at PREPA. I share it and live it every day. However, more than proposing a takeover of PREPA by the U.S. Department of Energy, I submit that the DOE should commit itself to a more active role of jointly developing specific mandates and deadlines for the transformation of PREPA. Currently, the DOE (through an agreement with the Southern States Energy Board), is assisting the government and legislature of Puerto Rico in the process of drafting the new regulatory framework under law 120 for the energy

model of the territory

As for PREPA's \$9 billion debt with bondholders, I believe that under Articles III and VI of PROMESA, negotiations are underway. But a Federal takeover of PREPA would also have significant effects on the responsibility to honor the debt. Just like I have done in the past, I am ready to be part of the conversation to find the right mechanism to implement the appropriate agreement reached by the parties and

sanctioned by the Federal Judge.

In closing, let me add that there is also a serious issue of democracy and selfgovernment in this whole process. Even now, as we speak, violations to the right of self-government of the people of Puerto Rico are being debated in Federal court. Based on my experience as an active advocate for energy reform, I trust that we, the people of Puerto Rico, have the willingness to design an energy model that will help us prosper and liberate our collective strengths.

Thank you, and I am ready to answer your questions.

QUESTIONS SUBMITTED FOR THE RECORD TO EDUARDO BHATIA, MINORITY LEADER, SENATE OF PUERTO RICO

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

Questions Submitted by Rep. Westerman

Question 1. Does the Legislative Assembly of Puerto Rico have direct oversight capabilities over PREPA? If so, what have you done to ensure the timely rehabilitation of the electrical grid?

Question 2. Does the Legislative Assembly of Puerto Rico have any role in overseeing PREPA's contract approval related to ongoing restoration and rehabilitation work?

Question 3. How is the Legislative Assembly of Puerto Rico ensuring that PREPA is using its funds appropriately and as intended?

Question 4. Are you aware of any contracts being held at PREPA's Office of Contract Procurement and Compliance (OCPC) that if released could expedite restoration and rehabilitation of the electric grid? If such contracts are being withheld, will you pledge to work with us to get PREPA to release the contracts as soon as possible so lifesaving work can proceed?

Questions Submitted by Rep. Graves

Question 1. Senator Bhatia, during my questioning period we were not able to fully explore one of your answers. Could you please share with the Committee all of the U.S. utilities you started to list which have a similar structure to PREPA? Again, I am looking for any electrical facility where a governor can remove and reinstall the entirety of the board of directors. In addition, where that same governor can remove and reinstall the leadership of the regulatory agency charged with overseeing the same electrical utility. Not the power to remove and appoint, but has total control (similar to the governor of Puerto Rico), to replace both the utility board of directors and the regulatory body at any time and as many times as they wish.

Question 2. Senator Bhatia, during questioning you alluded to the idea that there would not be an interested party willing to take over PREPA because it has no value. While I understand that the PREPA debt exceeds its likely asset value, I am hoping you can explain how something could hold no value when \$6B of taxpayer funds have been spent or obligated within the past year? In addition, isn't the inherent value of PREPA in its customer base and potential for growth in the event an independent and competent operator is empowered to improve the system's reliability and resiliency?

The CHAIRMAN. Thank you. All right. Now, 5 minutes to Mr. Spiotto?

Mr. Spiotto. Yes.

STATEMENT OF JAMES SPIOTTO, MANAGING DIRECTOR, CHAPMAN STRATEGIC ADVISORS LLC, CHICAGO, ILLINOIS

Mr. SPIOTTO. As you know, through the good work which you have done the past couple of years, you have formed and created PROMESA with the Oversight Board. The whole structure and philosophy was to encourage consensual resolution through Title VI. There was also, as a last resort, the use of a bankruptcy-type Title III to resolve those things that could not be resolved consensually.

Obviously, PREPA has had its problems: the failure to collect desperately needed receivables; the failure to maintain sufficient rate base, and to fund the costs of operations and critical improvements, including renewable energy; the failure to manage and operate the electric utility with a stable management, a team that can

create a reliable and well-managed system which the people of Puerto Rico need and desire.

It isn't that there was not a resolution that was possible. In 2016 and 2017, there was the restructuring support agreement which the Puerto Rico legislature passed legislation authorizing. PREPA had agreed to, major creditors had agreed to. The Governor, who was then newly elected, negotiated some enhancements in April of 2017. And it was about to be implemented and proceeded with a Title VI court approval. All it needed was the assent of the Oversight Board. Unfortunately, they rejected it. Gridlock, impasse followed. And because of that, people could not reach agreement. And a year ago, PREPA was placed into an involuntary resolution process under Title III.

Now, obviously, the change in management people have talked about, and that is unfortunate. Technical assistance and the right direction is important. The Oversight Board, to the degree they have disagreements with the Commonwealth, with the Governor, with PREPA, with the Energy Commission, perhaps one of the thoughts is rearranging the oversight and the supervision, giving more of a role to the Department of Energy or others that can provide the technical assistance and support, and possibly point the way toward the type of infrastructure improvements that PREPA should be proceeding with, and which will be helpful in the future.

Now, why is it important to do this? Why is it important to have a stable management board? Why is it important to have emphasis on voluntary resolution? Why is it important to make sure that the doors are open to new alternatives, including the infrastructure revitalization under Title V of PROMESA, which is very important?

It is because, one, bringing people together has been the essence of every utility restructuring. Getting people on the right page, having buy-in, as people have talked about, is important.

Second, electricity is that vital blood that creates economic development. It creates the type of recovery plan that you need to revitalize the economy of Puerto Rico.

And third, and most important from the standpoint of the future, it is important that Puerto Rico be able to have access to the capital markets, to be able to borrow at a reasonable cost.

PREPA, with all the good work that has been done so far, and with the intention of everyone to stimulate a resolution quickly, can become that example that Puerto Rico and PREPA is the responsible borrower that can borrow at a low cost in the future, because you are going to need it for the infrastructure improvements and the rate path and the management business plan that they will have. And to do that as an example will be beneficial not only to PREPA, but also to Puerto Rico and its other endeavors.

Why is it important to us, generally? As you know, we have an infrastructure demand in our country: \$4.5 trillion to be spent by 2025. And that is going to require revenue bond financing, just like PREPA will need in the future. And that means we need to find a good solution that does not create risk and fear in the market, but provides the assurance that we have solutions, that people can come together and solve the problem, so that the people of Puerto Rico will have the electrical system and service that they need and desire.

[The prepared statement of Mr. Spiotto follows:]

PREPARED STATEMENT OF JAMES E. SPIOTTO 1

Chairman Bishop, Ranking Member Grijalva and distinguished members of the Committee, I am honored to address you at its oversight hearing regarding the electrical utility for Puerto Rico, the Puerto Rico Power Authority ("PREPA"). The following remarks are based on my experience in workouts and restructurings of corporate and municipal debt obligations, specifically restructuring and bankruptcy involving electric utilities including the Washington Public Power Supply System, Pacific Gas & Electric, El Paso Electric, Tucson Electric, as well as my prior written testimony to House and Senate Committees on Municipal Bankruptcy and the government finance market including with respect to Puerto Rico in 2015 and 2016.

THE GATHERING STORM AND THE EVOLUTION OF PROMESA

In late 2015, this Committee was presented with the financial problems and debt crisis the Commonwealth of Puerto Rico and its people were suffering. The territory had over \$70 billion of public debt and pension liabilities of over \$40 billion. PREPA had debt of approximately \$9 billion. Both the overall debt of Puerto Rico and the PREPA debt were viewed as beyond their respective liquidity and the perceived ability to pay as scheduled and created what appeared to be an insurmountable burden to Puerto Rico and its people.

During the first part of 2016, Congress considered what needful rules and regulations would be appropriate. At the same time, the Commonwealth itself enacted in April 2016 the Moratorium Law (Art. No. 21–2016) purporting to suspend payment on the public debt. This caused the expected negative reaction from debtholders and increased the necessity for an effective mechanism for the resolution of financial crisis. This Committee held hearings and Congress enacted the Puerto Rico Oversight, Management and Economic Stability Act ("PROMESA"), 48 U.S.C. §§ 2101–2241, signed into law by President Obama on June 30, 2016, which created Financial Oversight and Management Board for Puerto Rico (the "Oversight Board" or "FOMB") for supervision and assistance to Puerto Rico. In enacting PROMESA, Congress exercised its power to "make all needful rules and regulations respecting the territory" under the U.S. Constitution (Article IV, § 3, cl. 2).

The Oversight Board was charged under PROMESA with being the mechanism to achieve fiscal responsibility and economic and operational recovery from the financial distress and debt burdens Puerto Rico was suffering. PROMESA, as is evident from this Committee's Hearing, on February 2, 2016, followed the tradition that states and the Federal Government have chosen for providing oversight, supervision and an effective mechanism to resolve the grave financial distress of governments such as Puerto Rico and its related governmental entities.

The goal of all these legislative efforts is the creation of a mechanism to encourage consensual resolution as in Title VI of PROMESA. PROMESA is structured to foster such consensus and provide a last resort to use a bankruptcy-like process for involuntary resolution, as Title III of PROMESA does, to effectuate resolution of debt issues that cannot effectively be resolved by agreement.

Unfortunately, PREPA has been the object of accusations of politicization and changing leadership and priorities without an efficient, focused management process and long-tenured, experienced and skilled management. This is attributed to inappropriate political influence in the management and operation of PREPA. These difficulties resulted in the failure to (a) collect desperately needed customer receivables causing liquidity problems, (b) maintain a sufficient rate base and fund needed costs of operation, especially critical improvements for the generation, transmission and distribution of electric power at an acceptable level and (c) manage and operate the electric utility with a stable management team for a reliable, well maintained system with operating procedures to assure uninterrupted electric power to all who desire it in Puerto Rico.

¹As of January 1, 2014, I retired as a Partner of Chapman and Cutler LLP. I am a Managing Director of Chapman Strategic Advisors, LLC, a consultancy providing educational and strategic insights to market participants concerning finance topics of interest. The statements expressed in this material are solely those of the author and do not reflect the position, views or opinions of Chapman and Cutler LLP or Chapman Strategic Advisors LLC.

CHANGING MANAGEMENT POLICIES AND FAILURE TO COLLECT RECEIVABLES DESPERATELY NEEDED BY PREPA

For example, in 2012, after investing \$50 million in a natural gas pipeline, PREPA withdrew its plan for the pipeline amid a storm of controversy, changing leadership and political debate. Further, FTI Capital Advisors PREPA's consultant, report in late 2014 raised serious and disturbing collection failures. Namely, of the approximately \$950 million in outstanding accounts receivable for general (non-governmental or managerial) customers, more than half were over 120 days old (\$543 million out of a total of \$943 million aged AR), \$400 million in inactive receivables accounts for which there was no collection activity or strategy and \$420 million outstanding accounts receivable from municipalities.

FAILURE TO MAINTAIN A SUFFICIENT RATE BASE TO PAY NEEDED IMPROVEMENTS AND COSTS OF OPERATIONS

It has been claimed that PREPA failed to increase its rate base (for non-fiscal expenses such as administrative, capital investment and debt service) which resulted in years of inadequate rates to cover PREPA costs. As was evident from the aftermath of Hurricane Maria, PREPA's power grid and aged facilities have long needed immediate attention to be enhanced by improved maintenance and reinvestment to the infrastructure in order to become durable, acceptable and hopefully hurricane proof.

The above were part of the reason why it was necessary for Congress to enact PROMESA. However despite progress being made post-PROMESA, there are still operational problems for PREPA and gridlock in negotiations of a reasonable and fair resolution of the distressed debt situation. Creditors claim that:

"Despite the progress that was made, there are still operational problems at the utility, including numerous power outages. PREPA suffers from: (1) poor system reliability and availability driven by poor maintenance and operation procedures, (2) poor levels of customer service, (3) poor level of collections and high levels of energy theft, (4) poor worker safety, (5) insufficient budgeting and capital planning rigor, and (6) inefficient procurement processes. HasBrouck Decl. at ¶9.

Far from moving to fix these problems, the new Puerto Rico administration is making them worse by destroying PREPA's hard-won political independence. Shortly after he took office, Governor Rosselló signed into law an act that granted the Puerto Rico Fiscal Agency and Financial Advisory Authority ("AAFAF") sole authority to negotiate with public corporations' creditors. Act 2–2017 at §6(cc). Notably, the Governor appoints the majority of the AAFAF board members, and there are no restrictions on his ability to remove those members. Former President of the PREPA board Luis Benitez testified that "in late 2016, PREPA and its creditors reached an agreement in principle to modify certain terms of the RSA, subject to approval by $[{\rm AAFAF}]$. . . The agreement in principle, however, was not executed because AAFAF assumed responsibility for creditor negotiations on January 27, 2017." 2

While there may be some debate over the level and quality of electric service provided by PREPA, the tragic effects of Hurricane Maria left no room for debate that there is an urgent need for reinvesting in and significant improvement to the power grid, generation, transmission and distribution system for the benefit of Puerto Rico's social and economic good and the success of any financial recovery plan.³

For these and other reasons, in 2018, the Governor of Puerto Rico has recently proposed the privatization of PREPA as a means of addressing the much-needed infrastructure improvements to the aged electric system. However the billing and

²See Motion of Ad Hoc Group of PREPA Bondholders, National Public Finance Guarantee Corporate, Assured Guaranty Corp., Assured Guaranty Municipal Corp., and Syncora Guarantee Inc. for Relief from the Automatic Stay to Allow Movants to Enforce Their Statutory Rights to Have a Receiver Appointed, In re Financial Oversight and Management Board for Puerto Rico, as representative of The Puerto Rico Electric Power Authority, Case No. 17 BK04780 in the United States District Court for the District of Puerto Rico.

United States District Court for the District of Puerto Rico.

3 Hurricane Maria made Puerto Rico the biggest blackout in U.S. history with about 3.4 billion customer hours of lost electricity service. Also, it topped recent global blackouts such as two back to back blackouts in India in 2012 that affected hundreds of millions of people but combined 2.5 billion lost customer hours due to a shorter duration. Rhodium Group, "The World's Second Largest Blackout," April 12, 2018, available at http://rgh.com./research/Puerto-rico-hurricane-maria-worlds-second-largest blackout/.

management problem of the past are reappearing, such as in January some customers left in the dark for months received bills for services rendered. The operational failure of PREPA has negative social and economic effects. As service was restored after Maria, the consequences of the prolonged power shortage continue to be suffered by Puerto Rico and its citizens including "increased crime, business closures and unemployment, a healthcare crisis and exodus to the U.S." were suffered by Puerto Rico.

THE MISSED OPPORTUNITY FOR CONSENSUAL RESOLUTION BY CREDITORS AND PREPA

During 2016 and the first half of 2017, certain public debt creditors and PREPA negotiated a Restructuring Support Agreement ("RSA"). Puerto Rico's legislature passed legislation authorizing the resolution. There was a change in governors in Puerto Rico at the beginning of 2017, and the new governor was able to negotiate in April, 2017 (as a new participant in the process) additional enhancements to RSA that would provide additional and much needed liquidity and further concession to the benefit of PREPA and the people of Puerto Rico. Further, the RSA was negotiated and structured to provide needed improvement in management and operation and had a rate path approved by the Puerto Rico Energy Commission on January 10, 2017. It should be noted that this RSA appears to be in keeping with the intent and spirit of PROMESA and would be a major step in the operational and financial recovery of PREPA. All that was needed was for the Oversight Board to certify the resolution for Title VI court approval. Unfortunately, in June, 2017, the Oversight Board rejected the settlement and refused to certify RSA for Title VI court approval.

The inability to implement RSA due to the Oversight Board's refusal to certify it for Title VI left PREPA and its creditors without a clear agreed path to recovery and resolution of issues. This created the impasse between PREPA and its major creditors that prevented a resolution and resulted in PREPA being placed under the protection of Title III of PROMESA on July 2, 2017. (PROMESA Bankruptcy Title).

THE RECENT AND REPEATED CHANGES IN PREPA'S MANAGEMENT HAVE BEEN AN OBSTACLE TO OPERATIONAL IMPROVEMENTS AND SUCCESSFUL RESOLUTION OF ISSUES

As previously noted, the changing politics and leadership of PREPA appear to exacerbate an already difficult and distressed utility operation. As news reports have highlighted, there have been five leaders of PREPA over the last 17 months with drama and uncertainty of long term plans.

The following timeline supports the claim that there have been unfortunate changes of leadership of PREPA that have created instability in PREPA's operations and governance:

Timeline of PREPA Governance Changes

March 2017: Gov. Rosselló appoints Ricardo Ramos as executive director of PREPA as part of strategy to "replace the leaders of all Puerto Rico's public corporations."

June 26, 2017: Governor signs Act 37–2017, which allows him to appoint three political appointees and three independent board members, all subject to his right to remove them if they disagree with his public policy.

June 28, 2017: Gov. Rosselló appoints three new board members, including an existing member of his administration and the treasurer of his gubernatorial campaign.

November 13, 2017: In response to the FOMB's motion to install a "Chief Transformation Officer" at PREPA, the Title III Court rules that the FOMB lacks authority to appoint a CTO.

November 17, 2017: Ricardo Ramos resigns following the slow pace of post-hurricane power restoration and criticism of the \$300 million contract he signed with Whitefish Energy.

November 2017: Gov. Rosselló appoints Justo Gonzalez as interim executive director.

March 21, 2018: PREPA's board appoints mainland utility executive Walter Higgins as executive director.

July 11, 2018:

 Walter Higgins resigns as executive director, citing family health issues and criticism of the contract under which he served for a salary of \$450,000 per year, with bonus incentives. The PREPA board of directors announces the appointment of one of its members, Rafael Díaz-Granados, as executive director at a salary of \$750,000 per year.

July 12, 2018:

- In a press release, Gov. Rosselló characterizes Díaz-Granados' proposed salary as excessive and states that if the PREPA Board does not "temper the salary to what I am proposing" then its members must resign. Díaz-Granados withdraws as executive director the next day.
- Five independent board members, including Rafael Díaz-Granados, resign in a letter stating that "political forces in Puerto Rico" who "want to continue to control PREPA" had been meddling in their decisions. The board is left without a quorum.
- After the board resignations, Gov. Rosselló appoints Elí Díaz, president of the Puerto Rico Aqueduct and Sewer Authority and Ralph Kreil, an engineer, to maintain a quorum.

July 18, 2018: Gov. Rosselló announces that Jose Ortiz, a former chairman of PREPA's board, will serve as executive director.

This history of a revolving door for leadership, along with the lack of operational success of PREPA, combined with the saga of the missed opportunity at peaceful resolution through RSA raise the question of whether there should be different oversight with a less politically influenced leadership and management of PREPA, at least until the resolution of debt issues, the transition to stabilize management and an acceptable recovery plan for PREPA have been attained and implemented.

IS THERE A NEED TO CHANGE PREPA OVERSIGHT AND SUPERVISION FROM THE CURRENT FOMB TO POSSIBLY DOE?

Given the purported impasse that the Oversight Board has with PREPA and the public debtholders as evidenced by the rejection of RSA, the question is raised how to resolve this unfortunate gridlock where no or little progress has been made over the last year. Some have proposed the U.S. Department of Energy ("DOE") or a Federal entity under DOE supervision should be considered a good candidate to be substituted for the current Oversight Board in supervising and assisting PREPA to resolution of its operational problems, rate issues and financial distress. On June 20, 2018, the DOE issued its recommendation for Puerto Rico—The Office of Electricity released its "Energy Resilience Solution for the Puerto Rico Grid ("DOE June 2018 Report"). This report details DOE's vision for rebuilding a resilient energy system in Puerto Rico. It suggested hardening infrastructure, as well as integrating clean energy technologies such as solar and energy storage with the island's energy portfolio. This report was intended to assist the island's government in drafting recovery plans and guiding the use of Federal aid. DOE appears well suited to provide the oversight, supervision and assistance that PREPA needs and so far has been in search for. It should be noted and recognized that Puerto Rico, its governor and related entities and the Oversight Board have a tremendous burden in dealing with the totality of Puerto Rico, its instrumentalities, public corporations and its local governments with unpredictable emergencies that demand immediate attention. One might speculate that the burden of the diversity and complexities of these matters is practically too heavy for one Oversight Board and Commonwealth to navigate all at the same time. Perhaps shifting the oversight to a Federal entity such as the DOE with some expanded powers might assist PREPA and Puerto Rico and ease the burden and allow the Oversight Board to focus on other items of the Puerto Rico debt adjustment processes that demand more attention. DOE has issued its June 2018 Report and is already working with FEMA and PREPA and is assisting with technical advice and assistance. Further, as the acting Chairman of Puerto Rico Energy Commission has noted on May 8, 2018 to the U.S. Senate Committee on Energy and Natural Resources, "The Commission continues to face unnecessary, avoidable obstacles in carrying out its statutory duties and has continuing disputes with the current Oversight Board that appear to be counterproductive.

DOE has the expertise, resources and mission to be a substitute oversight to supervise PREPA, navigate the PROMESA process as the Oversight Board for PREPA, and assist in evaluating appropriate rates, selection of appropriate governance and management, and, if appropriate, implementation of the privatization process. Further, DOE is more than capable in assisting PREPA in using PROMESA's Title V to expedite and implement needed regulatory permits that would allow more efficient and reliable power projects. It could assist in necessary steps to improve PREPA's infrastructure hardening and to hurricane proof PREPA's electric grid and

power distribution and generation ability. Since PREPA's future and effectiveness will depend on technical and operational issues that need to be addressed as quickly as possible, it may be superior to the current Oversight Board to have DOE or an entity like DOE with the expertise and resources in the energy field to supervise, and this may eliminate the need for education of the Oversight Board regarding any such initiatives. It also would be a clear break from past disagreement that the Oversight Board and even the Governor have had with PREPA and may foster a new opportunity at rekindling resolution efforts that has been for the most part missing over the last year or so. Further, DOE supervision and oversight also appear to be superior to political influence and changing management as noted above that seem to have impaired PREPA's operation.

Accordingly, PREPA under Federal supervision and control with DOE having oversight over PREPA and its rate making efforts may be in the best interest of all. It frees up the current Oversight Board to deal with the never ending list of all. It frees up the current oversight board to dear with the never entring has or issues to be resolved in the Puerto Rico financial crisis and allows the Governor and Legislature to focus on other pressing problems. At the same time, there is no loss of future momentum because DOE through its past efforts in hurricane relief has been educated to the obstacles and problems facing PREPA. This supervision of power supply system has some precedent support in the Tennessee Valley Authority ("TVA"), 16 U.S.C. §831 et seq., and Bonneville, 16 U.S.C. §832 et seq., and Federal Energy Regulatory Commission ("FERC") where Federal assistance enhanced the supplying of power for the benefit of the welfare of citizens and businesses of a number of states.

There are at least three reasons why PREPA would benefit from DOE supervision and oversight:

- 1. Provide Needed Permanent and Stable Board and Management for PREPA. As noted above, the last 17 months have been subject to no less than five leadership changes, and corporate governance issues related to PREPA include executive retention and stability of management. Even the newly appointed CEO, Jose Ortiz, may face the challenge of having to reverse his past policies and decisions he made.
- Create a New Opportunity for Voluntary Resolution. Both the Oversight Board and PREPA's current management have past disputes and a political history that could benefit from a change in supervision. A change could refocus the effort on debt resolution so that needed reforms for PREPA in operation and administration can be addressed, such as renewable energy, and further analysis of fuel supply contracts, capital expenditures, proposed financing, privatization, etc. The positive and constructive attitude can remove the cloud of a bickering and combative relationship between the creditors and the Oversight Board and the Commonwealth.
- PREPA's Change in Oversight May Open Other Doors under PROMESA. As noted above, PROMESA was intended to provide not only financial debt resolution and fiscal oversight but also infrastructure revitalization under Title V. There is provided in Title V expedited permitting for critical projects and, given DOE expertise, resources and mission, that may be better accomplished with DOE overseeing the process. The current Oversight Board, the Puerto Rico Energy Commission and Governor do not presently appear to be on the same page. The Governor has sued the Oversight Board over its budgetary decisions and the acting Chairman of the Commission in his testimony to the U.S. Senate in May 2018 appeared perplexed over the perceived lack of cooperation.⁴

⁴The Acting Commissioner stated:

In addition, FOMB [the Oversight Board] claims in its documents to support independent, strong regulation of monopoly electric services. But its actions are undermining regulation by giving PREPA an excuse to avoid the Commission's orders—PREPA gives as its reason that the Commission's powers are pre-empted by the FOMB

Commission's powers are pre-empted by the FOMB

FOMB continues its practice, which I summarized in my last appearance, of ignoring every Commission effort to cooperate in the adoption of a set of procedures that would allow the Commission and FOMB to support each other's work. The most recent effort by the Commission was the draft protocols attached to my testimony, which have been shared with FOMB. It is a balanced document, addressing each major area of the Commission's Act 57 authority and describing ways for the FOMB and Commission to mesh their work in that area. FOMB has consistently rejected our offers for cooperation. Instead FOMB argues that it can "substitute" for the Commission, and has provided as much in the certified PREPA Fiscal Plan. Congress did not grant FOMB that authority. Written Testimony of Jose Roman Morales PE, Acting Chairman, Puerto Rico Energy Commission, to U.S. Senate Committee, May 8, 2018, p. 4.

In order to resolve this controversy between the current Oversight Board and the Puerto Rico Energy Commission, Congress could transfer oversight and supervision of PREPA to DOE to establish stable and skilled management (thereby curing the past changing leadership and operational difficulties) to establish an appropriate rate path, explore privatization (as the Governor and recent legislation in Puerto Rico have supported). DOE could select appropriate management and oversee rate making in a prudent and fair manner that addresses past failing to set rates for full cost of reasonable and necessary operation and maintenance including fuel and generator costs, debt service, capital expenditures and improvements and administrative expenses that previously have been a problem. PREPA's perceived goal should be to obtain the necessary guidance and financing for the required infrastructure improvements to the electric utility system to assure a durable power generation transmission and distribution without interruption and capable of withstanding any future hurricane. A change in oversight to the DOE may be just the medicine the doctor ordered. It is within the power and province of Congress under the Territorial Clause to the U.S. Constitution (Article IV, § 3, cl. 2) to make needful rules and regulations. The change in oversight might be that crucial act that resets debt settlement negotiations and foster a possible consensual resolution that is to be favored over a litigious result.

PREPA NEEDS A PERMANENT FIX AND NOT A BAND AID

Under the current Oversight Board with its disputes with the Governor and the Puerto Rico Emergency Commission, it is doubtful PREPA can promptly and successfully benefit from PROMESA. To date, use of Title VI has been underutilized to virtual non-existence especially with regard to the Oversight Board's rejection of certification in connection with RSA, and Title III as an involuntary resolution process has perhaps been overused to the extent that virtually everything is a trial by combat. As any winning baseball team recognizes, a pitcher's effectiveness cannot be assured for every day and every batter, and a change in pitcher to suit the batter and the day may win the game.

Accordingly, DOE may be able to provide just the oversight, technical assistance, expertise and resources that help PREPA and the Commonwealth resolve PREPA's debt and operational issues before another ill wind blows away good intentions and post-constructive efforts. DOE supervision can be premised on establishing stable management, a prudent business plan with necessary enhancements to infrastructure for protection of the power grid for uninterrupted power service. The DOE oversight may better provide consideration of whether there should be the transition of PREPA operation to privatization or other form of continued operation. The goal is to return to Puerto Rico an electric utility worthy of its people and capable of assisting in Puerto Rico's recovery effort and attracting business expansion and development with assured and uninterrupted "hurricane proof" electric power.

Why Is This Important? First, the people of Puerto Rico as U.S. citizens deserve an electric utility that meets their needs and desires without fear of a strong wind changing their fate. Also, utilities are the essence of government services and part of the health, safety and welfare of its citizens. Electric power shines light to prevent crimes, promote business and economic development, light homes, businesses, schools, hospitals and virtually every facet of life. Revenue bond financing has been the financial support for utilities and municipal enterprises. Congress in the 1988 Amendment to the Bankruptcy Code, Pub. L. No. 100–597 (1988) intended to assure the financial market of protection for those who would finance needed utilities improvements and infrastructure renovation by assuring their right to receive timely payment even in a Chapter 9 (municipal bankruptcy proceeding). The 1988 Amendments to the U.S. Bankruptcy Code require that the benefit of their bargain be maintained. Likewise, the failure to address PREPA's operational and financial problems and obtain a prompt resolution can not only generate a cloud over PREPA but also over revenue bond financing that presently makes up about half of state and local government financing. Accordingly, the fate of PREPA and its resolution or lack thereof could not only adversely affect the electric utility the people of Puerto Rico desire but also the capital market response could have consequences for not only Puerto Rico future access to the capital market and borrowing cost but also could affect all who use and benefit from revenue bond financing.

In this regard it should be remembered that revenue bond financing is the major source of infrastructure financing. Revenue bond financing is key to needed infrastructure financing. The American Society of Civil Engineers ("ASCE"), in its 2013 Report, estimates the cost to maintain infrastructure at a passable level will be \$3.6 trillion by 2020 or about four times the annual tax revenues for all state and local governments. In 2009, ASCE's number for the next 5 years was \$2.2 trillion.

Inattention has caused the number to increase by \$1.4 trillion in 5 years. ASCE's 2017 Report stated the cumulative infrastructure funding need based on current trends extended to 2025, is \$4.59 trillion to have passable infrastructure with an estimated funding gap of over \$2 trillion. In whole or in part, revenue bond financing will be called on to fund the \$2 trillion gap. ASCE discovered in its 2016 economic study "Failure to Act Closing the Infrastructure Investment Gap for America's Economic Future" that the failure to do necessary infrastructure improvements in the U.S.A. will cost the country \$3.9 trillion in losses suffered to the GDP by 2025, \$7 trillion in lost business sales by 2025 and \$2.5 million in lost American jobs in 2025.

Further, any negative result in the restructuring of PREPA could have a perception of additional risk to revenue bond financing. Perception of increased risk is what makes a form of financing cease to be viewed in the market as strong (assured payment from a solvent enterprise) and to be viewed as a weaker credit. Limited access to the market and the increased cost of borrowing can result from being perceived as a weaker credit. One of the purposes of PROMESA is to have Puerto Rico and in this case PREPA regain market acceptance to provide market access and help lower the cost of borrowing. This negative perception of risk from a failure to promptly resolve PREPA's financial and operational problems may cost Puerto Rico in access to the market for financing or significant increase in future borrowing costs. This negative perception could have a similar effect on some weaker state and local governments.

Traditionally, the spread in the municipal market between strong credits (top investment grade) and significantly weak credits (lower non-investment grade) was

200–300 basis points.

To Puerto Ríco, a state or local government, an increase in interest costs (interest rate) of 200 basis points per year or 2 percent more interest cost a year on a 20-year bond with a bullet maturity would be 40 percent more of the principal amount paid as interest over 20 years. Put another way, on a billion dollar debt issue with a 20-year maturity and a bullet payment of principal at maturity, a 2 percent additional interest cost per annum would be a present value at a 5 percent discount of about \$250 million or 25 percent of the face amount. That is \$250 million not available to Puerto Rico, a state or local government to pay needed infrastructure improvements, public services, worker salaries, retiree benefits or tax relief to its citizens.

WOULD DOE AS OVERSIGHT BOARD FOR PREPA VIOLATE PUERTO RICO'S SOVEREIGNTY?

The obvious concern of having the U.S. Department of Energy exercise supervision and assistance to PREPA under PROMESA and support prudent and reasonable ratemaking is whether that would be offensive to Puerto Rico's sovereignty. First, this is apparently a no different effect on Puerto Rico's sovereignty than the federally appointed individuals on the current Oversight Board. Second, DOE does have expertise, resources and interest in the PREPA resolution. Third, DOE is already in conjunction with FEMA assisting and cooperating with PREPA, including the DOE June 2018 Report, is knowledgeable of the issues and has provided analysis of possible solution to PREPA's problem. Fourth, Puerto Rico is a Territory of the United States and, while the 1952 Constitution of Puerto Rico gave the Commonwealth of Puerto Rico jurisdiction over its domestic affairs, there was no surrender of Congress' power under the Territorial Clause "to make needful rules and regulations." Accordingly, after careful consideration, the oversight by DOE of PREPA under PROMESA should not be deemed offensive and may well be viewed a positive and constructive turn of events by PREPA and the Commonwealth.

THE TIME IS RIGHT TO CONSIDER POSSIBLE CHANGES TO THE OVERSIGHT AND SUPERVISION OF PREPA

PREPA continues to suffer from past operational and financial difficulties. These problems have continued despite the enactment and implementation of PROMESA almost 2 years ago. Further, despite the best intention of the drafters of PROMESA, there are the problems of disputes and disagreements between the current Oversight Board, the Commonwealth, the Governor and PREPA not to mention the creditors. A promising resolution of PREPA's problems in RSA supported by major creditors, PREPA, Puerto Rico legislative action and Energy Commission were dashed by the current Oversight Board rejection and refusal to certify the settlement for Title VI court approval. The resulting Title III insolvency proceeding, commenced about a year ago for involuntary resolution, has not produced any constructive results or helped encourage consensual resolution. In fact, the current situation appears to have produced grid lock and ever-changing leadership at PREPA

without further resolution of disputes between the current Oversight Board, Puerto Rico Energy Commission, the Governor and PREPA. There have been and there appear to be no effective restructuring efforts for public debt (except trial by combat in the Title III court proceeding) nor any effective funding of needed infrastructure improvements. DOE appears to be a favored possibility for oversight, supervision and resolution and capable of selecting stable management and considering appropriate operations and alternatives, including privatization. Resolution now or as soon as possible will allow a favorable perception in the capital market to future financing of needed improvements. Failure to in the near term to reach resolution of PREPA's issues may deprive Puerto Rico of the durable electric power needed for a recovery plan and economic development. The failure to reach resolution of PREPA's issues in the near term may also disappoint the capital markets that will adversely affect the cost of future borrowings by Puerto Rico and possibly others. Further, failure to consider change of the Oversight Board may challenge the ability to obtain a successful resolution of public debt.

Accordingly, the proposal for a change in oversight and supervision of PREPA under PROMESA is worthy of this Committee's consideration. Congress has under regulation" for Puerto Rico and to adjust oversight and supervision under PROMESA for PREPA in order to provide Puerto Rico, PREPA and creditors with an enhanced opportunity to find a consensual resolution. Thereby, they all may engage in constructive efforts to provide Puerto Rico and its citizens with the electric utility it needs and desires and demonstrate to the capital markets Puerto Rico and PREPA are responsible and credit worthy borrowers that should have access to the capital market to borrow at reasonable costs for needed infrastructure

improvements.

QUESTIONS SUBMITTED FOR THE RECORD TO MR. JAMES SPIOTTO, 1 MANAGING DIRECTOR OF CHAPMAN STRATEGIC ADVISORS LLC

Question Submitted by Rep. McClintock

Question 1. What would be the effect of repealing PROMESA and allowing the court system and the free market to work out the claims of creditors and the future of PREPA?

Answer. If PROMESA was repealed and traditional rights and remedies of electric utility creditors were to be exercised against PREPA in restructuring or resolving the defaulted public debt and other obligations owed to creditors, the situation would be significantly different.

Assuming, as is the case for Puerto Rico, that there is no authorized Federal bankruptcy proceeding for Puerto Rico and PREPA (absent that authorized by PROMESA), the financial distress of PREPA, its lack of liquidity and default on public debt obligations create a situation where bondholders and the bond trustee would look to traditional remedies provided for under the Indenture ² and applicable law to resolve the default. There is no doubt that defaults exist under the Indenture (i.e., failure to comply with the rate covenant to maintain sufficient rates (Section 502 of the Indenture), failure to pay all public debt obligations (see e.g., Section 701 of the Indenture) or other lawful charges that become due and payable (Section 701 of the Indenture) and failure to appropriately maintain the electric utility system to a level of operation and service that would generally be viewed as good repair and sound operative condition in an efficient and economical manner (Section 702) of Indenture). Since there are defaults on public debt, public debt creditors have traditional remedies under their respective documents.

Traditional Remedy of Utility Bondholders upon Default to Have a Receiver Appointed, etc.

The public debt creditors of PREPA hold revenue bonds issued by PREPA using The public debt creditors of Firefa hold revenue some leader sy and a bond trustee. The bond trustee upon default becomes what is referred to as a "prudent person" to take such action on behalf of the bondholders as a prudent person would take under the circumstances to protect its property and rights. The indenture sets forth certain remedies that the bond trustee and bondholders have

¹The views expressed herein are solely those of the author and do not reflect the position, opinion or views of Chapman and Cutler LLP or Chapman Strategic Advisors LLC.

²Trust Agreement between Puerto Rico Electric Power Authority and U.S. Bank National Association as Successor Trustee Dated as of January 1, 1974, as amended and supplemented (the "Indenture").

upon default including the right to request a court of competent jurisdiction to appoint a receiver, the ability to file a lawsuit for money judgment for past due payments not made, or for specific performance to require increased rates or to make payments or perform other obligations under the terms of the Indenture such as to perform required and necessary maintenance or improvements. (Section 804 of Indenture.)

Generally, public debt creditors, possibly joined by other creditors, would request the court appoint a receiver for PREPA. The receiver would be appointed by the court based on recommendations by creditors or other interested parties that would suggest for receiver persons with sufficient experience and skill in electric utility operations and management as ultimately determined by the court in the selection process as capable of taking appropriate action to rectify the operational and financial distress of the utility.

Proceeding to Have a Receiver Appointed

Typically, upon default, creditors promptly institute a proceeding to have a receiver appointed. The goal is to have a receiver appointed promptly within 30 to 60 days of a monetary default. The receiver along with any necessary additional staff of the receiver would quickly study the situation, interview current management and operators, investigate and identify the causes of financial or operational distress and report back to the court and creditors as to the problems and proposed action to be taken to resolve those problems. The proposed action could include raising rates on some or all utility customers, changes in operation and maintenance, and, if possible, a restructured payment of past debt on a consensual basis. This second phase occurs between 30 days to 120 days or more from a default and appointment of a receiver.

Reports to the Court and Consultation with Creditors

The public debt creditors (bondholders) and other creditors (for fuel, goods and services) may well be consulted by the receiver as to a proposed budget and rate path going forward to ensure the ongoing operation and maintenance of the electric utility system and necessary improvements as well as a proposal for payment of past defaulted debt obligations and current and ongoing debt and operation and maintenance expenses ("Recovery Plan"). The receiver would report to the court and creditors on a periodic basis during the first 6 months to a year from default. The more significant the operational or financial problems, the more time may be required to reach resolution of the issues.

The bond trustee and bondholders may be organized, as in the case of PREPA, into ad hoc groups (insured and uninsured bondholders groups, bonds insurers and bond trustee). The bondholders and bond insurers can, under the terms of the indenture direct the bond trustee to take certain actions. The PREPA indenture provides that bondholders (or the bond insurers) holding (25 percent) or more in principal amount of bonds outstanding may direct the bond trustee to have a receiver appointed (Section 804 of Indenture), and bondholders of 50 percent or more in principal amount of bonds outstanding may direct the trustee as to any other remedies to be taken or whether to support a Recovery Plan of the receiver (Section 807 of Indenture).

Development of a Recovery Plan

Generally, within a year more or less from default, the receiver (assuming one is appointed), the bondholders, bond trustee, bond insurer and other creditors would have negotiated and agreed to a proposed Recovery Plan for the repayment and, if appropriate, restructuring of debt obligations along with an acceptable and feasible rate path (rates, fee charges) sufficient to fund all restructured debts, liabilities and operational expenses and obligations pursuant to a recovery or business plan providing for the long-term operational maintenance and capital improvements for the electricity system (generation, transmission and distribution, as appropriate). This Recovery Plan on a consensual basis would be required to be acceptable to all creditors. If it is not acceptable to all creditors and the receiver court does not over-rule the objections of the creditors who do not accept the Recovery Plan, then a prepackaged bankruptcy (if allowed) could be instituted or an insolvency bankruptcy proceeding, if available, could be explored to have the Recovery Plan enforced on non-consenting holders assuming the required vote of accepting holders has been obtained. Absent agreement of creditors or a confirmed bankruptcy plan, the utility could be the subject of liquidation or sale of the assets of the electrical system in whole or in part, possibly as a receiver sale.

Recognition that a Receiver Could Be Appointed under PROMESA

Significantly, in an appeal from the Title III PREPA case to the United States Court of Appeals for the First Circuit, the First Circuit has just ruled that, under the PROMESA statute, the Title III court could grant a creditor's motion to lift the automatic stay to pursue the appointment of a receiver for PREPA. The Financial Oversight and Management Board for Puerto Rico, etc., v. Ad Hoc Group of PREPA Bondholders, et al., Case No. 17–2079, slip op. at 13 (1st Cir. Aug. 8, 2018).

PREPA was created as a body corporate and politic constituting a public corporation and governmental instrumentality of Puerto Rico by the Act No. 83 of the Legislature of Puerto Rico approved May 2, 1941, as amended, re-enacted and supplemented (the "Authority Act"). Accordingly, under the Federal Bankruptcy Code, PREPA is a Governmental Unit under 11 U.S.C. § 101(27). Further, PREPA also qualifies as a municipality under 11 U.S.C. § 101(40) and (52). However, under the Federal Bankruptcy Code, Puerto Rico is included in the definition of a "State" but not for purposes of defining who may be debt or under Chapter 9 (municipal bankruptcy). Since PREPA is a Governmental Unit, it is not a person that could file under Chapter 7 or 11 (corporate debtors liquidation or reorganization). So, without PROMESA or further authorization from Congress, PREPA could not file bankruptcy.

Resolution Alternatives If PROMESA Was Repealed

Accordingly, without further act of Congress, and if PROMESA were repealed, PREPA's financial and operational distress would be subject to one of these possible options: (1) a receivership with a successful Recovery Plan as approved by creditors and the receivership case as noted above, (2) a court supervised receiver sale or liquidation of assets and operations of PREPA if a consensual Recovery Plan cannot be agreed to or approved by the court over the objections of some creditors, or (3) continuing creditor litigation attempting to collect past due or accelerated debt.

This reality generally has a sobering effect on all sides. Creditors recognize they will not continue to be paid if the utility ceases to operate so adequate funding is necessary and PREPA recognizes that continued operation at a reasonable cost is not possible unless the creditors believe there is a reasonable, feasible Recovery Plan that pays a reasonable recovery for creditors. This reality, at least in the past, has promoted reasonable resolutions with the acknowledgment by all that, if creditors demand too much for debt payment too soon, it could adversely affect successful and continued operations, and, if PREPA pays too little to creditors, it may threaten needed consensual resolution and access to the capital markets for needed funding of operations and capital improvements.

New RSA Proposed Resolution

It should be noted, representatives of the public debt of PREPA, the *ad hoc* group of bondholders, PREPA, the Commonwealth and its governor, Puerto Rico Energy Commission ("PREC") and Puerto Rico Fiscal Agency and Financial Advisory Authority ("AAFAF") had all reached agreement in the first half of 2017 to a financial restructuring under the Restructuring Support Agreement of 2017 ("RSA"). Unfortunately, the Oversight Board for PROMESA ("FOMB") refused to certify that RSA for Title VI court approval. After the July 25, 2018 Hearing, on July 30, 2018, a new RSA was reached by the agreement of the Commonwealth, the *ad hoc* group of PREPA bondholders, AAFAF, PREPA and FOMB. This 2018 RSA is a tentative agreement on a financial restructuring subject to working out certain details. This is a constructive development that could be the significant step in developing, with all parties related to PREPA, a consensual Recovery Plant that is reasonable, fair, feasible and in the best interests of all. This would then provide PREPA and its creditors the basis for implementing the Recovery Plant by privatization, an ongoing restructured PREPA, a system of microgrids or such other viable electricity system that would provide resilient, non-interrupted electricity as needed and desired by the people of Puerto Rico with appropriate consideration of renewable energy and reasonable rates with a long-term viable business plan that has the buy-in of all the major parties.

Questions Submitted by Rep. Hice

Question 1. Is it not the case that the Puerto Rican Constitution requires that general obligation debt must be paid before all other expenses?

Answer. The Puerto Rico Constitution is explicit in providing protection for the Commonwealth's Constitutional Public Debt. Section 8 of Article VI of the Constitution provides that:

In case the available resources including surplus for any fiscal year are insufficient to meet the appropriations made for that year, *interest on the public debt and amortization thereof shall first be paid*, and other disbursements shall thereafter be made in accordance with the order of priorities established by law.

P.R. Const. art. VI §8 (emphasis added).

It is interesting to note that Section 8 was adopted from a provision of the Jones Act, Pub. L. No. 64–368, 39 Stat. 951 (1917), which governed the Commonwealth prior to the adoption of Puerto Rico's Constitution in 1952. Section 34 of the Jones Act provided a default prioritization of expenditures, listing "interest on any public debt" in the first-priority position along with the "ordinary expenses" of the insular government. Id. §34. Unlike the prior provision in the Jones Act, however, Section 8 of the Puerto Rico Constitution provides Constitutional Public Debt ³ first priority; Constitutional Public Debt does not share that position with "ordinary expenses" of government. Likewise, whereas the Jones Act provided only a default prioritization of government spending that was subject to revision by the Governor, Section 8 of the Puerto Rico Constitution does not provide any over-ride by the Governor or the Legislative Assembly. Accordingly, adoption of Section 8 of the Puerto Rico Constitution was a deliberate choice to strengthen the protections afforded to Constitutional Public Debtholders.

The Need to Provide for Funding of Essential Governmental Services

It is acknowledged that any financially distressed government, as part of the essential purpose of government, must continue to provide necessary services at an acceptable level to its citizens or suffer the consequences of financial and operational meltdown of government. Congress in 1917, in enacting the Jones Act for Puerto Rico, recognized that need to pay for the ordinary expenses of the island government, literally to keep the lights on, and to allow citizens to pursue their destiny. Further, the city of Detroit from 1960 through 2013 and Bridgeport, Connecticut in the late 1980s and early 1990s demonstrate, if a financially distressed government raises taxes and lowers services by a reduction in expenditures beyond that deemed acceptable by its citizens, the result normally is loss of individual and corporate tax payers and the resulting loss of revenue rather than the expected increases.

Repeated annual failure to provide needed and essential governmental services can be fatal to the recovery of a financially distressed government, and can lead to the "death spiral" of the government. The need to fund and supply required services by a government in financial distress may make the utmost practical sense but that does not comply with the spirit and intent of the treatment of Puerto Rico Constitutional Debt under its 1952 Constitution as a further refinement to the

Clearly, the human suffering and tragic results of a financially challenged economy and Hurricane Maria's ill wind wiping out basic governmental services such as water, electricity, roads, etc., would appear to be a justification for paying current operational costs to provide the barest of needed services. Further, the Jones Act appears to give, historically, precedent for priority payment of island expenses along with its public debt. However, there is the argument over what the words "available resources" ("Recursos Disponibles") in Section 8 actually mean. Do they mean all revenues deposited in the Treasury or all revenues that are available to be expended for public debt services after paying for needed essential government services? Also, there is the issue raised by the COFINA bondholders that, given their nonconstitutional public debt that has a pledge of sales and use taxes ("SUT") as their sole source of payment, the SUT used to pay COFINA bonds, should not be included in "available resources" that are available to pay Constitutional Public Debt when

 $^{^3\,^{\}rm o}$ Constitutional Public Debt" is public debt authorized under Puerto Rico Constitution and limited to 15 percent of the average of the total amount of annual revenues raised under the provisions of Commonwealth legislation and deposited into the Treasury of Puerto Rico (P.R. Constitution Article VI $\S 2$). This does not include debts such as COFINA bonds, or debts of public corporations (including PREPA) or other instrumentalities of Puerto Rico.

there are insufficient revenues. The resolution of current litigation over what "available resources" means and whether it includes or excludes SUT or whether "available" is after payment of necessary government expenses is yet to be resolved or determined by the court.⁴

The Serious Consequences of Failing to Timely Pay Public Debt

Further, there are serious consequences for not following the Constitutional requirements to timely pay public debt. Your question points out the principle that the Jones Act and the 1952 Constitution have highlighted, namely, the necessity for governments to honor their public debt obligations because the failure to do so can adversely affect their access to the capital market or the cost of borrowing.⁵

Accordingly, the Jones Act and the 1952 Constitution of Puerto Rico, as well as amendments thereafter, support the principle of paying public debt in order to prevent being denied access to the capital markets or incurring an unnecessary increase in borrowing costs. It would be helpful to have a consensual resolution of the public debt as well as all debt of PREPA to prevent the adverse consequence of a hostile debt restructuring that is viewed by the capital markets (the future source of needed financing for Puerto Rico and PREPA) as unfair, unreasonable and contrary to establish law and principles of government financing.

Question 2. Why has the FOMB set up a fiscal plan that currently allocates zero dollars for debt repayment—if the purpose of all the work we have been doing is to reduce the debt burden in order to restore Puerto Rico's access to capital markets, can you explain why paying down the debt seems to be the last priority?

Answer. I am not aware that FOMB expressed a reason for its fiscal plan for Puerto Rico that does not allocate revenue to the payment of public debt, but FOMB suggests there will be surplus funds during and at the end of the budgeted period that could be used to pay public debt. Perhaps FOMB was interested in demonstrating that the fiscal plan had sufficient funds to pay anticipated costs of government services and still have a surplus at the end of the budgeted period. From past history of negotiations with creditors, especially public debt creditors, it would be helpful for FOMB to explain what rights to payment and revenues the public debt or other creditors have. Are they secured? Do they have a pledge of revenues from which they are entitled under the law to receive payment? Also, FOMB should explain the treatment under any proposed recovery plan for any restructuring of the debt and justification for any reduction in payment or impairment of a purported secured claim or pledge of revenues. Hopefully, in negotiation between creditors and the Commonwealth, FOMB (as FOMB is the Commonwealth's representative in the Title III proceeding) will provide an explanation of what can be paid under the fiscal plan to specific creditor groups and the rational and justification for such treatment.

FOMB and the Governor may well claim, for negotiation purposes, that they have left the treatment of specific public debt out of their proposed fiscal plan. Governor Rossello's fiscal plan released March 23, 2018 had a cumulative cash-flow through Fiscal Year 2023 of \$5.9 billion, up from \$2.85 billion in the February 12, 2018 proposed plan. The scheduled public debt service for that period through 2023 is \$20.2 billion. So, if the surplus cash-flow through 2023 was used to pay debt service on public debt during that period, it would pay approximately 29.4 percent of debt service during the period (on average). Obviously, some public debtholders will

⁴On August 8, 2018, the Commonwealth, Oversight Board and a group of COFINA bondholders and bond insurers announced a proposed resolution of SUT revenues and payment to Senior holders of about 93 percent of their claims and 56.4 percent recovery for Junior holders and an overall (average) recovery of 74.5 percent on all COFINA bonds. The proposed resolution is subject to court approval.

is subject to court approval.

⁵Traditionally, the spread in the municipal market between the market perception of strong credits (top investment grade) and significantly weak credits (lower non-investment grade) was 200–300 basis points. (See e.g., approximately 200 basis point trading spread between Detroit sewer and water with and without Chapter 9 threat and Chicago sale tax securitization approximately 275 basis point lower than similar Chicago maturities.)

To Puerto Rico just like any state or local government, a 200 point per year or 2 percent more interest cost a year on a 20-year bond with a bullet maturity would be 40 percent more of the principal amount paid as interest over 20 years. Put another way, on a billion dollar debt issue with a 20-year maturity and a bullet payment of principal at maturity, a 2 percent additional interest cost per annum would be a present value at a 5 percent discount of about \$250 million or 25 percent of the face amount. That is \$250 million not available to state or local government to pay needed infrastructure improvements, public services, worker salaries, retiree benefits or tax relief to its citizens.

⁶It should be noted that the modified fiscal plan proposed by the FOMB and certified by a 6 to 1 vote on April 19, 2018 has only about a \$3.4 billion cash-flow surplus over the 6 years. This difference between the Governor's fiscal plan and FOMB's will need to be explained.

argue they are entitled to more or are secured or have a pledge of revenues dedicated to pay their debt and those issues will need to be addressed.

As noted in answer to the first question above, it is important to Puerto Rico, and its future efforts to reinvest in Puerto Rico and rebuild its infrastructure and its economy that it be able to borrow funds in the capital market at reasonable costs. The failure to explain and justify the restructuring of debt as reasonable, fair and in compliance with applicable law and principles of government finance can be detrimental to having access to borrowing and the ability to borrow at a reasonable cost. The best solution is a consensual resolution where creditors understand that their treatment in the restructuring, while not as much as they desire, is the most that can be done in order to have a successful restructuring and recovery for Puerto Rico and its people and is in reasonable compliance with the law and principles of government finance.

Question 3. Why do you believe the Oversight Board (FOMB) failed to agree to the Restructuring Support Agreement (RSA) considering this was an explicit mandate of PROMESA? Does that not indicate that the Oversight Board believes it is not accountable to a government or court?

Answer. The Oversight Board (FOMB) refused to certify the RSA in June of 2017 despite, as I mentioned in my written testimony, the approval of the Commonwealth with legislation authorizing the RSA, and support and agreement to RSA by the *ad hoc* group of PREPA bondholders, Puerto Rico Fiscal Agency and Financial Advisory Authority ("AAFAF") as well as rate approval of the Puerto Rico Energy Commission ("PREC"). The Oversight Board's refusal to certify RSA was apparently based on a disagreement over the structure of the resolution and rate path to be followed with the Oversight Board disagreeing with virtually all the other parties in interest. The refusal of the Oversight Board to certify the RSA for a Title VI court-approved hearing about a year ago led to gridlock and polarization of positions that caused the July 2, 2017 filing of PREPA under Title III of PROMESA, the involuntary debt resolution mechanism.

New Proposed RSA Solution

As you know, after the July 25, 2018 Hearing by the Committee, the Oversight Board with the Commonwealth, Governor, ad hoc group of PREPA bondholders and AAFAF reached agreement on a new RSA similar in a number of respects to the old RSA of 2017, so now there is a possible path forward toward consensual resolution of the PREPA financial situation subject either to input and approval of other creditors and court approval in the Title III proceedings and a settlement and Recovery Plan in Title III or, possibly with regard to the PREPA and the public debt pool of claims, a Title VI court approval. Since PREPA has other claims to resolve, it appears the settlement will be part of a recovery plan to be approved in the Title III action. The consensual resolution with public debt bondholders is far better than the contested, litigated result.

Question 4. Do you believe that the replacement of FOMB and DOE oversight would rectify many of the problems we are dealing with? What gives you confidence in that assessment?

Answer. The court hearing the Title III proceeding decided a motion to dismiss the Governor's lawsuit against the Oversight Board for failure to approve the Governor's fiscal 2019 budget and certain policy issues. The court ruled on August 7, 2018 that PROMESA reflected a "power-sharing" arrangement with the Oversight Board's ability to supervise and approve budgets with the final say being with the Oversight Board and the general continued power of the Commonwealth to otherwise direct the policy for the Commonwealth.7

It appears that part of the difficulties between the Oversight Board (FOMB) and

It appears that part of the difficulties between the Oversight Board (FOMB) and the Commonwealth and creditors is a difference in perspective. As you know, Congress in enacting PROMESA was quite diligent in protecting the dignity and respect to be accorded the Commonwealth and its governmental bodies and elected officials as to government and affairs issues. PROMESA, with respect to the yearly budget for Puerto Rico, provides for the Commonwealth through the Governor and the legislature to propose a fiscal year budget to be reviewed and commented on by the Oversight Board.

⁷Opinion and Order Granting in Part Defendants' Motion to Dismiss the Company, Case No. 18–080 in 17 BK 3283, *Hon. Ricardo Antonio Rosselló Nevares, etc., et al. v. The Financial Oversight and Management Board of Puerto Rico, et al.*, (D.C. P.R., Aug. 7, 2018) slip op. at 27.

If the Oversight Board does not approve the proposed fiscal year budget, then the Governor considers the comments of the Oversight Board relating to where the Oversight Board was troubled or concerned about the budget and the Governor and legislature should address those concerns in a revised budget that is submitted to the Oversight Board for its approval or modification and approval (See Sections 202(d)(1) and (2) or 202(e)(1) and (2) of PROMESA.)

As you are aware, disputes between the Oversight Board and the Governor have arisen and, as noted above, the Governor sued the Oversight Board over the extent of the powers of the Oversight Board to have the final say as to fiscal budgets and policy for Puerto Rico. This litigation is obviously not the best evidence of the relationship of cooperative assistance and supervision that PROMESA envisioned for the Commonwealth, Governor and Oversight Board to have. As mentioned, on August 7, 2018, Judge Swain entered an Order setting forth the balance of power to make the final decision on budgets between the Oversight Board and the Governor and the Commonwealth. The result recognized what PROMESA provided—proposal by the Governor, review and either approval or disapproval by the Oversight Board of the proposed fiscal year budget with comments as to what should be done for obtaining approval, and the Governor then can make the change he believes appropriate and resubmit the fiscal year budget to the Oversight Board for fiscal oversight approval and, if necessary, modification in order to be approved. These active and litigated disputes in process are not constructive for anyone. Obviously, Puerto Rico's concerns and issues must be considered along with the supervision concerns of the Oversight Board. The differing perspectives have unfortunately created a less than desired atmosphere with the members of the Oversight Board being named as Defendants in their official capacities in the lawsuit

The insertion of DOE as the oversight and supervisor of PREPA would be necessary if this general disagreement and litigious environment were major obstacles for constructive consensual and effective resolution of issues. Given the preliminary approval of the Oversight Board to the new RSA of July 30, 2018, there may not be the major obstacles to resolution of differences between PREPA (Commonwealth and Governor) and the Oversight Board. If for some reason this hopeful resolution should fail to win all necessary approvals and the Oversight Board and PREPA (Commonwealth and Governor) are back to the gridlock and difficulties of a year or even a month ago, then the DOE replacement may make practical sense. DOE obviously has the skill, resources, and experience to provide technical assistance and guidance on the most appropriate Recovery Plan for PREPA as well as consideration of microgrids, privatization, increased competition or other alternative being discussed. Further, given DOE's report of June 2018, noted in my written testimony, and its work with FEMA on Puerto Rico relating to current electricity system problems, DOE has valuable experience and insights that should be shared to the degree

As also noted in my written testimony, DOE's experience in Tennessee Valley Authority ("TVA"), 16 U.S.C. §831 et seq., Bonneville, 16 U.S.C. §832 et seq. and Federal Energy Regulatory Commission ("FERC") are examples of where Federal assistance enhanced the supplying of power for the benefit and welfare of citizens and businesses in a number of states. DOE's past efforts and experience, including with Puerto Rico and FEMA, provide a reasonable basis that DOE's oversight and supervision of PREPA would be beneficial to all. It may also be a supplement to the current Oversight Board as an alternative to complete change of the oversight

they have not.

The CHAIRMAN. Thank you.

Mr. Emmons, you are also recognized for 5 minutes.

STATEMENT OF THOMAS EMMONS, PARTNER, PEGASUS CAPITAL ADVISORS, NEW YORK, NEW YORK

Mr. Emmons. Thank you. Chairman Bishop, Ranking Member Grijalva, members of the Committee, thank you for having me here today.

My name is Thomas Emmons. I am a partner in the private credit group at Pegasus Capital Advisors. Pegasus is an asset management firm that provides growth capital to middle-market companies in the sustainability and wellness sectors. My focus at

Pegasus is debt finance for renewable energy projects.

I am here today because of my experience financing renewable energy projects. Specifically, I have been involved in financing more than \$20 billion in renewable energy projects in the United States in the past decade. I have more than 25 years' experience in raising financing for hundreds of projects around the globe, including Asia and Latin America.

I highlight that experience in order to emphasize to you that, based upon my experience and in my opinion, PREPA is in no condition to be an acceptable offtaker of power in any energy project

financed by the private sector.

Earlier this year, Pegasus was mandated to arrange the capital requirements of the \$305 million Montalva Solar Project in Puerto Rico, which will be built and operated by Greenbriar Capital.

In the world of project financing, particularly energy and natural resource financing, the whole financing package revolves around the offtaker. An offtake agreement is an agreement between a producer of a resource, such as electricity from solar, and a buyer of a resource. And the buyer of the resource is the offtaker. Essentially, the producers, who are investing in the production of a resource, need to know that the offtaker will be able to pay for the resource or product if and when it is delivered.

In the case of investing in Puerto Rico's energy infrastructure, the offtaker has to be PREPA. In my opinion, PREPA is currently unacceptable in its current financial condition to be the cornerstone

for a project in Puerto Rico.

In a financing package, the offtaker is the source of financial strength for the project. Without a strong offtaker, the project is not financeable. This is very black and white in the renewable

energy project finance world.

A common measure of financial strength is the credit rating assigned to it by Moody's or other nationally recognized credit rating agencies. Credit ratings are a critical component of any energy project financing package. For example, the vast majority of utilities in the United States have an investment grade credit rating of between BBB and AA.

But Moody's has been downgrading PREPA since 2012, and its current credit rating is Ca, or equivalent to CC, making PREPA a completely non-viable partner from a financing standpoint. So, to raise financing for a project supported by a power purchase agreement with PREPA, PREPA must be creditworthy, and it is not.

The ultimate objective may be for PREPA to be privatized, or for its debt to be restructured so that it returns to a strong and stable financial condition. However, the process to achieve either of these outcomes is long, difficult, and uncertain. But Puerto Rico needs to attract investment into its power system immediately, particularly renewable energy projects, which create jobs and move Puerto Rico toward a clean energy future.

Therefore, in order to immediately remove the roadblock to renewable energy investments created by PREPA's weak credit standing, I suggest that Congress pass a law or otherwise direct a Federal entity, which will have a strong credit rating, to guarantee the performance of PREPA under its renewable energy power purchase agreements. This payment performance guarantee will give investors assurance that PREPA will pay for the clean power from wind and solar projects if and only if such wind or solar project delivers power to PREPA as required under the power

purchase agreement.

This is not a financial guarantee and it is not a guarantee of PREPA's debt. Moreover, the Federal Government may never have to make any payment under this guarantee if PREPA continues to pay its power bills. But, in my opinion, it would immediately restore PREPA to the status of an acceptable power offtaker. As a result, private sector lenders and investors would invest in wind and solar projects in Puerto Rico, in parallel with the longer-term work of getting PREPA back on its own feet, financially.

Thank you.

[The prepared statement of Mr. Emmons follows:]

PREPARED STATEMENT OF THOMAS EMMONS, PARTNER, PRIVATE CREDIT, PEGASUS CAPITAL ADVISORS LP

INTRODUCTION

Chairman Bishop, Ranking Member Grijalva, and members of the Committee, thank you for having me here today. My name is Thomas Emmons. I'm a partner in the Private Credit group at Pegasus Capital Advisors. Pegasus is an asset management firm that focuses on providing growth capital to middle-market companies focused on the sustainability and wellness sectors. My focus at Pegasus is debt finance for renewable energy projects.

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PREPA CREDIT ISSUES

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A commonplace measure of financial strength is the credit rating assigned to it by Moody's, or other nationally recognized credit rating agencies. Credit ratings are a critical component of any energy project financing package. For example, the vast majority of utilities in the United States have an investment grade credit rating between BBB and AA.

But Moody's has been downgrading PREPA since 2012, and its current credit rating of Ca makes PREPA a completely non-viable partner from a financing standpoint.

To raise financing for a project supported by a power purchase agreement with PREPA, PREPA must be creditworthy, and it is not. No one in the world of renewable energy project financing would be able to raise financing for a project with PREPA in its current state.

CONCLUSION

The ultimate objective may be for PREPA to be privatized, or for its debt to be restructured, so that it returns to a strong and stable financial condition. However, the process to achieve either of these outcomes is long, difficult, and uncertain. But Puerto Rico needs to attract investment into its power system immediately, particularly renewable energy projects, which will create jobs and move Puerto Rico toward a clean energy future. Therefore, in order to immediately remove the roadblock to renewable energy investments created by PREPA's current weak credit standing, I suggest that Congress pass a law or otherwise direct a Federal entity, which will have a strong credit rating, to guarantee the performance of PREPA under its renewable energy power purchase agreements. This payment performance guarantee will give investors assurance that PREPA will pay for the clean power from wind and solar projects if and only if such wind or solar project delivers power to PREPA as required by the PPA. This is not a financial guarantee and will not be a guarantee of PREPA's debt. Moreover, the Federal Government may never have to make any payment under this guarantee, if PREPA pays its bills. But, in my opinion, it would immediately restore PREPA to the status of an acceptable power offtaker, and as a result, private sector lenders and investors would invest in wind and solar projects in Puerto Rico, in parallel with the longer term work of getting PREPA back on its own feet financially.

I thank you for your time and am happy to take any questions.

QUESTION SUBMITTED FOR THE RECORD BY REP. McCLINTOCK TO THOMAS EMMONS, PARTNER OF PEGASUS CAPITAL ADVISORS

Question 1. According to the Institute for Energy Research (IER), the levelized cost of electricity generation per megawatt hour for conventional combined gas is \$67.10 and \$65.60 for advanced combined gas. Whereas, it is \$86.60 for wind and \$144.30 for photovoltaic solar. The IER further warns that:

"Because our electrical system must respond to consumer demand instantaneously, non-dispatchable power is in essence superfluous to our needs. The requirement that dispatchable power back-up non-dispatchable power to make sure electricity is there when needed is not a luxury, but a necessity. The more that non-dispatchable power is used, the more the electrical system requires investments in dispatchable generation forms to back up its increased use. Government policies that promote the use of non-dispatchable power are equivalent to requiring consumers to buy and care for two vehicles: one that works when you need it and another that works when it feels like it. The hidden costs of non-dispatchable power are substantial and should not be overlooked as part of the public policy discussion."

Why are PREPA's goals at odds with the findings of this research?

Answer. Thank you for the opportunity to answer this important question. As a 30-year senior executive of the power and renewable energy finance sector, my goal is to facilitate the most financially efficient real time solutions in the energy marketplace. Although I am now exclusively devoted to financing renewable energy projects, for several decades I financed companies and projects in oil and gas production, and in gas- and coal-fired power generation.

The IER report you quote refers to a 2013 EIA report using 2011 data to estimate

The IER report you quote refers to a 2013 EIA report using 2011 data to estimate costs for power plants entering service in 2018. I believe it would be more instructive to rely on current data from the specific relevant marketplace (Puerto Rico) where proposed facilities are to be located. Moreover, Puerto Rico's energy situation is unique, as an island relying 100 percent on imported fuel, and with specific weather conditions which support wind and solar power. In this regard, the most current information can be found from the Federal Oversight and Management Board statistics printed this week on the following link: https://www.elnuevodia.com/english/english/nota/therecipeforprepacomestolight-2439251/.

The article states: "Although the fiscal plan reviewed and certified by the Oversight Board contemplates cuts of more than \$1.5 billion over a 5-year period, customers of the Electric Power Authority (PREPA) should expect higher rates in

the coming years, which could fluctuate between 28 and 30 cents per kilowatt-hour (c/kwh)." It further states: "The objective of the Board is to reduce the cost of electricity to 20 c/kwh. But this would happen, says the plan, after 2023, once PREPA

is privatized."

My testimony to the Congressional Committee was to provide a real-time lower-cost solution that can be implemented immediately and with no expected tangible cost to the Federal Government, but yet offer billions of dollars to the U.S. Citizens of the Commonwealth by way of job stimulation, increased tax revenues, energy savings of almost 50 percent, and as a key side benefit, a perpetual, non-polluting energy source.

Puerto Rico is much similar to Hawaii, where the cost of a renewable energy facility is much greater than on the mainland due to increased costs to withstand Class V hurricanes, expensive yearly insurance, higher local construction costs, and expensive land leases and acquisition cost. This, however, is greatly offset in both Hawaii and Puerto Rico, by fossil fuel costs that are close to, or in excess of, 30 cents per

kwh equivalent.

Solar and natural gas work hand in hand but even with natural gas being the best power source to provide back-up generation to solar energy, it is unlikely that additional LNG facilities will be built within the next 5 to 7 years, and if they are, it is further highly unlikely that these plants will produce at the low rates as indicated in the IER report, because factors such as high costs of liquefaction, new delivery infrastructure, new plant construction, higher insurance rates, local inefficiencies, and local politics will likely impede the hoped-for reduction of costs of firm

generation forecast for the next 5 years.

The Siemens study concludes that there are adequate PREPA generating resources to back up an initial tranche of renewable generation, and that 580 MW could be handled "economically" by the existing generation fleet. My client's project, to be located in the southeast of Puerto Rico, provides power at half the cost of fossil fuel plants, is sheltered from the hurricane pathways, provides power to the 25 percent of the population that lives on the south of the Island, has the highest solar insolation on the Island, and is located close to high voltage generation and adjacent to high voltage transmission lines which adds stability to the grid. There were clear reasons why most generation facilities were located on the south of the Island. For all these reasons, PREPA's goals of not having enough solar energy generation is at clear odds with the expensive regional cost of energy generation on the Island, for now and for the foreseeable future.

The CHAIRMAN. Thank you for your time, and I thank the entire panel for your testimony. We will now turn to the Members for questions. I remind them that under Committee Rule 3(d), the time is limited to 5 minutes, for total questions as well as answers.

So, for you, if the Member only gives you 10 seconds to answer, you still have 10 seconds to answer. I will apologize for that in advance, but we will see what happens.

I will ask my questions later on some time in the middle of this panel. Let me turn first to Mr. Gohmert, the Vice Chairman, if he has questions.

Mr. GOHMERT. Thank you, Mr. Chairman, and I appreciate the witnesses being here.

Mr. Walker, in your testimony you stated the long-term resilience and reliability of Puerto Rico's electric grid will require capable leadership, strategic investments, a strong culture of safety, and well-defined regulatory oversight. These don't sound like characteristics that are currently existing when it comes to getting Puerto Rico's electricity going.

One of the questions you were asked at the Senate hearing in May is who is in charge. I would like to ask each of the witnesses today, who is in charge of the Puerto Rico grid?

Mr. Walker, you first.

Mr. WALKER. PREPA is in charge of PREPA's utility grid in Puerto Rico.

Mr. GOHMERT. So, in your opinion, no individual is in charge?

Mr. WALKER. My understanding is they just appointed a new CEO, José Ortiz, before him, Walt Higgins. So, the CEO of PREPA is the person that is in charge of working in conjunction with their existing board.

Mr. GOHMERT. OK. Mr. Svanda?

Mr. SVANDA. From my perspective, I guess I would say that no one is in charge. I think the deplorable circumstances that we have all paid witness to over the last months would demonstrate that no one is in charge.

No one is assuring that there are emergency plans in place. No one is saying you must operate this system in accordance with modern accounting standards, modern engineering standards, modern reliability standards, or modern cyber security standards. And no one is paying attention. No one is keeping their eye on the ball and assuring that the citizens of Puerto Rico are getting reasonable service from the utility.

Mr. GOHMERT. Thank you.

Mr. Bhatia?

Mr. Bhatia. Yes. I would say it is a combination of three. PREPA, of course, but now we have an energy commission. We have a regulator that we didn't have before. And finally, I would say that there is a very robust and direct effort by the Senate of Puerto Rico, under the leadership—it is a bipartisan effort to try to create in the next 180 days the new laws and regulations that will regulate the energy sector in Puerto Rico. And we are working on that, and happy to share, and be a part of that.

Mr. Gohmert. So, while Puerto Ricans are doing without energy, so many of them, you think it will take 180 days to put laws and rules in place which will then be able to afford Puerto Ricans a

chance to get their electricity back?

Mr. Bhatia. We are doing it, basically. And if we get it done in 180 days, it will be almost a miracle after waiting 70 years

Mr. GOHMERT. I am sorry, I was having trouble hearing.

Mr. Bhatia. It would be a miracle, getting it done. And I hope we get it done. We are working with the Department of Energy, the Southern States Energy Board, and we are working with a whole bunch of stakeholders. I hope it is before 180 days, but we have a mandate by the Puerto Rico legislature, and a law to make it within a 180-day period.

So, we hope it is before that, of course. But our effort to create

a new law, a new policy for the-

Mr. GOHMERT. Do you have electricity while you are working for this 180 days?

Mr. Bhatia. We have electricity. Right now, as of this morning, only about, I would say-

Mr. GOHMERT. People that are working on the 180-day plan, they

will have electricity, right?

Mr. Bhatia. Right now, I would say less than 500 families in Puerto Rico have no electricity, so it is not like we are on a blackout right now.

Mr. GOHMERT. Mr. Spiotto, before my time is up, what do you

think? Who is in charge?

Mr. SPIOTTO. I don't think there is any stable management. I think there has been a revolving door which prevents developing a business plan and a rate path and a procedure to operate on the operating level.

Mr. GOHMERT. OK, thank you. And Mr. Emmons?

Mr. EMMONS. Structurally, it appears that PREPA, regulated by PREC, is in charge. But obviously, it is not working and is in need of an overhaul.

Mr. Gohmert. OK, thank you. It doesn't sound like the combined wisdom of our witnesses indicates that it is really in the hands of

capable folks.

Î was given information that seems to indicate that MasTec was given \$500 million authorization when, for 2 months, they were not even on the island, that there were others that were on the island, ready to go to work. It is just amazing.

My time is expiring, but people are needing help, and it doesn't look like the money is getting where it needs to go. I yield back.

The CHAIRMAN. Thank you.

Mr. Grijalva.

Mr. GRIJALVA. Thank you, Mr. Chairman.

Mr. Minority Leader, a couple of quick questions. Do you believe that, without some other means to effect consensual resolution, PREPA's debt, as has been discussed, that PROMESA's Title III bankruptcy case will hinder PREPA's transformation into a functional, integrated, with a large portfolio of sources utility?

Mr. Bhatia. Well, it could be, sir. It could be. It is both Title III

and Title VI.

They are trying to do a negotiation under the terms of Title VI, but Title III really has forced the parties finally to sit down. I was part of the process for the last 3 years, and it was an up-and-down, it was a roller coaster.

I think the fact that we have PROMESA, in terms of Title III,

is helping the process.

Mr. GRIJALVA. And one of the other witnesses testified that the Puerto Rico Energy Commission is too weak to inform PREPA. Would you care to respond.

Mr. Bhatia. Well, it was my bill that created the PREC. However, unfortunately, the current governor decided to sign a bill

which weakened the Puerto Rico Energy Commission.

I think part of what we have to do is make it again what it was, a very robust regulator that really had teeth. And I think that can be done easily. We can fix that, because it was built that way on my 2014 regulation, Act 57 of Puerto Rico.

Mr. GRIJALVA. One other question. I think the consideration and

then discussion about the transformation of PREPA.

The community-led integrated resource plan, the knowledge of experts and retired PREPA employees, and the process of making recommendations on the next steps for PREPA, this buy-in by the Puerto Rican people into this transformation, I believe, is essential. But discussions of a takeover or privatization, how does that balance, if at all, with the idea of this level of involvement?

Mr. Bhatia. Well, I would say, sir, the idea of federalization is not very popular right now down there. But I would say that privatization comes to the point where—what is the option? I mean, this is a bankrupt company that needs a lot of money, billions of dollars of investment to upgrade its technology, so there is no choice at this point. It is not a philosophical issue, I think it is more the plumbing. We need resources and we need investment. And that is the way it should be.

Mr. GRIJALVA. Thank you. Mr. Bhatia. Thank you.

Mr. GRIJALVA. I have one question for the Secretary, would legislation to have the Federal Government manage or control PREPA be practical without the support of the Puerto Rican people?

Mr. Walker. Absolutely not.

Mr. Grijalva. And we just talked a little bit about privatization.

You have to fix the plumbing first—

Mr. WALKER. Privatization, as set forth by the law that Governor Rosselló signed on June 20, outlines a two-step component, at least

if you boil it down.

One is the sale of generation to private hands, and then a concession agreement with regard to the transmission and distribution system wherein, potentially, you would have an outside company, whether it be another utility or a private engineering firm actually run the day-to-day T&D business. That model is not dissimilar to what was done in the Long Island Power Authority in New York for many, many years and, in fact, looks remarkably similar to that.

Mr. GRIJALVA. OK. I yield back, Mr. Chairman.

The CHAIRMAN. Thank you.

Mr. Young.

Mr. Young. Thank you, Mr. Chairman.

Mr. Walker, if the Department of Energy was tasked with the privatization of PREPA, how long do you estimate it would need to be managed by the Department before it would become private?

Mr. Walker. I think that is a challenging question, having not done any due diligence. We have, obviously, a significant understanding on how to run utilities from having four of our own public marketing administrations. But those were set up for a very different reason, and they are all financially viable. They exist for the purpose of transporting our federally owned hydropower and distributing it throughout the United States, over 2 million square miles.

This is a different type of entity. Notwithstanding the debt component, the privatization would be something that we would work with industry if we were tasked with doing so. It is not really within the scope of what DOE's mission is, from a national security agency focusing on the energy sector. However, we do have significant relations within our electricity subsector coordinating council with all of the electric sectors throughout the United States.

So, to put a time period on it, without having done the due diligence, I think would be challenging because there are other

components that are significant in this—

Mr. Young. Let me, I only have so much time. I am just suggesting respectfully it should not take that long. And there are

other models that have already been done. I am going to suggest the Department—we are going to privatize this unit. It has been a failure, and the Puerto Rican people deserve better, and they are

not going to get it through a government-run energy unit.

Yes, everybody is smoking pot, and if it is legal in Alaska, you're going to do it. I am just saying that is not going to happen. So, I am suggesting to you, within the Department, start thinking about that now. Set out a plan how quickly it can be done. Because 10 years, 5 years, what you are talking about, that is too damn long. We are going to do it quicker.

Mr. Emmons, in your written testimony you highlighted that PREPA is not creditworthy, and that is a known fact. And, in fact, it encumbers energy investment and modernization. And Mr. Svanda mentioned creating a financial backstop to make PREPA

investable. Do you have any thoughts on that idea?

Mr. EMMONS. Well, my suggestion was for a temporary shoring up of PREPA's credit, such that immediately, sooner than waiting for a full privatization, private-sector capital would be able to come in to build projects that relied upon PREPA's power purchase agreements, which are now not reliable, because it itself is not creditworthy, but to, in the interim, shore up PREPA's credit so that these projects can begin construction sooner than later.

Mr. YOUNG. Well, one of the challenges, I think is, who would want to invest in this, unless there is a backup? I can't see it quite

frankly. Do you think it could be done?

Mr. EMMONS. I think it can be done. An example of a situation like this——

Mr. YOUNG. Without a backup you think it could be done?

Mr. EMMONS. Oh, without a backup? Without a backup would projects be built with PREPA's power purchase agreements? No.

Mr. Young. OK. Mr. Chairman, I think the biggest challenge we have here is to look at the past, the present, and where we are going to be in the future. You know my feeling on Puerto Rico and statehood, et cetera. And the biggest drawback they have is that debt and a energy system that doesn't match any other system within the United States. If you want to be a state, you should actually have the same structure as other states have, as far as regulation and investment, because this is not going to happen. You cannot rebuild this territory with the system that is in place right now.

And I don't know whether you can do this or not. I have about 42 seconds. I was going to yield the rest of it to Jenniffer, but she is not here. I do thank you for having this hearing. Thank you.

The CHAIRMAN. Mrs. Napolitano.

Mrs. Napolitano. Thank you, Mr. Chairman.

Mr. Bhatia, under Federal private ownership, do you believe Puerto Rico Electric Power Authority, PREPA, would be able to withstand another major hurricane?

In talking to the Army Corps of Engineers a couple months back, they told me they were rebuilding to old standards. Would that be enough to withstand the hurricanes?

Mr. Bhatia. No, not at all, Congresswoman. I think it is a big mistake to rebuild based on the old standards. And I think that is

why there are two different issues, privatizing for investment, but opening it up for competition.

And I think what we should be doing is creating for the first time—and it is a novel idea—an energy market in Puerto Rico.

That is what needs to be done. Mrs. Napolitano. Solar power.

Mr. Bhatia. Yes, with solar power. And again, I will probably insist on California—we are following California, we are following Hawaii. Hawaii's 2045 idea is basically to phase out thermoelectric energy, fossil fuels, and phase in solar energy. That is exactly the model that Puerto Rico should follow.

Mrs. NAPOLITANO. With climate change, I would agree.

I yield my time to Nydia Velázquez and Mr. Soto.

[No response.]

Mrs. NAPOLITANO. Nydia? Soto?

Mr. Soto. Thank you so much. So, we passed reform already, right?

Mr. Bhatia. Yes.

Mr. Soto. OK.

Mr. Bhatia. Well, several reforms, but more are needed, yes. If you are asking me.

Mr. Soto. Yes. Sorry, Mr. Leader, I apologize. I should have said

that.

Would municipalities be able to potentially provide power under those?

Mr. Bhatia. Yes. I think that is exactly what we are working on. We are working on a new regulation that will allow microgrids. Instead of having one monopoly throughout Puerto Rico, breaking it up.

And we have very serious companies that have suggested and consultants who have told us how to do it. But we want to allow the citizens to participate. I would also say co-ops. We have a very robust—

Mr. Soto. And I am getting to that.

Mr. Bhatia. OK.

Mr. Soto. In Florida, as you know, we have municipalities. We have IOUs, investor-owned utilities. We have rural co-ops, like you mentioned. All of those entities would be eligible under the existing reform that you already passed, right?

Mr. Bhatia. Yes.

Mr. Soto. And how long do you think we will get into Step 2, where we see a lot of movement with this stuff, based upon your legislative experience?

Mr. Bhatia. We are working very closely with the Southern States Energy Board, and we are putting a package together of what we call the new public policy. That should be in place for the next 30 years.

Department of Energy is providing a lot of assistance, and we thank them—

Mr. Soto. Do you think we will see it in the next couple months? Mr. Bhatia. Yes, we should. Within the next 3 months, I think we can report back to Congress saying that we have accomplished our mission. We have been working really hard, non-stop.

Mr. Soto. Thank you.

Secretary Walker, does that appear to be a timeline you are

seeing, as well?

Mr. Walker. Again, through the SSEB, as the Speaker noted, we are working to ensure that they have a good energy regulatory framework structure placed together. So, that timeline is in line with what we are hearing from SSEB.

Mr. Soto. So, they are moving along?

Mr. Walker. Yes.

Mr. Soto. And then for renewables, the current reform, Leader Bhatia, does promote renewables like you are advocating for. Does there need to be further reform?

Mr. Bhatia. Well, what we are advocating is not to allow renewables, but to mandate renewables, which is being more aggressive. And we are almost there. We are almost there.

Mr. Soto. Forgive me, sorry. Are there bills moving through the

Senate right now to help do that?

Mr. Bhatia. We have a multi-sector task force led by the Southern States Energy Board, and our hope is this will be done within the next 2 or 3 months. But the idea is to have a specific mandate, just like Hawaii.

Again, if we look at Hawaii's legislation, we want to follow their

legislation.

Mr. Soto. Thank you, Leader.

Mr. Svanda, I want to talk a little bit about resiliency now. Do you think, if we had this competition in there, IOUs, municipalities, rural co-ops, that would stimulate more investment, again, and keep rates pretty stable?

Mr. SVANDA. Well, it would take a long time to get there. Mr. SOTO. How long, do you think? Years? Decades?

Mr. SVANDA. It will take years, in that if you look at the regional transmission organizations that operate in this country and operate economic markets and do dispatch of various bidders into a market system, it is a very complex system. It requires control and it requires monitoring and access to—

Mr. Soto. Thank you, Mr. Svanda. My time is limited. Last

question for Secretary Walker.

I know there has been a push by Army Corps to remove some of the current generators on the island that are temporary but are needed during hurricane season. Do you think it is a good idea to keep them there, at least until after hurricane season?

The Chairman. Just say yes.

[Laughter.]

Mr. Walker. We will work with FEMA.

The CHAIRMAN. All right.

Mr. Lamborn.

Mr. LAMBORN. Thank you, Mr. Chairman. Thank you for having this hearing.

Mr. Walker, I would like to start by asking you a question. How long were you there in Puerto Rico, personally, during and after the hurricanes last year?

Mr. WALKER. Two weeks.

Mr. LAMBORN. And you have spent time personally on the island, and you feel like you are familiar with the situation?

Mr. WALKER. I am familiar with it, with the generation transmission distribution system, yes.

Mr. LAMBORN. OK. So, when it comes to PREPA, did you ever observe any fraud, waste, or abuse at PREPA, including the mis-

management of critically needed resources?

Mr. WALKER. No. Again, I was not there in a capacity of running PREPA. I was there working with FEMA as a DOE subject matter expert in order to get the system up and running.

Mr. LAMBORN. What about the warehouse where things are

stored?

Mr. Walker. The facility owned by PREPA?

Mr. LAMBORN. Were things always conducted properly there, or

was there ever any mismanagement?

Mr. WALKER. The warehouse I believe you are referring to is Warehouse 5, where there were transmission assets stored at that facility.

Lamborn. And? Did Mr. you ever observe anything

inappropriate?

Mr. Walker. I wasn't involved with that warehouse. I think you may be referencing a news article that came out with Army Corps that I was not participating in.

Mr. LAMBORN. Mr. Svanda or Emmons or Spiotto, how would you characterize the existence of lack of existence of mismanagement at

PREPA?

Mr. SVANDA. Based, again, on my reading of news articles and things like that, it was horrendous. The article that was referenced—I don't have to be probably as cautious in my response if the news article was accurate, it is an abomination for the people of Puerto Rico to have the materials that are required to repair a system that is depriving them of power hidden away and requiring folks to force their way to gain access to them.

If that news reporting is accurate, there is no excuse for it.

Mr. LAMBORN. And any one of you-Mr. Bhatia, yourself, can you

comment on those news reports?

Mr. Bhatia. Well, I can tell you, I have no doubt there has been fraud, corruption, and waste in PREPA. And there is no question about it. And I conducted a thorough investigation on the purchase practices at PREPA, and we found over 600 instances in which the purchasing of oil was not done properly. They were paying for premium oil when they were getting sub-standard oil.

So, we are talking of corruption of billions of dollars over the

course of the last 10 years.

Mr. LAMBORN. I will just cut to the chase here. Given this climate of corruption and mismanagement, is PREPA even salvageable? Should we even spend another day trying to salvage it, rather

than starting all over?

Mr. Bhatia. Well, if you are asking me, I will tell you that that is why I am advocating for something different. I am saying let's stop this monopoly, let's open up the market. Let the market forces compete and make sure that efficiency is plugged in to the whole electric system in Puerto Rico.

And I think that the idea of this Committee trying to fix

PREPA—good luck.

[Laughter.]

Mr. LAMBORN. How about privatizing?

Mr. Bhatia. Privatizing what? Because PREPA owns a lot of very old technology. It is like we are privatizing the payphone company, you know? You may privatize a payphone company, but people have turned to cell phones. I mean who uses a payphone any

more? Who puts a coin there? Nobody.

So, I would say the analogy would be to open up the market, allow this new generation of millennials and others, other engineers to develop their own technology and create a whole new market in Puerto Rico for energy. I think that can happen. And with solar energy and new batteries that are affordable, I think we can create a new, robust system on the island of renewable energy.

Mr. LAMBORN. Any comments from anyone else?

Mr. SPIOTTO. From other restructurings of utilities, the first step is to get stable management in there, oversight, and supervision to make sure there is no bleeding. You stop the bleeding first. You share the pain, you develop a business plan that has credibility in the markets.

Mr. LAMBORN. Thank you.

Mr. SVANDA. I would add that just getting the existing system up and running so that the citizenry can be served with power is more critical than moving to a new market structure. That market structure will take time to evolve to, so we need to assure that there is reliable service, first.

Mr. LAMBORN. OK. Thank you all for being here.

Mr. Chairman, this is so important. I do wish that the Governor had been able to attend. Thank you, and I yield back.

The CHAIRMAN. Ms. Bordallo.

Ms. BORDALLO. Thank you, Mr. Chairman, and thank you for calling this hearing. This is a very important issue. It needed attention. And it is an issue that the Puerto Rican people have put up with for, did you say 70 years?

Mr. Bhatia. Yes.

Ms. BORDALLO. Well, that is a long time. I am from a sister territory. I live in Guam. And I have lived in the tropics almost all of my life. I can tell you that affordable, reliable electricity for air conditioning and everyday needs is absolutely a necessity. Many people don't understand, because they have it all year round.

And like all U.S. territories, Puerto Rico remains heavily reliant

on costly imports of fossil fuels. Is that correct?

Mr. Bhatia. Yes.

Ms. BORDALLO. For electricity generation often imported from abroad, just like Guam.

Mr. Bhatia. Right.

Ms. BORDALLO. The cost of electricity for Puerto Rico residents is nearly twice the national average, while at the same time their GDP per capita and median household income are just half that of the mainland United States.

Last month, we held a Subcommittee hearing on my draft bill to authorize wind energy development in Federal waters off the coast of U.S. territories, including Puerto Rico. So, I am confident that there is bipartisan support among the Committee for offshore wind, which would improve self-reliance and lower electricity costs in the territories.

I do have a question for you, Senator Bhatia.

Mr. Bhatia. Yes.

Ms. BORDALLO. I liked your comments today. And thank you for representing the residents of Puerto Rico, our fellow Americans.

The system needs, as you said, overhauling. There is no question about it, whether you go to privatization, or whatever. And it should not be a monopoly.

Mr. Bhatia. It should not.

Ms. BORDALLO. I grant you that. You have been very patient— 70 long years.
Mr. Bhatia. But can I clarify something, Congresswoman?

Ms. Bordallo. Surely.

Mr. Bhatia. Seventy years. But for the first 40 years or 45 years, our Puerto Rico Electric Power Authority, PREPA, was the jewel of the crown. They did a great job penetrating the mountains and taking electricity to a lot of poor people. So, I would say the first 75 percent of those 70 years they did an excellent job, and it was really a showcase of how a utility should work.

Ms. Bordallo. That is right.
Mr. Bhatia. It has been since the late 1970s and 1980s where things have deteriorated for PREPA.

Ms. Bordallo. We have a good power system on Guam. For a while there we had blackouts every other day, but now it is good, and I appreciate that.

Mr. Bhatia. Thank you.

Ms. BORDALLO. Why did you change?

Mr. Bhatia. Well, I think it had to do with a lot of the competition from the fossil fuels. They abandoned hydroelectric power. And after a while it became a huge government bureaucracy, and the bureaucracy took over. I mean, this should be a model for public policy schools, as to how a great, great publicly-owned company became an obsolete bureaucracy.

Ms. BORDALLO. That is right. All right, what does Puerto Rico need most from the Federal Government to improve the reliability of your electric grid? What is the first step that we should be look-

ing at, in your opinion?

Mr. Bhatia. I think we should have goals in place, and I think we should have a mandate. And I think if the U.S. Government is, in fact, helping Puerto Rico financially, it should not take over PREPA.

What it should do is create mandates with deadlines, saying the government will help finance certain things, and then we can make the list. I think Congresswoman Velázquez said some of the issues at the beginning. And others have a list. The Governor has a very good list. So, if we can follow the list with a specific mandate and a deadline, I think that the Federal Government could help speed up the process for Puerto Rico.

Ms. BORDALLO. That is right, and place it as a priority.

Mr. Bhatia. And place it as a priority, right.
Ms. Bordallo. My next question is for Assistant Secretary Walker. I have about a minute left.

What financial or technical assistance did the U.S. Department of Energy prepare to provide the power authority as Puerto Rico seeks to modernize their plants? Mr. Walker?

Mr. WALKER. We have actually been working extensively with PREPA, establishing, as I noted during my oral testimony, a model that enables the actual system to be replicated and load flows to be developed, as a result of that. That technical expertise has been utilized by and developed by six of our national labs, as well as our engineering staff here at headquarters.

That model enables the identification of the best investments that can be made, perhaps on the generation side, where it will economically drive down the cost, due to the locational capabilities

of that.

Ms. BORDALLO. All right, thank you. My time is up, but I thank you.

And thank you, Mr. Chairman. This is a very good hearing. I yield back.

The CHAIRMAN. Mr. Thompson.

Mr. THOMPSON. Thank you, Chairman, for the hearing. Thanks,

members of the panel.

Assistant Secretary Walker, thank you for joining us today. Nearly a year ago, a year after last year's disastrous hurricanes, Puerto Rico's energy grid, as we have heard, is still incomplete. And PREPA has been fraught, it appears, with infighting and has been unable to effectively restore power to the island.

Can you discuss additional challenges that are affecting Puerto

Rico's energy grid?

Mr. Walker. Sure. Fundamentally, there are some design issues that have resulted due to lack of maintenance. So, one of the biggest flaws in the system, which is part of the reason we built the model, is a lack of generation in the northern corridor near San Juan. Seventy percent of the load exists in the San Juan area, but the majority of the generation is in the southern tier. That creates some basic physics problems that need to be overcome.

As the model will identify as we go forward, we need to put gen-

As the model will identify as we go forward, we need to put generation in the north, near the low pocket, which is a traditional generation transmission distribution design. That will also provide opportunities to introduce new types of generation, whether it is a combination of renewables or things like liquid natural gas that will have the opportunity to drive down the cost per kilowatt hour significantly, and thereby also improve the economic vitality of the entire island.

Mr. Thompson. As we continue to discuss potential solutions to Puerto Rico's energy crisis, many proposals are being considered, and these include privatizing PREPA, creating a stronger regulatory framework, among others, kind of a followup to what you had mentioned about looking at the issue that we have with power generation being concentrated in the northern corridor, or the end of the island.

I assume you would agree with this: Do you think pairing these proposals with innovative solutions such as microgrids will have the ability to reliably restore power to Puerto Rico in a sustainable way?

Mr. WALKER. Absolutely. We have identified and worked extensively with PREPA, as well as PRIDCO, which is the Puerto Rico Industrial Development Corporation, for the locational capabilities of microgrids. We have had teams of people down from the national

labs who have significant expertise in developing and designing and operating microgrids. There is opportunity on the island, it is part of the recommendations that we identified, it is the utilization of microgrids, as well as the integration of other renewable resources.

Mr. Thompson. One of my colleagues previously asked the question, who is in charge? I think I heard five different answers, or a lot of variations of responses. And given those responses, it would hardly be fair to characterize the leadership of PREPA currently as capable.

Leader Bhatia, without a legislative response to the question of who is in charge, will Puerto Rico be able to overcome its political infighting and succinctly answer that? As a followup, how can we have confidence, given your testimony reflecting the reversal of actions that you undertook as Senate Majority Leader, that when change comes again, a new regime that is government, no matter where we are at, the only thing we know that won't change is eventually things do change, in terms of the people that come into office. How do we have confidence that when that happens in 2 or 6 years, that they too will not reverse any progresses made by the current administration?

Mr. Bhatia. I think that part of what we have to do is make sure that we have a clear mandate. It could be a state or a Federal mandate. And make sure that whatever investments we make, we make it very public, and create that new—which is what we are trying to do with the Department of Energy. We are trying to create the next 70 years or the next 50 years of a regulatory system that would have specific mandates with specific dates.

And if we can accomplish that, I think we are going to be in the process. Again, I bring the analogy of Hawaii, because Hawaii was going through the same problem, and they were able to fix it, once they created a 25-year plan with specific mandates.

Mr. THOMPSON. Mr. Spiotto, from a market perspective, how unhelpful is the political uncertainty surrounding PREPA's future to returning PREPA to the capital markets?

Mr. SPIOTTO. The capital markets like certitude. They don't like unrest. That means risk. Risk means more cost or no access.

Mr. THOMPSON. Very good. Thank you, Mr. Chairman. I yield back.

The CHAIRMAN. Thank you.

Mr. Beyer.

Mr. Beyer. Mr. Walker, I was fascinated, listening to the many different perspectives and trying to sort them out. Mr. Svanda is arguing for a strong regulator in a monopolistic environment; Leader Bhatia, with a new open energy market, with innovation, cost containment, and choice for the consumer; Mr. Spiotto arguing for DOE supervisor, stable board, voluntary resolution, changes in oversight; and then Mr. Emmons talking about the hopelessness of the debt situation, that with the Ca credit rating, who is going to want to be interested in it, and how do you somehow restructure all this debt to make them creditworthy.

How, as the Representative of the Administration, the executive branch, do you put these together?

Mr. Walker. Well, it is pretty simple. It is similar to what I told my team on the Office of Electricity. Simply, we need to get back to basics. And with this case, what we have is a utility that, by virtue of many varying factors, very complex issues, has fundamen-

tally gone awry.

However, if you take all the things that have been said here, Number one, I think, and the Administration believes, it is important for there to be a strong oversight from a regulatory body, much like we would have at a traditional state public service com-

mission in the United States.

Second, there is the opportunity to evolve the markets, but we have to get back to the basic component of getting a utility up and running from a very traditional generation transmission and distribution perspective. There are very basic things that need to be done at this utility, as is evidenced and put forth in our recommendations from the Department of Energy. Those things have to be done first.

So, getting the T&D system up and running, fixing and getting the generation in the right locations to drive down the cost of electricity for the economic vitality of the island is fundamental. That has to be done in conjunction with and allow that company to grow, while growing a public service commission that can have oversight.

Mr. BEYER. Great.

Mr. WALKER. Once that is stabilized, then you can get into all of the other things that everybody talks about through modernization, whether it is a very significant marketplace, as the Speaker notes, or whether it is a significant move to increase the penetration of renewables

Mr. Beyer. Let me move on. Mr. Leader, the notes show that it has assets of \$9.4 billion, liabilities of \$11.4 billion. You are \$2 billion upside down, with the obvious terrible credit rating. How do

you possibly get out of that situation?

Mr. Bhatia. That is why it is in bankruptcy. That is exactly what PROMESA brought about. The good part of PROMESA is the bankruptcy, the ability to look into the restructuring of Puerto Rico's debt. And I think that PREPA went wild between 2009 and 2012, borrowing about \$5 billion in 4 years. And they were borrowing to keep the rates down, which I think is the crime here. They were borrowing to subsidize, not to invest.

After \$9 billion debt, they did not restructure or improve their infrastructure. So, we have this old-our generating plants look

like the cars in Cuba. I mean these are 1960s plants.

Mr. Beyer. There are some occasional nice cars in Cuba, too.

[Laughter.]

Mr. BEYER. I yield the balance of my time to Mr. Soto.

Mr. Soto. Thank you, Congressman Beyer. I am glad you brought up the phone company, because I was amazed by the history that Puerto Rico actually had its own phone company, too.

Mr. Bhatia. Yes.

Mr. Soto. And I think no one here wants a Federal takeover, and I am certainly opposed to one. But I do think the common thread, no matter who is on this panel, is to have steady, transparent progress in the breaking up of PREPA and keeping us posted on how it is happening. I am really glad we have some dates on the record of 3 months or so before we see some major changes. But we don't have to reinvent the wheel. Most states have a quasi-

government system with IOUs, munis, and rural co-ops.

But I think the last two concerns are just to make sure that, as we are doing that, we need to protect labor agreements that are in place, and pensions that are in place, and making sure that those who take on this are taking on a portion of the debt. But I believe that bringing Puerto Rico in line with where the states have been with their systems and using a more traditional model, much like getting rid of the government phone company was very helpful to the island, as well, and then just keeping us posted.

[Pause.]

The CHAIRMAN. Are you yielding back?

Mr. Beyer. Yes, sir.

Mr. Soto. And I yield back. The Chairman. Mr. Labrador.

Mr. LABRADOR. Thank you, Mr. Chairman, and thank all the

witnesses for attending today.

Having been born and raised in Puerto Rico, I want to see affordable, reliable, and sustainable energy available to the whole island. I have a sister who lives in Ponce, I have a lot of family who lives in San Juan and Bayamon, and so they are all over the island, and I am concerned about the whole island. And the situation of Puerto Rico's electrical grid is really sad and is in desperate need of improvement.

Senator Bhatia, can you explain a little bit about what the Puerto Rico Energy Commission is? You sort of alluded to it, but

you didn't really explain what you did with your legislation.

Mr. Bhatia. Basically, the Puerto Rico Energy Commission looked at the 50 states of the Union and several countries in the world and basically copied the best practices and created a regulator. We have a regulator established in 2014, the commissioners were appointed in early 2015. They have been in place for a little over $2\frac{1}{2}$ years, and they have done a great job.

Part of my extended testimony has a long list of how they looked at a number of issues. In fact, they have just put out the first-ever

regulation of microgrids in the United States.

And the problem is, in the last 18 months, the current administration has tried to weaken the energy commission, and there have been letters from Members of Congress and others saying we have to strengthen the energy commission, not weaken it.

Mr. LABRADOR. Would you say right now the PREC is an

independent regulator?

Mr. Bhatia. I would say it is an independent regulator, or struggling to be independent. But I would call it an independent regulator, and we should all universally make sure that it remains independent.

Mr. LABRADOR. I was a little bit confused by your testimony. You keep saying that we want to mandate renewables, and that that would be your solution to the island. Have you met Mr. Emmons to your left?

Mr. Bhatia. Yes.

Mr. LABRADOR. They have been trying for a long time to get renewable projects in Puerto Rico and they have been rejected

again and again and again. I am trying to understand how that is possible.

I don't want mandates. I am a person, as you can imagine, I come from the right side of the aisle, I am not a big fan of mandates. Yet, when I hear the solution to Puerto Rico is having renewables, and I know that a company is trying to do renewable projects and they keep getting rejected, I am having a kind of a disconnect here.

Mr. Bhatia. Well, that is exactly right. You have it right, Congressman. The idea is that we have been rejecting solar energy and renewables precisely because there is a PREPA that completely refuses to allow renewable energy. We have had legislation on the books for the last 10 years. And we have not been able to fulfill any of the goals of that legislation.

So, what I am saying is part of the public policy, other than the open market-

Mr. Labrador. So, just to be clear, your legislation would allow renewables. It is PREPA that is rejecting it?

Mr. Bhatia. No, right, yes, exactly, exactly. Mr. Labrador. Yes.

Mr. Bhatia. I am all for renewables. I am all for solar energy. And again, I think Puerto Rico should move in that direction. But there are also other considerations, other than cost: environmental considerations, other issues that, as a public policy, coming from an island that has abundant resources. For us, it would be great to use the sun, which is what we have.

Mr. LABRADOR. That is right. A little bit of it, right?

Mr. Bhatia. Yes, we have a little bit of it, right. Mr. Labrador. Yes.

Mr. Bhatia. So, if we can replace fossil fuels with the sun, now that the costs have come down dramatically, I think it would be a good, not only energy policy, but a good economic policy for Puerto Rico.

Mr. LABRADOR. I agree with that. But what I am having some struggles with is the mandate aspect of it.

Mr. Emmons, can you speak to what you see as some of the impediments to doing these projects on the island, and what sort of maybe mandates we could do to make sure that it works?

Mr. Emmons. The impediments, from my understanding, from what I hear, have been mostly PREPA failing to perform under its obligations under the power purchase agreements. It is not only signing the contract and agreeing to buy the power when the project is built, but it is also cooperating with the project developer in reviewing and approving interconnection and other things which relate to the siting and interconnection and construction of the project.

And that is what, from my understanding, PREPA has been dragging its feet on, and presumably because they are not really desiring to incorporate renewables into the power system.

Mr. LABRADOR. Senator Bhatia, if the PREC was working as an

independent body, do you think we could solve this problem?

Mr. Bhatia. Yes, and it is solving it. And I think there have been many lawsuits by PREPA. PREPA is, for the very first time, seeing—this is like a wild horse being told you cannot do this any

more. And finally, we are tying up PREPA to tell them, look, you have to follow certain procedures before you actually do what you are doing.

So, yes, if we strengthen the energy commission, and we learn from any other utility commissions, we can have progress.

Mr. LABRADOR. Thank you.

The CHAIRMAN. That was my fault, I was napping.

Mr. Soto.

Mr. Soto. Just to reiterate, we need resiliency, renewables, and reform. With that, I yield back, Mr. Chairman.
The Chairman. Thank you for covering up for my nap.

Mr. McClintock.

Mr. McClintock. Mr. Emmons, you are an expert on financing. Obviously, PROMESA has not lived up to any of its promises. What would have happened if we had just left things well-enough alone, had the creditors and the courts intervene? I assume that PREPA would have been divided and sold off to, presumably, a competent operator.

Mr. Emmons. Well, I am a financier of projects. That question actually seems better directed to Mr. Spiotto, who deals with

restructurings and bankruptcies.

Mr. McClintock. Well, let me ask Mr. Spiotto, then. What would have likely happened if we just left well enough alone, let the system work as it has on so many other badly run enterprises,

public and private?

Mr. Spiotto. Generally, what happens, you have a receiver appointed, the creditors go in, have the right under the documents, the receiver is someone with stature to manage it, provide stable management during the restructuring process. And also to build credibility. They come up with a business plan, with a rate path. They get the utility commission to approve it. And they restructure it and they come back out.

Either they sell the utility to another party, or they wind up restructuring, putting in new management, and it is a reorganized

Mr. McClintock. But we didn't do that. We bumbled into the middle of it, came up with this jerry-rigged system, and it hasn't worked, and now we are 3 years down the road.

Mr. Spiotto. The capacity for growth and change is needed, yes. Mr. McClintock. And perhaps the simple process of bringing in competent managers through the marketplace was a better route to take, but we didn't take it, and now we are sadder, but hopefully wiser.

Mr. Walker, we are hearing a lot about renewables, presumably wind and solar. Those are the most expensive ways of generating electricity that we have available to us. In a system that is impoverished and in desperate need of simple generation, particularly on an island favored by trade winds, why aren't we pursuing much less expensive and much more reliable conventional electricity generation?

Mr. WALKER. Well, I think, first off, your assertion that it is the most expensive generation would assume that perhaps you were sitting in Arizona, paying 1.6 cents per kilowatt. However, when you are sitting in the middle of Puerto Rico paying \$.20-plus per kilowatt, some of the cost-effectiveness of wind and solar actually become economical.

So, again, we have been working with Puerto Rico, with models that we use at our national labs, which are the most sophisticated in the world, that take into account things like marketplace drivers and, actually, cost of energy.

So, recognizing that Puerto Rico relies on bunker fuel, for the most part, for their energy and/or coal, hitting below those price points is not that hard. There are strategic uses and economic uses

for both of those——

Mr. McClintock. But why aren't we making a simple economic—and I don't have a dog in that fight. My sense of it is whatever is the cheapest way to produce electricity is the best way to proceed. What is the cheapest way to produce electricity in this market, and why are we making a political decision and not an economic decision?

Mr. Walker. First of all, I think that answer depends on where you are and what your fuel resources are. I think we are neglecting some of the real challenges that exist in Puerto Rico, which is, when it costs \$1 million a mile—

Mr. McClintock. But you are not giving me a straight answer. What is the cheapest—

Mr. WALKER [continuing]. To run a transmission line, bringing and using solar power on top of a mountain, it is cheaper—

Mr. McClintock. But why does it cost \$1 million a mile to build a transmission line in Puerto Rico?

Mr. WALKER. Actually, about \$1 million a mile is a standard U.S. dollar amount.

Mr. McClintock. OK. Then my point is, why aren't we looking at it strictly in terms of economics, not in terms of politically favored sources of energy?

Mr. Walker. I guess I am not really sure where you are going. When you go to Puerto Rico and you look at some of the geography, where you have mountain-top distribution systems, the cost of running the distribution system up the mountain-top via traditional means is uneconomical compared to being able to utilize things like wind and solar, by placing the generation exactly where the load is

Mr. McClintock. Senator Bhatia, I think you made a very good point that a competitive market is the best friend of the consumer, far better than any kind of politically dominated regulator agency. Would you expand on that in the few seconds we have left here?

Mr. Bhatia. Yes, I would say it is, but it is within the energy system, the energy structure, the energy industry. Creating a competitive market is not something that happens overnight. It is a question of making sure that if you have affordable energy you can then move into that market. I would be happy to talk to you more about it.

The CHAIRMAN. Thank you. This time I have awakened.

Ms. Velázquez.

Ms. VELÁZQUEZ. Thank you, Mr. Chairman.

Mr. Spiotto, in your testimony you suggest the Department of Energy has the expertise, resources, and mission to oversee PREPA. You also indicate that this oversight should not be deemed as offensive, vis à vis Puerto Rico's sovereignty. Are you here

referring to federalization of PREPA?

Mr. SPIOTTO. No, I am talking about providing the technical advice and supervision. Part of the disconnect here, there were resolutions, but disagreements with the current oversight, which have good people on it, but they are not energy people. And I think what they really need is a path forward that works.

Ms. VELÁZQUEZ. Yes, OK, thank you. If that is your position, it is something that I really support for the role that the Department of Energy should play in the transformation of PREPA in Puerto

Rico.

You have not discussed within the administration the federalization of PREPA?

Mr. WALKER. Are you asking if we have discussed the federalization?

Ms. Velázquez. Yes.

Mr. WALKER. We have talked about lots of different solutions of how to solve the problem in Puerto Rico. And I guess I am a little dismayed because we keep dancing around the issue and nobody wants to talk about it.

But the fact of the matter is there are some things that we can do that can help solve the problem without federalizing this and putting the burden on the rest of the taxpayers across the United States.

Number one, let's have a backbone and pull away the board

appointments away from the Governor.

Number two, let's take all the commissioners from the PREC and pull them away from the Governor. Let's face it, we are dealing with a municipal entity that is politically driven. Solve the politics

and take it away from the politicians.

Ms. Velázquez. I agree with you that we need to de-politicize that process. But, from there, to federalize PREPA is a long haul. And the reason why I am bringing it up, despite the fact that the Chairman made it clear that he was not discussing federalization here, but since it has been widely discussed in the press in Puerto Rico, I just wanted for you to be on record to say that that is not the intention.

Mr. WALKER. I will say it clearer, then. We don't want to federalize PREPA.

Ms. Velázquez. Very good. And Mr. Bhatia, I have been visited by some CEOs who have said that private financing will not be attracted to Puerto Rico or to PREPA unless there is a federalization of PREPA. So, my question, Mr. Bhatia, is federalization even allowed under the territorial clause of the United States?

Mr. Bhatia. That is an 800-pound gorilla. Let me move into the

territorial clause of the United States, briefly, as a lawyer.

Most people talk about the territorial clause and they don't know what it is. Article IV, Section 3 of the Constitution says something which I think is shameful for the United States. It says that Congress shall have power to dispose of and make all needful rules and regulations respecting the territory or other property.

I would like to say, given this opportunity, that Puerto Rico is not property, and Puerto Ricans are not property of anyone. That goes back to the 18th century. That is perhaps a mentality of slavery. And I would really consider the fact that a lot of Puerto Ricans are just offended by this whole concept of the power of Congress of Puerto Rico on this territorial clause concept of being a property. We are not property of anyone, and I think that is important to notice.

Ms. Velázquez. Thank you.

Mr. Emmons, a recent report highlighted that between 2002 to 2017 PREPA paid over \$27 billion for fuel deliveries alone, and low-quality fuel, at that. Can you highlight the benefits of shifting from a fossil fuel dependent grade to one that maximizes the use of renewable energy in Puerto Rico?

Mr. Emmons. Thank you. That is a very easy argument to make

on many fronts.

For one thing, it is cleaner. All of this fuel that has been imported into Puerto Rico was burned, and therefore created

pollution.

Second, the cost of renewable energy depends on the location, of course. But as an island, Puerto Rico supports very low-cost renewable energy, particularly wind energy. The island environment is very much like offshore wind, and offshore wind is higher quality than onshore wind. But onshore wind in Puerto Rico is more like offshore wind. So, the wind resource in Puerto Rico is excellent.

And in the last 5 years, speaking of solar now, the cost of solar has come down 90 percent from what it was then. And it was even more expensive 5 years before that. So, in Puerto Rico, solar power is cheaper than imported fossil fuels. All the fossil fuels, obviously, have to be transported to Puerto Rico, whereas the wind and solar are locally sourced. Therefore, it is cheaper and cleaner.

Ms. Velázquez. Thank you.

Ms. VELÁZQUEZ. Thank you. Thank you, Mr. Chairman. The CHAIRMAN. Thank you.

Mr. LaMalfa.

Mr. LAMALFA. Mr. Chairman, I am sure nobody on this panel thinks that Puerto Rico is a property, or the people are. That is a little outrageous. It is a territory, the—Article IV said "or properties." So, we need to distinguish between that.

But let's get right down to this thing. I would like to see the island prosper and do well. I had a chance to visit. And that doesn't make me an expert by any means, but there is a lot of great poten-

tial down there, and for the fine people of that island.

So, what do you need to be successful to invest there, to thrive? Low-cost electricity would be a big cornerstone of doing that. What I saw on my visit was a bunch of shut-down, 60-year-old generators that are using diesel or fossil, bunker fuel, or something like that, that are not efficient. The Army Corps had in place some temporary generators they were using, if I remember correctly, about one-third or maybe one-fourth the amount of fuel to generate the amount of electricity that was being used out of those 60-year-old machines.

So, an improvement right there, with a temporary machine, but what if we thought ahead of this a little farther? We have abundant natural gas that we export, and we are seeking to export more across the Atlantic and other areas to share with Europe and others. The island is much closer than those areas. If it is economical for Europe to import, why would it not be economical for Puerto Rico to do so? Build the type of plants we need on opposite ends of the island, where strategically it makes sense, large plants.

I wonder, Senator or Mr. Walker. How many acres do they have available to cover the island with subsidized solar panels that need to be replaced every 15, 20 years—and who knows how they hold up when a hurricane gets underneath them—how many acres do we have to come up with that?

When I was on tour there I saw a lot of area that was either a flood plain or environmental set-asides or with what agriculture they have there. How many acres do you want to cover up on an island with that? Or cover with windmills that are low yield per

windmill, very expensive per windmill?

I don't see the yield for a power grid that wouldn't be subject to storms, cloudy days, and damage from hurricanes. Those alternatives just seem terrible to me, compared to large-scale plants that could be on-line at all times with a fuel source that is reliable, and you can turn it on at a switch, and much more cost effective per unit.

Would you two please touch on that for me?

Mr. Bhatia. Yes, let me make two points. One, if we had enough solar panels on 50 percent of our homes, that would be enough. That would be enough energy generated with 50 percent of our households having just panels on their rooftops. Of course, we have a lot more land that can be used, and we have solar farms. So, the acreage is not a problem.

And in terms of the Constitution, I just wanted to clarify, because you made a point, that it says respecting the territory or other—"other," and I underscore the word "other"—property. Again, I just bring up the fact that this was language from the 18th century, and we are using—

Mr. LAMALFA. Why don't we underscore the word "or."

Mr. Bhatia. No, it says "or other."

Mr. LaMalfa. Ór.

Mr. Bhatia. No, the Constitution says "or other." And that means if you are "or other," you are also property. It says "territories or other property of the United States." And what I am suggesting, sir, with all due respect, is that we should not see—it is shameful—and I am a U.S. citizen. It is shameful to actually treat Puerto Rico as property of anyone.

And I think citizens of Puerto Rico, we should legislate for Puerto Rico outside that whole concept of having the territorial clause. I know it may be the subject of a different hearing, but I think we owe respect to our fellow citizens down in Puerto Rico, and we are not giving them that respect, given the nature of the

fiscal board——

Mr. LaMalfa. When you come in here arguing, that is really not helping your case. I have a great respect for the people of Puerto Rico, and I want to see them prosper. Making that argument does not help other Americans to your cause.

Mr. BHATIA. I would just finish by saying if you had an oversight board, when you do the budget of the United States, if you had an oversight board come in from Russia or somewhere else, or whatever it is, giving you and telling you what your budget should be, even though you approved one budget for the people of the United States, like I did 3 weeks ago, and having an oversight board basically saying, "That budget will not go through, we will tell you what your budget is." I think that is shameful for the United States.

What happened to government of the people and by the people? What happened to democratic values? And that is why I think this whole territorial issue should be addressed at some point.

The CHAIRMAN. Thank you, Senator.

Mr. BHATIA. Thank you.

The Chairman. Look, I am from Utah. I understand what it is like for the Federal Government to control other property.

[Laughter.]

Mr. Bhatia. Well, then, help us.

The CHAIRMAN. Mr. Gallego.

Mr. GALLEGO. Senator, good to see you again.

Mr. Bhatia. Good to see you.

Mr. GALLEGO. It has been great working with you in the past, and the National Hispanic Conference of State Legislators.

Mr. Bhatia. Thank you. Likewise.

Mr. Gallego. Let's just refocus back on the actual substance and technical feasibility, in terms of renewables being able to supply the energy production that Puerto Rico needs, not just for, obviously, the consumer side, which is generation for that is fairly stable, but also, you still need to have a vigorous manufacturing environment in Puerto Rico to employ people, as well as to actually, obviously, generate wealth and income.

One of my concerns in terms of energy production and generation is that you have a, like Representative Soto just said, fully resilient

energy source.

In your opinion, renewables, whether they are mandated or not—I think, in terms of the economics, as Mr. Walker has, that renewables actually end up being economically more feasible than traditional carbon-based energy. In terms of renewables, Number one, with solar panels being as vast and big as you are going to need them to actually cover the whole island—not literally cover the whole island, but produce enough energy for the island—would they be able to be resilient against the hurricane season that comes every year?

Mr. Bhatia. Yes. I would say from the research I have done, I think there are ways of making them resilient. There are ways of actually having a hurricane covering your rooftop PV and photovoltaic process, and having energy 24 hours later or 10 hours later. So, instead of waiting 6 months, like we did, which was a trav-

esty, you could have solar energy right away. In fact, we are installing many solar centers right now in Puerto Rico to community centers to make sure that what happened in 2017 does not happen again.

Mr. Gallego. When you say you are installing solar in community centers, you are talking hospitals, emergency clinics, community centers, schools, first responders?

Mr. Bhatia. Right, and——

Mr. GALLEGO. So, that way they are resilient against a shutdown that occurs, for example, that—

Mr. Bhatia. Exactly, exactly.

Mr. GALLEGO. OK. And then, in terms of generation for mass manufacturing, you can't use, from my very limited experience, rooftop solar would not be able to be sufficient enough to do that. So, are you thinking about trough technology, or what kind of solar or renewable energy are you thinking about that would be able to sustain the baseloads you need for manufacturing?

Mr. Bhatia. I am making a case for solar energy, but I have to say it has to be a portfolio that will include oil, that would include

gas.

Mr. Gallego. Understood, yes, a mixture.

Mr. Bhatia. So, I think we have to be redundant in terms of our energy. But there are many companies down on the island that are already building. They don't want to go through being hostages of PREPA any more.

Mr. Gallego. Right.

Mr. Bhatia. So, people are actually getting off the grid, which will create another financing crisis. If people get off the grid, who is going to pay the debt of PREPA. That is another issue that has to be addressed.

But the fact is many companies are installing solar panels, and they are getting off the grid. And that is happening day in and day out right now.

Mr. GALLEGO. So, in your opinion, then, a mandate, you are advocating a mandate—

Mr. Bhatia. Yes.

Mr. GALLEGO [continuing]. In order to basically force the hand of PREPA to actually go ahead and put the investment into solar or to renewables.

Mr. Bhatia. Not just PREPA, but to encourage citizens and to encourage microgrids. And again, my aim is that we should stop seeing PREPA as the only and sole provider of energy. I think we could have a lot of independent providers, and I think we could have independent microgrids supporting—

Mr. GALLEGO. So, like, microgrids, but distributed solar for small

communities——

Mr. Bhatia. Exactly, exactly.

Mr. GALLEGO [continuing]. That are further away from the main lines there.

Mr. Bhatia. And again, my analogy—excuse me for making this analogy—has to do with hotels and Airbnb. People can be producers for the first time. You don't have to go to the hotel. People can actually have a spare room or a spare roof and produce their own energy. I think that is what 21st century energy is all about.

Mr. GALLEGO. And my last question, if we go to a privatization strategy for PREPA, what do you think that would have, in terms of the direction that we would take, in terms of renewable genera-

tion on the island?

Mr. Bhatia. I think we would have to work out a schedule with experts and engineers and people who are looking forward. We are working very closely with the Rocky Mountain Institute in Colorado. We are looking again at the Hawaii example. And we are

realizing that we have to have a mixed portfolio. Nobody is here saying that it should be 100 percent solar. It should be a robust combination with redundant energy, except for nuclear. We don't want nuclear in Puerto Rico.

The CHAIRMAN. Thank you.

Mr. GALLEGO. Thank you, sir, and I yield back my time.

The CHAIRMAN. Mr. Westerman.

Mr. Westerman. Thank you, Mr. Chairman. I want to go back to the conversation a little bit earlier between Ms. Velázquez and Mr. Walker. I believe you both agreed that PREPA didn't need to be politicized, that that is the best thing for PREPA, if we keep the politics out of it.

And Senator Bhatia, you testified about your work. I think you actually said Act 54 of 2014, but I think in your written testimony it is Act 57 of 2014. I don't think you were talking about November being Adoption Month, you were talking-

Mr. Bhatia. It is Act 57, yes.

Mr. Westerman. All right. And then Act 4 of 2016. Can you explain to the Committee what these two pieces of legislation were intended to accomplish, and why they were so necessary?

Mr. Bhatia. Yes. Act 57 is a major overhaul of the energy system of Puerto Rico. I was the author of the bill. And basically, what it does, it looks into, Number one, creating a regulator. And that was

sort of the main piece, and the main part of this.

But then it also created for the first time a component of efficiency, basically to force PREPA to change its outdated equipment. So, it creates a heat rate—I don't want to go into all of the engineering technicalities, but it is a very robust bill that mandates PREPA to do certain things, in terms of efficiency.

You have a 2018 hybrid car and you have a 1965 Chevy. Which

is going to be more efficient? It is the 2018 hybrid car. Mr. Westerman. Act 57 was to do that, and Act 4

Mr. Bhatia. Act 4 basically de-politicizes. The whole idea is to de-politicize the board. And it created a mechanism under law, where the Governor could no longer appoint, as board members, his wishes. He had to basically wait for a head hunter throughout the United States to give him names, give him or her names of people who are not part of the political system of Puerto Rico. So, it was an effort to de-politicize the

Mr. Westerman. But PREPA is 70 years old. Why did it take so long to enact these laws? Because, obviously, the people of Puerto Rico knew that these changes were needed. What was the delay in

getting these laws

Mr. Bhatia. Congressman, I wish I had an answer. I would say that the first time I had been in the majority, or I was in the majority in the Senate of Puerto Rico, and I was the President of the Senate between 2013 and 2016, I spent all the energy I could trying to fix what had been broken for years.

Mr. Westerman. And your objective was to make it non-political

with professional individuals that understood electricity.

Mr. Bhatia. Yes, and by the way, we also adopted a Hatch Act. Part of Law 4 2016 is the Puerto Rican equivalent of the Hatch Act, to prohibit employees of PREPA from participating in political events. And we wanted that, and that has been weakened, as well. Mr. WESTERMAN. Can you explain how the actions of the current administration helped or frustrated the intentions of those——

Mr. Bhatia. Well, what happened was, in 2017—you mean the independence of the board?

Mr. Westerman. Right.

Mr. Bhatia. In 2017, unfortunately, the Governor appointed as head of the PREPA board a chairman of his finance committee of the election. So, again, he re-politicized. Unfortunately, I would say, with all due respect to the Governor, he re-politicized PREPA. He started bringing in the elements of politics, which basically killed PREPA over the course of the last 30 years. And I think it is very, very unfortunate. I fought tooth and nail with that.

Mr. Westerman. What about Puerto Rico House Bill 1408, which has already been approved by both chambers of Puerto Rico's

legislature and is awaiting review by the Governor?

And the independent Consumer Protection Office said that the bill in question significantly weakens consumer participation and representation in this important process, and has the potential to perpetuate the very same patterns of conduct that have led to the present crisis regarding the vulnerability of Puerto Rico's power crisis.

Mr. Bhatia. Yes, and I hope we will fix that. Part of what we are doing now with law 120, which was approved in June, is basi-

cally to fix all of that language.

There are many signals coming from different sides. And I trust this is a bipartisan Committee. You should meet also Senator Larry Seilhamer, who is a Puerto Rican Senator, and he is working on trying to fix 1408 and other suggestions that have been made to weaken the energy commission. I don't think we should—

Mr. Westerman. Mr. Svanda, in your professional opinion, how would you characterize the Puerto Rico Energy Commission, given

Mr. Bhatia's statements?

Mr. SVANDA. Well, I guess I would fundamentally disagree. I think the intentions were correct, I think the words of the statute that he worked so valiantly to get enacted were correct. But it didn't end the political activities that occurred.

So, in my opinion, the commission has not been effective, the mission has—

The CHAIRMAN. You can have a shorter opinion, I am sorry.

Mr. Graves.

Mr. GRAVES. Thank you, Mr. Chairman, so many questions, so many loose ends here.

Mr. Walker, how much money have you spent on restoration in Puerto Rico?

Mr. WALKER. How much money did FEMA spend?

Mr. Graves. Yes, FEMA.

Mr. WALKER. We are in the process, when you add the different components, including—

Mr. GRAVES. Ballpark, ballpark.

Mr. Walker. About \$6 billion.

Mr. Graves. About \$6 billion.

Mr. Walker. Billion, that is correct.

Mr. GRAVES. OK, \$6 billion. I have been there before, I have been there since the hurricane—do you believe that the distribution system is in better shape now than it was before the hurricane?

Mr. WALKER. Well, it is simply in better shape because we have put new equipment on the system where there was old, replaced equipment.

Mr. Graves. Right.

Mr. Walker. But the fundamental design has not changed.

Mr. Graves. OK, so better equipment, \$6 billion. We have recently announced—

Mr. WALKER. To be clear, some of that \$6 billion is yet to be spent. But it is allocated out to some of the work that was noted earlier.

Mr. Graves. Sure. Thank you for the clarification.

So, we have \$6 billion in investments. Based on the condition of some of the electrical distribution system I saw before the hurricane, I think that we certainly have a better investment now than we had before.

What would you call the status of some of the generation

equipment in Puerto Rico?

Mr. Walker. I think generation is probably the single greatest investment that can be made in Puerto Rico, particularly in the northern San Juan area, where the load pocket is. Seventy percent of your load is there, and very little of your generation is there. You have some fundamental physics problems in that you create losses on your transmission system, which then create inefficiencies, from an economic standpoint, and drive the cost up.

Mr. Graves. And you are making investments there, though.

Mr. WALKER. We have not made investments in generation, because that is part of what would be developed and submitted to take advantage of some of the \$2 billion HUD funding, or some of the Stafford Act 428 funding that would be authorized.

Mr. GRAVES. Which totals, as I recall, just the HUD funding, I believe it is \$18 billion, which is about twice Puerto Rico's annual

budget.

Mr. WALKER. The way it was allocated by Congress was it was at least \$2 billion dedicated to Puerto Rico.

Mr. GRAVES. Right. But the entire, what is known as CDBGDR dollars, Community Development Block Grant—

Mr. WALKER. That was actually \$28 billion that you authorized.

Mr. Graves. It was \$28 billion? I thought—

Mr. WALKER. About \$28 billion. They asked for \$12 billion, you authorized \$28 billion.

Mr. GRAVES. I was thinking we had—well, OK. All right. I was thinking we had announced \$18 billion, but we will take either one.

My point is that when you are talking about multiple times the annual budget of the entire island, I really struggle with us dumping—and dumping is not the right word—investing, because I was an advocate for recovery dollars for Puerto Rico, but making that type of an investment in Puerto Rico, and not changing the conditions or ultimately changing the trajectory of where things were before, when the island was completely insolvent, as we have heard in this Committee.

Virtually every Federal program has some strings attached. You have to meet certain criteria, meet certain guidelines, comply with eligibility requirements, and things like that. I don't understand how we are going to come in and make these massive investments, yet we are not going to yield any type of governance changes.

Mr. Svanda, what other place in the United States has a government-owned utility with a government regulator? I don't

understand this. I don't understand.

Mr. SVANDA. It is not in the Puerto Rico model.

Mr. Graves. I don't understand that. You are a governmentowned utility with a government regulator.

Mr. SVANDA. That is-Mr. BHATIA. Can I-

Mr. Graves. Please, please.

Mr. Bhatia. There are plenty throughout the United States government regulators—let's take Long Island. Long Island Power Authority is owned by the state of New York, and now it is regulated by the regulator owned by the state. And throughout, if you look at the public utilities throughout the United States, Congressman, there are plenty of examples of public utilities being regulated by state-owned or state-controlled or state utility compa-

Mr. Graves. And, Senator, my guess would be that would be in a place where you have multiple utilities, though. PREPA is the sole utility

Mr. Bhatia. Not so, not so. With all due respect, it is not the only place where you have a—I mean there are other places-

Mr. Graves. I am running out of time, so I am going to reclaim my time. But if you could submit to me those examples. I would love to see them.

Mr. Bhatia. Yes, I will. I am not in favor of this monopoly

Mr. Graves. Right, right, so-

Mr. Bhatia [continuing]. So, I will provide information, but I am

Mr. Graves. If I ran a government, I don't know why I would have a redundant system of something I owned, and also have an oversight board that is government, as well. You can control it.

Look, bottom line is we have to move to a privatization scenario. This current trajectory, having a utility that is over \$10 billion in debt, while we are sitting here investing \$6 billion, we are sitting here investing tens of billions of additional dollars in the Puerto Rican economy for recovering, and making it not just recover, but making it stronger, making it better, we have to have the appropriate reforms to go along with it.

It seems like in some cases people are asking for their cake and wanting to eat it, as well. The Chairman. Thank you.

Miss González.

Miss González-Colón. Thank you, Chairman, and thank all the Members, and the people that are here for many hours.

First of all, Mr. Chairman, may I introduce for the record a statement from Greenbriar Capital Corp. This is a letter for the Committee. These are some examples of people that are investing

on the island in renewables, among other things, or solar power. And a letter from the Senate President of Puerto Rico, Thomas Rivera Schatz. Both of them to be for the record.

And I will begin with some questions for Mr. Walker.

We both traveled with the people of the Department of Energy in some of the CODELs. We went to Puerto Rico. And I know some people of your agency went to the Energy and Commerce hearings and Homeland Security hearings. And we allocated those \$2 billion.

The first thing I want to know is, when that money is going to be out there, when the island is going to receive the money, and where the money is going to be invested. I think the people of Puerto Rico want to know that. Because one thing is actually finding the money, getting that money approved, but when are we going to see some kind of improvement in the plans, some kind of improvement in the power grid of the island?

Because one thing is patching up, and we saw that during the last 9 months. And I am grateful for all the linemen, all the people from PREPA that were there during all this year, working long hours, 7 days a week, all the personnel there, and the people who came in the different brigades, the people from FEMA and the people from Army Corps of Engineers. But we need to focus now on what is going on.

And we are right now in the hurricane season. And we are praying every day that there is no hurricane coming up to Puerto Rico, because we know that even a small storm, a tropical storm, may have a huge impact in different areas.

So, if you can give us a time frame of what we can do, as Congress, to speed up that kind of——

Mr. WALKER. Sure. Congress allocated the money through HUD, and that requires HUD to go through a formal process wherein they have to put a guidance document together that will then be put on the Federal Register for the requisite period of time, as set forth by statute.

Once that is completed, there is application made by PREPA and the Puerto Rican Government to actually receive those funds for very specific projects. I would note that there is also the Stafford Act 428 funding, but heretofore PREPA nor the Puerto Rican Government have actually submitted a plan that would enable any money to be allocated under the 428 process.

Miss González-Colón. I know that, because I managed to include the amendments for the limitations that were there, to get the cap out in order to get the 100 percent Federal funding to most of those areas. And we worked together with the HUD Department in many of those actions. Now I will get to Mr. Emmons.

You were talking in your written statement about how the product sponsor needs to know that the offtaker, in this case PREPA, will be able to pay for the electricity when it is delivered. And one way to measure the financial strength of an offtaker is by looking at its credit rating.

And we all know about the credit rating of PREPA. The question will be if the credit rating of PREPA were to improve, will that be sufficient to facilitate the flow of private capital to Puerto Rico in order to facilitate the process of using the private-public

partnerships that are proposed in the recent law approved by Governor Rosselló, and actually, Senator Bhatia voted in favor of.

I do believe in privatization of the electric power authority of the island. We need to move forward. We can't continue to live in an old structure that is not functioning during this era. So, can you answer that?

Mr. EMMONS. Yes. The credit rating improvement of PREPA is necessary, but not wholly sufficient. There needs to be a stable, long-term regulatory environment, a de-politicized regulatory environment, as well as the improvement of the credit rating. Improvement of the credit rating will reflect the financial standing, as well as the overall regulatory environment.

Miss González-Colón. Thank you.

The CHAIRMAN. Thank you.

Mrs. Radewagen.

Mrs. RADEWAGEN. Thank you, Mr. Chairman and Ranking Member, for holding this hearing. I want to thank the witnesses for taking all that time to appear today. I have no questions. I would just simply like to yield back my time to Miss González-Colón.
Miss González-Colón. Thank you, Amata, for letting me use

that time. I really appreciate that.

Mr. Emmons, if we do not improve the rating of and the credit of PREPA, how-I mean a lot of people are talking about federalization. And I do believe that the Department of Energy does not want to take PREPA to manage it. I do believe that. I do believe that we can work together in order to provide assistance, the tools, the technology. I do know that there are more than \$40 million in different grants and technologies that are available in the Department of Energy that could be granted and used in Puerto Rico as a model to invest.

But in order to do that, and in order to find more Federal funds, we need to set what are going to be the standards, where the money is going to be invested. Where is the transparency in the process? How is the public-private investment going to be there?

And in the past, I was there, I was the state representative—we provided a local law to provide for solar panels to be installed. And as a matter of fact, once they began to establish those kinds of factories on the island, and began to connect to the power grid, PREPA dragged their feet, just to not allow those people to connect to the system. And what happened? You had a lot of companies like Amgen investing \$50 million to have their own generator to get power on the island.

And I am just saying that name, but we had a lot of those private companies doing that because electricity on the island is so expensive. So, people are thinking where is my money getting more return, investing in Puerto Rico, manufacturing in Puerto Rico, or

manufacturing in any other state?

In order to keep costs low, we need to reduce our kilowatt hour. So, again, how can we use, or the Federal Government, the Department of Energy, provide the tools to not just regulate, but guide. What should be the one, two, three, four guidelines to provide that kind of assistance?

Mr. Emmons. Well, in my testimony I mentioned an intermediate fix for opening up the gates to private-sector capital. My fellow panelists today have talked a lot about money coming into Puerto Rico, and talked about privatization and competition. And that is the main thing that I think is needed in Puerto Rico to improve the system.

In my testimony, I talked about an intermediate fix in order to accelerate the development and construction of renewable energy projects to be done in parallel, while the Congress figures out what the long-term privatization solution is for the Commonwealth.

Miss González-Colón. One of the things that creates the most public unease in any electricity reorganization in Puerto Rico is the people will have to pay for a rate increase to guarantee any profitability. How do we assure the people that this will not happen?

If we can ensure that in a process between the investors group and the Federal agencies, Mr. Walker and Emmons, do you have any comments on that?

Mr. EMMONS. I am sorry, would you repeat the question,

Congresswoman?

Miss González-Colón. Can we assure that the people will not need to pay for any rate increase in order to have any kind of electricity reorganization on the island?

Mr. EMMONS. I am sorry, the people will not be responsible for what?

Miss González-Colón. A rate increase.

Mr. Emmons. Oh, a rate increase.

Miss González-Colón. Electricity rate increase.

Mr. EMMONS. Oh, I am sorry. As we said before, the cost of local renewable energy is actually lower than the cost of private fossil fuels. And that is one of the ways to avoid rate increases.

The CHAIRMAN. OK, thank you. Before I ask my questions, I am going to ask unanimous consent to put an article in the record that basically says the system was crappy before the hurricanes hit.

Mr. Graves, do you want to do a unanimous consent request, as well?

Mr. Graves. I do, Mr. Chairman. I would like to submit for the record an April 10, 2018 press release by HUD, indicating that the \$28 billion in Federal funds for CDBGDR was for all nine disaster states, as well as Puerto Rico and the Virgin Islands. Puerto Rico's allocation was \$18 million. As stated, I believe that as a result of the late bill, I think it was December 2017, Puerto Rico also got \$1.5 billion.

Number two, I just want to clarify for the record. I believe that the Long Island utility is not controlled by the state. There is separation between the regulator and the actual utility. Whereas, in the case of Puerto Rico, you have the same entity controlling both the utility and the regulator.

The CHAIRMAN. All right. Somehow we will get that in the record, then.

Mr. GRAVES. I was almost articulate.

The CHAIRMAN. I also have a letter from the Puerto Rican Manufacturers Association for the record.

And you already put yours in the record, right?

Mr. GRIJALVA. The President of the Puerto Rican Senate also submitted a letter.

The CHAIRMAN. OK. So, you are not out of the woods yet.

Let me try to summarize this as best I can. And I want you all to answer the question when I get done on what is the difference between the word "strong" and "independent"? Is there a difference between those two, especially as you are dealing with oversight for the PREPA board? I will give you the 5 minutes to think about what your answer is going to be for that one.

So, let me see if I have this straight—so far we have a PREPA commission to do oversight. That used to be three members, it is

now five. Who appointed those other two members?

Mr. Bhatia. They have not been appointed, sir. They are—The Chairman. But they will be appointed by the Governor.

Mr. Bhatia. Yes, there were three—

The CHAIRMAN. OK, so four out of the five will be appointed by the Governor?

Mr. Bhatia. Yes. Five out of five.

The CHAIRMAN. OK, five out of five appointed by the Governor. Then, as you said, there is also the PREPA board that does the actual—it is not the oversight, it is the board itself. And that has seven members?

Mr. Bhatia. Yes, but that is a—

The CHAIRMAN. And all of those are appointed by the Governor?

Mr. Bhatia. Yes, based on a-

The CHAIRMAN. Now, if we are talking about some kind of independent concept, a professional, non-politicized, Mr. Svanda, how

does Congress help facilitate an independent commission?

Mr. SVANDA. I think, for starters, Congress needs to enact legislation that provides for a very fast transition from what exists today with guidelines for how the new independent body will be structured, and how the new appointments will be made and to divorce that from the political structure.

The CHAIRMAN. We are not talking about making mandates on how they actually do their job, it is simply the process of how you get those oversight commissions in line. And that would be very much consistent with what the other states do. I think there was testimony in May in the Senate. Senator Kean went on basically the same line and the same kind of argument that went there.

In your testimony also, and this is one of the other questions and problems I have with the Senator—you said that both majority parties on the island are active and organized inside PREPA, and its employees have raised thousands of dollars for political campaigns. And then you also add PREPA has accumulated an obscene amount of political power which made effective oversight impossible. And then you quoted the problems that PREPA has come from decades of internal decisions that went unquestioned.

Is that accurate, as far as what was in your written testimony? Mr. Bhatia. It is accurate, and that is why I had to act the last term and basically confront that. And by reason or by force, but I had to confront that, and I created a mechanism, a Hatch Act. I created a Hatch Act for Puerto Rico to get rid of that.

The CHAIRMAN. OK, and we will see if we can help facilitate that

going forward in the future, as well.

Mr. Walker, the Governor sent a letter to us that said, "Our hurricane recovery has been complicated by the layers of bureaucracy imposed on us by Congress and the Federal agencies." Does that seem to you to be like an accurate account of the restoration of power, the efforts that were done by FEMA and the Army Corps and DOE?

Mr. WALKER. No, absolutely not. I think it was compounded right from the onset by the fact that there was a failure to call for mutual aid that took until October 31.

The CHAIRMAN. And I think what we are seeing, and you have all been saying this, this is not a new phenomenon that is done with the electrical grid, the electrical oversight. This has been going on for a whole lot of years. And you can't blame one governor, you can't blame one administration, you can't blame one territorial legislature. This has been an ongoing problem that we need to try to some way break this time.

Mr. Emmons, let me ask you very, very quickly. You have had 25 years of financing and raising financing in Asia and Latin America. How come it has been so difficult to do it in Puerto Rico? And I am sorry, I have 1 minute. You have 20 seconds to answer that one.

Mr. EMMONS. Well, I think it is easy in that there isn't the regulatory oversight. The framework of the success of the business in the mainland is the public utility commissions, basically, as the watchdogs of the people.

The CHAIRMAN. Mr. Spiotto, I am going to give you the last 30-second question. I will do this very quickly. In your written testimony, you wrote that Puerto Rico does not have the state backup like Detroit had with the state of Michigan. And therefore, if there is a negative perception of risk because of the failure to resolve Puerto Rico's debt, it may cost Puerto Rico in access to marketing for financing in the future. Is that accurate?

Mr. Spiotto. Yes.

The CHAIRMAN. That was a faster answer than I was expecting. [Laughter.]

The CHAIRMAN. With that, I think this has been remarkable.

Actually, I have one last question. Mr. Walker, are you telling me you were never at Warehouse 5?

Mr. Walker. I was in the Palo Seco Transmission Yard.

The CHAIRMAN. OK.

Mr. WALKER. The warehouse is on a separate piece of property contiguous to—

The CHAIRMAN. OK, OK. That is good enough.

[Laughter.]

The CHAIRMAN. Look, I appreciate you all being here. I appreciate this testimony. And I think you are all driving at one particular point, that we need to have a re-organization—I mean it is essential for Puerto Rico, for the citizens there, that they do have a good and reliable source of energy, however you want to do it, and it needs to be non-politicized, however we need to do that. And if you don't get that right, then the rest of the restoration just is not going to happen, and the next hurricane comes up here again.

And I appreciate you also mentioning, both of you talked about how it is the unique process of the island, and I think Jenniffer could also say this, that the generation capacity is on the south side, and the consumption is up in the north side, and you have to transmit those over high mountains, unless you do something totally unique and totally different in the way you deal with that

particular situation. So, thank you for doing that.

Members who are no longer here, except for two of you, may have additional questions. Under our Committee Rules, they can submit those questions within 3 business days, and we will forward those questions to you, asking for your response. Then we are going to ask for a 10-day response period for any additional questions that may be there.

If there is no other business, thank you for your patience. Thank

you all for being here. This Committee is adjourned.

[Whereupon, at 4:57 p.m., the Committee was adjourned.]

[LIST OF DOCUMENTS SUBMITTED FOR THE RECORD RETAINED IN THE COMMITTEE'S OFFICIAL FILES]

Rep. Bishop Submissions

- —Letter dated July 23, 2018 from Mr. Bront Bird, CEO and President of Foreman Electric Service Company, concerning the interest and need in energy development on the island.
- —Statement for the Record by Mr. Rodrigo Masses, President, Puerto Rico Manufacturers Association, concerning procedures with FEMA, PREPA, and other localities with transparency.
- —Los Angeles Times, September 28, 2017, "Puerto Rico's debtplagued power grid was on life support long before hurricanes wiped it out," by Ruben Vives and Molly Hennessy-Fiske.

Rep. Graves Submission

—Article from *The Intercept* concerning debt repayment on Puerto Rico and stakes in its revitalization.

Rep. González-Colón Submissions

- —Letter dated July 25, 2018 from the Hon. Thomas Rivera Schatz and Larry Seilhmaer Rodriguez in support of wellexecuted privatization that can improve service and infrastructure.
- —Letter dated July 13, 2018 from Greenbriar Capital Corp, PBJL Energy Corporation concerning "Claim Against Puerto Rico Planning Board Determination Montalva Solar Farm Inconsistent With Land Use Plans."

Rep. Grijalva Submission

—Letter dated July 25, 2018 from the Hon. Thomas Rivera Schatz and Larry Seilhmaer Rodriguez in support of wellexecuted privatization that can improve service and infrastructure.

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