RALPH DLG. TORRES
Governor

ARNOLD I. PALACIOS
Lieutenant Governor

COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS
OFFICE OF THE GOVERNOR

Responses to Questions for the Record

The Honorable Ralph DLG. Torres
Governor of the Commonwealth of the Northern Mariana Islands (CNMI)
U.S. House of Representatives Committee on Natural Resources
Oversight Hearing
"How the Biden Administration's Build Back Better Plan can benefit the U.S. Territories"
April 7, 2021

Question(s) from Representative Sablan

1. When we talk about sending large amounts of federal money to the Northern Marianas and other insular areas, a concern is accountability, making sure the money is used as intended and does not go astray. We have been trying to track the lost wages assistance you were awarded last November. How much were you awarded for lost wages assistance? How much of that money has been paid out to unemployed workers in the Marianas?

Response
The CNMI was awarded a total of $7,721,288.00 from FEMA for the Lost Wages Assistance (LWA) Program. This amount includes $71,288.00 for Administrative Costs, plus $7,650,000 for the LWA payments for the weeks ending 8/1/20 to 8/15/20. Since November, when the award was announced, the CNMI requested and was waiting for a response on a cost share waiver. The request for the waiver was prompted by the CNMI's inability to have the local funds needed for the required cost share. We are thankful that the waiver was approved by President Biden on March 22, 2021, and since then, our CNMI Department of Labor has worked with our CNMI Public Assistance Office and FEMA on the proper disbursement of the LWA funds to eligible unemployed workers. We are pleased to report that after adjudicating potential recipients, the LWA benefits will be paid out beginning the week of April 12, 2021 to the eligible unemployed workers in the CNMI.

2. Governor Torres, by our account, the Northern Marianas is receiving roughly $750 million from the six different COVID-19 relief bills enacted into law so far. And the Marianas has received another three-quarters of a billion dollars from FEMA for disaster recovery since 2018. We certainly want the people of the Marianas to have the resources needed to get through the pandemic and the typhoon disasters – and to build back better. But it is difficult to see exactly where all this money is going and whether it is being targeted on your strategic goals. **Can we get a proper accounting of how your administration has distributed these federal assistance dollars throughout the Commonwealth and for**

what specific purposes, and how that spending matches up to your Comprehensive Economic Development Strategy?

Response
We understand the importance of having proper accountability of federal assistance dollars, especially since the funding is critical to our long-term recovery and rebuild following the devastation of Super Typhoon Yutu and the economic impact of the COVID-19 pandemic.

Currently, the CNMI Office of Grants Management and State Clearinghouse (OGM), together with the CNMI Department of Finance and the CNMI Office of Management and Budget, have implemented and launched a Disaster Recovery website that is actively maintained and updated every two weeks to provide accountability and transparency for all federally funded programs and projects related to the recovery efforts post-typhoon and the COVID-19 pandemic.

The website is: www.cnmidr.gov.mp.

The data is archived and may be retrieved through the Office of Grants Management at any time. The website and all personnel associated with streamlining financial management and reporting efforts was made possible through a grant funded by the US Department of Interior. Routine visits are made by OGM staff to various agencies in charge of obligating these funds for its intended purpose. These figures are cross-referenced to the CNMI Financial Management System (FMS), while the Department of Finance ensures that all obligations are thoroughly reviewed before posting, certified, and paid out. The CNMI's FMS is able of generating detailed expenditure reports at a moment's request. Internal controls are present at multiple levels of the review and reporting aspects.

One of the most critical components to tracking multiple FEMA project worksheet (PW) awards for our disaster recovery is to ensure the CNMI establishes a proper accounting for each of the subrecipients receiving an award. In the CNMI FMS, each subrecipient is assigned a Business Unit (account) as the State Identifier number and all project worksheets awarded to the subrecipient is recorded in the business unit which is equal to the FEMA PW award. The transactions reflect total obligations, total expenditures and total drawdowns in real time. The business units are assigned using the DR number established by the declaration. For example, M4404B is assigned to the Department of Public Works for Super Typhoon Yutu. All PW awards to DPW is recorded in this business unit. The last digit or alpha is assigned to the Subrecipient and the tracking methodology is utilized with other declarations except they are identified by their declaration (M4396 is Mangkhut, M4404 is Yutu and M4511 is COVID-19 (followed by an alpha or digit assigned to the Subrecipient).

As for the CNMI Comprehensive Economic Development Strategy (CEDS), some of the projects in the CEDS will be funded by the PW awards. FEMA PWs are written in detail to the Scope of the damage as a result of the disaster. Other sources of funds available that can contribute to the project improvements excluded in the PW related to the facilities repair is allowed; however, it must be presented in detail to ensure there are no duplication of efforts. The FEMA Policy also provides guidance to project implementation.

The CNMI Office of Planning and Development (OPD) is facilitating efforts to ensure that the CNMI is leveraging incoming disaster recovery funding to build back better through coordinated inter-agency planning and project implementation efforts. This work is supported by partners from our state and municipal agencies as well as the private sector; agency leadership participate in regular CNMI Planning and Development Advisory Council (PDAC) meetings. Progress towards identified goals as well as discussion of projects and cross-cutting needs are shared amongst and across Planning Taskforce meetings, held at least quarterly, in addition to regular issue-specific meetings that focus on issues such as planning for "complete streets", achieving environmentally compliant and sustainable solid waste management, supporting social services, education, and equity, implementing nature-based solutions, geospatial information sharing and capacity building, and more. As reflected in our 2018 Smart, Safe Growth (SSG) Guidance Manual, 2019 Comprehensive Economic Development Strategy (CEDS) Update, and the current Draft Comprehensive Sustainable Development Plan, which incorporates these and other planning documents and guidance, coordinated planning with a holistic focus on cross-cutting sustainability outcomes is necessary to help us recover from disasters and build back better. With support from our partners in the CNMI State Hazard Mitigation Grant Program and the Northern Marianas Housing Corporation, which administers the CDBG-DR Program, SSG principles have been included as consideration to further guide and support sustainability and resiliency goals across these federally supported recovery initiatives. For example, the SSG review matrix was applied to all proposed HMGP projects to identify priorities as well as scope of work enhancements. These efforts align with investment priorities identified in the CEDS which serves as an important socio-economic planning component within the current draft of the CNMI Comprehensive Sustainable Development Plan.

The 2019 CEDS vision is that the CNMI "will leverage its assets of cultural and natural resources to grow a diverse economy grounded in a sustainable workforce and resiliency in our built environment to assure a safe, healthy, and vibrant community for all", an aim that is in close alignment with our CSDP and supported by SSG Guidance. In the 2019 update, over 200 projects were submitted for consideration for the CEDS priority project listing. These projects were grouped into seven categories and evaluated based on criteria reflecting on their public benefit, industry growth, support of new or emerging industry, SWOT impact, employment sourcing, economic circulation, and environmental impact. Assessment of the environmental impact component in particular is supported by the application of SSG principles and the SSG Review Matrix, which OPD is currently working on with USEPA and FEMA to further revise to improve functionality and alignment with planning considerations that will further facilitate timely project tracking and information sharing and align closely with the federal "building back better" focus on ensuring efficient development of infrastructure for our communities. With guidance from the Seattle Regional Office of the U.S. Department of Commerce's Economic Development Administration, OPD is currently coordinating with the CNMI Department of Commerce to prepare our 2021 CEDS. We are confident coordination and cross-cutting resiliency goals will continue to be a planning and project implementation priority.

3. We all agree that much of the public infrastructure in the Northern Marianas is outdated, inefficient, and in major need of repair or replacement. What would you say are our most pressing needs? **How would you prioritize what should get attention and funding first?**

Response
As mentioned during the hearing, many of the CNMI's roads are in substandard condition and in need paving or repaving. This is an opportunity to see the kind of investment we need to see our thoroughfares redesigned to better accommodate traditional vehicle transportation, but at the same time integrate a "complete street" design, that incorporates bike lanes, sidewalks, and appropriate lighting and landscaping. Such a redesign and re-envisioning of our roadways, that takes into consideration a variety of forms of transportation, will better serve our community and facilitate numerous sustainability objectives including helping to reduce our carbon footprint, as well as enhance our image as a tourism destination to bolster economic development. It will further provide us with the opportunity to address longstanding issues with drainage and runoff that causes significant damage to our marine environment.

Beyond roads, the most pressing infrastructure needs facing the CNMI revolve around healthcare, public utilities, and economic development. The COVID-19 pandemic certainly illuminated medical and public health capacity across the entire country, and the CNMI definitely needs to modernize its only hospital and expand its capacity to better serve our community. My administration and the Commonwealth Healthcare Corporation (CHCC) intend to continue discussions about this with this committee and our federal partners to ensure this critical infrastructure goal is met. This will include coming back to this committee with CHCC on a solid estimate about our island healthcare system's needs for a new hospital and other relevant facilities.

Improvement of our public utilities is another critical priority. Our priority list in collaboration with the Commonwealth Utilities Corporation (CUC) is as follows:

- ***New Power Plant for base generation on Saipan. Criticality: Highest to most imperative investment: Cost Estimate: $180 million***
    - **Justification**: Saipan relies on the power generation of three very aged plants that are beyond useful life, with no access to parts and only custom manufactured parts available, and variable sized engines to meet demand. The engines on average are 45 years old. All three plants are manually operated with manned facilities that rely on a declining pool of experienced mechanics that were primarily supplied from the Philippines. CUC lost 17 mechanics in early 2020 that were CW and the immigration rules are restricting access to this quality of mechanic. The labor situation is at risk if we cannot replace staff and immigration has been frustrating that effort. As you may be aware, new generating engines are automated with SCADA technology to allow remote monitoring and control. This is the direction CUC wants to go with a new power plant that provides 100 MW's of base load energy demand, with 40% alternative energy systems for peak loads, and a 40% reserve to assure coverage for maintenance of these systems. The efficiencies of new generating systems will be significant and will allow significant cost containment over the life of a new power plant.
    - **Current Situation**: CUC has benefitted from the pandemic in that demand fell by half to 32 MW peak load from pre-Typhoon Yutu conditions where peak load met 44 MW. There are two of four engines in the main plant that are down for maintenance with one potentially to be pulled permanently out of service. In addition, CUC contracted with Aggreko for 12 MW of backup power at $340,000

per month. If and when the economy picks up in Saipan, CUC may not be prepared to supply adequate power to meet everyone's needs. As a result, CUC is presently looking to acquire one ($8 million) and maybe a second new generating engine to replace two engines already pulled out of service that would give CUC the breathing room to construct a new plant and then terminate from service the other two plants, #2 and #4.

- ***Water line replacement island-wide on Saipan.*** Criticality: High to Imperative Investment: Cost Estimate: $180 million
    - **Justification:** If desalination is to be funded for Saipan, it is imperative that CUC first avoids losing fresh potable water from the existing outdated water transmission and distribution infrastructure pipelines that presently suffer from a high percentage of main breaks and leaks per mile of main installed. Presently, the non-revenue water loss averages 65% over the last 6 months, down from 78% in 2016 and up from 50% in 2019. The date of the water system goes back to the Japanese days and additions in the 1980's with the bulk of the existing mains being asbestos concrete pipeline that has been exposed to a high-water table of ocean water near the low coastal zones and internally from water with a high exposure of hardness (i.e., magnesium and calcium) and chlorides that vary between 25 ml/L and 2,700 ml/L at the entry point to the distribution system and even higher at the well points.
    - **Benefits:** Replacement of the bulk of the water transmission and distribution system, approximately 12 miles of varying sized mains between 2" and 10" are beyond their useful life, are brittle and affected by flexion from heavy vehicles, earth tremors which are very frequent (between 3 and 6 on Richter scale) and high velocity conditions from frequent shutdowns due to frequent repairs and inopportune fire flow conditions from undersized lines serving hydrants that really aren't part of a true fire response system. Ultimately, specific benefits would include:
        - Improved carrying capacity of transmission mains serving distribution sectors.
        - Improved pipeline standards to increase useful life and reduce leaks and main breaks.
        - Introduction of more looping of service sectors to improve pressures, supply needs, and fire protection.
        - Expansion of pressure reducing valves, pressure sustaining valves and air relief valves to improve hydraulic conditions due to the large variance in terrain.
        - Incorporation of SCADA capabilities to the well head, key pressure sensor zone points throughout the system, key hydraulic motor driven valves between Tank Service Areas, and monitoring of booster stations to improve supply distribution as conditions change.
- ***Potable water for Saipan with desalination using Nano Filtration (NF)/(RO) Reverse Osmosis treatment of the brackish water aquifer sources with ocean deep well water as a backup source as required.*** *Criticality: Highest to Imperative Requirement: Cost Estimate: $90 million for plant(s) and $100 million for looped supply system.*

- **Justification:** Saipan does not have drinkable nor palatable water. The thirteen shallow ocean impacted aquifers that make up Saipan's water resources provide brackish water that is presently treated for pathogen removal with Chlorine gas and hypochlorite tablets. The water is safe to use in any fashion but it does not meet Class Two conditions for palatability. This leaves the island dependent on private water suppliers to provide bottled fresh water at a cost with a high waste component to the landfill. The island community of Saipan has been exposed to this condition for years, if not centuries. It is imperative that Saipan be given the means and the opportunity to benefit from RO technology which has become the norm for many countries around the world.
- **Island Situation Defined:** CUC has 139 wells in its list of supply wells. The bulk of those wells are distributed into three areas: International Airport well field, Kagman Tank Service Area (TSA), and As Matuis TSA. It is understood that brackish water is easier and less expensive to treat with NF/RO than ocean sources. It is suggested that a Pilot test be done to determine the type of membrane system we should use to meet water quality standards. A Feasibility Study should also be done to determine if locating one Desal facility centrally that would pull the well field supplies to that location would be cheaper and more cost efficient than having three independent Desal facilities located in each well field. Either option would be connected to a looped transmission system to serve as a source supply to the existing storage tanks in the various TSA's that already serve the island's distribution systems.

- ***Replace Wastewater Collection System in Total on Saipan and Provide Funding to Expand Collection Systems to All Homestead Areas where Septic Systems Are Used.*** Criticality: High and Necessary: Cost Estimate: $200 million
  - **Justification:** The original Asbestos Concrete Pipe and Vitreous Clay Pipe is failing and it exists predominantly along the western side of the island. There are presently nine (9) locations on the island where collapses have occurred and they remain unrepaired because of the brittleness of the pipe. When repairs are done, the pipe breaks again right next to the repair patch such that the only repair to do is manhole to manhole which increases the cost of repairs from $1,500 to $450,000, which CUC does not have. Therefore, CUC rigs a bypass until we have funds targeted for repair. Presently, CUC has about 2,500 wastewater customers out of 14,000 water customers. The bulk rely on septic systems which add high levels of nitrates to the water table that is part of the storm water runoff that gets to the ocean and cause red flag events following a heavy rainstorm. The failing sanitary collection system is affected by infiltration and inflow (I&I) that can expose pathogens to storm water areas as a result. CUC needs serious investment in new collection mains in order to eliminate nitrates from the water table that ultimately can affect each aquifer.

- **New Wastewater Treatment Needs:** Along with new collection mains to unsewered areas of the island, consideration should also be given to the addition of three new wastewater treatment facilities for all three islands of the CNMI.

- **On Saipan**, the Kagman area is totally unsewered and the four Homesteads rely fully on septic systems. These septic systems are adding a large quantity of nitrates to the soil that is gradually getting into the aquifer system which CUC is not presently treating for removal. This area also includes a large area of farmsteads that could benefit from access to reuse wastewater treatment for irrigation of their crops and remove their reliance on untreated groundwater. CUC has been evaluating a modular wastewater treatment system, Upflow Sludge Blanket Technology (USBT), which can remove nitrates and grow modularly to meet demand which is different from conventional treatment which requires anticipating demand and building the future capacity today. This is a low cost, low energy, low labor system that is automated and meets all treatment requirements for standard outfall needs or for reuse with very little solids development at the tail end of the system. It has been tested and used in more than 200 sites around the U.S. and also Europe. Estimated cost: Feasibility Study: $300,000; Treatment unit - $10 million; and collection system - $25 million.
- **On Tinian,** the situation is different in that there is no wastewater treatment on the island with growth projected in eight new homestead developments, needed capacity for the San Jose community that rely on septic systems, and for the potential impact of the military diversion project that will be making use of the Northern end of the island beginning from the international airport. The Island Delegation is asking for a centralized wastewater treatment facility using the same USBT treatment system discussed above. Anticipated growth on the island has been located primarily in the San Jose area. With the planned expansion of more homesteads, the need to control septic impacts, nitrates and such, from getting to the central sump area that serves as the primary water source for the island, is imperative. Estimated Cost: Feasibility Study - $300,000; Treatment Unit - $10 million to meet today's population or $15 million to meet military and/or local homestead expansion of first phase units. Estimated Cost: Collection system - $25 million for San Jose community.
- **On Rota,** the local delegation is interested in the same USBT treatment system discussed above. This island relies on septic systems but would benefit from the addition of a treatment system. Rota has two primary communities at each end of the island with Songsong serving as the downtown for commerce. Growth plans are lower but they have indicated a desire for initiating some in-fill development with several new homesteads. Estimated Cost: Feasibility Study - $300,000; Treatment Unit - $10 million; and Collection system - $25 million.

- ***AMI/AMR Water Metering System for all three islands of the CNMI.*** Estimated Cost to Complete three island installation after Pilot Study is finished - $8.5 million for Water Meters
  - **Justification:** CUC is applying for a grant to perform a $300,000 Pilot study to install and use (i) a communication network that includes a dedicated spectrum that will link all three islands with CUC's Customer Service Billing system to (ii) 80 pre-pay water meters from Sensus to assess the success of using a system similar to the Power Division's prepay metering system that gives full control to the customer to pay for water service whenever and from wherever they are at any time.

- **Beneficial Use:** The value of the AMI communication system is that it also has the flexibility to tie in the SCADA (supervisory control and data acquisition) network of connectivity points that the water system is proposing to use for monitoring and remote control of well production and operational conditions, pressure points in the distribution system to monitor for main breaks, to have automated control over water transfer adjustments as demand pulls water, and to read the water meters of 14,000 accounts more accurately and more consistently to help lower and reduce the non-revenue water loss estimate that presently stands at 65% for March, 2021. The same system can also include the extension of SCADA connectivity to the wastewater system which would include the lift stations, internal remote monitoring and control, connection to VFD's (variable frequency drives), automatic backup generator startup capability, and remote security systems to those facilities (i.e., TV, electronic sensor, recording). Estimated cost to complete installation of SCADA to water and wastewater is $10 million.

As reflected in our 2019 Comprehensive Economic Development Strategy (CEDS), investment in our infrastructure is anticipated to help diversify and stabilize our economy, an effort that is needed now more than ever as we work to recover from the financial and community impacts of COVID-19.

Moving forward, the CNMI's Draft Comprehensive Sustainable Development Plan envisions applying Smart, Safe Growth and other development guidelines to holistically improve resource use across sectors. Much like the "Build Back Better" initiative, CNMI's first Comprehensive Sustainable Development Plan recognizes the need to align infrastructure investments to achieve modern infrastructure that supports good education and health systems as well as good paying jobs. The goals and objectives identified in the Comprehensive Sustainable Development Plan identify metrics for renewable energy and water systems deployment while recognizing need to also continue to invest in education and social services. These planning efforts align with national efforts to address the climate crisis, build a clean energy economy, address environmental injustice, and create good-paying jobs both within the CNMI and around the country.

4. In your testimony, you point out that the lack of local construction labor is a significant hindrance to major infrastructure improvement and that recent laws limiting access to foreign labor have proven too cumbersome and costly. **You suggest allowing the 3,000 CW-1 visas permitted for disaster related construction be opened for other public and private construction activities as well. Would this be enough to meet our needs? What else would you propose?**

Response
The recovery of the CNMI following the devastation that came from Super Typhoon Yutu in 2018 showed that the greatest bottleneck toward mobilizing federal resources in a cost-effective and timely manner in the CNMI is the availability of construction workers. Without an adequate supply of skilled construction workers, project costs to the federal and local government had the potential to significantly stall needed construction to protect the lives and wellbeing of our citizens. Congress recognized this limitation and saw the benefits toward the efficacy of federal resources

in supporting greater numbers of construction workers to be permitted to aid in the monumental effort of rebuilding our community. For this, I am immensely grateful.

More than two years after Super Typhoon Yutu, we see the benefits of this change in federal policy, with a greater number of projects moving forward as we rebuild homes, transition residents out of tents and into safe and habitable dwellings, and work toward rebuilding the damage caused to our critical infrastructure. This has surely made better use of federal assistance aimed at reducing the long-term costs of disasters through greater resilience in our built environment, was implemented without additional cost to the federal government, and showcased no negative impact to the opportunities available to U.S. workers in our nation.

For this efficiency to be realized, Congress acknowledged the unique circumstances of the CNMI with regard to labor and utilized existing laws and existing resources to advance the goals of the federal government.

As we look toward other urgent federal priorities in infrastructure and economic recovery there are many lessons we can derive from this experience. Within my testimony to this Committee, I stressed that the state of our Commonwealth's outdated and aged critical infrastructure is in severe need of rehabilitation and modernization. Just as construction labor shortfalls limited the extent to which federal resources can be employed toward the rebuilding of the CNMI after a natural disaster, the bottleneck of labor will persist if we seek to join in the national movement toward a comprehensive program to address our nation's infrastructure needs.

The state of our nation's infrastructure, though more modern in many respects than those within the CNMI, is in a similar state of disrepair. In an April 2021 report from Moody's Analytics, Build Back Better Initiative, alongside the American Rescue Plan, is poised to help to create or support 19 million new jobs in the process of redefining the future of American infrastructure to remain competitive with the world and support the needs of Americans throughout our country.

The 50 states of our nation are fortunate to have both the supply and accessibility of skilled construction labor to support these worthwhile objectives and the skills are often times not relegated to a particular location, being able to support the needs of the interconnected network of American communities. The impact of this proposal on the employment outcomes of Americans is phenomenal and I celebrate the opportunities available for our nation's workers that are created through this comprehensive national program. However, as has been the case since our joining the American community in 1978, the dynamics of the CNMI economy and labor force are unique from those in the nation due to our location, geographic isolation, and size.

Further, this plan seeks to utilize the resources of our nation toward the economic development of our communities in the aftermath of the supreme disruption caused by the COVID-19 pandemic. The recognition that the economic opportunities available to communities across our nation is a national priority is welcomed, but in this there are challenges to translating the potential of American prosperity to our region of the world so far removed from the mainland.

In the fulfillment of both these notable objectives throughout our nation, inclusive of the citizens in the CNMI, Congress would have to recognize these unique challenges in obtaining equity for

our territory. This could be achieved at great additional expense to the federal government or can be achieved, once more, with the utilization of the available programs within the federal at little to no additional costs.

Recognizing the present transition program, and the CW-1 program, as a vehicle to obtain this equity in the distribution and efficacy of federal resources toward the goal of infrastructure development and increased economic opportunities is a path that has proven itself to be efficient, cost-effective, and one that advances the opportunities for U.S. workers.

In this, I would respectfully propose that the CW-1 program break from its conceptualization as an immigration program but be considered one of the most effective tools of the federal government in working through our unique challenges toward obtaining viability in this region and achieving substantial economic development in our territory. This can be achieved by increasing the 3,000 CW-1 set aside for Disaster-related projects and open this allotment to all federally funded projects, inclusive of Department of Defense and critical infrastructure projects. Also further amendments can better recognize the critical role construction labor plays in the advancement of wider economic opportunities in the Commonwealth. Federal assistance is greatly needed, but long-term viability of our community in this region relies on a vibrant private sector to support jobs and government resources outside of disasters. I further ask that we revisit the restriction of the CW-1 permit for construction trades exclusive of federal projects and allow the CNMI's private sector to support the redevelopment and revitalization of our economy and I ask that we revisit the structure of the Northern Mariana Islands U.S. Workforce Act (U.S. Public Law 115-218) to reform this crucial program so that it supports the economic development needs of our community.

We are a truly and beautifully diverse nation, and I am proud of what the CNMI's inclusion in the American family represents to the ideals of our country. But with diversity comes unique distinctions of need that require specific policy to ensure equitability among our population. I think of the successes achieved through the establishment specific and targeted federal policies toward the advancement of underserved populations, like the Tennessee Valley Authority Act, as a demonstration of the ability for a large federal government to understand and support the unique needs of the unique communities of our nation. Just as the nation was advanced through programs like the TVA, I firmly believe an approach to the territories like the CNMI that recognizes our unique challenges with labor, economic development, and infrastructure, is achievable and beneficial to our country.

5. Interior's Office of Insular Affairs awards annual Energizing Insular Communities program grants to the four smaller territories to fund energy strategies that reduce the cost of electricity and reduce dependence on foreign fuels. These are great objectives to follow as we seek to overhaul our power generation. **Have the EIC program and funding grants helped the Marianas lower electricity costs and reduce reliance on fossil fuels?**

Response
The CNMI has received a multitude of Energizing Insular Communities (EIC) grants from the US Department of the Interior Office of Insular Affairs. Currently, many of the projects (construction base) are at a standstill because of the requirement of federal NEPA (National Environmental

Protection Act) clearances. Grants involving no earthmoving activities, such as feasibility studies such as for a 2MW Utility Scale Grid Connected Energy Storage for the island of Rota or revising the five-year State Energy Plan are underway and the results appear promising. From the demand side, our CNMI Department of Public Works Division of Energy is carrying through with a recent grant to increase recipient numbers with energy star efficiency rebates, allowing immediate relief from units that are not energy-saving.

The Commonwealth Utilities Corporation (CUC) has made tremendous headway in terms of planning the future of renewable energy in the CNMI. They have employed the services of a Master Engineer in the Field of Solar Photovoltaics that will advise CUC on critical components needed to advance solar technologies with the aim of replacing at least 20% of fossil fuel dependency in the next 5 years. CUC has also replaced a large sum of 150w metal halide streetlight bulbs/lamps with energy efficient LED lightning and purchasing smart electric meters for energy tracking and the effective delivery of services.

CUC has done a broad review of its cost saving and carbon reduction efforts, and it is fair to say that CUC's efforts have allowed us to avoid rate increases and significant increases in fuel consumption due to a variety of efforts to incorporate low energy consumption efforts. For example, CUC calculated the annual kWh savings from the change from High Pressure Sodium streetlights to LEDs as 1,800,000 kWh. At 15.4 kWh/gal, that equates to 116,883 gallons of fuel saved per annum. This then translates to 1,168,830 Kg of carbon dioxide which has been removed from entering the air, or 18.5 tons. We are pursuing automated pre-pay meters for power consumption where the customer has full control of their account. They can choose to delay payment and therefore avoid power consumption or pay for power and use it as needed. Also, the level of accuracy when reading the meter at the precise time each month has improved greatly such that there has been some measurable degree of improvement in estimated line loss.

In addition, the new Advanced Metering Infrastructure (AMI) System will provide the following:

- This AMI system will improve the metering and billing program and allow metering communications to impact improved billing accuracy and subsequently settlements and reducing inefficiencies with real time billing features.
- The AMI system will also eliminate the need for manual meter reading, reduced vehicle/fleet fuel usage, and reduce manual disconnections and reconnections.
- The web-based metering system provided through a web-software portal allows for system organization of the meters and analysis of customer activity and meter data. Its capability allows for the assessment of automated, accurate and detailed usage data by customer, area, feeder and island that would result in savings and benefits for the customers and the corporation as it ensures that non-revenue losses are mitigated.
- The automated data enables improved and quality planning for distribution management. It allows for accurate usage comparison between feeders and/or specific areas and against line loss as well as for strategic generation planning.
- Remote outage detection capabilities.
- Tampering alert capabilities.

- The web-based metering system is also capable through its web-software portal to function as both a post-pay and a prepay service meter. Customers on this metering system can respond to their energy consumption patterns and act on energy conservation measures.
- The post-pay feature eliminates printing of bills and notices.
- The post-pay feature also improves cash flow and reduces receivables.
- Reduced inefficiencies result in savings and benefits for the corporation and its customers.

As customers or rate payers continue to see the price of fuel escalate, they are fearful that their utility bills will grow as well. For this reason, the CNMI needs to attack the source of the problem—our aging and undermaintained generators. CUC needs new efficient generators capable of using both gas and diesel platforms, tied to solar grid technologies to make effective strides in reducing the cost of electricity in our communities.

Question(s) from Representative Cohen

1. Thank you for sharing the status of your landfills, which highlights an increasing worldwide problem – too much waste and outdated waste management plants. In your case, it seems that Super Typhoon Yutu exacerbated the problem, destroying numerous buildings and damaging much of the critical infrastructure, resulting in the disposal of 31,000 units of electronic waste and hazardous wastes, and collecting and recycling 1,447 damaged electric transformers. The EPA has provided some funds to assist with clean-up, including an initial $566,000 last year. What is the current plan to manage solid waste once the Marpi Landfill reaches capacity?

Response
The CNMI Department of Public Works (DPW) 2019 assessment of Saipan's waste stream reflected nearly 75% of materials entering the Marpi Landfill were identified as "traditionally recyclable" and highlights the waste management hierarchy which emphasizes avoidance, reduction, reuse, and recycling before waste disposal will extend the life of the existing facility – currently only two of six cells have been permitted for use, and efforts to prepare Cell 3 are underway. As of February 2019, approximately 718,549 cubic yards or approximately 27.8% of the 2.58M cubic yard, 6-cell facility have been exhausted. The Inter-Island Solid Waste Management Taskforce will support comprehensive planning and project implementation efforts to meet or exceed diversion goals, extending the life of the Marpi Landfill and resulting in important improvements in waste management across the CNMI.

Thanks to the Additional Supplemental Appropriations for Disaster Relief Act (ASADRA) funding and with the support of the CNMI Office of Planning and Development (OPD) along with DPW and the respective Mayor's Offices in the CNMI, the CNMI Bureau of Environmental and Coastal Quality (BECQ) is working with our CNMI Inter-Island Solid Waste Management Taskforce to support comprehensive planning and project implementation efforts to meet or exceed diversion goals, extending the life of the Marpi Landfill as well as working to identify opportunities to invest in recycling, diversion, and other "zero-waste" programs to reduce costs of solid waste disposal and facility maintenance while maximizing the life of existing facilities. Ultimately, this Taskforce aims to ensure our long-term solid waste management plan is environmentally compliant as well as economically sustainable.

To further support these solid waste management planning and implementation efforts, the CNMI currently has two requests for proposals (RFPs) out for bid. One of these RFPs will support the development of our comprehensive integrated solid waste management plan for all of our islands. The other RFP will conduct a waste stream assessment and zero waste pilot project for the island of Tinian to support their next steps in achieving their waste reduction and management goals. We are grateful for the ongoing support of these efforts, including the recent approval of Phase 2 of our ASADRA proposal that will fund construction management services and repairs of the berm, liner, and leachate system at the Marpi Landfill on Saipan and update the dump closure study to include a revised cost benefit analysis for environmentally compliant waste management on Tinian as well as supporting continued capacity building which includes holding "Zero Waste" trainings for existing and new solid waste management staff with the goal to improve production and consumption patterns island-wide.

2. What actions have the Northern Mariana Islands taken or considered to reduce plastic usage and/increase recycling efforts?

Response
The CNMI Bureau of Environmental and Coastal Quality (BECQ), along with the CNMI Department of Public Works (DPW) and representatives of the respective Mayors Offices in the CNMI are members of our CNMI Planning and Development Advisory Council (PDAC), which oversees our CNMI Office of Planning and Development (OPD). Over the last three years, OPD has worked closely with the PDAC to collect baseline information and recommendations regarding the state of a range of resources and infrastructure including solid waste facilities. A recommendation specific to solid waste management was that CNMI work to "complete and implement a comprehensive integrated solid waste management plan that optimizes diversion and recycling to extend the life and reduce operations costs of solid waste management facilities," a goal that is guiding management planning and project development efforts today.

Additionally, a draft Comprehensive Sustainable Development Plan is in the process of being finalized and adopted. Currently the goal that will guide CNMI actions to improve sustainability of our consumption and production patterns is that by 2030, 50% of the recyclable waste stream will be diverted from CNMI's landfill or RCRA-compliant waste management facilities on Saipan, Tinian, Rota, and the Northern Islands with diverted waste composted, reused, or sold to support sustainable waste management systems. Short- and mid-term objectives to reach this goal include:

- By 2025, OPD and DEQ will support DPW in the development and incorporation of the integrated waste management plan with recycling stream tracking and reporting protocols in place to support future updates and the PDAC, Legislature, and CNMI Governor adopt the plan update; and
- By 2025, OPD, the CEDS Committee, and the Socio-Economic Planning Taskforce will include data collection and consideration of programs to support exportation of local produce in economic planning and development to enhance economic growth and sustainability.

As noted previously, to further guide these efforts, development of CNMI's comprehensive integrated solid waste management plan will be a critical next step to support infrastructure

investment and capacity building as well as community engagement and behavior change efforts that will be necessary to achieve our ambitious but achievable goals for recycling diversion and waste management improvements through "Zero Waste" initiatives that will help us extend the life of our existing facilities, wisely develop and plan new ones, and ultimately improve infrastructure, environmental, and human health outcomes for the CNMI.

Moreover, it is important to note that the CNMI BECQ through its Division of Coastal Resources Management launched a behavior change campaign, "Plastic Free Marianas (PFM)," in January 2020 to help reduce the use of single-use plastics in the CNMI. This initiative aims to address the CNMI's growing plastic pollution problem through educational outreach in schools, businesses, and community members about the environmental and public health impacts of single-use plastic pollution and the overarching social, environmental, and economic benefits of generating less waste. The usage and improper disposal of single-use plastic, such as plastic water bottles, plastic grocery bags, foam plates and take-out containers, and plastic utensils, among others, has been a long-term problem that needs to be addressed sooner rather than later.

Since the CNMI's first positive case of COVID-19 in March 2020, PFM was at a standstill due to the severity and need of PPEs in order to keep our community safe. Consequently, the amount of disposable face masks, latex gloves, and sanitizing wipes being improperly disposed of has dramatically increased, based on the findings of the 2020 International Coastal Cleanup.

Reducing the consumption of single-use plastic rather than focusing on recycling will help our islands by

1. reducing the amount of plastic entering our landfill where it takes hundreds of years to breakdown;
2. reducing the risk of improperly disposing single-use plastic, which will eventually become marine debris; and
3. lessening public health impacts caused by chemicals found in single-use plastic.

Although recycling beats dumping plastic into our landfills, it is not the most efficient way of eliminating plastic pollution, especially in the CNMI. Recycling in our islands is limited as we do not have the proper facilities for it. Majority of recycling centers around the world are taking in way more plastics than they are able to recycle, making recycling centers one of the top contributors to marine debris.

BECQ is currently working toward the relaunch of the PFM initiative in the later part of 2021. Plastic Free Marianas will focus on lessening the consumption of all single-use plastic in our islands in hopes to lessen the amount of waste that enters our landfill and oftentimes our ocean.