TESTIMONY OF
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COMMITTEE ON ENERGY AND COMMERCE
UNITED STATES HOUSE OF REPRESENTATIVES
ON
"ADDRESSING THE URGENT NEEDS OF OUR TRIBAL COMMUNITIES"

Chairman Pallone and Ranking Member Walden, thank you for the opportunity to provide my views on Indian Renewable Energy to the Committee and for holding this very important hearing on urgent renewable energy development needs in Indian Country.

As the Committee continues its deliberation on clean energy development in general and the federal response to mitigate and recover from the economic and energy impacts of the COVID-19 public health emergency, I respectfully submit this written statement and testimony and ask that the Committee consider the proposed legislative solutions to immediately improve tribal energy and utility development opportunities.

Introduction

The committee has spent the last year evaluating federal policy and programs to address national renewable energy, clean grid, green transportation and climate change mitigation, adaption and resiliency solutions. With the nation in the grip of the COVID-19 pandemic, and its substantial impact on the nation's economy, the Energy Subcommittee recently held a hearing on the impacts of COVID-19 on the energy industry. As several of the witnesses testified at that hearing, Congress has the opportunity to promote economic and job recovery from COVID-19 through investment in clean energy, energy efficiency and energy infrastructure projects. As this Committee contemplates the type of federal support necessary, it should also consider federal legislative options based on solutions that reflect the unique circumstances of tribal utility and energy development, and are respectful of the tribes' sovereign status. Further, legislative proposals should seek to accomplish several goals, all of which are consistent with those expressed by this Committee through the CLEAN Futures Act and the Climate Crisis Action Plan, including:

- Mitigation of economic harm caused by COVID-19 through reduced energy costs for tribal communities;
- Jumpstart economic development through increased capital and investment in tribal utility and energy development efforts;
- Increase job creation on Indian lands;
- Support tribal energy self-sufficiency, self-determination and reliability; and

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- Recognition of tribal sovereign authorities over energy development on Indian lands.

Background

Energy development has been occurring on tribal lands for over 100 years. Starting with oil and gas development, then incorporating coal mining, many Indian tribes are no strangers to the extraction and exportation of their energy resources. Over the last few decades, tribes have tried to take more control of the development of those energy resources – through federal laws such as the Indian Mineral Development Act, the Surface Mining Control and Reclamation Act, and the Energy Policy Act of 2005. Yet, there are only a handful of tribes that have recoverable and economically feasible energy mineral resources.

However, almost every federally recognized tribe – all 574 of them – have access to renewable energy resources. The federal government, since 1992, has developed several programs in both the Department of Energy and the Department of the Interior to assist tribes in deploying those renewable energy resources. Starting with the Energy Policy Act of 2005 (Title V), and the formation of the Office of Indian Energy Policy and Programs in the Department of Energy, Congress has enacted several additional laws to support tribal renewable energy development. This support has included the enactment of the Helping Expedite and Advance Responsible Tribal Homeownership ("HEARTH") Act to reduce federal regulatory barriers.

This change in federal policy, and funding to support it, has led to over 200 tribes receiving program support – grants and technical assistance - to study, assess, and deploy renewable energy and energy efficiency projects. Despite this widespread support, there are still only two commercial scale renewable energy projects on tribal lands - even though Indian lands have between 6.5% and 13% of the nation's total technically feasible renewable energy resources[2]. The good news is that many more distributed energy projects (such as roof top solar and small community scale projects) and energy efficiency projects have been deployed on tribal government buildings, tribal housing, tribal enterprises – saving tribes and tribal members precious funds, creating jobs, and reducing their carbon footprint.

Further, constrained economic development, lack of investment (especially private sector investment) and high unemployment rates are well documented for Indian tribes. These economic realities permeate all aspects of tribal communities, and are especially acute when looking at the lack of infrastructure investment, including energy infrastructure. For some tribes, this lack of investment is especially glaring when compounded by the public health and economic impacts of the COVID-19 pandemic.

Key Opportunities for Tribal Energy Development as Economic Recovery Drivers

There are still plenty of opportunities for all tribes to take advantage of their renewable energy resources. If these opportunities come to fruition, tribes can see increased economic activity, economic and revenue diversification, jobs, and reduced energy costs, among other health and economic benefits. Given current market and technology trends and the current economic imperatives, major opportunities to focus on include, but are not limited to: 1) partnerships with

[2] Milbrandt, Anelia, Donna Heimiller, and Paul Schwabe. 2018. Techno-Economic Renewable Energy Potential on Tribal Lands. Golden, CO: National Renewable Energy Laboratory. NREL/TP-6A20-70807

corporations for the direct sale of renewable energy; 2) distributed energy and energy efficiency projects; 3) microgrid deployment; and 4) tribal utility formation and operations.

Partnerships with Corporations

According to several recent studies in 2017, private corporations entered into contracts to procure almost 2 GW of solar and wind power. Corporations are engaged in these direct procurement efforts for several reasons, including corporate sustainability goals, renewable energy commitments, climate change commitments, and economic benefits. Recently for example, over 1,500 United States companies – from Fortune 500 to small businesses - have committed to supporting the Paris Climate Accord. Corporate procurement is now one of the major drivers of new renewable energy deployments.

These companies are prime partners for tribes that are still interested in commercial scale projects – generating and exporting renewable power off of the reservation. Commercial projects primarily benefit tribes through lease payments, development fees, taxes, and construction, operations and maintenance jobs. A typical commercial scale project requires an experienced developer, a tax equity investor (to monetize the federal tax credits), a willing lender, and a credit worthy off-taker. In the past, the off-taker has typically been the local utility. But, in many states, the ability to sell to the utility can be challenging at best. As more and more companies are devising ways to directly procure renewable power, tribes with good locations and plenty of renewable energy potential may have another advantage – as a minority supplier to a corporate direct user off-taker.

Another benefit of working directly with a corporate off-taker is that Tribes could use their substantial renewable energy resources to attract companies - especially those that are in energy-intensive industries, or have renewable energy goals that cannot be met by local utilities - to locate on the reservations. This effort would require investment in energy infrastructure and human capital. And, it has the added benefit of bringing jobs to Indian reservations.

Community Solar, Distributed Energy, and Energy Efficiency

Lower costs of solar, wind and storage have made distributed energy projects more economically feasible. Distributed energy projects can include roof-top solar, small wind, and community scale solar or wind up to 5-10 MW. The key is that the project is located in the electricity distribution system and is intended to be used directly by a single or multiple buildings (or homes). The primary benefits of a distributed energy project are to reduce the carbon footprint, save money (by offsetting the amount of power purchased from your utility), create jobs, and increase resiliency and reliability (protection from natural and man-made risks to big grid failure).

There are still technological challenges with integrating intermittent renewables into the distribution system. And utilities are very concerned about the economic impacts on their business model as more people and companies deploy distributed energy projects. But, a recent study of utility executives in 2017 reveals that at least 60% of them expect distributed energy projects to

continue to proliferate and their utilities will have to obtain the necessary expertise and technology to integrate those projects with minimal disruption to the distribution system[3].

Almost all of the tribal renewable energy projects deployed in the last 5 years have been distributed energy projects. Several tribes have deployed 1 – 3 MW systems, with many also deploying roof-top solar on tribal member homes. These projects have generally been limited in size due to the various federal grant programs. But, many more tribes can, and should be, exploring larger "community scale" projects: projects that are between 5 - 30 MWs that can power critical infrastructure, such as schools, hospitals and health care, public safety, government campuses, tribal enterprises, wastewater treatment, fisheries, farms, and tribal housing. These projects are typically too costly for the federal grant programs but are ripe for public-private partnerships to leverage tax credits that will reduce the cost to construct (and thus the cost of power).

Microgrid Systems

Still in its relative infancy, microgrid deployment is starting to get more attention because of plummeting technology costs and improved technology. A microgrid is defined by the Department of Energy as:

> "a group of interconnected loads and distributed energy resources within a clearly defined electrical boundaries that act as a single controllable entity with respect to the grid, and that can connect and disconnect from the grid to enable it to operate in both grid-connected and 'island' mode."

The best way to think of a micro-grid is as a self-sufficient energy system that includes generation (solar, wind, diesel engines, natural gas generation), storage, energy load, and a controller that manages the varies generation and ensures power to the various loads. Micro-grids are typically found at universities, hospital campuses and the military. But, more communities and companies are evaluating the ability to deploy microgrids because of the ability to save money (like distributed energy projects), and protect critical infrastructure. One Tribe, Blue Lake Rancheria in northern California, has deployed two microgrids, using solar, storage and diesel engines. Several other California tribes have expressed interest in deploying microgrids as well.

As microgrid financing models and ownership models evolve, tribes may be well positioned to take advantage of micro-grid technologies. Micro-grids can provide many economic and other benefits to tribes, such as cost savings, jobs, and resiliency. For many tribes that have reliability issues with their energy services - such as the 30 or so tribes in northern California who suffer electricity shut-offs when PG&E de-energizes power lines during high wildfire risk days - micro-grids are one critical way to improve that reliability.

Tribal Energy Utility Formation and Operations

A few of the major economic benefits of tribal electric utility ownership and operation include, but are not limited to:

[3] Accenture Consulting, "Power Surge Ahead: How Distribution Utilities Can Get Smart with Distributed Generation" (2017)

* Tribal sovereignty, energy self-sufficiency and control over the source of the tribe's electricity
* Cost reduction and management of electricity costs
* Revenue generation and job creation

Many tribes and tribal members have expressed substantial concern over climate change impacts, clear air issues, greenhouse gas emissions, and rising electricity costs. Through a tribal utility, these tribes can reduce their dependence on fossil fuel electricity (such as coal and natural gas), increase their use of renewable energy and distributed energy resources, and reduce electricity costs through the acquisition of electricity of their choosing.

Furthermore, a tribal utility can be a vehicle for developing tribal renewable energy resources for both on-reservation and off-reservation use. This provides the tribe with a greater degree of control over the development of those energy resources, while maintaining a separation of effort between the tribal government and the tribal utility's enterprise efforts.

In addition, a tribal utility can control its electricity costs through access to the wholesale electricity market. As regulated utilities and rural electric cooperatives continue to increase retail rates, the wholesale cost of power has stayed relatively flat. Furthermore, tribes that are serviced by incumbent utilities – whether investor owned, rural electric cooperative, or a public power company – lack control over both the source of power and the price they pay for power. A tribal utility can directly access the wholesale market, or negotiate for long term electricity contracts, that will most likely result in lower power costs for the tribal government, enterprises, and tribal members who live on the reservation.

Moreover, instead of making payments to outside utilities, the tribal government, enterprises and members will make payments instead to the tribal utility. These revenues would go directly to a tribal entity that is more responsive to the tribal community. The revenues will also go towards electricity procurement, operations and maintenance of the electricity system and reinvestment into the community. In addition to energy choice, the tribal utility will have more flexibility in operations and customer service. Lastly, the tribal utility will result in funds remaining in the tribal community.

Tribal utilities can also promote tribal member workforce development and job creation through the operations and maintenance of the utility. Depending on the size of the reservation, the energy system, and the number of facilities to be serviced, there can be dozens of new jobs for tribal members. If the tribal utility makes the determination that it can produce its own electricity – such as through distributed energy systems like community solar, wind, or small natural gas generation – the construction and operation of those types of projects will result in further job creation.

Major Barriers to Tribal Energy Development

State Regulatory Actions

For tribes to be able to take advantage of commercial-scale, distributed energy or microgrid deployment requires knowledge and compliance with state electricity regulatory schemes.

Because the retail electricity market is regulated at the state level – primarily through the regulation of utility companies – tribes that want to develop their clean energy resources will undoubtedly have to find their way through the state regulatory maze. For example, the ability of a company to directly purchase renewable energy from an independent power producer – even if located on tribal lands – is controlled by state law and utility regulations. Or, to be able to offset energy costs through net metering – and the value of that offset – by implementing distributed energy projects is dependent on state utility net metering policy, tariffs, and interconnection standards. Because of the determinative role state regulation plays in "on reservation" clean energy development, tribes have to monitor, comment, lobby, and participate in state legislative and utility regulatory administrative actions to have influence over those policies and regulations that have a direct effect on their energy development efforts.

Dual State Taxation

The issue of dual state taxation is not unique to economic development barriers on Indian lands. Under several US Supreme Court decisions, states can generally tax non-Indians (whether customers, business owners or energy companies). This dual taxation problem results in tribes having to forego its own tax revenue to avoid making a project economically infeasible. But, if tribes are going to attract outside private capital - which must own the project to obtain the tax benefits that make the project feasible - then something must be done about the dual taxation issue.

Grid Modernization

Utility industry groups, state regulators, and Congress have all acknowledged that if the nation is going to move to more renewable energy and energy efficiency deployment, the electric grid - big, middle and distribution - will need to be updated and modernized. This is especially necessary on the distribution system. Several studies and state policy reviews confirm that as technology improves to support more distributed energy, microgrids, electric vehicle infrastructure, demand response, smart grid technology, advanced controls and communications, storage, and resiliency and reliability objectives, the grid must be improved. These same technology issues exist for existing tribal utilities, and are a strong consideration for tribes that are investigating whether to form a utility. Grid modernization will be expensive, and tribal utilities can be financially hampered from making the investments in the distribution grid needed to improve grid performance, integrate distributed energy and storage, or other improve grid resiliency and reliability.

Access to the Bulk Transmission System and Wholesale Markets

Tribal utilities and commercial-scale project developers can also be frustrated by lack of access to the bulk transmission system. This access issue can be a location problem because the Tribe or renewable energy resource is too far from transmission lines. And/or it can be a capacity problem because there is not enough capacity on the transmission lines they do have access to. In either event, "middle grid" development - and the capital necessary to build it - is necessary for Tribes to be able to access wholesale markets for electricity purchases or to sell power into the market.

Capital Investments

The federal government has several grant, loan and loan guarantee programs that tribes can access for renewable energy and energy efficiency projects. These programs range from the DOE Office of Indian Energy, Tribal Energy Loan Guarantee Program, and Weatherization Assistance Program, the DOI BIA Loan Guarantee Program and Tribal Energy Development grant, USDA Rural Utility Service and High Energy Cost grant program, Department of Commerce Public Works grant program, and the Low Income Home Energy Assistance Program. Combined, these programs can bring tens of millions, or hundreds of millions, dollars into Indian Country. But, while this seems substantial - and it's sorely needed - it is just not sufficient.

There has been little to no private sector investment in tribal renewable energy projects that directly serve tribal communities. Compared to the creation of successful public-private partnerships between cities, counties and private developers and project owners, Tribes have lagged behind in attracting outside capital to invest in local distributed energy projects. Given that large financial banks, such as Citibank and JP Morgan, have committed several hundred billion dollars to clean energy investments, not to mention the increased interest in "green bonds", the private capital markets have yet to find their way to Indian Country.

Proposals for the Committee's Consideration

NCAI, NAFOA, and other Inter-tribal Organizations recently submitted a substantial list of potential infrastructure-related proposals that were mostly focused on providing much needed federal investment in energy development on tribal lands. And, while federal funding is absolutely necessary, it is also insufficient. But, added to some high leverage legislative changes - some of which are "no cost" fixes to current law - and in my view, regulatory sovereignty, a broader source of capacity, and private sector capital (including non-profit sector) can be brought to bear on overcoming the challenges and taking advantage of the opportunities.

In short, these proposals would serve to generate jobs through distributed energy and energy efficiency projects, promote tribal utility development and utility infrastructure modernization, and encourage private investment in tribal energy projects consistent with tribal sovereign and self-determination principles.

Amend Federal Power Act and PURPA to include Tribes in definition of State

Purpose: The Federal Power Act and PURPA are two of the most important statutes that define and control the relationship between federal and state regulatory power over energy development and utilities. Yet, there is literally no mention of the third sovereign - tribes - and the role of tribes in the regulation of energy development and wholesale or retail energy markets on tribal lands. This omission results in a lack of legal and jurisdictional clarity over the sovereign governance Tribes should be able to exercise over those who would site, operate, and sell power to tribes, tribal members, and tribal enterprises. Congress should amend the FPA and PURPA to include tribes in the definition of State. This would clarify the tribes' primacy over "retail" electricity providers - including rural electric cooperatives - and the distribution grids located on tribal lands. It would also confirm that tribal utilities and tribal energy companies are not subject to FERC jurisdiction.

Amend the Indian Tribal Energy Self-Determination Act (Title V, Energy Policy Act of 2005

Allow for "reimbursement" grant under the Office of Indian Energy grant program

Purpose: The Energy Policy Act of 2005 established the Office of Indian Energy Policy and Programs in the Department of Energy. Pursuant to the Act, the Director of the Office of Indian Energy is responsible to develop and implement grant programs, among other programs, for the deployment, construction of energy and energy infrastructure projects on Indian lands. While the Office of Indian Energy has consistently administered an annual deployment grant program, this program has become administratively unwieldy and underperforming with respect to the number and amount of grants awarded. Congress should consider converting this grant program into a "reimbursement" grant, whereby tribes that construct certain types of energy projects can obtain a reimbursement payment from the Office of Indian Energy after the project has been constructed and placed into operation. This reimbursement grant would result in considerable savings in the administration of the grant program for the Office and considerable savings for tribes in the costs to apply for the grant program.

Expand eligibility for Tribal Energy Loan Guarantee Program; increase funding sufficient to provide full 90% loan guarantee on authorized lending authority; authorize a direct loan and green bonds guarantee program

Purpose: Despite the Department of Energy's recent efforts to implement the Tribal Energy Loan Guarantee Program authorized in 2005, there have not been any tribes or tribal energy development organizations that have successfully applied for and obtained a loan guarantee. It is expensive to apply, and the application process is complicated and arduous. Amend and expand the program to allow for a direct loan program with a $2 billion authorization, clarify the types of projects and locations of projects, ensure broader lender participation, provide guarantees for "green bonds", and reduce the very high barriers to applying for loan guarantees.

Prohibit state and local taxation of energy projects on tribal lands.

Purpose: The economic viability of commercial-scale (or utility-scale) renewable energy projects are dependent on federal tax incentives, such as the investment tax credit or production tax credit. The renewable energy industry continues to promote the extension of these tax credits as the major mechanism for the sustained viability of the industry. Since tax credits require taxable ownership, Indian tribes (which are not taxable) must partner with taxable entities to develop renewable energy projects. In addition, tribes with oil, gas, and coal resources will also lease those resources to non-tribal entities. Yet, states and local governments persistently try to tax those non-tribal entities, which detracts from the tribes' ability to impose their own taxes to raise much needed revenues for tribal governments. Congress could adopt language similar to the tax prohibition found in the Indian Gaming Regulatory Act.

Require federal power marketing authorities to purchase tribal energy generated power and finance certain tribal grid transmission projects.

Purpose: Current laws authorizes, but doesn't require, the Western Area Power Administration (WAPA) to acquire tribal power for WAPA power purchase purposes. WAPA has over 160 tribes

in its footprint, yet after 15 years, WAPA has never entered into a power purchase contract with a tribe. Congress could make this purchase mandatory for all PMAs - similar to PURPA's mandatory purchase requirement - when a tribe offers a contract, so long as the PMA doesn't pay more than prevailing market prices.

Furthermore, over 35 tribes have now established operating tribal utilities. Yet, many of these tribal utilities are hampered in their efforts to reduce energy costs for tribal members by lack of access to power markets because of the lack of access to the bulk transmission system. Tribes that want to explore utility-scale energy generation projects also find projects hampered by lack of access to the bulk market system. WAPA should be required - through its Transmission Infrastructure Program - to work with Tribes and tribal utilities that are interested in developing transmission projects on Indian lands for technical and financial assistance.

Expand eligibility for energy programs under Title V of the Energy Policy Act of 2005 to include organizations owned and controlled by Indian allottees for energy projects on allottee lands

Purpose: Energy programs, including grants, technical assistance and loan guarantee programs, under Title V of the Energy Policy Act of 2005 are typically limited to tribes, tribally-owned organizations or intertribal organizations. Individual Indian allottee organizations are not eligible for the programs. The definition of Tribal Energy Development Organization should be amended to include allottee-owned organizations.

Amend the Internal Revenue Code

Amend the business investment tax credit for renewable energy projects to allow tribes to receive payment and participate in projects

Purpose: There is a great deal of support for the solar and wind industries' call for reinstating the ARRA Section 1603 "payment in lieu of tax credit" provisions to provide immediate capital to renewable energy projects. Since tribes are not taxable entities, they cannot take advantage of these tax credits, and thus cannot own renewable energy projects that rely on tax incentives for economic and market viability. Furthermore, as governments, tribes cannot have an ownership interest in a project for which tax credits (or other tax subsidies) are taken. Amend the Internal Revenue Code to treat tribal energy enterprises equal to taxable entities for purposes of accessing tax credits. Further, amend the Code to exclude tribes, tribal utilities, and tribal energy development organizations from the prohibition on ownership of renewable energy projects that receive an investment or production tax credit.

Increase funding for distributed energy, energy efficiency and energy infrastructure projects

Provide additional $250 million in ICDBG for energy efficiency and energy conservation projects.

Purpose: Tribal Housing Authorities access the ICDBG program for important housing and community development purposes. These funds may go to new building construction, or building and housing rehabilitation. While these funds can be used for energy efficiency and energy conservation projects (such as rooftop solar), they are usually insufficient to accomplish the twin goals of construction/rehabilitation and energy efficiency. Providing additional funding to tribes

and tribal housing authorities through the ICDBG program specifically for energy efficiency and energy conservation projects that can be combined with energy savings contracts.

Provide $ 5 billion to support electrification of Indian lands and distribution grid deployment and modernization

Purpose: Electricity infrastructure on Indian lands and tribal utilities formed by Indian tribes to provide electricity services on Indian lands have historically been underfunded through federal rural electrification programs. As a result, Indian lands have some of the highest rates of lack of electrification and the highest costs of energy in the country. Congress should consider the creation of a Tribal Electrification Program, within the USDA Rural Development Administration, to fund the electrification of Indian lands and grid modernization through a direct loan, grant, and forgivable loan program. This new program should be funded at a minimum of $5 billion. Funds would be authorized for:

- Transmission line development and construction;
- Distribution grid development, construction, upgrades;
- Acquisition of transmission and distribution infrastructure that serve Indian lands

Conclusion

In short, there are several key renewable energy and energy efficiency opportunities for Indian tribes that, if acted upon now, will improve economic conditions on Indian lands, bring jobs to tribal communities, and reduce energy costs for tribal governments, tribal members, and tribal enterprises. Many potential legislative solutions should seek not only to promote these goals but more importantly remove the barriers to these opportunities. Some of these solutions are fixes to existing statutes that are no-cost. Others will require substantial funding. Both types of solutions are necessary to continue to immediately advance tribal renewable energy development as a driver of economic recovery and job creation in Indian Country.