

Written Testimony of Carole M. Plowfield, Director
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U.S. Department of Energy
Before the
Committee on Energy and Natural Resources
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Chairman Murkowski, Ranking Member Cantwell, and distinguished Members of the Committee, I appreciate the opportunity today to discuss the Office of Indian Energy Policy and Programs at the Department of Energy (DOE), and our efforts to implement energy development in Indian Country as you evaluate rural energy issues.

The Office of Indian Energy Policy and Programs (IE) serves all federally-recognized Indian Tribes, Alaska Native Regional Corporations and Village Corporations, and Tribal Energy Resource Development Organizations. The Office's mission is to maximize the development and deployment of energy solutions for the benefit of American Indians and Alaska Natives. In consultation with tribal and other stakeholders, IE achieves its mission by promoting Indian energy development, electrifying Indian Country, and helping to reduce the cost while increasing the reliability of Indian energy. IE implements these objectives through our deployment programs, policies and facilitating partnerships between tribes and private industry.

IE offers various types of programs to Indian tribes and Alaska Natives consistent with its authorities in section 217(b) of the Department of Energy Organization Act, as amended (42 U.S.C. § 7144e(b)), and section 2602(b) of the Energy Policy Act of 1992, as amended (25 U.S.C. § 3502(b)). Our Office addresses the challenges that tribal communities, many of them rural, face through our three pronged approach of financial assistance, technical assistance, and education and capacity building. Competitive grants are offered periodically for the deployment of energy infrastructure on tribal lands. Federal staff provide technical assistance upon the request of a tribe regarding a specific energy topic or project concept. Education and outreach activities include monthly webinars, a college student summer internship program, periodic workshops, presentations at conferences, and other engagement activities outlined on IE's website¹, where IE federal staff inform tribal members of the opportunities available.

¹ <https://www.energy.gov/indianenergy/office-indian-energy-policy-and-programs>

According to a 2013 Department of Energy (DOE) report, Indian lands² in the contiguous 48 states have the technical potential to produce about 1.1 billion megawatt hours (MWh) of electricity for wind energy—3.4 percent of total U.S. technical potential.³ Indian lands also have the potential to produce about 14 billion MWh of solar energy - 1 percent of total U.S. generation potential.⁴

Numerous factors burden Indian tribes interested in developing their vast energy resources. Energy and infrastructure development in Indian Country is limited due to inadequate financial and human capital and a complicated legal and regulatory structure governing Indian lands.

Between 2002 and 2017, DOE invested nearly \$78 million in 250 tribal energy projects implemented across the contiguous 48 states and in Alaska, through funding provided by the Office of Indian Energy and its predecessor program. These projects, however, are valued at over \$150 million, as they are leveraged by over a \$73 million cost share paid by the recipient tribal groups.

IE maximizes the development and deployment of strategic energy solutions to advance tribal energy development in Alaska, where the high cost of electricity is of particular concern to Alaska Natives. Since 2002, IE and its predecessor program has invested over \$22 million in 56 energy development and efficiency projects in Alaska, with over \$30 million contributed in tribal cost share. During this period, project impacts include reducing demand for diesel and fuel oil by almost 600,000 gallons per year, and providing Power Cost Equalization assistance to over 40 Native villages at a savings of more than \$600,000. More than 175 Alaska Native villages rely almost exclusively on diesel fuel for electricity and oil for heat. In some communities, electricity costs exceed \$1.00/kilowatt-hour, more than eight times the national average⁵.

In the past three fiscal years (2015-2017) IE has obligated \$31.3 million to tribal grants and completed over 300 technical assistance requests. Approximately \$21.3 million, or 68.1% of all grant awards, have been obligated to energy infrastructure projects, including microgrids, which are localized distribution networks that can disconnect from the traditional grid to operate autonomously and help mitigate grid disturbances to strengthen grid resilience. The remaining

² Indian land means any tract in which any interest in the surface estate is owned by a tribe or individual Indian in trust or restricted status and includes both individually owned Indian land and tribal land. 25 C.F.R. §162.003.

³ DOE's National Renewable Energy Laboratory, *Geospatial Analysis of Renewable Energy Technical Potential on Tribal Lands*, DOE/IE-0013 (Washington, D.C.: February 2013).

⁴ DOE, *Developing Clean Energy Projects on Tribal Lands, Data and Resources for Tribes*, DOE/IE-0015 (Revised April 2013).

⁵ Schwabe, P. (2016). *Solar Energy Prospecting in Remote Alaska: An Economic Analysis of Solar Photovoltaics in the Last Frontier State* (No. NREL/TP-6A20-65834; DOE/IE-0040). NREL (National Renewable Energy Laboratory (NREL), Golden, CO (United States). <https://energy.gov/sites/prod/files/2016/02/f29/Solar-Prospecting-AK-final.pdf>

31.9%, \$10 million, to support tribal efforts to build internal capacity to understand and navigate energy projects. In fiscal year (FY) 2017, 65% of IE's budget was committed to energy grants.

During FY 2017, IE obligated a total of \$10.43 million in funding for 32 tribal energy projects, consisting of 13 hardware deployment awards and 19 planning grants. The hardware deployment awards will install 6.3 megawatts (MW) of new energy generation for more than 3,000 tribal buildings and homes across the nation, saving more than \$2 million each year. Building on these investments, IE released a Notice of Intent on November 12, 2017, to issue a Funding Opportunity Announcement (FOA) for the deployment of energy infrastructure on tribal lands.

The U.S. Department of Energy announced on February 16, 2018 up to \$11.5 million in new funding to deploy energy infrastructure on tribal lands. The funding announcement is sent to all federally-recognized tribes, and made available to the public on IE's website.⁶ Coincidentally, this announcement is closing today, April 19th, and we are excited to continue our work to support Native American and Alaska Native communities interested in harnessing their vast undeveloped energy resources.

The FOA closing today builds on efforts to strengthen tribal energy, economic infrastructure resource development, and electrification on tribal lands. This is also the first time that IE issued a FOA on an entirely fuel and technology neutral basis. This FOA will expand the potential for tribes to use the particular resources available to them.

We are also currently working to improve our service and outcomes by meeting approved metrics of newly installed generation capacity and cost savings throughout Indian Country. Our performance goals are to install approximately 25MW of cumulative new generation capacity on tribal lands between FY 2019 and the end of FY 2022, and to achieve cost savings of \$550 million for tribal communities during the same period. We are committed to delivering innovative solutions to ensure our energy infrastructure remains affordable reliable, and resilient, while being good stewards of taxpayer dollars.

Conclusion

In conclusion, I am honored to be here today representing the Department of Energy, and I am grateful for the hard work of the dedicated staff of DOE's IE office. I would like the Committee to know that although we are a small office, our team of 7 federal employees is currently managing 59 projects across the nation valued at over \$62 million and IE's investment of over \$30 million. The caliber of our team is impressive, including three engineers, two military veterans, and individuals with years of experience on tribal energy issues, all of them dedicated public servants.

We have made progress, but there is still much more to do. Secretary Perry, our DOE team, IE, and all of our tribal partners who we serve, look forward to working with this Committee to continue to provide affordable, reliable and resilient energy to tribal communities, and maximize

⁶ <https://www.energy.gov/indianenergy/office-indian-energy-policy-and-programs>

the development and deployment of energy projects that add new generation capacity, and provide additional cost savings to tribal members.

Thank you again for the opportunity to appear before you today, and I look forward to your questions.