

Oceti Sakowin Power Authority Recommendations for i2X EEJ TAG

INTRODUCTION

680 MW of renewable energy on the Cheyenne River and Oglala Sioux Reservations – all in advanced stages of development – were stopped last year because they could not afford the excessive and unreasonable interconnection costs imposed by the Southwest Power Pool. These projects include 2 wind farms (570 MW combined) being developed by OSPA.

OSPA negotiated with DOE's Loan Programs Office (LPO) for close to a year to obtain funding from the Tribal Energy Loan/Loan Guarantee Program (TELGP). LPO finally confirmed that the OSPA wind farms were eligible for this funding, but the decision came too late for OSPA to secure a loan, and OSPA lost the SPP queue positions it has held since 2017.

Congress and the Biden Administration have established multiple programs to promote utility-scale Indian Energy – the 2005 Energy Policy Act Indian Preference, TELGP – now funded at \$20 Billion, the Justice40 initiative, two FERC proceedings designed to reduce transmission and interconnection costs, i2X, and unprecedented outreach by the Granholm DOE Administration to Tribes and Tribal energy developers. But to date NONE of these have been implemented for utility-scale projects, and OSPA's advanced Indian Energy projects are now threatened as a result.

Pursuant to the i2X agenda, OSPA provides its Final Recommendations on actions and initiatives that can reduce the time and cost of interconnection for the type of utility-scale wind and solar Indian Energy projects that OSPA is developing. These include several recommendations for medium and long-term planning methodologies, funding and technical support that will greatly assist OSPA in achieving its mission, as well as support other Tribal developers and projects in disadvantaged communities (DACs).

But of greatest importance, OSPA proposes two actions for immediate application that will repair the damage caused by SPP's unreasonable interconnection costs and practices, and DOE's failure – to date – to implement the federal programs designed to support Indian Energy. They are:

- **PROVIDE INTERCONNECTION TO THE NATIONAL POWER GRID FOR OSPA PROJECTS WITHOUT GOING THROUGH THE SPP QUEUE PROCESS.**
 - OSPA has demonstrated that the SPP interconnection process is an absolute barrier to the development of Indian Energy on Tribal lands. Indian Energy projects must be exempted from SPP's unjust and unreasonable rates and practices.
- **ISSUE PPAs FOR OSPA'S WIND FARM OUTPUT IMMEDIATELY.**
 - There is GSA precedent for issuing a PPA for Indian-developed energy relatively early in the development process.
 - A PPA is an elegant solution that would ensure federal funding of interconnection and transmission costs, without waiting years for FERC or DOE rules and policy changes.

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POLICY AND PROGRAM RECOMMENDATIONS

1. i2X Team as subject matter expert (SME) and project lead across DOE and other agencies on interconnection matters	
Project Size	Community Scale, Utility Scale
Focus	Technical Assistance, Inter/intra-agency Coordination
Background	DOE and other federal agencies have many programs and resources available to spur and fund clean energy.
Issue	Interconnection backlogs, costs and construction timing have a significant impact on the economic viability of a clean energy project. These interconnection challenges and underlying causes could impede an otherwise viable Tribal clean energy project from advancing and being able to access the federal programs and resources.
Recommendation	<p>i2X Team can be the subject matter expert (SME) and team lead on interconnection aspects of multiple federal agency efforts to improve the national grid and spur clean energy development to ensure Tribal and other DAC projects are not left behind. Some examples include:</p> <ul style="list-style-type: none"> • i2X Team could support federal V/PPAs in several ways, such as developing transmission and Justice40 valuation models for pricing power appropriately and identifying areas where transmission underinvestment has impeded interconnection to target V/PPA efforts. (See OSPA Recommendation 3 below.) • i2X Team could facilitate interconnection problem-solving and transmission planning sessions between the federal power marketing administrations and Tribes, ensure there are actionable follow ups, and track progress. The i2X Team can understand and balance technical and Justice40 considerations, provide a new neutral perspective with knowledge of government and technical constraints and resources. (See OSPA Recommendation 4 below.) • i2X Team could support DOE LPO team on designing a dedicated, streamlined funding mechanism for interconnection deposits that meet RTO/ISO imposed requirements, uncertainties and deadlines. (See OSPA Recommendation 5 below.)
Benefits	<ul style="list-style-type: none"> • Tribal/DAC Project – coordinated federal agency response and assistance • US Government – delivery of higher quality services and improved program outcomes

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2. Grant Tribal projects exemption from interconnection queue procedures and security deposits	
Project Size	Utility Scale
Focus	Regulatory Relief
Background	Projects on Tribal lands generally face more challenges due to a greater regulatory burden (e.g., BIA lease approval, NEPA review, etc.) which can extend development timelines and increase costs, and are sited in areas with an historic underinvestment in transmission capacity. In addition, most Tribes have limited access to development capital and are often reliant on grant programs that are competitive and have lengthy and rigid application-to-disbursement schedules.
Issue	RTOs/ISOs and utilities have implemented excessive deposit fees based on estimated network upgrade costs and require payment in as little as 15 days from when the deposit amount is set. While this regime is challenging for the largest developers, it can be fatal to Tribal developers and projects that do not have ready access to capital.
Recommendation	<p>FERC should implement a rule or grant a standing waiver to exempt Tribal developers and projects from interconnection queue procedures and security deposits.</p> <ul style="list-style-type: none"> • Tribal projects should be able to enter the queue at any time and stay in as long as needed to meet the additional regulatory burdens or have access to a separate fast-track interconnection process. • Tribal projects could be required to pay standard study costs but should be exempted from paying any security deposits. <p>In addition to FERC action, exempting Tribes from the RTO/ISO interconnection queue process may also be accomplished by <u>direct order of the Secretary of Energy</u>, <u>direct interconnection of Tribal projects to WAPA under separate authorities</u>, or other means.</p>
Benefits	<ul style="list-style-type: none"> • Tribal Project – access to capital, reduces uncertainty, encourages developers and investors to support projects on Tribal lands • US Government – fulfills trust obligation to Indian Tribes, accelerates renewable energy development on Tribal lands

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3. Federal V/PPAs that value transmission and social justice investment and meet Indian preference requirements	
Project Size	Utility Scale
Focus	Project Financing
Background	Interconnection costs and construction timing have a significant impact on the economic viability of a clean energy project.
Issue	Many large Tribal reservations have superior renewable resources but inadequate transmission capacity to develop utility-scale projects. This historic underinvestment in transmission infrastructure drives up the total costs of interconnection, including allocated network upgrades, and extends the timeline for developing Tribal clean energy projects.
Recommendation	<p>US Government clean energy power purchases can target investment in needed areas to support transmission build out in underserved communities, as well as serve as a catalyst for private sector investment in these areas and provide a blue print for a V/PPA option for corporate power purchasers. OSPA believes this is an elegant and efficient solution because federal PPAs would fund the interconnection and transmission costs imposed by transmission providers such as SPP, which costs have proven to be an insuperable barrier to the development of Indian energy. While FERC and various DOE offices are considering promising reforms of such costs, these may take years to implement – a federal PPA would eliminate this barrier to Tribal developers <u>immediately</u>. Thus, the federal government should:</p> <ul style="list-style-type: none"> • Develop a model for valuing transmission infrastructure upgrades (e.g., 2023 Berkley Lab study on designing a financial transmission right (FTR) specific to wind power projects, draft 2023 Transmission Needs Study considers wholesale power price differentials); • Develop a model for valuing investments in disadvantaged communities, including compliance with the Administration’s Justice40 Initiative; • Incorporate these valuations into the economics for a federal V/PPA; and • Issue federal V/PPAs early in a project’s development with milestone requirements and pricing ranges or caps included to protect public fiscal interest. An example is the GSA Renewable Energy Contract No. GS-OOP-14-BSD-1016 with MG2 Tribal Energy, LLC (aka the Geronimo Energy PPA) which was issued by GSA early in the development process of the Geronimo Energy wind farm. • Such PPAs should be issued pursuant to the Indian Preference Provision of the Energy Policy Act of 2005 (25 U.S.C. § 3502(d)), as appropriate.
Benefits	<ul style="list-style-type: none"> • Tribal/DAC Project – interconnection cost recovery, access to capital, reduces uncertainty • US Government – transmission build out consistent with NTP and Needs Studies, fulfills trust obligation to Indian Tribes, accelerates renewable energy development on Tribal lands, meets Justice40 goals

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4. Federal Power Marketing Administrations include Tribal clean power projects in transmission planning	
Project Size	Community Scale, Utility Scale
Focus	Transmission Planning, Transmission Capacity Investment
Background	<p>Almost half of all federally recognized Indian Tribes are located within the service area of one of the three federal Power Marketing Administrations (PMAs) that own substantial transmission facilities:</p> <ul style="list-style-type: none"> • WAPA – 17,000+ miles of transmission and 88 Tribal customers • BPA – 15,000+ miles of transmission and 44 Tribes in service area • SWPA – 1,300+ miles of transmission and ~40 Tribes in service area <p>Many Tribal clean energy projects will interconnect directly to or impact PMA transmission facilities.</p>
Issue	<p>The WAPA transmission system is inadequate to support new utility-scale generation projects. Significant WAPA network upgrades are allocated to new generation projects as demonstrated by OSPA experience:</p> <ul style="list-style-type: none"> • 119 MW Pass Creek Wind on Pine Ridge Reservation would require \$47M in WAPA network upgrades, and additional \$32M in other network upgrades (excludes interconnection-specific costs) • 450 MW Ta'teh Topah Wind on Cheyenne River Reservation would require \$74M in WAPA network upgrades, and additional \$51M in other network upgrades (excludes interconnection-specific costs) <p>BPA and SWPA transmission systems may also have limited capacity to support new utility-scale Tribal generation projects, but OSPA does not have the data needed to evaluate.</p>
Recommendation	<p>The federal PMAs should include projected Tribal clean power community and utility projects in their regular transmission planning activities, upgrade their networks accordingly to speed overall deployment, and reserve capacity for Tribes to develop and deploy clean energy projects. The i2X Team could take the lead in designing initiative and facilitating stakeholder planning sessions.</p> <ul style="list-style-type: none"> • This should be an ongoing, iterative process to expand transmission investment and capacity as Tribes successfully complete projects and plan for additional new projects. • If Tribes do not use reserved transmission capacity within a reasonable timeframe (e.g., 5 to 10 years after transmission upgraded), it could be open for use by non-Tribal projects.
Benefits	<ul style="list-style-type: none"> • Tribal/DAC Project – reduces uncertainty and costs, accelerates development timeline, encourages developers and investors to support projects on Tribal lands • US Government – transmission build out, fulfills trust obligation to Indian Tribes, meets Justice40 goals, accelerates renewable energy development on Tribal lands

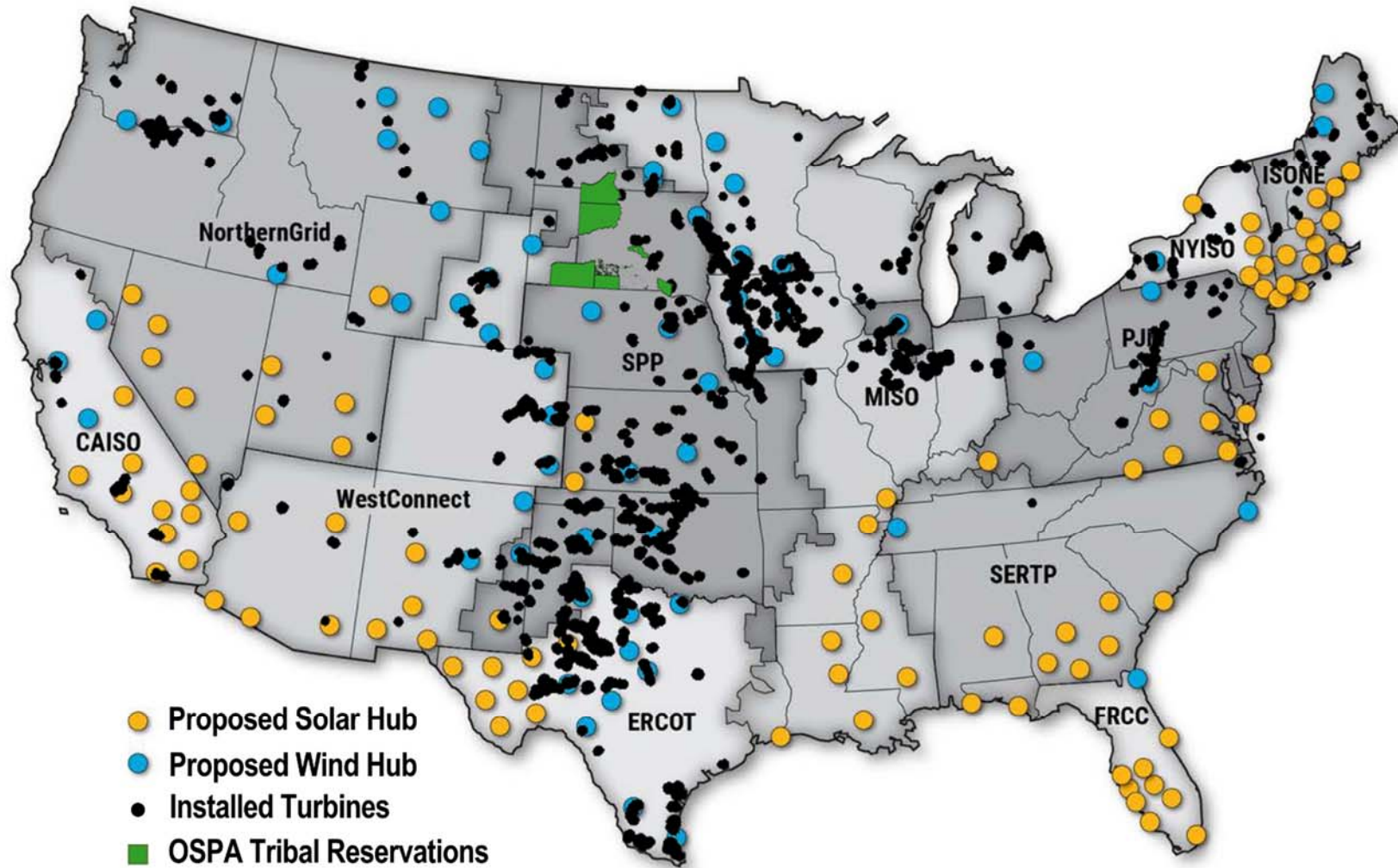
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5. Dedicated DOE LPO revolving fund to support interconnection deposits	
Project Size	Community Scale, Utility Scale
Focus	Project Financing
Background	Projects on Tribal lands generally face more challenges due to a greater regulatory burden (e.g., BIA lease approval, NEPA review, etc.) which can extend development timelines and increased costs, and are sited in areas with an historic underinvestment in transmission capacity. In addition, most Tribes have limited access to development capital and are often reliant on grant programs that are competitive and have lengthy and rigid application-to-disbursement schedules.
Issue	RTOs/ISOs and utilities have implemented excessive deposit fees based on estimated network upgrade costs and require payment in as little as 15 days from when the deposit amount is set. While this regime is challenging for the largest developers, it can be fatal to Tribal developers and projects that do not have ready access to capital.
Recommendation	<p>DOE should use a portion of the Tribal Energy Loan/Loan Guarantee Program (TELGP) to set up a revolving fund dedicated to assisting Tribal developers with interconnection fees.</p> <ul style="list-style-type: none"> • Loan application process should be simple and efficient to be able to meet the tight deadlines imposed by the RTOs/ISOs and utilities. • Loan can be paid off with construction financing or long-term project debt. If project is not constructed and Tribe/Tribal developer cannot repay loan via other means (e.g., refund of security deposit), the loan would be converted to a grant to the Tribe/Tribal developer. <ul style="list-style-type: none"> ○ This structure is consistent with program-related investments (PRI) made by many large, private foundations as a means of increasing the potential funding pool for economic development projects by reinvesting repaid loan proceeds when available. ○ If an RTO/ISO or utility retains any portion of a security deposit for a withdrawn project, it is typically applied toward the increased network upgrade costs of other impacted generation projects, thus resulting in transmission investment in the regional grid consistent with Administration goals and policies.
Benefits	<ul style="list-style-type: none"> • Tribal/DAC Project – reduces uncertainty and costs, accelerates development timeline, encourages developers and investors to support projects on Tribal lands • US Government – transmission build out, accelerates renewable energy development on Tribal lands, meets Justice40 goals

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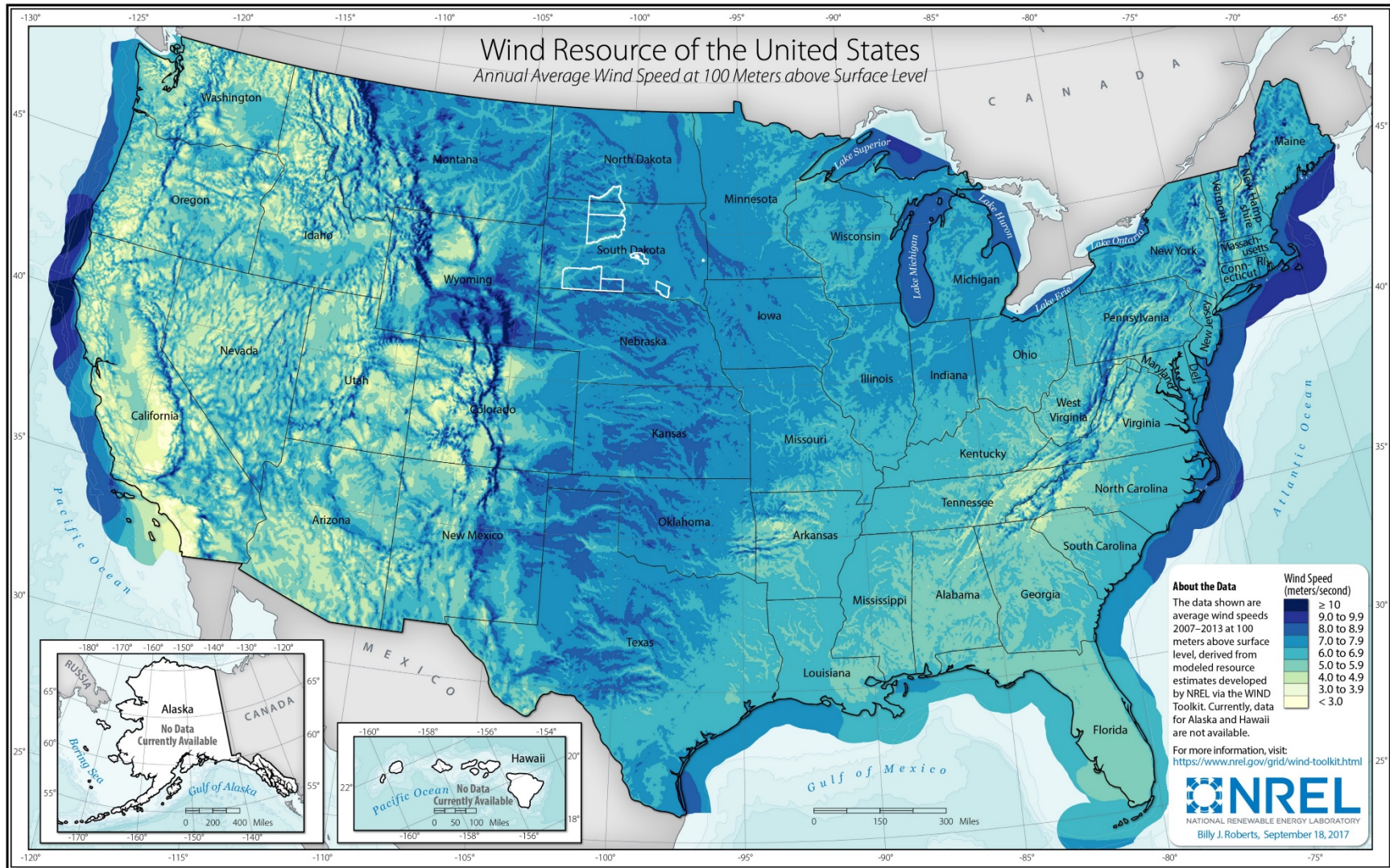
6. Establish a new Interregional Renewable Energy Zone (IREZ) hub that will benefit OSPA member Tribes	
Project Size	Utility Scale
Focus	Transmission Planning, Transmission Capacity Investment
Background	Many large Tribal reservations have superior renewable resources but inadequate transmission capacity to develop utility-scale projects. This historic underinvestment in transmission infrastructure drives up the total costs of interconnection, including allocated network upgrades, and extends the timeline for developing Tribal clean energy projects. This is particularly true in South Dakota west of the Missouri River where the largest OSPA reservations are located.
Issue	NREL is preparing its recommendations on the siting of Interregional Renewable Energy Zones (IREZ) and associated IREZ Hubs. The preliminary hub siting map proposes locating hubs on the eastern and western edges of South Dakota and just over the borders to Nebraska and North Dakota, but these locations are far from wind production centers on OSPA Tribal lands and would perpetuate the existing pattern of installed wind power projects surrounding the reservations but not on the reservations. See Map 1 below. Without clean energy development on the reservations, Tribes and their communities will never share in the economic benefits.
Recommendation	<p>Site one or more IREZ Hubs in the central part of South Dakota, west of the Missouri River.</p> <ul style="list-style-type: none"> • The four Sioux Tribes with the largest land masses are located in two contiguous pairs, spanning from the northern to the southern borders of South Dakota, abutting the western bank of the Missouri River. These four Reservations span over 13,000 square miles, and have multi-GW wind energy production capacity. See Map 2 below. • Siting one or more IREZ Hubs in close proximity to these two major production centers would achieve NREL’s goal of facilitating transmission from production centers to load centers, would help to redress the historic injustice of under-investment in and around Indian land by the federal government, and would comply with the Administration’s Justice40 initiative.
Benefits	<ul style="list-style-type: none"> • Tribal/DAC Project – reduces uncertainty and costs, accelerates development timeline, encourages developers and investors to support projects on Tribal lands • US Government – encourages transmission build out in resource rich but underserved area, fulfills trust obligation to Indian Tribes, meets Justice40 goals, accelerates renewable energy development on Tribal lands

Map 1: NREL Proposed IREZ Hubs, the OSPA Tribal Reservations and Installed Turbines



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Map 2: Wind Resources and the OSPA Tribal Reservations



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7. DOE technical assistance for reviewing interconnection studies	
Project Size	Community Scale, Utility Scale
Focus	Technical Assistance, Workforce Development
Background	Interconnection studies are conducted by the transmission owner or RTO/ISO to determine the network upgrades required to bring the power from the clean energy project onto the grid. These studies will determine the total interconnection costs for a project, which may significantly impact project economic viability.
Issue	There is room for error and interpretation in conducting these studies, and it requires a very specialized skillset to evaluate the results and consult with the transmission owner or RTO/ISO on any identified issues or discrepancies in the results. A Tribal developer or disadvantaged community developing its own project is unlikely to have the skills in-house to conduct this analysis or be able to access experienced consultants on short notice and at affordable rates.
Recommendation	<p>DOE should provide technical support on request to review interconnection study results provided by an RTO/ISO or utility for errors or anomalies and discuss findings with RTO/ISO/utility and requestor if needed.</p> <ul style="list-style-type: none"> • If demand for services is high, DOE could try to tap into retired engineers or engineering/consulting firms that may provide services pro bono or at reduced rates for projects being developed by disadvantaged communities. • DOE may want to consider developing an internship or study program with Tribal/HBCU/Community college engineering programs to build technical capacity in disadvantaged/minority communities.
Benefits	<ul style="list-style-type: none"> • Tribal/DAC Project – access to needed technical assistance, potentially reduces development costs and timing • US Government – workforce development, accelerates renewable energy development on Tribal lands