

Proposed Solutions to Regulatory Barriers to Tribal Solar Development

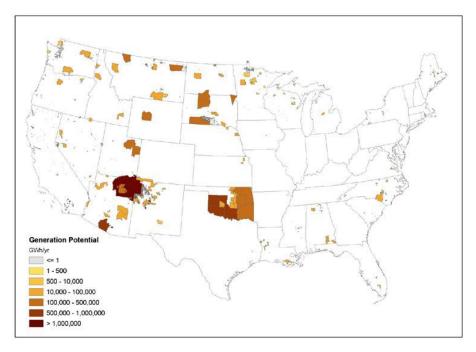
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Conference
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- 2 Barrier 4: Net-Metering Limits or Lack of a Net-Metering Policy
- 3 Case Study: Leech Lake Band of Ojibwe
- 4 Next Steps

Addressing Regulatory Barriers to Tribal Solar Deployment

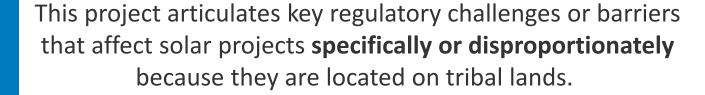
Tribal lands represent approximately 6.5% of total U.S. utility-scale renewable energy technical potential.



Photovoltaic generation potential by reservation



Project Overview



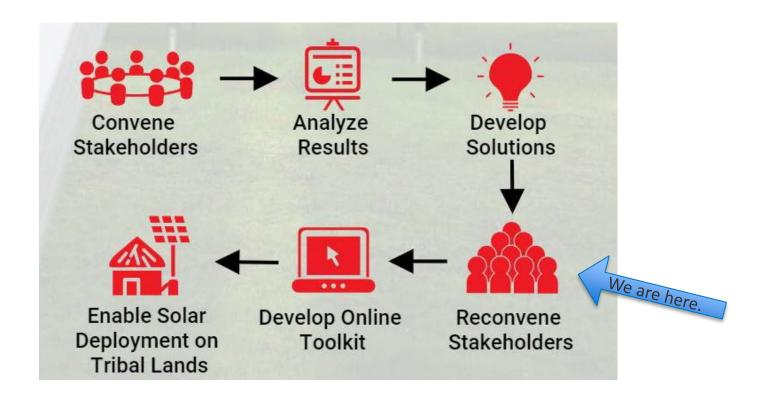
This project is working to ready stakeholders to address regulatory barriers by:

- Increasing institutional capacity for tribes and regulatory bodies
- Developing frameworks
- Providing trainings
- Developing a document repository.



The Tribal Solar Initiative is a partnership between the National Renewable Energy Laboratory (NREL) and the Midwest Tribal Energy Resources Association (MTERA).

Project Approach

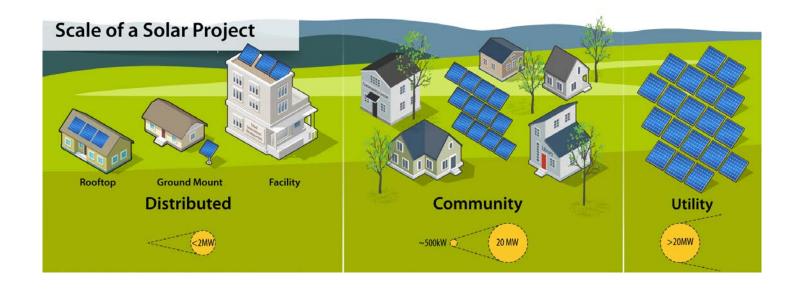


Regulatory Barrier

Regulatory Process: Any decision-making process that involves making rules that govern where, when, and how a solar project can be developed.

| Jurisdictional Level | Organization |
|-------------------------|--|
| Tribal | Tribal government |
| Local Utility | Cooperative utility (or similar) governing board |
| Local | County |
| State | State public utility commission |
| Regional | Independent system operator/regional transmission operator |
| Federal | Federal Energy Regulatory Commission |

Solar Project Scale



Barrier Four: Net-Metering Limits or Lack of a Net-Metering Policy

Overview

Net metering: A practice in which utilities credit a system owner for the excess electricity generated by their solar panels.

Net-metering rules (or lack thereof) can play a large role in the economics of a solar project.

- Relevant project scale: Distributed, behind-the-meter (rooftop)
- Relevant jurisdiction: Local utility governed by the state or utility board of directors.



30-kW rooftop PV array that powers the Forest County Potawatomi Community administration building

Barriers

Three ways in which a net-metering policy may be a barrier to tribal solar development:

- 1. Compensation rate
- Project or state/utility-wide size caps
- 3. No net-metering rate.



80-kW parking canopy solar system at Agua Caliente reduces Tribal office electricity cost from \$22,000 to \$200 annually.

Solutions

Short-Term/Workaround Long-Term Solutions Solutions Be aware of net-Work with utility or metering restrictions state rulemaking to early in planning establish or change net-metering rules process Split up large project Include net-metering into smaller projects when negotiating right of ways. that meet size caps.

See Issue Brief 5: **Utility Tribal Engagement**

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Case Study: Leech Lake Band of Ojibwe

Challenge: Net-Metering Policy

- Minnesota's net-metering policy allows for solar systems of 40 kW or less.
- Leech Lake wanted to install a 200-kW project.
- Divided the project into five 39.9kW projects instead
- Allows the Tribe to use netmetering.



One of the five solar PV projects

See Barrier 4: Net-Metering Limits or Lack of a Net-Metering Policy

Challenge: Tribe Served by Five Separate Utilities

Solution: Evaluate each utility policy to determine costs and benefits.

Leech Lake sited the five solar arrays in four different utility service territories. The Tribe negotiated four separate contracts using each utility's virtual net-metering system.

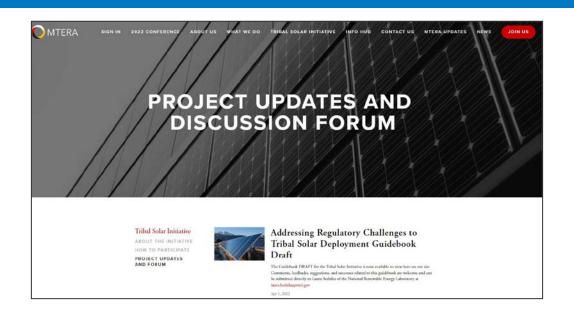


Installing one of the five solar PV projects

See Barrier 3: Tribes Served by Multiple Utilities

Next Steps

Guidebook Available for Comment



Draft:

https://static1.squarespace.com/static/5e8fda58c9a6ee72f8d6a871/t/6247155d 9e0af24c6331c7b0/1648825721171/Final+Guidebooks+Draft.pdf.

Comments: Use this form or send to laura.beshilas@nrel.gov.

Thank you!

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