Potential Solutions to Regulatory Barriers to Tribal Solar Development

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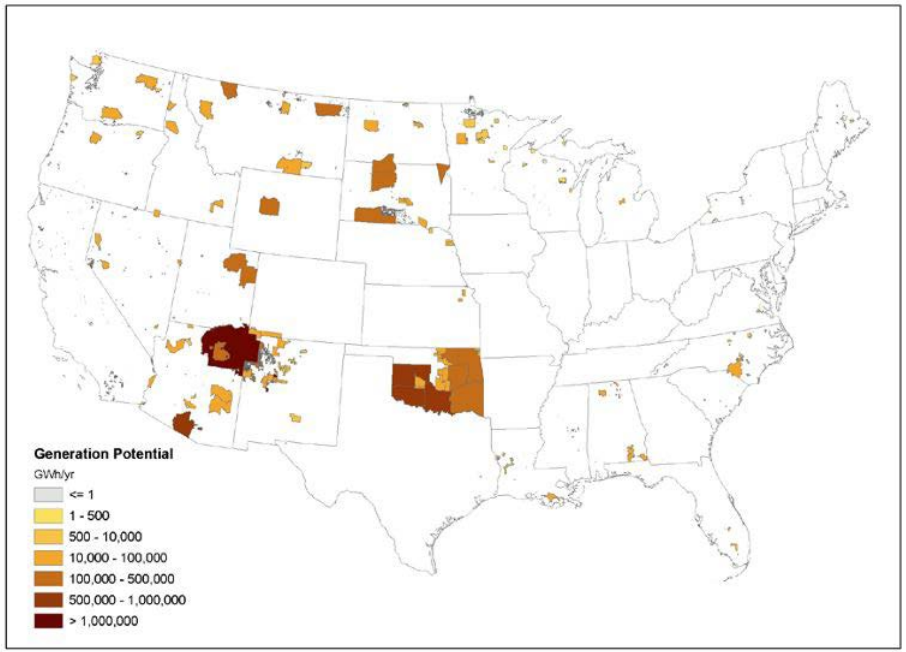
Agenda

1. Project Overview
2. Barrier 1: Lack of Tribal Representation in Decision-Making Processes
3. Case Study: Agua Caliente Band of Cahuilla Indians
4. The Inflation Reduction Act
5. Up Next

Addressing Regulatory Challenges 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

Image: https://www.nrel.gov/docs/fy18osti/70807.pdf

Project Overview

This project articulates key regulatory challenges or barriers that affect solar projects **specifically or disproportionately** because they are located on tribal lands.

Project Approach

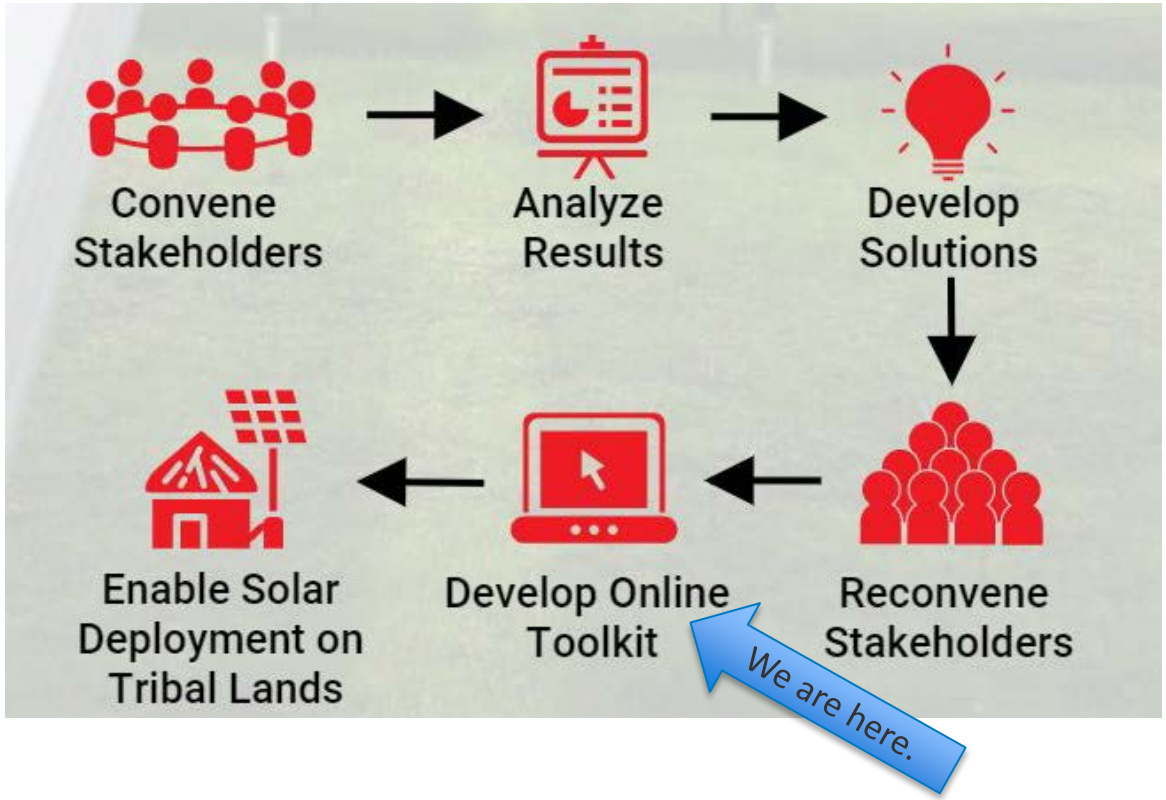


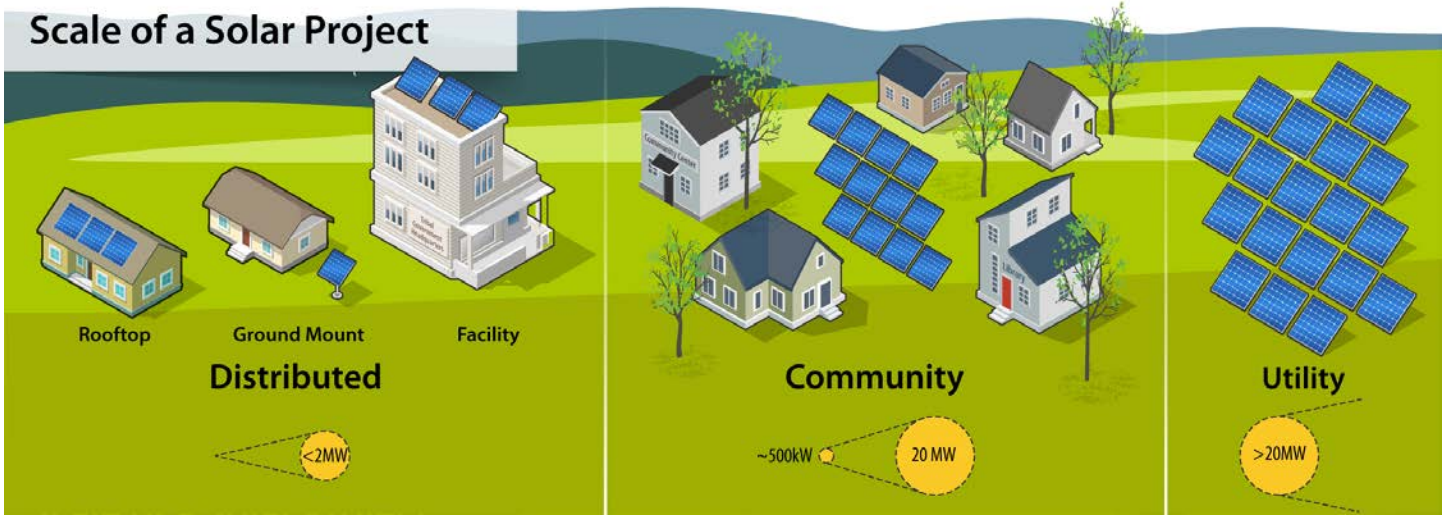
Image: https://www.mtera.org/tribal-solar-initiative

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



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Barrier 1: Lack of Tribal Representation in Utility, State, or Federal Energy Policy Decision-Making Processes

Overview

Tribes are often not represented in decision-making processes that impact their ability to develop energy projects.

- Relevant project scale: All
- Relevant jurisdiction: All.

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

Image: https://www.energy.gov/indianenergy/articles/forest-county-potawatomi-recognized-renewable-energy-achievements

Potential Reasons for Lack of Tribal Representation

- Time
- Financial resources
- Technical expertise
- Sovereignty concerns
- Election procedures.

Tribes should have a “seat at the table” when it comes to energy decisions that affect their lands. Participants take part in the 2018 Energy Planning & Development Workshop in Kodiak, Alaska.

Image: NREL 51235

Potential Solutions

Short-Term/Workaround Solutions	Long-Term Solutions
• Outreach from tribal staff or leadership to elected and appointed officials with info about tribal perspectives or priorities • Tribal liaison positions.	• Tribal members run for or get appointed to office • Generic dockets.

Issue Brief #5: Utility-Tribal Engagement

How can utilities and regulators build better relationships with tribes?

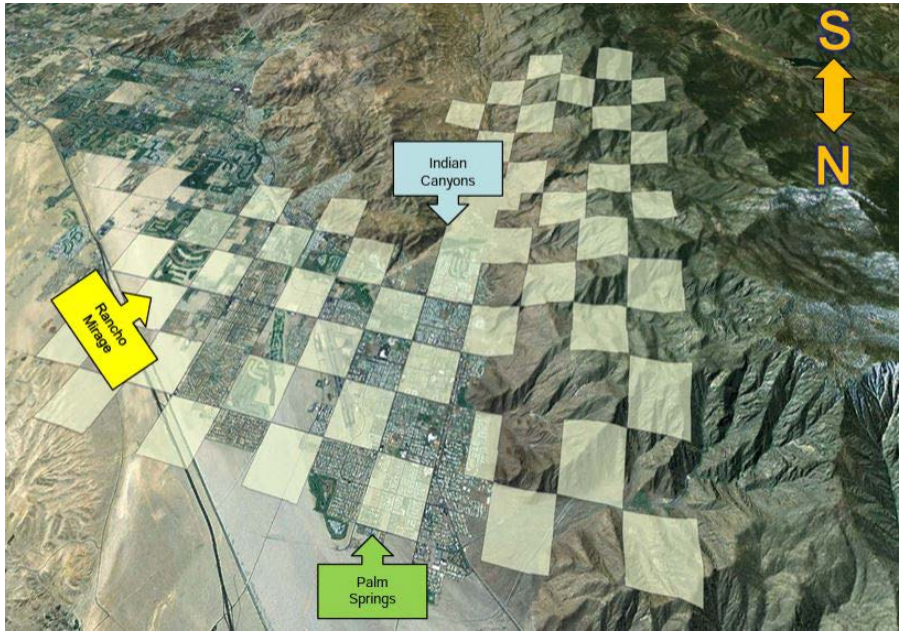
- Prioritize tribal hiring
- Establish clear lines of communication
- Use appropriate public meeting strategies for increased accessibility
- Learn about the communities' cultural values and beliefs
- Formalize tribal relationships.

Breaking ground on a 1-MW array at Picuris Pueblo, NM. The cooperative, Kit Carson, works closely with the tribe.

Image: NREL 64847

Case Study: Agua Caliente Band of Cahuilla Indians

Challenge: “Checkerboarding”



Agua Caliente land is highlighted in the Palm Springs California area, displaying the “checkerboard” pattern.

Image: Todd Hooks, https://www.energy.gov/sites/prod/files/2016/01/f28/18_ac_cahuilla_todd_hooks.pdf

Challenge: Rate Negotiation

Solution: Tribal liaison

"Tribal liaisons can… translate between tribal and utility cultures in how each speaks about project development."

-Todd Hooks

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

Image: Todd Hooks, https://www.osti.gov/servlets/purl/1349229

Challenge: Intra-Tribal Communication

- Solar has higher upfront costs and longer payback times– compared to hospitality, tourism, and gaming.
- Solar seen as riskier investment.
- Communicate other benefits:
    - Energy resilience
    - Environmental benefits
    - Economic diversification value.

The Inflation Reduction Act (IRA) and Tribal Solar Development

Barrier 10: Nontaxability of Tribes and Investment Tax Credit Rules

Tribes historically could not take advantage of the federal solar Investment Tax Credit (ITC), and therefore projects are more expensive.

- Relevant project scale: All
- Relevant jurisdiction: Federal tax law.

Short-Term/Workaround Solutions

- Tribes can develop taxable entities that can take advantage of the ITC
- Tax partnerships.

Long-Term Solution

- Federal legislation.

The IRA Is a "Game Changer"

The new legislation provides a solution to Barrier 10. Tribes can now take advantage of the ITC. There is no longer a significant disincentive for tribal ownership of solar projects.

			Start of Construction						
			2006 to 2019	2020 to 2021	2022	2023 to 2033	The later of 2034 (or two years after applicable year[a])	The later of 2035 (or three years after applicable year[a])	The later of 2036 (or four years after applicable year[a])
ITC	**Full rate** (if project meets labor requirements[b])	Base Credit	30%	26%	30%	30%	22.5%	15%	0%
		Domestic Content Bonus				10%	7.5%	5%	0%
		Energy Community Bonus				10%	7.5%	5%	0%
	Base rate (if project does not meet labor requirements[b])	Base Credit	30%	26%	6%	6%	4.5%	3%	0%
		Domestic Content Bonus				2%	1.5%	1%	0%
		Energy Community Bonus				2%	1.5%	1%	0%
	Low-income bonus (1.8 GW/yr cap)	<5 MW projects in LMI communities or Indian land				10%	10%	10%	10%
		Qualified low-income residential building project / Qualified low-income economic benefit project				20%	20%	20%	20%

https://www.energy.gov/eere/solar/federal-solar-tax-credits-businesses

Draft Guidebook Available

MTERA.org

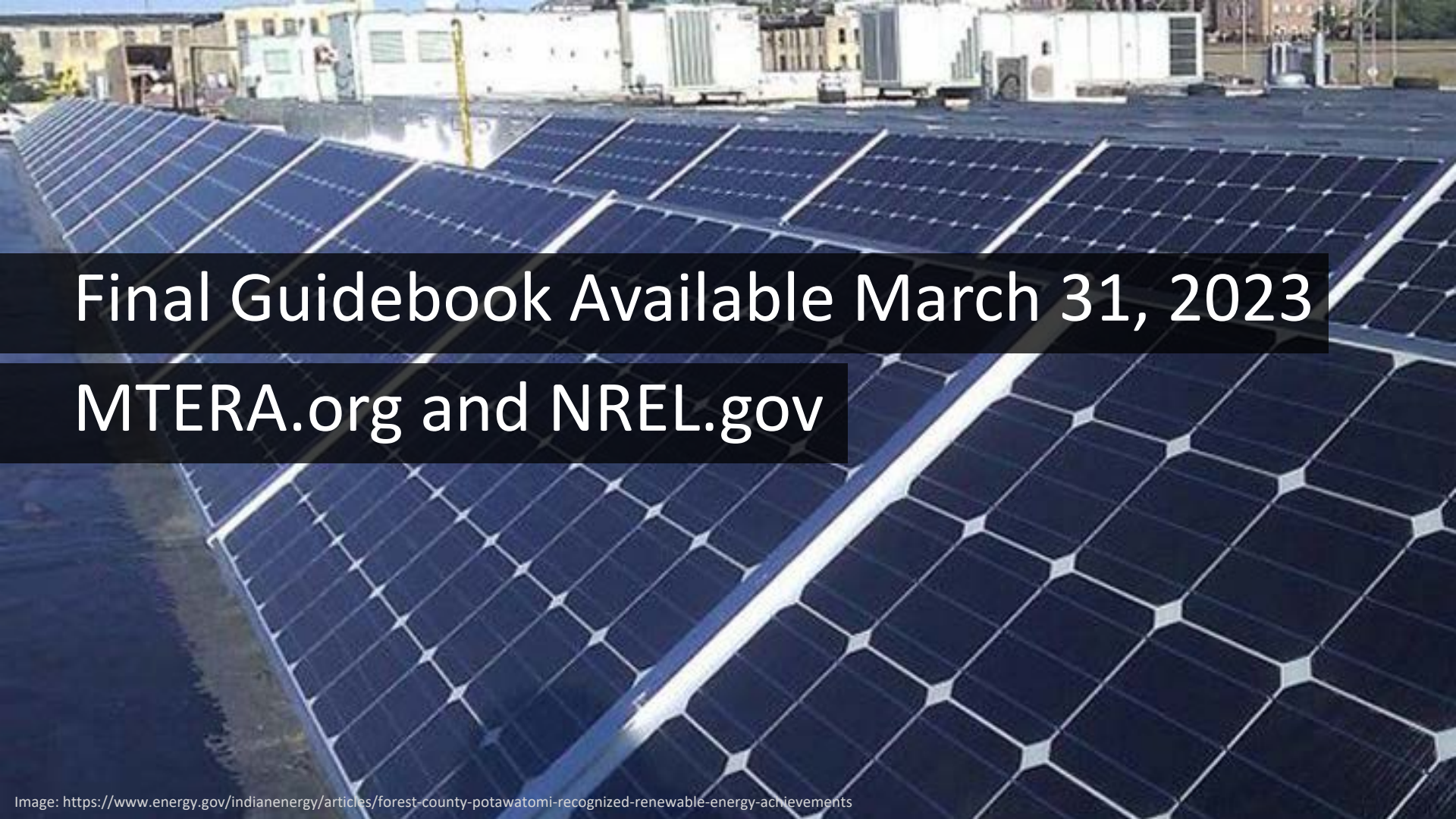


Image: https://www.energy.gov/indianenergy/articles/forest-county-potawatomi-recognized-renewable-energy-achievements

Thank you!

www.nrel.gov

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