

Clean Energy Transmission

NATIONAL WILDLIFE
FEDERATION'S TOOLKIT FOR
COMMUNITY PARTICIPATION



**NATIONAL
WILDLIFE
FEDERATION**

Who is this guide for?

Individuals, communities, public interest groups, and local officials.

Why use this guide?

Communities and local decision makers are integral members of the development process. This is your opportunity to learn about the historic opportunity that you have to lead decision making.

Inside this guide:

Tips to understand how transmission projects are conceptualized and built, and tools to engage effectively with regulatory agencies, developers, community members, and your local government.

As you make your way through this Guide, please take advantage of the materials provided, including:

- [A Clean Energy Transmission Policy Platform for Thriving Communities and Wildlife](#)
- [Community Workbook: Cultivating Rural Communities' Approaches to Nature and Electrification](#)
- [Important Terms](#)

Please share with us your comments and questions about this toolkit. We will update these materials to meet the needs of all impacted communities.

Cover photo: Thianchai Sitthikongsak/Getty images

Vision Statement

Electricity allows our communities to function; clean electricity allows our communities to thrive. Shifting the electric grid to clean generation will require a massive buildout of new generation sources, battery storage, greater energy efficiency upgrades, and a modern, resilient grid—and transmission. The choices we implement in the next 10 years will make or break our efforts to reach net-zero greenhouse gas emissions by mid-century. Reducing greenhouse gas emissions will ensure we avoid the most catastrophic climate impacts on water security, food supply, human health, wildlife populations, and more.

To safeguard our environment and provide affordable and reliable energy to our communities, electric transmission capacity must more than double within this decade. This infrastructure development must be resilient in the face of increasingly severe weather events and will have significant, potential impacts on our lands, wildlife, cultural resources, and more.

The National Wildlife Federation is committed to ensuring that the values and perspectives of local communities and the well-being of our natural ecosystems are a central aspect in accelerating America's clean grid buildout. We hope that you find this toolkit useful in developing your understanding of the US electric grid, and in providing your community the resources it needs to participate in shaping the dialogue on local transmission and clean energy developments.

For more information, please view our [Connecting the Clean Energy Grid Video](#).

“Transmission is the key to unlocking a clean and just power grid that can serve everyone.”

- Veronica Ung-Kono, Staff Attorney and Clean Energy Transmission Policy Specialist at the National Wildlife Federation

*An employee runs
diagnoses on heliostats
at the Crescent Dunes
Solar Thermal Facility
in Tonapah, Nevada.
The facility, built with
US sourced steel,
glass and technology,
provides more than
500,000 megawatt hours
of electricity per year,
available day or
night through molten
salt storage.
Dennis-Schroeder/NREL*



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Introduction

Our current energy grid in the United States is woefully outdated and insufficient to meet our energy needs amidst increasingly severe weather events and rising electricity costs. Upgrading our system to clean energy and a modified grid will allow our communities to thrive with cleaner air, reliable energy, and lower costs.

Power lines are the key to ensuring electricity flows to where it is needed most, like our schools, homes, businesses, and hospitals. The extra tall power lines are called transmission lines. These lines differ from the lines along your neighborhood street. They carry much more electricity than the lines along your neighborhood road and carry that electricity across long distances.

A transmission project typically consists of building a new set of transmission towers, lines, and maybe even a new substation. Transmission projects as defined in this toolkit will refer to projects that span multiple states and connect energy producers and energy consumers across state and regional boundaries.

In the United States, building these projects is complicated. A group of people or business owners cannot just come together and decide that they want to build a transmission project. These projects are **expensive** and require a substantial amount of regulatory review from local, Tribal, state, and federal agencies. Regulatory review is important. The process keeps developers accountable, enforces environmental laws that keep our environment clean, protect wildlife, natural resources, and cultural resources, adheres to fire safety codes and health and safety standards, ensures all projects meet the same standards, keeps costs low for customers, and provides opportunities for the public to be involved in the review process.



Steve Hockstein Bloomberg/Getty Images

How did we get here? In the early 1900s, the dissemination of electricity to the masses wasn't fairly proportioned. Dense, urban centers enjoyed the luxury of electricity while rural communities lived without access to this new, life-changing resource. So, in the 1930s, President Franklin D. Roosevelt (FDR) created the Rural Electrification Administration (REA), which helped farmers get power and light at an affordable price. Energy was finally affordable because FDR implemented the Rural Electrification Act of 1936, which offered loans to rural communities to build generation, distribution, and transmission lines that could produce, carry, and deliver electricity to these communities, respectively. This program only saw great success because generation, local networks, and transmission worked in collaboration to create our power grid.

After years of building, the United States ended up with [roughly 600,000 miles of transmission lines, around 5.5 million miles of local distribution lines,](#) and a diverse set of generators from new sources like solar and wind, to fossil fuels like coal and natural gas. All of these diverse forms of generation, together with a large network of transmission and distribution lines, have provided relatively affordable energy for the United States for years.

The Need for Transmission

The transition away from fossil fuels to clean energy is not about a one-size-fits-all solution. It is about using a variety of solutions informed by the needs of those most impacted and the broader power grid. Nontraditional electricity generation resources like solar and wind are necessary to meet climate goals and clean up our environment. Unfortunately, building these resources in every community throughout the United States is not possible, and even if it were, it would not be enough to meet our future energy demands. One example of this is rooftop solar. There are not enough rooftops for rooftop solar to replace all the fossil fuels that America currently burns to generate electricity. Rooftop solar can only generate [13 percent of the energy we will need by 2050.](#)

How we think about and build transmission will need to change as well as we transition our energy grid from one designed to accommodate the large, centralized fossil fuel plants of previous decades to a more interconnected grid consisting of geographically distributed renewable energy sources.



Atmospheric river storms flooded thousands of acres of farmland in what was once the Tulare Lake. Mario Tama/Getty Images

While there has been a small number of planners and advocates engaged in conversations to provide the regulatory framework, policies, and reforms to accommodate for our changing energy grid, much more participation from community members, local governments, and federal agencies is desperately needed. In 2022, there were over 10,000 active requests for alternative energy sources to interconnect to the power grid, marking a [40% increase from 2021](#). These pending requests stifle our progress to make electricity affordable and allow for new energy sources to come

online. Additionally, most transmission lines in the US have not been upgraded in several decades, leading them to be less efficient and less reliable when severe weather strikes.

But tackling these challenges is possible. In fact, there has never been a better time for us to address these challenges. Passed in the last two years, the Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA) allocated hundreds of billions of dollars to renewable energy development, transmission buildout, and other technologies that can help upgrade and build out the energy grid.

Tackling these challenges is possible. In fact, there has never been a better time for us to address these challenges.

Embracing the clean energy transition with the transmission lines that bring energy to our homes and businesses will ensure future generations have a reliable and resilient energy future.

Opportunity in the Face of a Changing World

Communities are increasingly under pressure from issues exacerbated by planet-altering pollution. Prolonged droughts diminish crop yields and food availability, increased flooding damages roads, bridges, farms, and homes, and severe wildfires burn through valuable forests and wildlife habitats. As we collectively strive to mitigate these effects, embracing the transition to clean energy and the transmission that brings it from the source to homes and businesses is an important solution and can ensure future generations have a safe and healthy future filled with opportunity.

For 150 years, the extraction and burning of fossil fuels has left lands scarred, wildlife displaced, and communities in poor health, costs not reflected in a utility bill. The detrimental impact of these facilities is disproportionately borne by communities residing and laboring near them. In the United States, **18 million people** live within a mile of active oil and gas production operations, the majority of whom are Hispanic, Black, Asian, Native American, live below the

poverty line, and/or are children. Upgrading and expanding the clean energy transmission system will address existing environmental health issues by transitioning communities from dependence on polluting fossil fuel-based power to new, regenerative power. Additionally, many communities lose electricity and vital heating or cooling during extreme weather events, which can be prevented by designing a more resilient and interconnected energy grid.

Clean energy projects generate job opportunities and stimulate local economies through new revenue. Transmission projects can provide funds for local, state, and federal governments through taxes collected on the sale of electricity and in the form of royalty, rent, and lease payments compensating public or private landowners for the use of land. Public revenue is also created during the construction phase indirectly through sales and use taxes. The amount and distribution of these



Rushlan Dashinsky/Getty Images

A deer passes by transmission lines outside of Denver, Colorado. Faina Gurevich/istock/Getty Images



Biodiversity— which is on the decline—is a vital part of sustaining life on Earth. It filters our water, gives us oxygen to breathe, provides us with an array of foods and materials, and contributes to the economy.

sources of revenue vary according to state laws but can be a steady source of funds for essential governmental services. Some developers have also been open to collaborating with communities to develop innovative revenue-sharing or project ownership configurations that can build long-term financial equity in communities.

The health of our communities and the health of our natural ecosystems and wildlife are directly linked. Biodiversity—which is on the decline—is a vital part of sustaining life on Earth. It filters our water, gives us oxygen to breathe, provides us with an array of

foods and materials, and contributes to the economy. Without a diversity of pollinators, plants, and soils, our supermarkets would be lacking. That's why it is important to ensure energy and transmission projects are sited responsibly with nature and wildlife in mind. Poorly sited projects can cause harm to critical wildlife habitats, which could cause a ripple effect and distress ecosystem and community health. Community involvement is imperative to ensure project developers understand the region's biggest challenges and concerns and are held accountable for responsible development.



Protection for future generations includes ensuring outdoor recreational opportunities and sporting traditions remain accessible and strong. Outdoor spaces are places for learning, playing, and connecting to nature and are integral to preserving our legacies, histories, and cultures. Ensuring everyone has opportunities to connect to nature rejuvenates the human spirit and helps us understand our past and future.

This toolkit encourages communities to consider clean energy and efficient transmission as integral components

of their strategy to build resiliency and opportunity. By embracing these solutions, communities can not only mitigate the impacts of pollution and extreme weather but also create sustainable, resilient environments for current and future generations. Through collective action and informed decision-making, communities can lead the way toward a cleaner, healthier, and more sustainable future.

[Learn more about energy justice](#)

Poorly sited projects can cause harm to critical wildlife habitats, which could cause a ripple effect and distress ecosystem and community health.

National Wildlife Federation's 5 Pillars of Responsible & Fair Clean Energy Transmission

The National Wildlife Federation created 5 pillars to guide the development of responsible and fair clean energy transmission. These pillars help NWF ground our advocacy and are not meant to be more than helpful considerations for communities, as communities decide their own guiding principles.

1. Minimizes impact to wildlife habitat in siting transmission infrastructure while prioritizing already disturbed areas

- ➔ Wildlife corridors and connectivity allow species to move between habitats, particularly during seasonal migrations and in response to habitat fragmentation and changing trends of precipitation and heat. Preserving and increasing habitat connectivity and wildlife corridors is an effective adaptation strategy for managing biodiversity. Maintaining this connectivity in nature also benefits people by reducing flood risk, mitigating extreme heat, preserving access to nature, and expanding hunting, fishing, and subsistence opportunities.
- ➔ Where possible, new transmission lines should be placed alongside existing, power lines or along roads and railroad tracks. Developers

should also prioritize degraded lands like abandoned mines or former industrial sites—and they should seek to avoid building new lines where they will impact communities that are already experiencing environmental harm from other sources.

2. Centers and empowers local communities and Tribal Nations

- ➔ Relying on fossil fuels disproportionately harms underserved and overly burdened communities. These communities are often subjected to high energy costs and unreliable power through rolling blackouts during extreme weather events. Expanding the transmission system will bring clean, affordable energy to these communities and address existing environmental health issues. It can also create opportunities to own these investments and job opportunities that include local workforce training programs and hiring agreements.
- ➔ Responsible investment in energy transmission requires that Tribal Nations, project developers, and regulators build real, meaningful relationships with communities that listen and adapt measures based on the concerns and honor the decisions made about proposed projects.

3. Applies mitigation measures that conserve and restore ecosystems and wildlife habitat and populations

➔ Identifying and avoiding certain critical areas is also a necessary mitigation tool. These critical areas include wildlife migration corridors, sensitive natural ecosystems, cultural heritage and archeological sites, and watershed and riparian areas important to migratory birds. Locating projects in already disturbed areas that do not require additional land clearing and do not overburden existing communities. Incorporating Indigenous Knowledges and modeling and mapping tools should also be an integral part of project planning.

4. Applies proactive, interregional long-term planning that equitably invites collaboration among communities, state, regional, and federal stakeholders, regulators, and Tribes

➔ The power grid is a national security asset that we all benefit from. It provides electricity to our military bases and keeps our homes warm during blizzards and cool during hot summers. The power grid is also the backbone of our society's other infrastructure, allowing wastewater treatment plants to run, keeping our hospitals powered, and so much more. New transmission



Karen Desjardin/Getty Images

is important to reduce our reliance on traditional energy and will provide communities with access to new alternative energy. However, improving existing projects will save customers money and improve the resiliency and reliability of the grid, especially during extreme weather events. Both must occur simultaneously.

5. Responsible transmission development maximizes coordination of decision-makers

➔ Each state has different procedures to follow for approving a transmission project, including different environmental siting criteria. Since transmission projects will affect biodiversity, natural resources, and wildlife habitat, coordination in mitigation is imperative. Notably, developers must collaboratively and proactively design projects with conservation advocates, their partners and local communities, wildlife scientists, and ecologists, to ensure that those with practical knowledge and subject matter experts can inform this new landscape.

Community- and Facility-Scale Renewable Energy Project Development and Finance Workshop participants Jana Ganion, Blue Lake Rancheria; Norman Wellington Sr., Gila River Indian Community; Gary Burns, Shoalwater Bay Tribe; and Arla Ramsey, Blue Lake Rancheria, engaged in one of several interactive exercises. John De La Rosa/NREL/Flickr



You have unique life experiences and expertise that can help create projects that serve you and your community.

Opportunities for Advocacy

It can be a daunting task to consider getting involved in the siting and permitting of transmission projects. But the opportunities to get involved exist for one reason: your opinion, expertise, and priorities matter. You have unique life experiences and expertise that

can help create projects that serve you and your community. The key is to remember: It's another process just like any other process and if you break it down into smaller tasks, it becomes possible for anyone to get involved.



Opportunity 2: Administrative and Grid Operator Advocacy

Administrative Advocacy

Administrative action is an important avenue for environmental and energy action and civic engagement. Agency rulemaking is the process for state and federal agencies to write the rules that will implement laws passed by Congress in particular subject areas, such as transmission. Agency rulemaking is particularly important because it provides specific details and frameworks for how regulated entities—such as power companies—must comply with the law, and how the public can get involved.

It is important to engage in rulemaking from the onset of that process, including the pre-rulemaking process. Participating in the process all the way through ensures your perspective is incorporated and provides an opportunity for you to learn how other members of the public and organizations are assessing the issues.

Sometimes, an agency will begin by simply asking for information on a particular topic. They will ask for this input in writing, and they may ask for

Opportunity 1: Meet Your Representatives

Your state and federal Congressional representatives want to hear from you. You can influence what policies and laws they support and pass by meeting with them to voice your expertise.

[Find your House Representative](#)

[Find your Senator](#)

[Learn more about meeting
members of Congress](#)

information through a listening session: a public meeting (virtual or in-person) where they offer opportunities for you to tell the agency your thoughts and opinions.

The Agencies

The Agencies that typically create the rules relevant to transmission development are:

Federal Agencies:

Federal Energy Regulatory Commission (FERC)

The FERC is an independent agency that regulates interstate transmission of, and the bulk sale of, electricity and natural gas.

Department of Energy (DOE)

The DOE is the federal agency responsible for energy research, can be a convener of other agencies, and has many other important duties.

Department of the Interior (DOI)

The DOI is a federal agency that manages America's vast natural and cultural resources, including our public lands.

Bureau of Ocean and Energy Management

The BOEM is a federal agency responsible for offshore renewable energy development in federal waters.

State Agencies:

Public Utility Commission/ Public Service Commission

The lead agency or agencies responsible for issuing the certificate of public good and necessity for a transmission project.

The Rulemaking Process

Typically, an agency will publish a notice of a proposed rulemaking. If it is a federal agency, it will do so in the [Federal Register](#), and will normally publish the notice on its website as well. You can also register your email on agencies' websites to receive notifications for these notices and updates to the rulemaking process.

The agency will ask for public comments on the proposal. This is a prime opportunity for individuals and organizations to collectively or separately submit letters for the official record with their critiques and requests. Federal agencies are required

by law to consider public comments submitted during an official comment period. After collecting and reviewing the comments, the agency will issue a final regulation. The agency may also decide not to pursue a final rule, or decide to revise their initial proposal and take more comments on the revised proposal, and then publish the final regulation. Of note, agencies will use different periods of time for their open comment periods, and some may be as brief as thirty days. So, coordination and planning are of great importance; local groups can also seek the technical advice of national- or state-based organizations that may also be following a regulatory process.

Local Process

Do not underestimate the importance of local and municipal processes. These processes—or a lack of process at this level—are often what prevents needed projects from being built. Town planning is the planning and design of all the new buildings, roads, energy resources, and parks to make them attractive and aligned with the values of the people who live there. This is a community's opportunity to list the principles and priorities that will guide the town's decision-making.

To learn more about your local process and how you can get involved, review the [NWF Workbook: Cultivating Rural Communities' Approach to Nature and Electrification \(CRANE\)](#).

Siting and Permitting

To build a transmission project, the developer has to figure out where to physically put the project. This process is called the siting process. Deciding on a location depends on a variety of factors including the size of the project, whether construction in a certain area will harm protected wildlife species' habitat, whether the project will be near a body of water, whether it will take away green spaces in a community, proximity to homes, and other factors. Many of these factors are provided for in state and federal laws and regulations with varying levels of protection. For example, the Endangered Species Act is a federal law that provides a framework to conserve and protect endangered and threatened species and their habitats, including during the construction and operation of major infrastructure projects.

Do not underestimate the importance of local and municipal processes. These processes—or a lack of process at this level—are often what prevents needed projects from being built.



Carlos Ciudad/Getty Images

Local governments and communities can play a unique role in their market regions as they are both large consumers of energy and represent the interests of their residents.



SDI Productions/Getty Images

Numerous permits are required to build transmission. Permits are official documents providing permission for someone to build a transmission project. Developers must apply for relevant permits for their project to be legal.

To understand what specific regulations apply to your state you can access the Department of Energy's [Regulatory and Permitting Information Desktop Toolkit](#).

Grid Operator Advocacy

Local governments and communities can play a unique role in their market regions as they are both large consumers of energy and represent the interests of their residents. In 2021, U.S. cities [have become leaders in clean energy and affordable electricity](#) by buying 4,370 megawatts of clean energy. That's enough power to electrify more than 940,000 U.S. households annually. Cities and communities are well-positioned to incorporate important

goals (such as equity and justice goals) into clean energy procurement and advocate on behalf of the consumers in their area.

Opportunity 3: Designing Projects with Developers

Siting a project depends on more than just what laws require. Developers want to work with you to create projects that work for your community. You can provide your expertise here. In particular, members of the sporting and outdoor communities can have helpful information for developers related to wildlife habitats, migration patterns, and more.

The projects we build together will dictate how future generations function. Working with developers is a chance to ensure communities hosting transmission projects benefit not only from the clean energy that they should gain access to, but also from local job and economic opportunities stemming from the construction and maintenance of the facilities.

Understanding the Power of Project Agreements

Beyond the environmental benefits, transmission projects have the

potential to generate numerous of well-paying jobs and address socio-economic disparities exacerbated by severe weather events and pollution.

Historically, the positive impacts of new developments have not consistently reached the people most impacted by the projects. Systemic practices like redlining and racial segregation have concentrated industrial and infrastructure activities in low-income and communities of color, resulting in heightened pollution and significant health risks in certain areas. Opposition to transmission projects generally arises due to concerns such as environmental impacts, insufficient public participation opportunities or representation by



Veronica Ung-Kono/NWF

Project agreements represent collaborative agreements between real estate developers, community coalitions, and, at times, government entities.

elected officials, insufficient regulatory analyses, health and safety, economic effects on land and property values, ignoring communities' wishes, and the infringement of Tribal Nations' rights.

Project agreements have the potential to help communities and Tribal Nations negotiate with developers to receive benefits in return for the inherent costs of industrial-scale development in their neighborhoods.

Project agreements represent collaborative agreements between real estate developers, community coalitions, and, at times, government entities. These agreements address a wide array of community needs, empowering coalitions to influence and oversee land development, secure community-specific benefits, and hold developers accountable for their commitments. Individuals and local organizations can advocate that transmission projects include some of these types of agreements.

Examples of Project Agreements

- Project labor agreements (PLAs): [Project labor agreements](#) are [pre-hire collective bargaining agreements](#) between labor unions and contractors that establish the terms and conditions of employment for a specific project. PLAs typically specify wages, benefits,

and working conditions, and require contractors to source labor through union hiring halls, which help connect workers with jobs. They also include methods of dispute resolution to ensure that projects continue without interruption and can include [no-strike and no-lockout](#) clauses.

Project labor agreements are required as part of federal construction projects of \$35 million or more due to an [executive order](#) signed by President Biden in February 2022.

- Community workforce agreements (CWAs): A CWA creates economic opportunities for residents and businesses in communities where projects are being proposed. Provisions can include hiring local residents and underrepresented workers, prioritizing the re-hiring of workers from certain local industries such as a closing coal plant, and ensuring the participation of local small business enterprises in projects.
- Community benefits agreements (CBAs): A CBA is a voluntary but legally binding agreement between a developer or company and nearby community organizations that direct benefits from new development projects to local people. These benefits vary based on a community's needs; they can include employment provisions, new infrastructure, and



Creative Touch/Getty Images

resources for the community such as affordable housing, public parks, job training programs, and/or measures to protect the environment. CBAs are negotiated prior to government approval of a project. In some cases, a local or state agency may play an active role in negotiations and can act as an enforcer of an agreement.

- **Community Benefits Plans (CBPs):** A CBP is a non-legally binding roadmap for how a developer will engage with communities during a project. While they do not always include designated funding or enforcement mechanisms, CBPs can help pave the way for future, legally binding community benefits agreements by laying some of the groundwork and bringing stakeholders together early on. The Department of Energy requires CBPs for Bipartisan Infrastructure Law and Inflation Reduction Act funding opportunities and loan applications.

Helpful Tips When Designing Project Agreements:

Consider Forming a Coalition

- Emphasize ongoing coalition building, before engaging developers.
- Encourage broad coalitions representing diverse community interests to strengthen negotiation advantages.

Issue Education & Research

- Promote continuous issue education to foster shared principles and trust within coalitions. This can help align members' priorities and create a forum for dialogues of potential risks and concerns.
- Common research goals include understanding the development process, identifying opportunities for public engagement, and learning about the governing regulatory bodies and relevant regulations.

A Community Benefits Plan is a non-legally binding roadmap for how a developer will engage with communities during a project.

Be prepared to renegotiate terms as new issues arise, and act as observant advocates for community interests throughout the life of the project.



10,000 Hours/Getty Images

Consider a Community Assessment

- Undertake community assessments to identify the top concerns for your community.
- Community assessments are often developed through holding large community meetings to understand the perspectives of many different community members, and special care should be taken to understand the perspectives of community members whom the project would most directly impact.
- This process should ideally create a set of clearly defined community priorities or principles that can govern your coalition’s approach to project development. This may include identifying what concessions your coalition would be willing to make and can be a difficult process depending on the different members in a coalition.

Form a Negotiating Team

- Assemble an experienced negotiating team, likely including legal counsel, to anticipate and address developer responses.
- The negotiating team should have the trust of the coalition to adequately represent the needs and concerns of the community to avoid internal division.

Implementation, Monitoring, and Enforcement

- Maintain ongoing oversight of the project to ensure agreement terms are upheld.
- Foster ongoing communication between the community, developers, and coalition members, even after the project is built.
- Be prepared to renegotiate terms as new issues arise, and act as observant advocates for community interests throughout the life of the project.

Case Studies: Communities Leading the Way

It is vital to recognize that Tribes, Indigenous Peoples, and communities of color are not monoliths. Not all will approve of proposed projects, especially if they overlap with sensitive cultural, spiritual, or archeological sites or critical wildlife habitats. Nor will they all disapprove. That is why participation is important to help shape a positive outcome for both the affected groups and our need to expand access to alternative energy. Below are examples of transmission activities that upheld some of the important principles outlined earlier in this toolkit. These project elements helped lead to successful outcomes, though the National Wildlife Federation is not endorsing the projects in their entirety.

The Morongo Band of Mission Indians

In exchange for access to its right of way, The Morongo Band of Mission Indians entered into an agreement with Southern California Edison to invest \$200 million in a lease to upgrade existing transmission lines along a 48-mile existing corridor that stretches from the Devers substation near Palm Springs to Grand Terrace and San Bernardino.

This example represents a model for other developers in applying Free, Prior, and Informed Consent. This example also shows how Tribal Nations, Tribal governments, and Tribal communities can make decisions around energy and transmission infrastructure on Tribal lands and receive a just share of the benefits.



Morongo Transmission LLC



Danielle Farrell

Benefits for this project include:

- Energy cost savings passed on to individual tribal members;
- Direct payments to the Tribe for use of their right of way;
- Reduced upfront costs for Southern California Edison;
- The Tribe was able to recover its investment through a 30-year fixed transmission annual revenue requirement meaning that the transmission project would pay for itself from the revenue it creates;
- Tripling of the Tribe's capacity to transmit power generated by solar, wind, and battery resources in eastern Riverside County, Imperial County, and outside California to population centers in Southern California; and

- Transformed a tense relationship between the Tribe and the utility to one based on reciprocity.

What made this project possible?

The initial contract for Southern California Edison's access to the Morongo Band of Mission Indians' rights of way through their reservation was set to expire, and if the utility had failed to renew an agreement with the Tribe for future access they would have had to spend up to \$500 million and eight additional years to reroute the project miles around the reservation's boundaries.

Given that there is no power of eminent domain--meaning the government cannot take private property and convert it into public use without fair compensation to the property owners--on Tribal lands, the utility was incentivized to come up with terms acceptable to the Tribe or face steep financial costs.

Citizens Energy Corporation

The Citizens Energy Corporation is a non-profit parent company to multiple for-profit energy developers. They work to leverage profits from energy development projects toward community-driven social impact

initiatives and improving access to affordable clean energy for all.

Partnering with utilities and/or developers, Citizens Energy Corporation invests its own capital into a project and earns the same investment return as the project developer. Citizens contractually commit to using 50 percent of their profits to create programs to assist low-income families and disadvantaged communities in the project area based on their needs. Citizens' involvement provides a direct benefit to project developers and local communities by improving communication and relations between both groups and designing programs that can lead to positive outcomes for all of the stakeholders involved.

An example of their projects includes the Sycamore-Peñasquitos Line, the profits from which will be used to help low-income families share in the benefits of the electrification of the transportation sector. Community organizations around San Diego that serve low-income families will gain access to electric transportation options and charging infrastructure to reduce polluting emissions where they live and work.

[This webinar offers more information about the unique transmission ownership models practiced by either the Morongo Band of Mission Indians or Citizens Energy Corporation: \[Achieving YIMBY: Engaging Communities on Clean Energy Infrastructure.\]\(#\)](#)

Nevada Wildlife Federation's Smart from the Start Coalition

In recent years, Nevada has seen a dramatic increase in renewable energy development on its public lands. The onset of these development proposals sparked interest from conservation nonprofit organizations, labor unions, sporting groups, and industry groups. Each of these organizations recognizes the value of sharing information, contacts with utilities and developers, and working together to shape the energy future of Nevada.

In recent years, Nevada has seen a dramatic increase in renewable energy development on its public lands.



Alia Youssef/Getty Images

Fair Practices for Advocacy

- Work with developers early in the process
- Share connections to federal and state regulators, utilities, and other advocates
- Share knowledge of upcoming regulatory actions
- Provide opportunities for input from all interested people
- Consider and identify the people who require consulting and information before and during advocacy
- Use the best available science to inform and lead decision-making
- Identify pre-existing social and economic factors in communities to contextualize potential and direct barriers to fair energy transition
- Adhere to Free, Prior, and Informed Consent (FPIC) with Tribal Nations

The coalition creates a forum to keep an open dialogue based on science, curiosity, a shared concern for local communities, wildlife conservation, and the outdoors, and creating an energy grid that can serve everyone. The coalition is a blueprint for other states and advocates to use to balance the demand for renewable energy and transmission development and safeguard the well-being of wildlife and local communities.

Coalitions of Local Governments and Communities Working with Grid Operators

The [PJM Cities and Communities Coalition](#) based in the Mid-Atlantic and the Midwest and Fix the Grid based in the Northeast are coalitions of local governments and communities with ambitious clean energy goals advocating for grid operators to move to renewable resources of energy at the wholesale market level. Membership is free. These coalitions exemplify practical models to allow the public to engage with grid operators and local governments without needing technical experience.

Conclusion

In the face of increasingly severe weather events and escalating electricity costs, we must address today's outdated and insufficient energy infrastructure. The United States' new and historic investments in pollution reduction and energy diversification present an unparalleled opportunity for every person to decide their energy future and the future of subsequent generations.

We hope this toolkit clarifies some of the complexities of clean energy transmission and serves as a roadmap to build an energy grid that benefits all people, wildlife, and the environment.

Resources

- [A Clean Energy Transmission Policy Platform](#)
- [Community Workbook: Cultivating Rural Communities' Approaches to Nature and Electrification](#)
- [Community Benefits Agreement Framework—PowerShift](#)
- [Audubon Birds and Transmission Report](#)
- [Transmission Possible](#)
- [ACEG Best Practices for Developers for Transmission Development](#)
- [The Nature Conservancy's Power of Place](#)
- [FERC Public Participation Website](#)
- [Reimagine Appalachia's Community Benefits Summit](#)
- [WE ACT Community Engagement Brief](#)
- [ACORE: Transmission Makes the Power System Resilient to Extreme Weather](#)
- [The Benefit and Urgency of Planned Offshore Transmission: Reducing the Costs of and Barriers to Achieving U.S. Clean Energy Goals](#)
- [Tribal Nation Offshore Wind Transmission Technical Assistance Program](#)

Important Terms

Bipartisan Infrastructure Law (BIL): Federal legislation authorizing more than \$1 trillion for public transportation, climate, clean energy, safe drinking water, resilience, environmental remediation, broadband internet, and other infrastructure. It is the largest federal investment in infrastructure in the nation's history. [Learn more.](#)

Certificate of Public Good or Certificate of Public Convenience and Necessity (CPG/CPCN): A certificate issued by an agency granting a company authority to operate a public service, primarily as a utility or transportation company.

Community Benefits Agreement (CBA): A legally binding contract for all parties that helps ensure that measurable local benefits will be given to a community. [Learn more.](#)

Community Benefits Plans (CBPs): The Department of Energy requires Community Benefits Plans as part of all Bipartisan Infrastructure Law and Inflation Reduction Act funding opportunity announcements and loan applications. CBPs are not Community Benefit Agreements. [Learn more.](#)

Coordinated Interagency Transmission Authorizations and Permits Program (CITAP): The program aims to create a coordinated and streamlined process that will set deadlines for Federal authorizations and permits for electric transmission on a two-year timeline, while ensuring meaningful engagement with Tribes, local communities, and other stakeholders.

Department of Energy (DOE): The federal agency tasked with administering United States energy policy.

Department of Public Service: A state agency within the Executive Branch of a State's government and is charged with representing the public interest in energy, telecommunications, water and wastewater utility matters. (The name may vary based on state.)

Federal Energy Regulatory Commission (FERC): The independent, federal agency that regulates the interstate transmission of electricity, natural gas, and oil.

Free, Prior, and Informed Consent (FPIC): White-led conservation organizations have historically contributed to racism and the erasure of marginalized communities throughout the United States. To be authentic partners means that NWF, developers, decision-makers, and all partners must follow the principles of free, prior, and informed consent (FPIC) as recognized in the [United Nations Declaration on the Rights of Indigenous Peoples](#), and use our united power to uplift Indigenous voices and leaders paving the way for future conservation initiatives. Healthy ecosystems and healthy humans restore and conserve healthy relationships and communication with Indigenous and Tribal communities and leadership.

Applying FPIC respects Tribal sovereignty and self-determination and enable staff to appropriately and intentionally engage with Tribal Nations, Tribal governments, Indigenous-led NGOs, and community members. Learn more about NWF's [Tribal and Indigenous Partnership Enhancement Strategy](#).

- **Free:** The consent is free, given voluntarily and without coercion, intimidation, or manipulation. A process that is self-directed by the community from whom consent is being sought, unencumbered by coercion, expectations, or timelines that are externally imposed.
- **Prior:** The consent is sought sufficiently in advance of any authorization or commencement of activities.
- **Informed:** The engagement and type of information that should be provided prior to seeking consent and also as part of the ongoing consent process.

- **Consent:** a collective decision made by the right holders and reached through a customary decision-making process of the communities.

Grid Enhancing Technologies (GETs): Tools that make the power grid more flexible, reliable, and efficient, and can safely and quickly increase electric carrying capacity to help integrate more renewable energy. The Biden Administration recently committed to upgrading 500,000 miles of existing transmission lines with GETs. [Learn more here.](#)

Grid operators, also known as Regional Transmission Organizations or Independent System Operators (RTO/ISOs): Grid operators run wholesale electricity markets. They coordinate, control, and monitor the electric grid across many states. Their function to the power grid is similar in part to air traffic controllers. Grid operators are the electricity authority in their specific geographic area in charge of running the power grid to ensure it is reliable, safe, and economical.

Inflation Reduction Act (IRA): Federal legislation authorizing one of the largest investments in the American economy, energy security, and climate. It enhances or creates more than 20 tax incentives for clean energy and manufacturing.

Intrastate: Relating to or existing within the boundaries of one state.

Interconnection: The rules that new electricity generators—wind, solar, gas, energy storage, or otherwise—must follow to connect to the electric grid and deliver energy to customers.

Interstate: Relating to or existing between the boundaries of multiple states.

Merchant generator: A non-utility or independent power producer that sells energy to competitive wholesale power marketplaces.

Office of Public Participation (OPP) at FERC: Assists the public with Commission proceedings at FERC. [Learn more.](#)

Permit: An official document providing an entity authorization to do something. Learn more about Federal permits [here](#).

Public Comment Period: The range of time the public has to submit input before an agency makes a final decision on a proposed rule.

Public Utility Commission (PUC)/Public Regulation Commission (PRC): Regulates electric, gas, telecommunications, water and wastewater utilities. In most states, a single agency will regulate these sectors; however, in some states, these functions may be split between more than one agency.

Regulations: Authorized by statutes, these rules or orders are issued by a regulatory agency and have the force of law.

Statutes: Laws written and enacted by the legislative branch of government (e.g., U.S. Congress, state legislators).

Siting: A complex series of decision-making processes and actions that determine the location and design of new facilities.

Substation: A set of equipment that reduces the high voltage of electrical power transmission to a lower voltage that can be used in homes, businesses, schools, etc.

Utility: A company that supplies an area with electricity, gas, water, or sewage.



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