BEYOND THE WIRES:

Lessons from Transmission Lines Built with Community Benefits

November 2025

Environmental Defense Fund

CLEAN AIR TASK FORCE

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Acknowledgments

Environmental Defense Fund (EDF) and Clean Air Task Force (CATF) would like to thank case study interviewees whose insights informed the findings of this report and told the stories of their communities or projects. EDF and CATF would also like to thank many partners for their review and insights in developing this report, including Angela Ferguson, Annika Harrington, Dakoury Godo-Solo, Ted Kelly, Michael Ioannou, Dr. Tonya Calhoun, and Tomás Carbonell.

Project Summary

This report summarizes learnings from a set of case studies investigating how electricity transmission projects have integrated community benefits into their development processes. The case studies specifically explore transmission projects that have been completed and are in service. The purpose of this work is to learn more about the nature of benefits frameworks; the regulatory, logistical, and engagement processes that led to agreements; community representation in agreement negotiations; the degree to which frameworks result in demonstrable benefits to the community; and any related implications on project cost and timeline, in order to inform and improve community benefits conversations happening today. These case studies were informed by web research, document and docket review, and first-person interviews.

View the full set of case studies and summary report at
https://www.edf.org/beyond-wires-community-benefits-transmission-projects
and
https://www.catf.us/resource/beyond-the-wires-community-benefits-from-transmission-projects/

TABLE OF CONTENTS

Executive Summary 4

The Increasing Salience of Community Benefits 6

Motivation for this Work 8

Our Research Contribution 9

Types of CBFs Studied 10

Who Represents the “Community”? 10

Informing Future Benefits Negotiations: Key Takeaways from Past Efforts 12

The Value of Meaningful Engagement 14

Key Considerations for Developing a CBF 17

Conclusion 20

EXECUTIVE SUMMARY

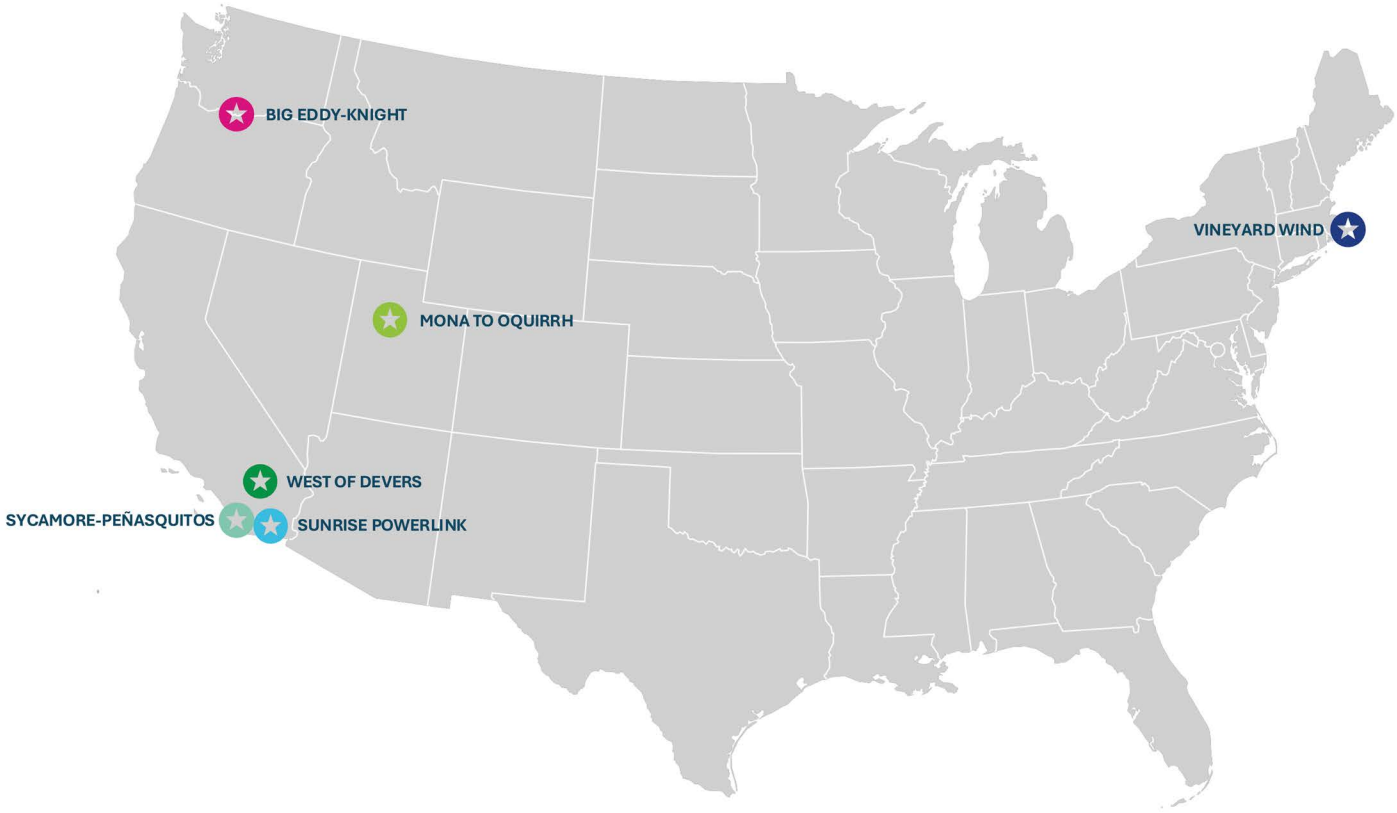
Community benefits frameworks (CBFs) are emerging as a powerful tool to de-risk transmission projects, offset local impacts, and help secure the trust and support needed to build critical energy infrastructure at scale. When developers engage communities early and tailor benefits to local needs, they can reduce opposition, avoid costly delays, and accelerate project delivery.

This report, developed by Environmental Defense Fund (EDF) and Clean Air Task Force (CATF), distills lessons from five case studies covering six successfully constructed transmission lines. The findings show how well-designed community benefits frameworks can align national energy infrastructure goals with local priorities—delivering lasting value for developers and communities.

Across Massachusetts, Washington, Oregon, Utah, and California, developers and local partners have approached engagement and benefit sharing through agreements, partnerships, settlements, and innovative financing and ownership models. While approaches varied, common strategies included engaging communities on transmission line routing, conserving land and viewsheds, funding community infrastructure, and addressing local needs. Challenges most often arose from delayed engagement, regulatory complexity, and real or perceived unfairness in benefit distribution. Key project examples include:

- **Vineyard Wind (Massachusetts)** partnered with the Town of Barnstable through a host community agreement that aligned with local priorities like sewer upgrades and water quality protections.
- **Big Eddy-Knight (Washington and Oregon)** avoided litigation by financing conservation and mitigation measures, though benefits concentrated on one stakeholder group underscored the need for broader inclusion.

FIGURE 1:
Map of Transmission Lines Covered in Case Studies



- **Mona to Oquirrh (Utah)** delivered community-approved rerouting and land conservation through legal settlements, but only after costly conflict.

- **West of Devers Upgrade (California)** pioneered a co-ownership model with the Morongo Band of Mission Indians, advancing Tribal sovereignty and shared ownership of transmission assets.

- **Sunrise Powerlink and Sycamore-Peñasquitos (California)** created nonprofit partnerships that reinvested project profits into clean energy programs, though benefits took time to materialize.

Collectively, these cases highlight that early, meaningful community engagement is not optional—it is essential. Developers that consult communities before finalizing plans, work with trusted local representatives, and tailor benefits to local contexts are far more likely to earn public support and deliver projects on time.

Effective community benefits extend beyond direct payments. Investments in infrastructure, workforce development, environmental conservation, and shared ownership build resilience, strengthen local autonomy, and create long-term prosperity.

Flexibility and creativity in ownership and financing models have also proven critical. Adapting CBFs to local conditions and embracing innovative approaches help developers and regulators unlock broader support, even from communities initially skeptical or under-resourced.

Policy and regulatory frameworks also play a decisive role. Supportive policies, flexible regulatory approaches, and openness to new models enable scalable, adaptable frameworks that meet community and energy infrastructure needs.

As the U.S. builds the next generation of transmission lines, these case studies demonstrate that while CBFs are not one-size-fits-all, when thoughtfully developed, they can provide immense value to both developers and communities. By designing agreements that respect local priorities and distribute benefits fairly, developers can accelerate energy infrastructure while strengthening community trust. Future efforts should explore regional approaches to negotiation, track long-term community outcomes, and ensure equity across diverse populations.

THE INCREASING SALIENCE OF COMMUNITY BENEFITS

The United States must build more infrastructure to provide secure, reliable, affordable, and clean energy and electricity to homes, businesses, and industries. **To meet net-zero emissions and growth forecasts, the U.S. needs to expand its transmission capacity two to five times,** increase its interregional transfer capacity by the same factor, and add tens of thousands of shorter generation ties.[1] Investing in and building this infrastructure at the required pace and scale means **more communities than ever will interface with and host clean energy development.**

A single transmission line can affect many communities, including Tribes, states, regions, counties, cities, and even groups of individuals connected to the geography through common use or cultural significance. Successful completion of an electric transmission line ultimately means that a community, and typically many communities, will host transmission towers and related infrastructure. The decision of whether to host infrastructure or support the development of a transmission project is neither simple nor clear-cut.

While some communities may see clear and tangible benefits from projects, including decreased electric bills, increased electric reliability, or reduction in local pollution through plant retirements or decreased operation reliance, for others the benefits are far less direct or apparent. The impacts of transmission infrastructure also cannot be ignored. Construction of a transmission line can require clearing vegetation and forestry within or near communities, impact local recreation and species habitat, and affect or restrict access to cultural or historic sites. During active construction, communities can experience worsened air pollution and traffic. Altered viewsheds, new divisions between previously connected neighborhoods, and perceptions of property value impacts can persist for the life of the project.

Despite these impacts, and inherent difficulty in communicating benefits, transmission infrastructure historically has been developed through a "decide, announce, defend" approach, where project routes and details were determined by developers with minimal input from communities.[2] Failure to acknowledge, address, and

FIGURE 2:
West of Devers Transmission Line

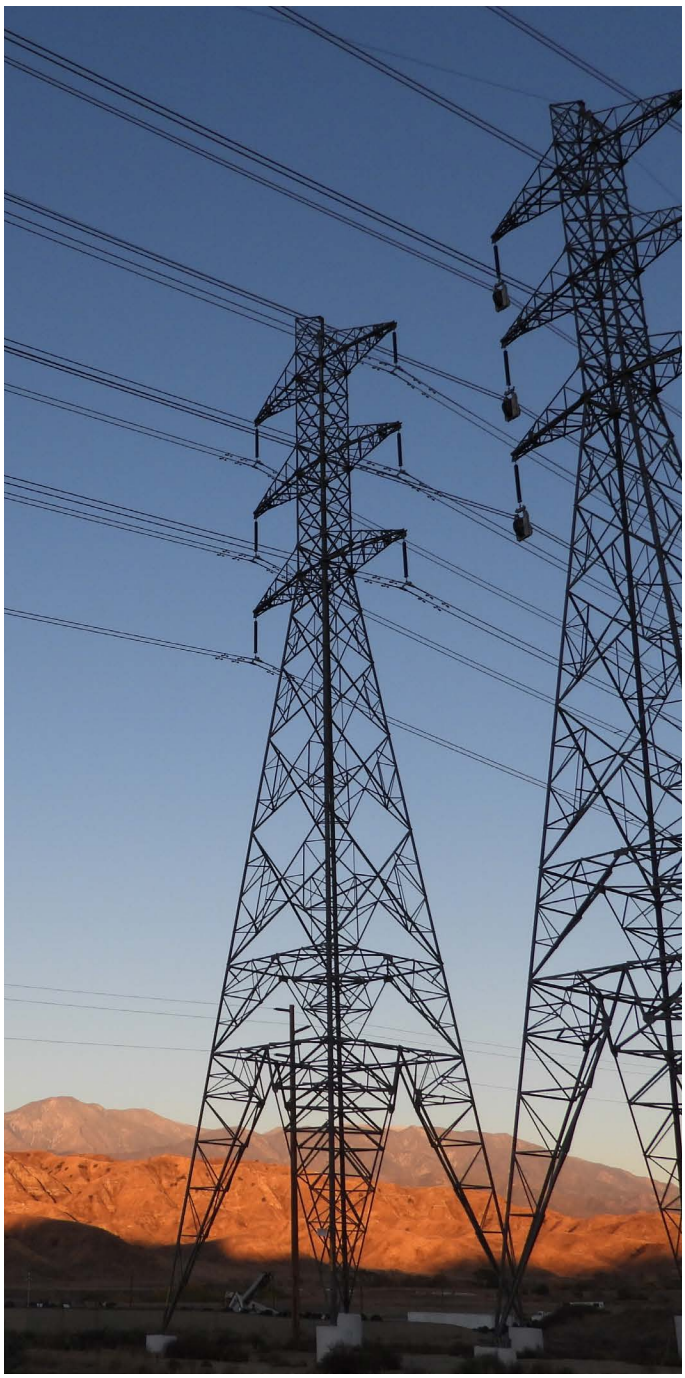


PHOTO CREDIT: SOUTHERN CALIFORNIA EDISON

1 Larson, E., Greig, C., Jenkins, J., Mayfield, E., Pascale, A., Zhang, C., Drossman, J., Williams, R., Pacala, S., Socolow, R., Baik, E.J., Birdsey, R., Duke, R., Jones, R., Haley, B., Leslie, E., Paustian, K., & Swan, A. (2021). *Net-Zero America: Potential Pathways, Infrastructure, and Impacts, Final Report.* Princeton University; U.S. Department of Energy. (2023). *National Transmission Needs Study*

2 U.S. Department of Energy. (2023, October 19). *What does it take to modernize the U.S. electric grid?*

mitigate these impacts on communities has contributed to increased community opposition to energy infrastructure projects in the United States in recent years and has fostered negative perceptions of major energy projects, making them more difficult to advance.[3] With the scale of transmission expansion required, these old strategies are increasingly unworkable. Instead, proactive engagement—where developers involve communities early and offer tangible benefits—has become essential to building the trust and cooperation needed for successful project development.

Stakeholders involved in transmission development face the challenge of aligning infrastructure deployment with the values and cost-benefit assessments of various communities. One increasingly popular framework to address this challenge is through "community benefits," in which developers and communities reach agreements allowing for infrastructure projects while providing services, compensation, co-ownership, workforce opportunities, or other relevant advantages to the community. These arrangements can be mutually beneficial: developers offering community benefits may receive increased support and experience fewer obstacles during siting and permitting processes.

Defining Community Benefits Frameworks

Community benefits frameworks (CBFs) are arrangements where developers agree to provide benefits to communities in exchange for hosting infrastructure. These frameworks—known as community benefits agreements, benefit plans, or community compensations—share similar goals but differ in details and execution. Depending on negotiations, benefits may be delivered through legally binding agreements (such as community benefits agreements, host community agreements, or project labor agreements), other legal avenues, or voluntary initiatives.[4]

FIGURE 3:
Big Eddy-Knight Transmission Line

PHOTO CREDIT: BONNEVILLE POWER ADMINISTRATION

3 Sergi, B., Lopez, A., Cole, W., Levine, A., Carey, J., Mangan, C., Mai, T., Williams, T., Pinchuk, P., & Gu, J. (2025). *Impact of Siting Ordinances on Land Availability for Wind and Solar Development.* National Renewable Energy Laboratory; Eisenson, M., Elkin, J., Norman, I., Coombs, R., Kim, C., Koenig, R., Michalski, S., Quiroz, E., Scariano, J., Teasdale, A., Tong, V., & Williams, A. (2025). *Opposition to Renewable Energy Facilities in the United States: June 2025 Edition.* Sabin Center for Climate Change Law, Columbia Law School.

4 Clean Air Task Force. (2023). *Community Benefits Programs & Clean Energy* [Fact sheet].; Clean Air Task Force. (n.d.). *Community Benefits Resource Inventory.*

MOTIVATION FOR THIS WORK

Research is ongoing into the types and effectiveness of community benefits frameworks for supporting infrastructure deployment.[5] Historically, this research has largely focused on single site-specific infrastructure agreements, such as those for energy facilities, municipal services, or stadiums.[6] These large projects typically affect a limited number of nearby communities. While construction provides temporary jobs, ongoing maintenance and operations can generate lasting local employment and stable tax revenue.

Developing CBFs for linear infrastructure projects, such as transmission lines, introduces a distinct set of challenges. Transmission lines can extend for many miles, crossing several communities, states, and Tribal lands. This broad reach adds considerable complexity to strategic engagement efforts. Although these lines offer important advantages—including reliable electricity, improved security, greater resilience to extreme weather events, reduced pollution, and access to more affordable energy—the communities located along these routes may not always receive direct benefits. Additionally, the applicability of general benefits to individual communities is often unclear.

These frameworks are also typically implemented on a case-by-case basis. This requires developers to negotiate separate agreements with each community affected by a transmission project, with each community bringing its own set of values, needs, and prior experiences with infrastructure projects and their proponents. Additionally, developers are frequently required—either voluntarily or as part of environmental review and permitting processes—to develop alternative routes for proposed transmission lines. These alternatives can involve entirely new groups of stakeholders, thereby increasing the complexity of community engagement and negotiations. On the other side, communities participating in such discussions frequently lack clear guidelines regarding the types of services or compensation they may appropriately request as consideration for hosting new infrastructure.

Other factors, including the rise of merchant (private, non-utility) transmission projects, the prevalence of home rule states where local communities hold permitting authority, growing load and interconnection demands, and the need for long-distance regional or interregional projects all contribute to the increasing necessity of engaging communities in the development process and ensuring community interests are represented in CBFs.

Gaining a clearer understanding of how CBFs for transmission are designed and executed, and evaluating their lasting impact on host communities can be critical for fostering support and ensuring the successful construction of necessary infrastructure. Exploring their development and outcomes can help guide future projects and maximize positive community and project results.

Frameworks for community benefits from transmission development have also been the subject of recent research papers. Data for Progress and World Resources Institute published a report featuring case studies on benefits development and negotiations for three merchant-owned transmission lines, as well as findings from four focus groups examining perceptions of transmission across the United States.[7] Americans for a Clean Energy Grid and DNV released "The Pace of Trust" report, which outlines best practices and key insights regarding community engagement and benefits agreements in transmission projects.[8] Additionally, the Northeast Grid Planning Forum—an initiative of the Acadia Center and Nergica—provides further case studies on negotiating transmission benefits, proposes policy and community tools, explores innovative models for community ownership, and shares perspectives from a working group of consumer and community leaders from the U.S. and Canada.[9] This non-exhaustive summary of completed and ongoing work underscores the significance that developers, communities, and researchers assign to community benefit considerations in enhancing project outcomes.

5 Clean Air Task Force. (n.d.). (Community Benefits Resource Inventory)

6 E.g., Lavine, S., Pecego, A., Shen, W., & Yang, B. (2023). *Community Benefits Agreements Case Studies, Federal Guidelines, and Best Practices.* Clean Air Task Force & Columbia Climate School; Trandafir, S., Thomas, P., Bidwell, D., & Rezendes, R. (2023). Community benefit agreements for solar energy: Examining values, preferences and perceived benefits in the United States using a discrete choice experiment. *Energy Research & Social Science, 106.*

7 Adcox, G., Brungard, E., Rogers, J., Hack, J., Saha, D., & Fraser, C. (2025). *Lines That Connect Us: Reimagining Transmission Development Through Community Partnership and Benefits Sharing.* Data for Progress & World Resources Institute.

8 Americans for a Clean Energy Grid & DNV. (2025). *The PACE of Trust: A Framework by Community Voices for Advancing Transmission.*

9 Acadia Center, Northeast Grid Planning Forum, & Nergica. (2025). *Community Powered Progress: A Pathway to Greater Community Participation in Transmission Infrastructure Projects.*

OUR RESEARCH CONTRIBUTION

In this report, Clean Air Task Force (CATF) and Environmental Defense Fund (EDF) build on this foundation by further examining transmission-specific benefits negotiation processes, the regulatory frameworks established to support these initiatives, and related approaches to community engagement to facilitate a broader discussion regarding the applicability of CBFs and strategies for their development or enhancement to optimize project outcomes.

Recognizing the importance of transmission deployment to the success of the energy transition and the complexities involved in linear infrastructure negotiations, CATF and EDF conducted intensive research on community benefits frameworks for six energized transmission lines: Vineyard Wind (Barnstable, Massachusetts), Big Eddy-Knight (Klickitat County, Washington and Wasco County, Oregon), West of Devers Upgrade Project (Morongo Indian Reservation, located in California), Mona to Oquirrh (Tooele County, Utah), Sunrise Powerlink (Imperial County, California), and Sycamore-Peñasquitos (San Diego County, California). By focusing on already-constructed transmission lines, it was possible to evaluate the effects of CBFs in practice. Projects currently in development are utilizing new approaches to community benefits that may require separate analysis.

The objectives of this analysis were to (1) examine how CBFs have been negotiated and developed; (2) identify the range of CBFs in use; and (3) analyze the impacts of those frameworks.

This research draws on publicly available sources such as utility commission dockets, minutes from public meetings, articles, and online posts, as well as interviews with utilities, merchant developers, nonprofit organizations, government officials, lawyers, community representatives and organizations, and numerous other stakeholders involved in the development of these frameworks. Key findings regarding regulatory processes, community engagement, and negotiations pertinent to the evolution of the CBF were compiled into case studies for each project.

Each case study provides a narrative account of the line's history, neighboring communities, involved stakeholders in negotiation processes, relevant community engagement initiatives, regulatory actions to implement benefits agreements, the structure of these benefits, and the manner in which communities and organizations received or realized benefits.

FIGURE 4:
Sunrise Powerlink

PHOTO CREDIT: CITIZENS ENERGY

TYPES OF CBFS STUDIED

The projects profiled in our case studies highlight four distinct community benefits frameworks. These examples do not represent an exhaustive catalogue of all current, ongoing, or possible benefits arrangements for transmission infrastructure. Insights gained from these case studies may inform current and future negotiations, as well as encourage the development of additional innovative structures.

- **Host community agreement (Vineyard Wind):** a legally binding agreement between a project developer and a local municipality where the project is located. A host community agreement can include additional financial compensation, mitigation commitments, local infrastructure improvements, or other conditions.

- **Transmission partnership agreement with nonprofit (Sunrise Powerlink, Sycamore-Peñasquitos):** a unique partnership between a nonprofit and a utility or independent transmission owner where the nonprofit becomes a formal partner on a transmission project, invests a financial stake in the line, and uses the profits it recoups to reinvest into benefits programs for communities.

- **Participating transmission owner agreement with a Tribal entity (West of Devers Upgrade):** a joint financing model between a Tribal entity and a utility or independent transmission owner where the entity becomes a formal partner on a transmission project, invests a financial stake in the line, and earns a profit from its investment.

- **Legal settlement (Big Eddy-Knight, Mona to Oquirrh):** A negotiated agreement that resolves a dispute between two parties – in the instances examined in this report, a transmission developer and a community entity – either before or after litigation begins. The terms of the agreement can include payment or services to the community entity.

WHO REPRESENTS THE "COMMUNITY"?

One of the core challenges in assessing CBFs is the absence of a universally accepted definition of "community." The term can refer to a wide range of entities, including local governments, Tribal nations, nonprofit organizations, neighborhood associations, and informal groups of affected residents. This ambiguity complicates the negotiation and evaluation of benefits agreements, as stakeholders often have differing perspectives on who should be considered a legitimate representative or beneficiary. As a result, project developers and policymakers must exercise deliberate care in identifying and engaging with all relevant parties to ensure equitable participation.

The case studies highlight a diverse set of communities, organizations, and governments that participated in or were represented within benefits agreements. Notable examples include the Town of Barnstable in the Vineyard Wind project, Friends of the Columbia Gorge (FOCG) in the Big Eddy-Knight settlement, and various local governments and nonprofit entities involved in transmission partner agreements and co-ownership models. Tribal governments and regional advocacy organizations also played significant roles in select cases, reflecting the broad spectrum of rightsholders and stakeholders impacted by transmission infrastructure development.

TABLE 1:

Summary of Lines

Project Name	Project Location	Developer	Community Benefit Framework	Key Themes: What Went Well?	Key Themes: What Could be Improved?
Vineyard Wind	Barnstable, Massachusetts	Vineyard Offshore	Host community agreement	• Early engagement • Trusted messenger • Aligned with town priorities (e.g., sewer upgrades, water quality) • Mitigation measures • Cooperation between town and developer on local conditions led to improved project design • Community receives funds early and independent of whether project succeeds	• Increasing politicization of offshore wind makes model more challenging to replicate • Political will and supportive policy critical to enable future offshore transmission projects
Sunrise Powerlink and Sycamore-Peñasquitos	Imperial County and San Diego County, California	San Diego Gas & Electric	Transmission partner agreement with nonprofit	• Innovative co-ownership structure between utility and nonprofit gave flexibility in delivering community benefits • Benefits (e.g., rooftop solar, electric vehicles) further reduced emissions and promoted environmental justice	• Complex regulatory approvals process • Top-down benefits model • Requires nonprofit with significant capital • Nonprofit not representative of community • Benefits not always directly linked to being an outcome of the project • Takes time for benefits to materialize (benefits only accrue as profits are recouped)
West of Devers Upgrade Project	Morongo Indian Reservation	Southern California Edison	Participating transmission owner agreement with Morongo Band of Mission Indians	• Innovative financing partnership between Tribe and utility • No increase in rates for consumers • Trust-building between Tribe and utility over time • Successful agreement averted need to build new costly lines • Upheld Tribal sovereignty	• Tense initial negotiations between Tribe and utility • Lengthy regulatory approvals process • Unique enabling circumstances (not necessarily replicable) • Neighboring (non-Tribal) communities did not think they benefited from this model
Big Eddy-Knight	Klickitat County, Washington and Wasco County, Oregon	Bonneville Power Administration	Legal settlement	• Proactive agreement avoided litigation • Used flexibility in legal authorities to fund mitigation projects • Flexibility around route selection to protect Tribal cultural resources	• Settlement was with only one environmental group, cutting out local government officials, landowners, and other stakeholders • Mitigation measures were indirect and did not take place in the communities that hosted the line
Mona to Oquirrh	Tooele County, Utah	Rocky Mountain Power	Legal settlement	• City had leverage, multiple legal pathways to seek remedy and force the developer to the table • Legal settlement included community-approved rerouting and direct community benefits (e.g., land donation, funding for new park)	• Route was selected before community engagement took place and the developer refused to reroute, leading to backlash, litigation, and delays

INFORMING FUTURE BENEFITS NEGOTIATIONS: KEY TAKEAWAYS FROM PAST EFFORTS

The transmission projects examined, along with the CBFs used, illustrate the customized approach required for transmission development. Although there is no universal method or principle that ensures project success for all lines investigated, several findings were identified that influenced the effectiveness and challenges of the various community benefits models.

Thinking Beyond Financial Compensation Can Yield Dividends

Monetary contributions to communities are frequently central to discussions of community benefits, but these payments alone rarely suffice to secure robust community support. More effective approaches include a diverse array of benefit types, such as:

Coordinated and Collaborative Construction

Developers coordinating with communities on local construction efforts and proactively addressing construction concerns can provide tangible community benefits. In the case of Vineyard Wind, the developer's cable route aligned with the Town of Barnstable's planned sewer upgrades, so both parties coordinated construction. The town began installing a gravity sewer system while transmission lines were buried, saving an estimated $3 million as Vineyard Wind paid for paving, surveying, and design. This cooperation reduced project costs for taxpayers and minimized construction impacts. Co-locating infrastructure, such as broadband cables, can offer similar benefits.

Technical Assistance to Communities

The ability of communities to participate meaningfully in benefits negotiations is closely tied to the resources at their disposal. Effective engagement often requires access to technical expertise, legal counsel, and organizational capacity—resources that may be scarce among smaller or less affluent communities. Consequently, those with greater financial and institutional support are typically better positioned to advocate for their interests and secure favorable outcomes.

FIGURE 5:
West of Devers Transmission Line

PHOTO CREDIT: SOUTHERN CALIFORNIA EDISON

This disparity underscores the need for mechanisms that support under-resourced communities, such as dedicated funding for participation, capacity-building programs, and transparent information sharing throughout the project lifecycle. Developers may augment community expertise by allocating resources for community entities to retain independent technical experts. For instance, in Barnstable, Massachusetts, Vineyard Wind allocated up to $50,000 for the town to hire external consultants to assess a substation design.

Additional Benefits Inherent to Co-Ownership

Instead of working within the confines of traditional ownership models, both a developer and community may find greater and more extensive benefits in co-ownership or partnership. For the West of Devers Upgrade Project, history between the Tribe, government agencies, and utilities led the Morongo Band of Mission Indians to seek arrangements beyond financial compensation for the use of their land. The agreement reached allowed the Tribe not only to obtain a property interest in that part of the transmission line, but also to maintain its sovereignty and decision-making power. In another instance, the nonprofit Citizens Energy partnered with utilities to jointly own segments of the Sunrise Powerlink and Sycamore-Peñasquitos transmission lines, allowing it to direct part of the profits to community benefits programs.

Land Conservation and Protected Areas

Where communities maintain strong connection to their natural surroundings, acquisition and protection of open spaces can emerge as a priority during transmission project negotiations. Some towns have sought tangible conservation outcomes that preserve the local environment and safeguard cherished traditions. For example, for the Mona to Oquirrh transmission line, the developer Rocky Mountain Power agreed to purchase a 130-acre hillside for the nearby community that was previously slated for residential development—including high-density condominiums—and transfer it to the town for permanent conservation and recreational use. This ensured the land would remain undeveloped, supporting non-motorized recreation trails and protecting the surrounding landscape for future generations.

Utility, Merchant Developer, and Regulator Creativity and Flexibility Can Lead to New, Promising Models

In all case studies, utilities, merchant developers, and regulators showed a willingness to use unconventional approaches and financing structures, emphasizing the role of creativity and adaptability in forming benefits structures.

Utility Compromise on Profits can Pave the Way for Project Success

While regulated investor-owned utilities prioritize maximizing investment returns, exhibiting flexibility in profit recovery to adopt innovative community benefits models can help secure critical support for project implementation. As one stakeholder noted, losing 100% of the profits for a project never built is worse than keeping 90% of the profits for a successful project.

Regulatory Flexibility Can Enable Alternative Benefits Models

In many cases, state laws and regulations that govern public utilities restrict the ability of government- or investor-owned utilities to make financial payments or provide services commonly associated with community benefits structures, as these costs are typically passed on to ratepayers. When formal agreements are not feasible, developers have identified innovative solutions to achieve similar objectives. For example, the federally operated Bonneville Power Administration (BPA), which developed the Big Eddy-Knight transmission line, was limited to paying only fair market value for rights-of-way required for siting transmission lines and therefore could not direct additional compensation to communities or landowners. However, by leveraging its authority to fund mitigation measures, BPA negotiated a settlement with local environmental organization FOCG to establish a $1.78 million agency-managed fund for FOCG and other stakeholders to implement mitigation-related projects to offset project impacts. The agreement also included a provision under which FOCG agreed not to initiate, join, or support any legal or other challenges to the project.

Transmission Developer Authorities Can Shape Benefits Incentives

The transmission projects studied involved a range of developers, including investor-owned utilities, merchant developers, and a federal Power Marketing Administration. These entities operate within distinct regulatory and financial frameworks, which can either facilitate or constrain their capacity to provide additional community benefits as compensation. For instance, as noted above, BPA, as a federal agency, faces limitations on compensating landowners above fair market value for their property. In the case of the Big Eddy-Knight transmission project, BPA established a mitigation fund to be managed by the agency, pursuant to a settlement agreement with FOCG. However, BPA's ability to offer compensation to community entities on

an ad-hoc basis remains limited. Conversely, Vineyard Wind, as a private developer, demonstrated considerable autonomy and flexibility in negotiating, structuring, and executing its host community agreement with the town of Barnstable.

Differences in the ability to exercise eminent domain authority across the project represented another key distinction among developers, which may influence their approach to community engagement and delivery of community benefits. Developers that are dependent on local approvals may be more inclined to actively collaborate with communities and local government entities, while those with the option to utilize state-level eminent domain authority may demonstrate less initiative in conducting outreach efforts.

Community Benefits Can Be Conveyed Outside of a Negotiated Agreement

Community benefits do not always require delivery through a formally signed or negotiated document and are not always neatly determined before project development begins; instead, they can be introduced at different stages of the development process. Some developers adopted a proactive strategy by establishing a CBF prior to project initiation, as occurred with Vineyard Wind (host community agreement) and Big Eddy-Knight (proactive legal settlement). Both agreements contained provisions requiring the signatory community entity to collaborate with project development efforts and/or refrain from initiating legal action.

Certain projects inherently provide advantages to communities—such as economic growth, infrastructure development, and workforce opportunities—which may be enhanced by targeted initiatives. Developers may supplement these benefits outside of formal agreements through one-time or recurring donations, sponsorships for community events or organizations, or improvements to local infrastructure affected by construction activities, including upgraded roadways, lighting, or facilities.

Community Benefits Can Emerge from Conflict

In some instances, CBFs were established as a response to significant conflict that posed a substantial risk to the continuation of the project. The negotiations and discussions associated with these projects were often contentious, resulting in considerable delays required to resolve the issues. Notable examples include the Mona to Oquirrh legal settlement and the West of Devers Upgrade Project's partial ownership model. While affected communities ultimately received greater benefits than initially anticipated, these examples show that community benefits can emerge in somewhat unexpected ways and are not always planned proactively in coordination with the community. These reactive community benefits incur additional time and cost for the project, and spur conflict that could have been mitigated through proactive engagement and benefits development with a community.

THE VALUE OF MEANINGFUL ENGAGEMENT

Community engagement is critical to informing benefits structures, and developers should thoughtfully consider engagement timing, target audiences, and choice of messenger in maximizing successful project outcomes. The following community-oriented takeaways emerged from the case studies.

Timing of Community Engagement in Developing Benefits Frameworks

Consulting Communities Before the Route is Finalized Can Improve Outcomes

Engaging communities during the initial phase of route selection, before changes become costly or difficult, can help address concerns related to viewsheds, biodiversity, cultural sites, and other factors. Early involvement is important for minimizing risks such as litigation and delays. For example, the initial Mona to Oquirrh transmission line route, which was developed with limited community engagement and crossed a ridgeline that is part of a protected viewshed, experienced opposition and delays due to litigation. In contrast, the West of Devers Upgrade Project by Southern California Edison (SCE) involved ongoing communication and participation with the Morongo Band of Mission Indians, resulting in no major project opposition concerning the final route.

Siting Control and the Regulatory Environment Can Impact the Timing of Engagement with Local Leaders

In some jurisdictions, local governments hold significant authority to approve or deny major project components,

acting as either potential hurdles or facilitators for required state-level approvals (see the Vineyard Wind case study). Requirements to consult with and secure consent from local authorities promote early and comprehensive engagement, as developers recognize that insufficient or delayed involvement with these jurisdictions, given their level of authority, may result in protracted permitting processes. In other jurisdictions, formal local approval is, at least officially, not required (see the Mona to Oquirrh case study). In these jurisdictions, community opposition can still result in delays from legal challenges throughout the permitting process and into construction. The nuances of when precisely to engage will vary, but developers should be mindful that formal approval from local communities is not the only approval that can make a difference. Developers can go beyond what is required to improve the chances of project success.

Putting the "Community" in Community Engagement and Benefits

Communities comprise a diverse range of stakeholders with interests in the geographic area where a transmission project may be developed, including Tribal leaders and citizens, local elected officials and government employees, environmental and conservation organizations, individuals directly affected by the project (such as those whose property is traversed by the line), neighboring residents, and groups who utilize or have spiritual, cultural, or religious ties to the land or resources impacted. Integrating the multiple—and often divergent—perspectives of these community members when developing CBFs presents significant challenges for developers. However, the case studies illustrate several strategies that developers can implement to ensure that all voices are acknowledged and concerns addressed, thereby enhancing project outcomes and creating effective benefits frameworks.[10]

Connect with as Many Individual Community Members as Possible Through Diverse Engagement Opportunities

Engaging with a broad and diverse range of community members across multiple channels and actively seeking feedback can meaningfully inform project planning while minimizing community disruption and opposition. Public meetings, open houses, participation in local events, and deploying staff to forthcoming construction sites serve to facilitate effective communication and enable timely responses to questions and concerns. Providing flexible engagement opportunities—including virtual sessions and outreach outside standard business hours—ensures broader accessibility for individuals who may otherwise find participation challenging. The Vineyard Wind engagement team consistently attended public events and remained available for individual discussions, embracing every opportunity to communicate transparently about the project's potential effects on the community. This allowed community concerns to be raised and addressed in a timely manner, reducing the likelihood of unresolved issues developing into opposition.

FIGURE 6:
West of Devers Transmission Line

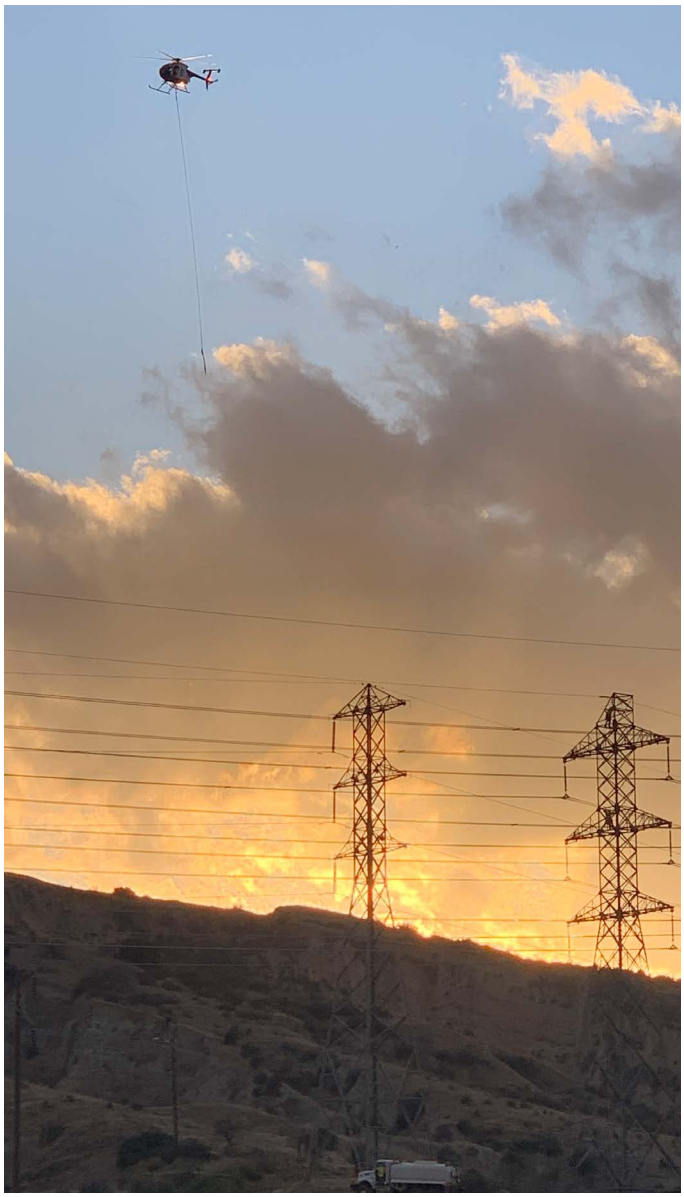


PHOTO CREDIT: SOUTHERN CALIFORNIA EDISON

10 For more resources on community engagement, see Clean Air Task Force. (n.d.). *Community Engagement in the U.S.: The Power of Engagement.*

Engage Tribes in an Independent and Individual Manner that Acknowledges Their Sovereign Status, with Careful Consideration of Each Tribe's Distinct Circumstances

As sovereign entities, Tribes have the right to give or withhold consent for any action that would affect their lands. Tribes should be consulted prior to any project concept being finalized and with enough time to review following informed engagement. Tribes should also be consulted separately and individually from other Tribes, governing entities, and community organizations. While formal consultation may not always be required for a transmission developer, project developers are encouraged to use a thorough engagement process that recognizes the Tribe's status as a sovereign entity. SCE reached a lease agreement with the Morongo Band of Mission Indians after SCE's president contacted the Chairman of the Tribe directly. Negotiations concerning the agreement were conducted and formalized by senior officials—an approach that differed from SCE's typical lease agreement process. Dedicated Tribal expert staff, liaisons, or outside consultants can be valuable resources for developers to understand the unique circumstances of each Tribe and to consider the Tribe's history, particularly regarding infrastructure development and prior experiences with the utility.

The Morongo Band of Mission Indians has had a long-standing and intricate history with SCE and its predecessor companies, presenting challenges in establishing trust and affecting all interactions between the parties. It was only after the utility engaged in discussions with the Tribe and developed a thorough understanding of its historical context that SCE came to appreciate the underlying reasons for the Tribe's reluctance to enter negotiations. Additionally, the Tribe benefited from working with a legal

FIGURE 7:
Big Eddy-Knight Transmission Line

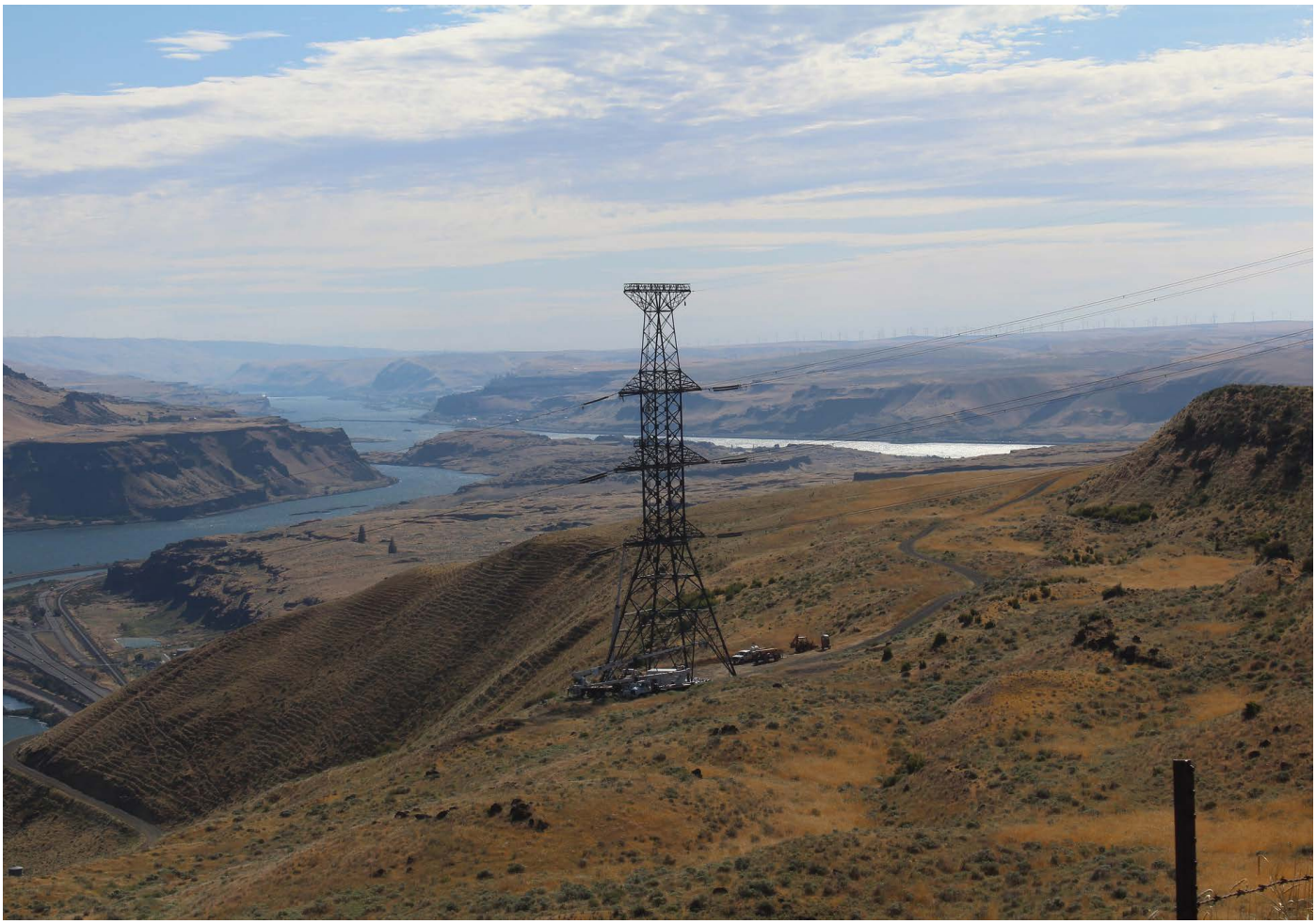


PHOTO CREDIT: BONNEVILLE POWER ADMINISTRATION

expert who had an established relationship with the utility and helped facilitate communication. Tribal expert staff and consultants can also assist developers in identifying and mitigating impacts to cultural resources along proposed routes, as demonstrated in the Big Eddy-Knight transmission line project.

Community Friction May Arise When One Stakeholder Group Receives Most of a Project's Monetary Benefits

While negotiating with a single group is efficient, it can also create tension within the community. In the Big Eddy-Knight transmission project, the developer and FOCG reached a $1.78 million settlement fund for mitigation projects. As part of the deal, FOCG agreed not to oppose the project. The public learned about the agreement only upon its announcement, leading many to feel FOCG benefited at the expense of landowners and local government.

Messengers Matter

Who goes out and engages with the community can be just as important as the substance of the engagement. Here, one takeaway is clear:

Messengers Trusted by the Community are Fundamental to Developing Effective Benefits Frameworks

Developers who work with messengers already established in the community can sometimes build trust and identify shared interests more efficiently than those who rely solely on external representatives. For example, Vineyard Wind employed a long-time local resident, which was positively noted by many stakeholders interviewed for this report.[11] Similarly, the West of Devers Upgrade Project partnership between the Morongo Band of Mission Indians and SCE was facilitated by the Tribe's prior relationship with several attorneys, who introduced the partnership idea and maintained working relationships with SCE executives. They served as facilitators by offering legal advice to the Tribe and sharing the Tribe's background with the utility.

KEY CONSIDERATIONS FOR DEVELOPING A CBF

Our research shows that, at present, a universal CBF does not exist; rather, agreements must be carefully customized to address the unique context and requirements of each locality. Nevertheless, the case studies highlight several key considerations that developers should incorporate into any negotiation process and insights that communities can take with them into future conversations.

Considerations for Developers

Agreements Should Include Provisions Guaranteeing Community Benefits in the Event of Project Cancellation

Negotiations regarding community benefits typically occur prior to finalizing projects and obtaining necessary permits. Therefore, incorporating measures that ensure communities receive benefits regardless of a project's outcome can strengthen stakeholder confidence and demonstrate the developer's genuine commitment to the community, independent of project completion. For example, during the Vineyard Wind project, the host community agreement was executed before Vineyard Wind formally initiated the permitting process for Covell's Beach in Barnstable. The developer and the town stipulated a payment of $16 million over 25 years should an alternative beach landing in another town be selected.

Benefits Should Be Provided Near the Completion of the Agreement

Benefits that require substantial time to materialize may not appear directly connected to the project - the development timeframe for transmission lines can exceed ten years. If benefits are only realized after the project becomes operational, communities may perceive a weaker link between the advantages and the original project, which can diminish goodwill and complicate siting and permitting efforts. For example, with the Sunrise Powerlink and Sycamore-Peñasquitos projects, benefits emerged when the assets became operational, and Citizens Energy was able to recover profits and reinvest them. In the case of the Sunrise Powerlink line, profits were designated for the development of a community solar initiative in Imperial Valley; nonetheless, it took over a decade from initial project planning to accumulate sufficient resources for the investment in the solar initiative.

11 Vineyard Wind. (2018, March 23). *Vineyard Wind Announces Hire to Strengthen Community Engagement* [Press release].

Mitigation Measures Should Prioritize the People and Land Directly Impacted by the Project

It is preferable for mitigation actions to be closely linked to project infrastructure, as demonstrated by examples such as the Vineyard Wind substation and road impacts. Community members in the vicinity of the project may express concerns regarding mitigation efforts that focus on surrounding areas rather than addressing direct project impacts. For instance, with the Big Eddy-Knight transmission line, initial mitigation strategies included the acquisition of two conservation sites chosen to enhance scenic value within the National Scenic Area. However, these sites were not located in any of the counties hosting the transmission line, which led to tensions with the affected county commission.

Developers Should Collaborate with the Community to Clarify and Understand Long-Term Community Goals and Provide Benefits Aligned with Those Objectives

Identifying community needs can inform the negotiation process and help address potential concerns that may arise during project development. For example, the developers of the Vineyard Wind project engaged with the town of Barnstable over several months to determine key community priorities, such as sewer infrastructure upgrades and safeguards for water resources. The resulting host community agreement included funding allocations for these infrastructure enhancements. In comparison, the Sunrise Powerlink and Sycamore-Peñasquitos lines followed a less direct approach, with Citizens Energy conducting research and collecting some community input, while retaining decision-making authority. The effectiveness of this approach relies heavily on the extensiveness of the outreach and the seriousness and time dedicated for community response.

Considerations for Communities

The case studies also highlight several key considerations that communities should incorporate into any negotiation process, and activities that should be avoided to achieve a cooperative and beneficial arrangement with transmission developers.

Cultivate Ongoing Relationships with Local Utilities and Merchant Developers

Having existing relationships with local utilities and merchant developers independent of a particular project can build trust that smooths negotiations when tensions over a project arise. Conversely, a contentious history makes it more difficult to overcome obstacles—though not impossible, as was seen in the case of the West of Devers Upgrade Project.

Start Proactively Thinking About Community Needs and Priorities

Successful CBFs can go beyond cash payments to address a broader range of community needs, such as sewer infrastructure (Vineyard Wind), local parks (Mona to Oquirrh), and conservation (Big Eddy-Knight). Local leaders should proactively work with a wide range of community groups to identify and prioritize those needs in advance of any negotiations with the developer. Likewise, communities with pre-existing community land use plans will be well positioned to engage in discussions around siting and routing for community engagement. In the case of Mona to Oquirrh, the city of Tooele had identified land for long-term viewshed conservation and recreation. Ultimately, this proactivity gave them leverage to negotiate with the developer.

Develop Technical and Legal Expertise

Negotiations with developers can cover a range of topics that require substantive expertise. To promote a level playing field, local leaders should identify ways to access that expertise, which can include working with trusted local experts and hiring consultants or staff. For the latter, it may be an option for developers to fund technical expertise for communities as a component of the negotiation, as Vineyard Wind did for the town of Barnstable.

Considerations for Regulators and Policymakers

Incentives Should Align with Public Interest

Comprehensive legislation alongside pragmatic regulations, public utility commission oversight, and intervention procedures can be effective mechanisms to better align utility investments with the public interest, encouraging utilities to compromise their total return on equity. Lawmakers and regulators, however, should adopt an integrated approach to policies and regulations, ensuring that requirements balance adequate flexibility and necessary safeguards so as not to deter essential infrastructure investment.

Regulators Should Maintain a Willingness to Approve New Approaches to Project Ownership and Financing

In many cases, innovative financing models or project co-ownership require regulatory approval from a state

regulator or the Federal Energy Regulatory Commission. Utility regulators are required by statute to ensure that wholesale rates remain "just and reasonable" and are not "unduly discriminatory or preferential." Because financing mechanisms or the involvement of a non-incumbent utility partner may affect project costs or projected returns on investment, regulators must determine whether any increased costs are proportionate to the benefits ratepayers receive. For the Sunrise Powerlink project, the Sycamore-Peñasquitos project, and the West of Devers Upgrade Project, the Federal Energy Regulatory Commission and the California Public Utilities Commission granted approval for a non-incumbent utility nonprofit entity to join as a participating transmission owner. This decision was based on findings that the arrangements benefited communities and conformed to requirements for just and reasonable rates under the circumstances.

Design of Eminent Domain Authorities Should be Carefully Considered

As states and Congress consider establishing a more centralized eminent domain authority for constructing public infrastructure, it is important to assess the potential effects that such top-down condemnation could have on communities and public participation. While the establishment of centralized eminent domain authority may offer potential efficiencies in the siting and construction of essential infrastructure, it may limit meaningful engagement and the willingness of developers to develop a community benefits strategy. Policymakers must carefully weigh these trade-offs and precisely design these authorities.

FIGURE 8:
Sunrise Powerlink

PHOTO CREDIT: CITIZENS ENERGY

CONCLUSION

This report examines the role of CBFs in the development and acceptance of transmission line projects. The case studies demonstrate that providing benefits in a timely manner, aligning with local priorities, and engaging directly with affected communities are important factors for establishing trust and support. Projects that included proactive collaboration, such as Vineyard Wind's partnership with the town of Barnstable to address infrastructure needs, generally experienced more positive outcomes than those with minimal community involvement.

Developers often negotiate with individual communities, but the linear nature of transmission infrastructure has led to research and efforts aimed at regionalizing community benefits negotiations. This approach may transfer responsibility from individual communities to broader organizations. For example, some models suggest creating representative bodies to negotiate collectively with developers, while others propose forming community foundations to manage and distribute developer contributions according to stakeholder-identified priorities.

There remain challenges in ensuring benefits are delivered promptly and targeted to those most affected by infrastructure projects. Delays and insufficiently focused measures can impact future project approvals and community relations. As infrastructure planning continues, there is an ongoing need to explore alternatives beyond traditional negotiation frameworks, including regional approaches that could improve efficiency and fairness.

Further research is needed to evaluate the long-term effects of different benefits structures and to identify methods that balance developer flexibility with meaningful community participation. Examining broader aspects of community engagement, beyond benefits agreements, will provide insights into how sustained dialogue may influence outcomes. Continued research and analysis is also essential to address persistent gaps in understanding and practice.

Key areas for further investigation include:

- Establishing clearer definitions and criteria for community representation
- Evaluating the effectiveness of different benefits structures across varied contexts
- Identifying best practices for supporting equitable participation
- Investigating long-term impacts of benefits agreements on community well-being, environmental outcomes, and stakeholder relationships to inform more inclusive and successful transmission development
- Understanding the varying capacities of transmission developers to provide compensation and how these authorities shape incentives

Because the transmission lines discussed in this report have already been energized, most of the negotiations took place more than a decade ago. Since then, new entities have entered the field and communities have gained experience with various infrastructure types, prompting changes in negotiation practices. Continued study in these areas will be important as infrastructure requirements grow and community roles evolve within the development process.