



MID-GRID Quarterly Meeting

GDO Presentation

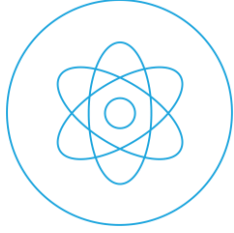
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U.S. Department of Energy

January 25, 2024

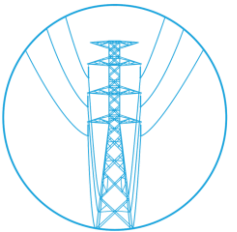


DOE's Grid Deployment Office

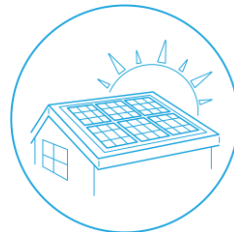
The Grid Deployment Office (GDO) works to provide electricity to everyone, everywhere by maintaining and investing in critical generation facilities to ensure resource adequacy and improving and expanding transmission and distribution systems to ensure all communities have access to reliable, affordable electricity.



The **Generation Credits Division** works with existing generation facilities to ensure resilience and reliability and works to improve electricity markets at the wholesale and distribution level.



The **Transmission Division** supports innovative efforts in transmission reliability and clean energy analysis and programs, and energy infrastructure and risk analysis in support of the Administration's priorities to enhance grid resilience.



The **Grid Modernization Division** oversees activities that prevent outages and enhance the resilience of the electric grid.

GDO Transmission Division

1

Enhanced planning

2

Siting and permitting, including federal permitting coordination and support for state, tribal, & local efforts

3

Commercial facilitation



Commercial Facilitation

Transmission Facilitation Program (TFP)

(Sec. 40106 of the Bipartisan Infrastructure Law)

TFP is \$2.5 Billion in revolving fund borrowing authority.

- The TFP is a revolving fund program that provides Federal support to overcome commercial hurdles in the development of large-scale new transmission lines, upgrading of existing transmission, and the connection of microgrids in Alaska, Hawaii, and U.S. territories.
- TFP designed for projects that would otherwise not be constructed, or be constructed with less capacity, without Federal support.
- NOT designed for projects that already are fully subscribed or have a fully allocated source of revenue.

Facilitation Tools:

1. Capacity Contracts

- Buy up to 50% of planned line rating for up to 40 years
- Sell capacity contract to recover costs

2. Public Private Partnerships (PPPs)

- Can be within a national interest electric transmission corridor (NIETC)
- Necessary to accommodate an increase in electricity demand across more than one state or transmission planning region

3. Financing/Loans

On October 30, DOE selected first three projects for conditional capacity contract awards.

- **Cross-Tie:** Expected construction start date of Q2 2025
- **Southline:** Expected construction start date of Q1 2025
- **Twin States Clean Energy Link:** Expected construction start date of Q3/Q4 2026



Enhanced Transmission Planning

GDO Enhanced Transmission Planning Activities - Overview

National Transmission Needs Study = DOE's triennial state of the grid report; final issued Fall 2023

National Transmission Planning Study = identify interregional and national strategies to accelerate cost-effective decarbonization while maintaining reliability; inform planning processes; identify transmission options

Offshore Wind Transmission Planning = DOE and BOEM conducting convening workshops with FERC and other federal agencies; released *An Action Plan for Offshore Wind Transmission Development in the U.S. Atlantic Region*



Enhanced Transmission Planning: National Transmission Needs Study ("Needs Study")

Final published 10/23

Webinar recorded 11/23, available online



Understanding the Needs Study

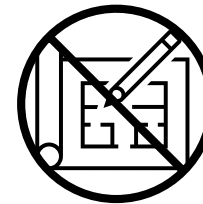
What It Is

What It Isn't

Objective



Assessment of Needs

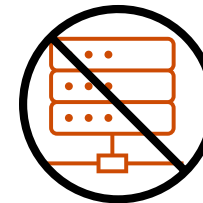


Not prescribing solutions

Methods



Considers published data and reports (180 references)



No new modeling, cost-benefit analysis, or system planning

Output



Needs organized by geographic regions



Regions not synonymous with corridors



How will this Needs Study be used?

1

Informs designation of National Interest Electric Transmission Corridors (NIETC)

- The Needs Study does not designate any NIETCs.
- Designation considers Needs Study and many other statutory factors (FPA §216).

2

Informs Department transmission priorities and can support the implementation of funding programs, technical assistance and broader transmission planning activities

3

Encourages planning entities to revise their planning processes to consider a wider range of transmission benefits, portfolios instead of individual projects, scenario-based planning, longer planning horizons, alternative transmission solutions, and weather data which better reflects future extremes.

4

Encourages state policymakers to incorporate findings into regulatory processes through coordination with neighboring states, active participation in planning authority processes, and state-led solicitations for transmission.



National Takeaways

1. There is a pressing need for new transmission infrastructure.
2. Interregional transmission results in the largest benefits.
3. Needs will shift over time.



Enhanced Transmission Planning: **National Transmission Planning Study (“NTPS”)**



National Transmission Planning Study: Objectives

1

- ▶ Identify **interregional and national strategies** to accelerate cost-effective **decarbonization** while maintaining system reliability

2

- ▶ Inform regional and interregional transmission planning processes, particularly by **engaging stakeholders** in dialogue

3

- ▶ Identify **viable and efficient** transmission options that will provide broad-scale benefits to electric customers

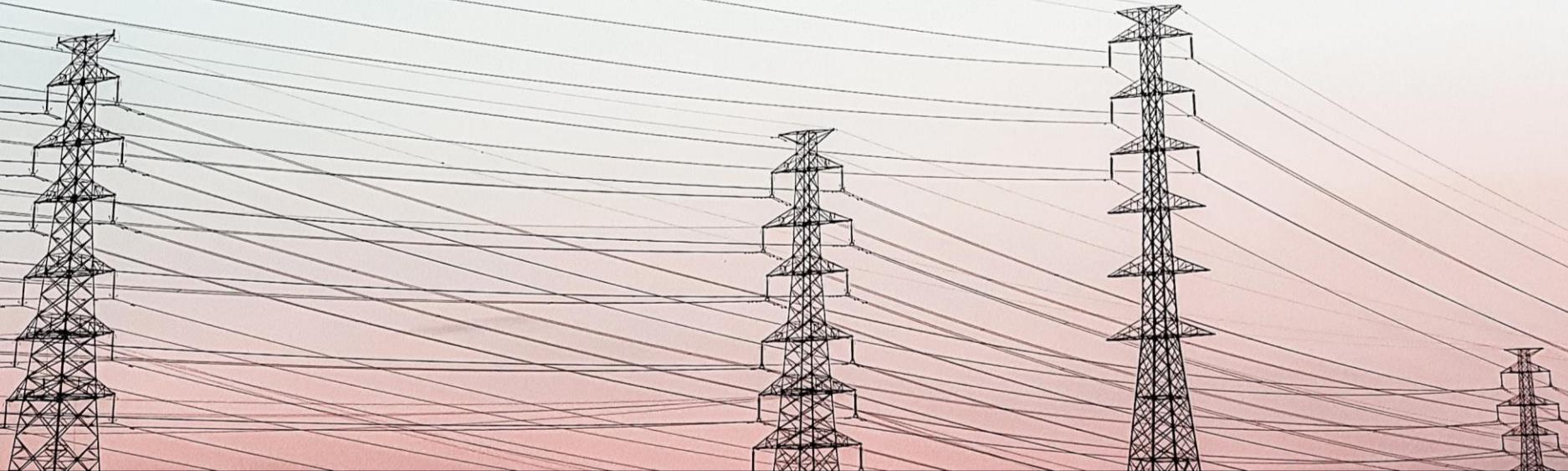




Transmission Siting and Permitting

What is a National Interest Electric Transmission Corridor (NIETC)?

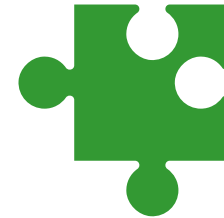
- ▶ An area of the country where inadequate transmission harms consumers (currently or in the future) and that DOE has designated as a NIETC.
- ▶ Development of new transmission in a NIETC is needed to address consumer harms, including:
 - Economic harms;
 - Reliability;
 - Resilience; and
 - Access to clean, diverse, and affordable electricity supply.



Impact of NIETC Designation

Focuses public and policymaker attention on greatest areas of transmission need and unlocks statutory tools to advance transmission deployment, including:

- Public-Private Partnerships under the Bipartisan Infrastructure Law's **Transmission Facilitation Program**
- Direct loans under the Inflation Reduction Act's **Transmission Facility Financing** program
- **Federal siting and permitting authority** under section 216(b) of the Federal Power Act for the Federal Energy Regulatory Commission (FERC) in certain circumstances



Note: NIETC designation is **not** a route determination for a specific transmission project, **not** an endorsement of specific transmission solutions, and **not** selection of or preference for a specific transmission project for any purposes.

DOE designed a four-phase process to create *multiple opportunities for public input*, from initial proposals to feedback on an increasingly narrow list of potential NIETCs.

| | |
|----------------|---|
| Phase 1 | Public Proposals + DOE Preliminary Review |
| Phase 2 | DOE Preliminary List + Public Comment |
| Phase 3 | Public Engagement + NEPA Reviews + Draft Reports |
| Phase 4 | DOE Designates NIETC(s) |

Transmission Siting and Permitting: DOE Support for State, Tribal, and Local Siting and Permitting



Overview of Inflation Reduction Act (IRA) Transmission Siting and Economic Development Grants (TSED) Program

The IRA provides a total of \$760 million for DOE to make TSED grants available to siting authorities and to state, Tribal, and local governmental entities to carry out eligible activities related to the siting of covered transmission projects that:

- Strengthen and Accelerate Permitting:
 - Certain siting and permitting activities by siting authorities that are reviewing or preparing to review a permit application for a “covered transmission project”
- Strengthen Community Benefits:
 - Economic development activities in communities affected by the construction or operation a “covered transmission project”

Who is eligible to apply for funds through TSED?

- **For siting and permitting activities:** siting authorities, defined as state, Tribal, or local governmental entities with the authority to make a final determination regarding the siting, permitting, or regulatory status of a “covered transmission project.”
- **For economic development activities:** siting authorities or any state, Tribal, or local government entity proposing to undertake a project in a community impacted by the construction or operation of a “covered transmission project.”



What is a "Covered Transmission Project?"

The Inflation Reduction Act defines a “covered transmission project” as:

- A high-voltage interstate or offshore electricity transmission line that is proposed to be constructed and operated:
 - at a minimum of 275 kV AC or DC if onshore, or
 - at a minimum of 200 kV AC or DC if offshore
- By an entity, and for which the entity has applied or informed a siting authority of its intent to apply for regulatory approval.





GDO's Grid Modernization Division

Grid Resilience and Innovation Partnerships (GRIP)

Program Overview

- ▶ These programs will be released as one funding opportunity but provide opportunities for various applications to various entities including states, tribes, utilities, and industry.
 - Topic Area 1- Grid Resilience Grants
 - Topic Area 2- Smart Grid Grants
 - Topic Area 3- Grid Innovation Program
- ▶ DOE Goals for the GRIP Program
 - 1. Transform the U.S. electric grid at the transmission and distribution levels by increasing resilience in the face of extreme disruptions, enabling data-rich and flexible grid performance, and spurring innovation at all stages of project ideation and execution;
 - 2. Prioritize energy justice as an essential component of infrastructure development by dramatically altering the relationship between energy providers and their communities; and
 - 3. Catalyze and leverage private sector and non-federal public capital for impactful technology and infrastructure deployment.
- ▶ Concept papers are a required first step in the application process and due by:
 - January 12, 2024 - for all Topic Areas.



Application Submission Timing / Schedule

FOA Released: November 14, 2023

| FOA Released: November 14, 2023 | | | | | |
|---|------------------|---|------------------|--|------------------|
| Topic Area 1 Grid Resilience Grants (40101(c)) | | Topic Area 2 Smart Grid Grants (40107) | | Topic Area 3 Grid Innovation Program (40103(b)) | |
| Concept Papers Due: | January 12, 2024 | Concept Papers Due: | January 12, 2024 | Concept Papers Due: | January 12, 2024 |
| Response to Concept Papers: | February 2024 | Response to Concept Papers: | February 2024 | Response to Concept Papers: | February 2024 |
| Full Applications Due: | April 17, 2024 | Full Applications Due: | May 22, 2024 | Full Applications Due: | April 17, 2024 |

- ▶ The next GRIP FOA is expected to be announced before January 1, 2025.



Grid Resilience State and Tribal Formula Grants

For projects reducing the likelihood and consequences of electrical outages due to disruptive events, including vegetation management, battery storage, and utility pole management.

Available funding: Total of \$562 million for states, territories, and Indian tribes for Fiscal Year 2024

Type of funding: Non-competitive grant with application templates and other resources available

Deadline to Request Funding for FY2024: **April 17, 2024**

- **New applicants** should apply via FedConnect
- **Past applicants** should work with their Federal Project Officer

Grant highlights:

- Project specifics do not need to be included in grant application
- 15% cost match for grant recipients, as well as 100% or 1/3 cost match for entity that carries out the grid resilience project

Upcoming Webinar:

Thursday, February 1, 2024
2:00 pm – 3:30 pm ET



For more information

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or

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Website:

[Energy.gov/gdo/gridresilience](https://energy.gov/gdo/gridresilience)





Stakeholder Engagement and Community Benefits

Community Benefits Plan Implementation

A **Community Benefits Plan (CBP)** is a **new requirement** added to all IIJA FOAs. The CBP for GRIP Programs is valued at **20%** of the overall score of the application.

The CBP should outline:

- How the applicant intends to achieve DOE's priority areas of **Justice40, Diversity, Equity, Access & Inclusion (DEIA), & Quality Jobs**; and
- A **Specific, Measurable, Assignable, Realistic, & Time-Based (SMART)** milestone, **per budget period**, to measure progress on the proposed CBP actions.

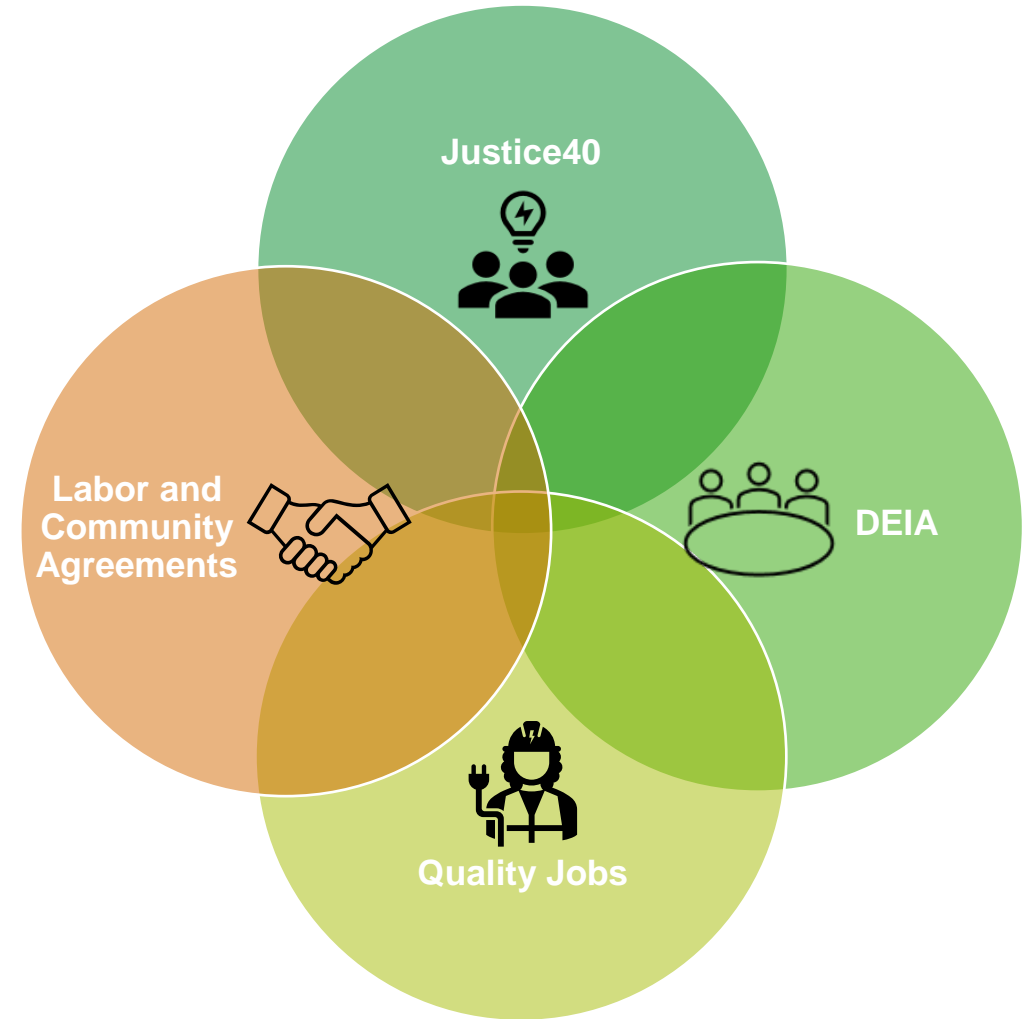
If the project is selected:

- DOE will incorporate the **CBP** into the award and the recipient will be **required** to **implement** the **CBP** as proposed.
- During the life of the award, DOE will **evaluate** the recipient's progress, including as part of the "**Go/No-Go**" review process.



Community Benefits Plan: Four Priority Goals

1. Community and Labor Engagement- Meaningful engagement with community and labor partners leading to formal agreements with accountability to affected stakeholders
2. Investing in the American Workforce- Create quality jobs to attract and retain skilled workers and ensure workers have a voice on the job over decisions that affect them
3. Diversity, Equity, Inclusion, and Accessibility- Equitable access to wealth-building opportunities (teaming, access to quality jobs, business and contracting opportunities, etc.)
4. Justice 40- Meet or exceed the objectives of the Justice40 initiative that 40% of the overall benefits of certain federal investments flow to disadvantaged communities



CBP Areas for Improvement for Full Applications

Lessons Learned from GRIP Concept Paper Reviews

- ▶ CBP should be specific to the communities your Application impacts, and include a clear demonstration of engagement with the communities throughout all stages of the proposed project
- ▶ Incorporate community input, especially from historically underrepresented communities, into both project and Community Benefits planning process
- ▶ To the extent your project provides J40 benefits, provide details that demonstrate a flow of benefits to disadvantaged communities (DAC). Does project scope include work directly in DAC?
- ▶ CBP documentation that demonstrates the applicant's ability to achieve CBP goals; e.g. union/labor agreements, community agreements, letters of support
- ▶ CBP Plan includes SMART (Specific, Measurable, Assignable, Realistic and Time-Related) milestones supported by metrics to measure the success of the proposed actions.



Community and Labor Engagement Within Community Benefits Plan

Successful applicants will consider:

- ▶ Proactively and meaningfully engaging with stakeholders ensures that community perspectives can be incorporated into the project plan
- ▶ Engagement is an opportunity for project proponents to hear from these stakeholders about their concerns and desires
 - Stakeholder engagement is a relatively small cost that delivers high value
- ▶ Ongoing engagement, and responsiveness to the issues raised is important for reducing or eliminating certain risks associated with the project
- ▶ Certain stakeholders are more vulnerable to and affected by project implementation than others
 - Frontline communities and workers are some of the most-impacted



Thank You



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