Bipartisan Infrastructure Law and Inflation Reduction Act Program and Opportunities

Grid Deployment Office | Tribal Clean Energy Summit
Mission Statement: 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.

- **Power Generation Assistance Division**: The Power Generation Assistance Division works with existing generation facilities to ensure resilience and reliability.

- **Transmission Division**: 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.

- **Grid Modernization Division**: The Grid Modernization Division oversees activities that prevent outages and enhance the resilience of the electric grid.
# Hydroelectric Incentive Programs

<table>
<thead>
<tr>
<th>Hydroelectric Program</th>
<th>Funding Amount</th>
<th>Next Milestones</th>
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<tbody>
<tr>
<td><strong>Section 242</strong> Hydroelectric Production Incentives Program: Adding power to nonpowered</td>
<td>$125 million; capped at $1 million per facility</td>
<td>• Provides funding based on generation from hydropower development at non-powered dams</td>
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<td>dams and generation to existing facilities</td>
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<td>(Annual appropriations since 2014).</td>
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<td><strong>Section 243</strong> Hydroelectric Efficiency Improvement Incentives Program: Improving existing hydropower facility efficiency</td>
<td>$75 million; capped at 30% federal funds toward improvement, not more than $5 million to a single facility in a fiscal year</td>
<td>• Improving generation efficiency by at least 3 percent (enacted under the original EPAct2005, but unfunded until now).</td>
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<td><strong>Section 247</strong> Maintaining and enhancing existing hydropower through Grid Resiliency, Dam Safety, and Environmental Improvements</td>
<td>$553 million; capped at 30% federal funds of improvement, not more than $5 million to any facility in a fiscal year</td>
<td>• Focuses on improvements in three areas:</td>
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<td>o Improving Grid Resiliency</td>
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The TFP is a revolving fund program that will provide Federal support to overcome the financial hurdles in the development of large-scale new transmission lines, upgrading of existing transmission, and the connection of microgrids in select States and U.S. territories.

- First RFP will focus on projects that can begin construction by year-end 2027
- Best fit for projects that are nearly "shovel ready" and are in regions that rely on firm point-to-point transmission
- TFP designed for projects that would otherwise not be constructed without support
- Will NOT include projects that already are fully subscribed or have a fully allocated source of revenue

TFP is $2.5 Billion in revolving fund borrowing authority.

Financing Tools:

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

2. Loans

3. Public Private Partnerships
   - 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
IRA: Transmission Facility Financing within the Grid Deployment Office

- Provides $2 billion in direct loan authority for facility financing.
- For projects designated by the Secretary to be necessary in the national interest under section 216(a) of the Federal Power Act

Loan Programs Office

- Through Title 17 LPO has $40 Billion in loan authority, for which innovative transmission expansion projects and emerging technologies (including HVDC deployment) are eligible.
- Through Sec. 1706 LPO has $250 Billion in loan authority to retool, repower, repurpose or replace energy infrastructure (including transmission) that has ceased operations or enable operating energy infrastructure to avoid air pollutants.

Western Area Power Administration Transmission Infrastructure Program

- $3.25 Billion in debt financing/development assistance for qualifying transmission projects with at least one terminus in WAPA’s 15 state footprint and that facilitate delivery of renewable energy
## Grid Resilience Funding Available through BIL

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<tr>
<th>Formula Grants</th>
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<tr>
<td><strong>Grid Resilience Formula Grants</strong></td>
<td>$2.5 billion</td>
<td>• Application open until March 31&lt;sup&gt;st&lt;/sup&gt;, 2023</td>
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<td>Preventing Outages and Enhancing the Resilience of the Electric Grid / Hazard Hardening (Sec. 40101(d))</td>
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<td>• RFI/draft FOA for utilities and industry competitive program released in August 2022. Comments due by October 14, 2022</td>
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<td><strong>Smart Grid Grants</strong></td>
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<td>Deployment of Technologies to Enhance Grid Flexibility (Sec. 40107)</td>
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<td><strong>Grid Innovation Program</strong></td>
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<td>Program Upgrading Our Electric Grid and Ensuring Reliability and Resiliency (Sec. 40103(b))</td>
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State, Territory, & Tribal Formula Grid Resilience Grants

$2.5 Billion (approximately $500 million per year for FY 22-26)

- Formula based on population, area, probability, severity of disruptive events and expenditure on mitigation efforts.
- States, Territories, and Tribes funded via annual formula grant
  - 15% cost match
- States, Territories, and Tribes may subgrant to eligible entities for projects
  - 100% cost match for subgrantee
  - Small utility 1/3 cost match
- FY22 Grants range:
  - States: $1.5M - $33.8M
  - Territories: $700K - $3.7M
  - Tribes: $30K - $2.1M

Goals & Objectives:

- Demonstrate measurable improvements in energy resilience to all hazards in the United States and mitigate climate-related risk,
- Invest in modernized grid infrastructure that can enable consumer access to lower-cost energy and accommodate increased electrification, increased penetrations of variable renewable electricity and distributed energy resources, and other evolving system needs over the coming decades,
- Invest in clean energy and decarbonization solutions to achieve a carbon-free power sector by 2035 and net-zero greenhouse gas emissions economy-wide by 2050, and
- Create good-paying jobs with the free and fair choice to join a union

FY22 applications are open now
Resilience investments allowed under the Formula Grant

**Potential Investments include:**

- utility pole management,
- hardening of power lines, facilities, substations, of other systems,
- undergrounding of electrical equipment,
- replacement of old overhead conductors and underground cables,
- relocation of power lines or reconductoring of power lines with low-sag, advanced conductors,
- vegetation and fuel-load management,
- weatherization technologies and equipment,
- fire-resistant technologies and fire prevention systems,
- monitoring and control technologies,
- use or construction of distributed energy resources for enhancing system adaptive capacity during disruptive events, including microgrids, and battery-storage subcomponents,
- adaptive protection technologies, and
- advanced modeling technologies

Resilience measures that are **NOT** allowed under this provision include:

Construction of a new - electric generating facility; or large-scale battery-storage facility that is not used for enhancing system adaptive capacity during disruptive events; or cybersecurity.
These programs will be released as one funding opportunity but provide opportunities for various applications to various entities including states, tribes, utilities, and industry.

1. Utility & Industry Grid Resilience Grants (Competitive)
2. Smart Grid Grants (Competitive)
3. Grid Innovation Program (Competitive)

Request for Information (RFI) and Draft Funding Opportunity Announcement (FOA) are out now for comment. Comments due October 14, 2022

FOA release expected mid-November for FY22 and FY23 funding (~$4.2 billion).

$2.5B Total ($500 million/year FY 22-26)
FY22 and 23: Up to $1 Billion

Eligible Entities

- Grid operators
- Storage operators
- Electricity generators
- Transmission owners or operators
- Distribution providers
- Fuel suppliers
- Others deemed eligible by the Secretary

- Capped at the amount the eligible entity has spent in the previous 3 years on hardening efforts
- Small Utility Set Aside (for those selling no more than 4 million MWh of electricity per year)
  - Must match 1/3 of grant amounts received
  - At least 30% must go to small utilities
- Cost Match = 100%

Prioritize projects generating the greatest community benefit in reducing the likelihood and consequences of disruptive events.
2. Smart Grid Grants

$3B total ($600 million/year FY 22-26)
FY22 and 23: Up to $1.2 Billion

- Grants to support the deployment of technologies to enhance grid flexibility
- Open Eligibility
  - Institutions of higher education;
  - For-profit entities;
  - Non-profit entities;
  - State and local governmental entities, and tribal nations.
- Cost Share: At least 50% of grant

Goals & Objectives:
- Increase Transmission Capacity
  - Grid Enhancing Technologies
- Mitigate Wildfires
  - Asset Management Technologies
- Load Management/Electrification of “edge devices”
  - Managed Charging/Grid Infrastructure and autonomous control
- Incorporate Secure Communications/Cybersecurity

The Smart Grid Investment Grant (SGIG) program was previously funded under the Recovery Act, which awarded $3.5 Billion of grants during FY 2009 & 2010 for activities through FY 2015
3. Grid Innovation Program

$5B Total ($1 billion/year for FY22–26)
FY22 and 23: Up to $2 Billion

- Demonstrate innovative approaches to transmission, distribution, and storage to harden and enhance resilience and reliability; and
- Demonstrate new approaches to enhance regional grid resilience implemented through States by public and rural electric cooperative entities on a cost-shared basis.

- Eligible Entities
  - a State;
  - a combination of 2 or more States;
  - an Indian Tribe;
  - a unit of local government;
  - a public utility commission

Cost Share: 50% Minimum
3. Grid Innovation Program (continued)

**Primary Objectives:**

- Ensure reliable grid operations
- Improve overall grid resilience
- Enhance collaboration between and coming eligible entities and private and public sector owners and operators on grid resilience
- Contribute to the decarbonization of the electricity and broader energy system
- Provide enhanced system value, improve current and future system cost-effectiveness and deliver economic benefits

**Areas of Interest for Applications:**

- Transmission capacity enhancements
- Advanced distribution grid assets and functionality
- Combined systems demonstrating innovative approaches
Grid Resilience Formula Grants
  • FY22 applications extended to 3/31/23
  • Funds disbursed on a rolling basis

Grid Resilience & Innovation Programs (GRIP)
  • RFI open for comment 8/30/22 - 10/14/2022
  • FOA plans to be released late Fall ‘22
    o Grid Resilience Utility & Industry Competitive Grants – 40101(c)
    o Smart Grid Grants – 40107
    o Grid Innovation Program – 40103(b)
The Grid and Transmission Programs Conductor acts as a clearinghouse for GDO’s transmission and grid resilience financing programs. Find information on Grid and Transmission programs within:

- Bipartisan Infrastructure Act
- Inflation Reduction Act
- And other existing DOE transmission and grid programs

Learn More about the Grid Deployment Office

Visit the Grid and Transmission Programs Conductor Guide and Briefing Book for more information about eligibility and application requirements and funding opportunity or grant timelines.

If you have additional questions, please reach out to us at Transmission@hq.energy.gov and we will get back to you as quickly as possible.

https://www.energy.gov/gdo/conductor
Questions?