



Department of  
**Environment &  
Conservation**

# Informational Session & Public Hearing

Draft Program Narrative for the Grid Resilience Formula Grant Program under the  
Infrastructure Investment and Jobs Act (IIJA)

September 15, 2022

# Agenda

## Question and Answer Informational Session

*6:00 PM CDT – 6:30 PM CDT*

- I. Welcome and Overview  
Ronne' Adkins, Office of External Affairs
- II. Presentation from TDEC  
Molly Cripps and Alexa Voytek, Office of Energy Programs
- III. Informal Question and Answer Session

## Formal Public Hearing & Receiving of Comments

*6:30 PM CDT – 8:00 PM CDT*

- I. Procedural Overview  
Ronne' Adkins, Office of External Affairs
- II. Public Comments Received
- III. Closing

# Webex Hybrid Meeting Information

- Information on how to join the online meeting is available at [www.tn.gov/environment](http://www.tn.gov/environment)
  - Public Participation on the main menu
  - Energy Notices and Hearings
  - Links for the hearing with today's date.
- You may also call into the meeting
  - Dial: 1-415-655-0001
  - Access code: 230 809 80439
  - For technical difficulties:
    - Dial: 931-619-2949 (Robert)
- Please mute yourself when not talking.



# Introductions

- Presenters: Molly Cripps  
Director  
Office of Energy Programs  
[Molly.Cripps@tn.gov](mailto:Molly.Cripps@tn.gov)  
  
Alexa Voytek  
Deputy Director - Programs, Innovation &  
Transportation, Communications  
Office of Energy Programs  
[Alexa.Voytek@tn.gov](mailto:Alexa.Voytek@tn.gov)
- WebEx Host: Robert Becker, Cookeville Regional Director  
Office of External Affairs



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# Informational Session

Draft Program Narrative for the Grid Resilience Formula  
Grant Program under the Infrastructure Investment and Jobs  
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Department of  
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Public Hearing on  
Infrastructure Investment & Jobs Act  
Section 40101(d):

*Formula Grants to States and Indian Tribes for  
Preventing Outages & Enhancing the Resilience  
of the Electric Grid*



# Infrastructure Investment & Jobs Act (IIJA) of 2021

- Also known as Bipartisan Infrastructure Law (BIL).
- Signed into law on November 15, 2021.
- IIJA created 60 new U.S. Department of Energy (DOE) programs, including Section 40101(d): *Formula Grants to States and Indian Tribes for Preventing Outages and Enhancing the Resilience of the Electric Grid*.
- The entirety of IIJA, Public Law 117-58, including Section 40101(d) can be accessed here: <https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.htm>.

## IJA's Section 40101(d) Grid Resilience Goals

The goal of this Grid Resilience Formula Grant Program (hereinafter referred to as "Program") is to support the federal government's objectives to:

- (1) demonstrate measurable improvements in energy resilience to all hazards in the United States and mitigate climate-related risk;
- (2) 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;
- (3) 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
- (4) create good-paying jobs.



# Formula & Program Oversight

- Allocated to States via an annual formula grant:
  - Approximately \$459 million allocated nationally per year for FY 2022–2026 (around \$2.3 billion total);
  - 15% cost match for each allocation must be provided by each State; and
  - Up to 5% of a State’s allocation from the federal government can be used for technical assistance, distribution of information to reduce the likelihood and consequences of disruptive events, and administrative expenses associated with the Program.
- The IIJA set forth a specific, five-part formula for determining each State’s funding allocation, based on population, geographic area, probability of disruptive events, severity of disruptive events, and expenditure on mitigation efforts.
  - For the first year of the Program, Tennessee has been allocated \$7,614,436.00.
  - The Tennessee State Energy Office, also known as the Tennessee Department of Environment and Conservation’s Office of Energy Programs (TDEC OEP), will oversee the Program.

## About TDEC OEP

- TDEC OEP provides education, outreach, technical assistance, and/or funding and financing opportunities for the following:
  - energy efficiency;
  - energy management;
  - renewable energy;
  - energy security planning, preparedness, and response;
  - and energy in transportation.
- Through its activities, OEP promotes the efficient, effective use of energy to enhance the environmental and economic health of the state.
- Learn more about OEP: <http://www.tn.gov/environment/energy>.

# Eligibility for Grid Resilience Formula Grants

For the purpose of implementing eligible resilience measures that achieve the objectives of this Program, States may use grant funding to issue subawards to eligible entities.

Eligible entities include:

- an electric grid operator;
- an electricity storage operator;
- an electricity generator;
- a transmission owner or operator;
- a distribution provider;
- a fuel supplier;
- any other relevant entity, as determined by the Secretary (of DOE).

# Eligible Activities

Funding provided under this Program may be used to implement a wide range of resilience measures intended to mitigate the impact of disruptive events, including:

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

## Ineligible Activities

Resilience measures that are not allowed under this Program 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.

# Subrecipient Cost Match Requirements

## Matching Funds

- Any eligible entity that receives a subaward under this Program shall be required to match 100% of the amount of the subaward.
- However, if the eligible entity sells 4,000,000 megawatt hours of electricity or less per year, the required match will be one-third (33%) of the amount awarded of the subaward.

## Small Utility Set-Aside

- States must ensure that, of the subawards provided to eligible entities, the percentage made available to eligible entities that sell not more than 4,000,000 megawatt hours of electricity per year is not less than the percentage of all customers in the State that are served by those eligible entities.



# Justice40 Initiative

- Justice40 or J40 is a whole-of-government initiative that requires 40% of the overall benefits of federal investments to flow to disadvantaged communities (DACs) that are marginalized, underserved, and/or overburdened by pollution. This Program will be subject to J40 requirements.
  - The White House Council on Environmental Quality (CEQ) created a tool to assist with the identification of DACs, the Climate and Economic Justice Screening Tool (CEJST).



Census tracts shown in dark gray are currently designated as DACs.

Source: CEQ CEJST



## Required Application Documents

States must submit the following documents to DOE by March 31, 2023, to obtain year one formula funds:

- **Program Narrative;**
- **Public Notice & Hearing;**
- Head of Government Letter or Tribal Council Resolution;
- SF-424 (Application for Federal Assistance);
- Environmental Questionnaire (i.e., pre-NEPA);
- SF-LLL (Disclosure of Lobbying Activities);
- Pre-Award Information Sheet.



# Program Narrative

The Program Narrative must address the following:

- **Objectives and Metrics:** List of 3-5 objectives and associated metrics that the applicant intends to apply for guiding their resilience investment decisions.
- **Criteria:** Description of the criteria used for selecting and determining the awards to eligible entities.
- **Methods:** Description of the methods the applicant anticipates using for soliciting, awarding, and distributing funds, as well as monitoring outcomes (i.e., metrics).
- **Funding Distribution:** Description of the proposed funding distributions and categories of recipients of the subgrants to be provided to eligible entities.
- **Equity Approach:** Description of the plan that the State or Indian Tribe will employ to ensure their proposed project will incorporate 1) quality jobs; 2) community benefits; and 3) diversity, equity, inclusion, and accessibility.
- **Technical Assistance and Administration:** Description of how the State or Indian Tribe intends to utilize up to 5% of Federal grant funds for project administration and technical assistance.
- **Public Notice and Hearing:** Description of the notice and public hearing process and outcomes, including the number and types of organizations that attended.

The Program Narrative ***will not*** list or address specific projects. TDEC OEP will begin soliciting projects in calendar year 2023.



## Examples of Federal Compliance Requirements

- As a federal Program, eligible entities and projects will be subject to several federal compliance requirements, including, but not limited to:
  - Build America, Buy America (BABA)
  - Davis-Bacon Act (labor / wage & hour law)
  - Title VI of the Civil Rights Act of 1964
  - National Environmental Policy Act of 1969 (NEPA)

# Build America, Buy America Act (BABA) – Domestic Sourcing

- Projects funded by this Program must meet the following Buy America preferences:
  - (1) All iron and steel used in the project are produced in the United States. This means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
  - (2) All manufactured products used in the project are produced in the United States. This means the manufactured product was manufactured in the United States, and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation.
  - (3) All construction materials are manufactured in the United States. This means that all manufacturing processes for the construction material occurred in the United States.
- For more information, including potential waivers, review the Office of Management and Budget's Initial Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure:  
<https://www.whitehouse.gov/wp-content/uploads/2022/04/M-22-11.pdf>.

# Davis-Bacon Act – Labor and Wages

- The Davis-Bacon Act applies to contractors and subcontractors performing on federally funded or assisted contracts in excess of \$2,000 for the construction, alteration, or repair (including painting and decorating) of public buildings or public works.
- Davis-Bacon Act and Related Act contractors and subcontractors must pay their laborers and mechanics employed under the contract no less than the locally prevailing wages and fringe benefits for corresponding work on similar projects in the area. Contractors and subcontractors must pay covered laborers and mechanics weekly and submit weekly certified payroll records.
- For more information, refer to this guide on Davis-Bacon and Related Acts: <https://www.dol.gov/agencies/whd/government-contracts/construction/laws>.

## Title VI of the Civil Rights Act of 1964 – Non-Discrimination

- Title VI of the Civil Rights Act of 1964 prohibits discrimination based on race, color, or national origin in programs or activities receiving federal financial assistance (42 U.S.C. §2000d). As a recipient of federal funding, TDEC OEP is required to comply with the rules, laws, and regulations of Title VI.
  - Title VI also applies to recipients of federal financial assistance that passes through TDEC in the form of grants / subawards, contracts, or subcontracts, as well as federal financial assistance that passes through another state agency to TDEC.
- TDEC's Title VI Coordinator: <https://www.tn.gov/environment/program-areas/opsp-policy-and-sustainable-practices/opsp-title-vi-and-environmental-justice.html>.
- Title VI Statute, 42 U.S.C §§ 2000d - 2000d-7: <http://www.gpo.gov/fdsys/pkg/USCODE-2008-title42/html/USCODE-2008-title42-chap21-subchapV.htm>.

# National Environmental Policy Act of 1969 (NEPA) – Environmental Review

- NEPA requires federal agencies to assess the environmental effects of proposed actions prior to making decisions. Projects under this Program may be required to undergo an Environmental Assessment or Environmental Impact Statement process.
- National Environmental Policy Act (NEPA) of 1969:  
[https://www.energy.gov/sites/default/files/nepapub/nepa\\_documents/RedDont/Req-NEPA.pdf](https://www.energy.gov/sites/default/files/nepapub/nepa_documents/RedDont/Req-NEPA.pdf).
- Guidance and Requirements Table, to assist in the NEPA process:  
<https://www.energy.gov/nepa/guidance-and-requirements-table>.

## Subawards

How and when do States request and receive approval to proceed with resilience projects and associated subawards to eligible entities?

- State grant recipients may, at any time after they receive the approval of their grant, provide notification and documentation to DOE for resilience projects and subawards.
- DOE has noted that review of the documentation and required written concurrence by DOE may take time and will be impacted by factors such as National Environmental Policy Act (NEPA) considerations.

# Program Timeline

- **Early September:** TDEC OEP releases Draft Program Narrative for public comment
- **Thursday, September 15:** TDEC OEP hosts Public Hearing, both in-person and online, from 6:00 PM – 8:00 PM CT

Sonny West Conference Center, Sections C and D  
Howard Office Building  
700 2nd Ave. S, Nashville, TN 37210

**OR**

[Webex](#)

- **Monday, October 17:** TDEC OEP closes Program Narrative public comment period
- **Fourth Calendar Quarter of 2022:** After considering public feedback, TDEC OEP submits the Program Narrative and other required application documentation to DOE



## Draft Program Narrative – Objectives and Metrics

- **Improve Grid Resilience** – Maintain and enhance the reliability and resilience of the electric grid, with the goal of minimizing the frequency and duration of power outages resulting from natural hazards.
- **Promote Grid Equity** – Ensure that benefits from these funds are distributed equitably to Tennesseans, particularly for communities that are more susceptible or vulnerable to electric power outages.
- **Support the State’s Grid Workforce** – Strengthen the workforce that is responsible for implementing grid reliability and resilience projects, potentially via offering professional development opportunities, and consider any other efforts that will help the State attract, train, and retain an appropriately skilled workforce in the grid improvement space.

## Metrics for Objective #1: Improve Grid Resilience

- **The System Average Interruption Frequency Index (SAIFI)**, which equals how often the average Tennessee electricity customer experiences an interruption. To calculate:
  - $SAIFI = \text{total number of customers interrupted} / \text{total number of customers served}$
- **The System Average Interruption Duration Index (SAIDI)**, which equals the total number of minutes (or hours) the average Tennessee electricity customer experiences an interruption. To calculate:
  - $SAIDI = \text{sum of customer interruption durations} / \text{total number of customers served}$
- **The Customer Average Interruption Duration Index (CAIDI)**, which equals the average time required to restore service to Tennessee electricity customers. To calculate:
  - $CAIDI = \text{sum of customer interruption durations} / \text{total number of customers interrupted}$

## Prompted Questions for Stakeholder Feedback

**Question:** Do you have feedback on the proposed metrics for Objective #1 (Improve Grid Resilience)?

**Question:** In addition to the SAIFI, SAIDI, and CAIDI metrics, do you have suggestions for additional or alternate metrics that TDEC OEP could utilize and/or additional datasets that TDEC OEP should leverage in assessing grid resilience?

## Metrics for Objective #2: Promote Grid Equity

TDEC OEP proposes to define “Vulnerable Communities” as those that fall into at least one of the following categories:

- Disadvantaged communities (DAC), as defined by the White House Council on Environmental Quality (CEQ)
- High risk areas for natural hazards, as determined by the Federal Emergency Management Agency (FEMA) Multiple Hazard Index
- Areas that house high populations of electricity-dependent Tennesseans, particularly those who require electricity to operate medical devices. This is shown in the FEMA HHS emPOWER Map.
- High social vulnerability communities, as defined by the Centers for Disease Control and Prevention (CDC) Social Vulnerability Index.
- Economically Distressed or At-Risk counties, as determined by the Appalachian Regional Commission.

## Metrics for Objective #2: Promote Grid Equity

- **Percentage of overall funds provided to subrecipients serving Vulnerable Communities**
- **Vulnerable SAIFI** = total number of Vulnerable Community customers interrupted/total number of Vulnerable Community customers served
- **Vulnerable SAIDI** = sum of Vulnerable Community customer interruption durations/total number of Vulnerable Community customers served
- **Vulnerable CAIDI** = sum of Vulnerable Community customer interruption durations/total number of Vulnerable Community customers interrupted

## Prompted Questions for Stakeholder Feedback

**Question:** Do you have feedback on the proposed metrics for Objective #2 (Promote Grid Equity)?

**Question:** Can Local Power Companies calculate SAIFI, SAIDI, and CAIDI metrics for portions of their service territory (e.g., Vulnerable Community areas), or can they only calculate these metrics for the entire service area? If the latter, do you have suggestions for additional or alternate metrics that TDEC OEP could utilize and/or additional datasets that TDEC OEP should leverage in assessing impact to Vulnerable Communities?

## Metrics for Objective #3: Support the State's Grid Workforce

TDEC OEP will evaluate the need for an inventory of existing or planned professional training and/or workforce development programs. Such an inventory could inform whether the State may want to conduct a more in-depth industry landscape analysis and/or support related initiatives in future years.

The following metrics may be used by TDEC OEP to track performance in equitable grid workforce support:

- Of all workers employed to execute projects funded by this Program, percentage of workers that come from Vulnerable Communities;
- Local businesses or vendors employed to execute projects funded by this Program;
- Of all local businesses or vendors employed to execute projects funded by this Program, percentage of businesses located in Vulnerable Communities;
- Number of Eligible Entities that utilize their existing workforce to execute projects funded by this Program, categorized by type of project.

## Prompted Questions for Stakeholder Feedback

**Question:** Do you have feedback on the proposed metrics for Objective #3 (Support the State's Grid Workforce)?

**Question:** Do you have suggestions for additional or alternate metrics that TDEC OEP could utilize and/or additional datasets that TDEC OEP should leverage to measure success in attracting, training, and retaining an appropriately skilled and unskilled grid workforce?



## Project Evaluation Criteria

- Potential of the project to minimize the frequency and duration of power outages;
- Potential benefits that would impact Vulnerable Communities;
- Community benefits to be achieved as a result of the project in reducing the likelihood and consequences of disruptive events, with priority given to projects that will generate the greatest community benefit (whether rural or urban);
- Potential for the project to directly strengthen and/or support the workforce that is responsible for implementing grid resilience projects;
- Proposed cost match contribution in excess of the percentage required and any other cost-effectiveness considerations; and
- The location of the project (the project must be located within the State of Tennessee).

## Methods / Funding Distribution

- Following submission and receipt of DOE's approval of Tennessee's Program Narrative, TDEC OEP will convene a stakeholder working group, which will inform the development of key Program design decisions, including the decision to award funding via competitive solicitation(s) and/or formula grant(s) and the potential prioritization of Eligible Resilience Measures to be funded under the Program.
- The working group will utilize data and existing tools to develop a framework and a methodology for determining and/or evaluating community benefit of grid resilience projects in a measurable way, where possible.
- The working group will also evaluate the need to expand the State's list of Eligible Entities to include critical facilities and infrastructure that ensure essential community services or lifelines remain functioning when a disruptive event occurs.

## Prompted Question for Stakeholder Feedback

- **Question:** To ensure that the percentage of funding made available to Eligible Entities that sell not more than 4,000,000 MWh of electricity is not less than the percentage of all customers in Tennessee served by those Eligible Entities, how should TDEC OEP define “customer” (i.e., by meter or population based)?

## Technical Assistance / Administration

- In Year 1, the State intends to utilize the 5% allowed for administrative and/or technical assistance to support stakeholder engagement, program design and implementation, project evaluation, and program/project oversight.
- The State intends to engage the services of Oak Ridge National Laboratory, as the Lab has significant expertise in tracking customer-level outages, grid resilience modeling, and infrastructure interdependence analysis, a history of working with TVA and various local power companies in TN, and great familiarity with the transmission and distribution grid in TN. This expertise will be leveraged to provide technical assistance, particularly in the following areas: 1) data-driven analysis of outages; 2) engaging with stakeholders to establish metrics, data exchange, and interoperability considerations; and 3) analyses to evaluate mitigation technologies before and after deployment.

# Public Notice and Hearing Timeline

- Public notice August 15, 2022
- Public Hearing September 15, 2022

Public comment period ends at  
5 pm CDT on October 17, 2022

The logo consists of the letters 'TN' in a white, bold, sans-serif font, centered within a red square. Below the square is a thin blue horizontal bar.

# Questions?

- Questions asked during this time are informal and not considered official comments for the record.
- Only comments made during the formal public hearing immediately following will be considered part of the formal record.
- In-person questions will be addressed first, followed by questions typed into the chat box, followed by questions from call-in attendees.

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# Formal Public Hearing

**Draft Program Narrative for the Grid Resilience Formula  
Grant Program under the Infrastructure Investment and Jobs  
Act (IIJA)**

# Procedural Overview

- Please sign in so we have a record of your participation and to receive updates on the Program.
- If attending via Webex, sign in by typing your contact information in the chat to the Webex host.
  - Please include
    - Name
    - Organization you are Representing (or private citizen)
    - Email Address
    - How you heard about hearing (paper, email, website)
    - Whether or not you wish to comment
    - Gender – optional
    - Race/Ethnicity - optional
    - Organization Zip Code (if applicable) - optional



# Procedural Overview

- This evening's hearing will be recorded via Webex.
- The moderator will limit the length of oral comments to **5 minutes** to allow all parties an opportunity to speak and will require that all comments be relevant to the draft Program Narrative and/or prompted questions from TDEC.
- All public comments bear the same weight.

# Procedural Overview

- If you do not wish to comment today you may submit comments until 5 pm CDT on **October 17, 2022**.
  - Submit written comments to a TDEC staff member before the end of the hearing
  - Email written comments to [TDEC.OEP@tn.gov](mailto:TDEC.OEP@tn.gov)
  - Mail written comments to  
TN Department of Environment & Conservation  
Office of Energy Programs  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 2nd Floor  
Nashville, Tennessee 37243
  - Submit verbal comments by calling TDEC OEP at 615-741-2994 and asking for Audrey Jackson



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# Comments?

- Before sharing comments, please clearly state your name, affiliation, and, if you are a virtual participant or have called into the hearing, your physical location.
- Please limit your oral comments to **5 minutes**.
- In-person comments will be addressed first, followed by comments typed into the chat box, followed by comments from call-in attendees.

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Thank you!

*TDEC thanks you for your participation  
and attendance at today's hearing.*