

# Tennessee Grid Resilience State Formula Grant Program - Request for Concept Papers

**Program Scope:** The Infrastructure Investment and Jobs Act (IIJA) section 40101(d) <u>Grid Resilience Formula Grant Program</u> (Program) seeks to improve the resilience of the electric grid against disruptive events. IIJA section 40101(a)(1) defines a disruptive event as "an event in which operations of the electric grid are disrupted, preventively shut off, or cannot operate safely due to extreme weather, wildfire, or a natural disaster." The Program was designed by the U.S. Department of Energy to strengthen and modernize the power grid against extreme weather, wildfires, and other natural disasters.

Administration, Funding, and Eligible Applicants: The Tennessee Department of Environment and Conservation's Office of Energy Programs (TDEC OEP) is the lead administrator of the Program in Tennessee. TDEC OEP is requesting Concept Papers from electric distribution providers in Tennessee (i.e., municipal electric power providers, consumer-owned electric cooperatives, and investor-owned utilities) for eligible grid resilience projects. A subsequent competitive solicitation of project proposals will make available an expected \$22 million in funding for eligible applicants, representing four years of federal funding from the five-year program. Under this solicitation, TDEC OEP expects to award 10-60 total projects, with projects ranging in size from approximately \$500,000-\$3,000,000 each. Please note that subawards funded under the Program will be subject to all applicable federal, State, and local statutes, rules, and regulations, including, but not limited to, the Build America Buy America (BABA) Act, Davis Bacon and Related Acts (DBRA), the National Environmental Policy Act (NEPA), the National Historic Preservation Act, Title VI, State and local construction and permitting requirements, and local zoning regulations.

**Cost Match:** IIJA Section 40101(h)(1) and (h)(2) require that in addition to the 15% Cost Match to be provided at the recipient/state level (IIJA Section 40101(d)(8)), large utilities that sell more than 4 million megawatt hours per year must provide cost match at a minimum of 100 percent of the total subaward, and small utilities that sell 4 million megawatt hours or less per year must match no less than 1/3 of the total subaward.

Eligible Activities: IIJA Section 40101(e) prescribes the following eligible activities:

- Grid-related weatherization technologies and equipment (i.e., weatherization of grid components and systems, and not the weatherization of a facility or building);
- Fire-resistant technologies and fire prevention systems;
- Monitoring and control technologies;
- Undergrounding of electrical equipment;
- Utility pole management;
- Relocation of power lines with low-sag, advanced conductors;
- Vegetation and fuel-load management;
- Use or construction of distributed energy resources for enhancing system adaptive capacity during disruptive events, including microgrids and battery-storage subcomponents;<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Please note that new electric generating facilities (e.g., solar facilities) are not allowable under the Program. Energy storage systems, e.g. batteries, are allowable if the system is used to improve grid resilience during disruptive events.



- Adaptive protection technologies;
- Advanced modeling technologies;
- Hardening of power lines, facilities, substations, other systems;
- Replacement of old overhead conductors and underground cables; and,
- In combination with any of the above activities, the training, recruitment, retention, and/or reskilling of skilled and properly credentialed workers to perform proposed work.

**Concept Papers:** Submission of the Concept Paper is the first step in applying for Program funding. As noted above, eligible applicants include distribution providers in Tennessee (i.e., municipal electric power providers, consumer-owned electric cooperatives, and investor-owned utilities).

Eligible applicants are limited to one Concept Paper each; however, multiple activities or project types may be combined and included within a single Concept Paper. Eligible applicants may also partner as a consortium to submit a single Concept Paper covering projects across multiple distribution service territories, provided that a lead organization is designated and that lead organization agrees to serve as the prime subrecipient, if awarded. **Concept papers will be evaluated based on applicant eligibility, eligibility of proposed activities, demonstration of need (e.g., grid resilience need, financial need, critical facility need, etc.), project budget, and project schedule. Full proposals from applicants that did not submit a Concept Paper will not be accepted.** 

After completing a comprehensive, merit-based review of all complete Concept Papers received, TDEC OEP will encourage selected entities to submit a full proposal. Concept Papers must include all the information indicated below to be considered complete. **Concept Papers should be submitted electronically to TDEC.OEP@tn.gov no later than September 24, 2025.** Successful applicants will be notified of their invitation to submit a full proposal by **October 31, 2025.** Applicants that are not encouraged to submit a full proposal will be notified of TDEC OEP's decision no later than **October 31, 2025.** Questions about the Concept Paper can be directed to TDEC.OEP@tn.gov.

### A. Applicant / Contact Information

Organization Name

Organization Type (i.e., Municipal Electric Power Provider, Consumer-Owned Electric

Cooperative, or Investor-Owned Utility)

Number of Meters Served (Inclusive of all Customer Types)

Approximate Service Territory Size (Square Miles)

Electricity Sold in Calendar Year 2024 (in Megawatt Hours)

Address

City

State

Zip Code

Phone Number

Website (if Applicable)



# Project Manager / Responsible Administrator

First Name

Last Name

Title / Role

Address

City

State

Zip Code

Phone Number

**Email Address** 

# B. Project Description (limit to 2,500 words, 8.5x11 paper size, 12-point font, black font, and standard margins)

**Project Title** 

Project Location(s) (county(ies), zip code(s), and census tract(s))

Partners / Cooperating Distribution Providers (if applicable)

Consortium Concept Papers will be considered, provided that:

- One eligible applicant agrees to serve as the project lead and prime subrecipient for the project, and
- Participating, eligible organizations in the consortium commit to provide commensurate cost match for their portion of the project, based on their organization size. (Large utilities that sell more than 4 million megawatt hours per year are required to match at a minimum of 100 percent of the total subaward request. Small utilities that sell 4 million megawatt hours or less per year are required to match no less than 1/3 of the total subaward request.)

### Project Description, to include:

- Proposed Activities
  - Proposed activities must be included in the list of eligible activities prescribed by IIJA Section 40101(e). More than one eligible activity may be proposed for a single project. For consortium projects, the primary applicant may also request funding for administrative and/or technical assistance related costs, not to exceed 5 percent of the total subaward request.
- Demonstration of Need
  - Examples include, but are not limited to, deferred maintenance stemming from insufficient funds; grid disruptions from recent extreme weather, wildfire, or a natural disaster; reliability/resilience issues; demonstrated lack of grid situational awareness; and/or critical infrastructure that is vulnerable and in need of hardening.
- Outage Frequency and Duration Baseline Metrics



Detail the 3-year rolling 12-month average SAIDI<sup>2</sup> and SAIFI<sup>3</sup> (major events excluded) for the proposed project site and/or affected service area.

- Proposed Deliverables
   Provide an estimated inventory of the project's proposed infrastructure
   incompared to a provide an effect of the project of the project
  - improvements (e.g., number of new utility poles to be installed, miles of line to be reconductored, acres of vegetation control within the utility right-of-way, etc.).
- Anticipated Resilience Benefits
  - Describe the projected improvements to the system's performance on "black sky" days (days with major disruptive events) (e.g., fewer outages, quicker restoration times, a reduction in the number of affected customers, etc.), including how such will be measured, tracked, and reported following project completion. Include information regarding anticipated benefits to critical infrastructure (e.g., hospitals, water/wastewater treatment facilities, emergency shelters, transit), if known.
- Project Benefit Types: What category of Project Benefit Type(s) is this project concept categorized as? (Indicate all relevant categories)
  - o Preventing Initial Outages
  - o Preventing Cascading Outages
  - Providing Contingency Power
  - o Reducing Restoration Time
  - Adding System Redundancy
  - Adding System Reconfiguration Capability
  - Supporting Islanded Operations
  - Replacing Aging Infrastructure
  - Other:
- Anticipated Reduction in Outages and/or Costs
  - (e.g., anticipated reduction in outages for customers in areas that are more susceptible to electric power outages, lower cost to the distribution provider due to improved resilience, avoided costs due to fewer maintenance calls, etc.).
- Anticipated Public Engagement
   Provide detail on any potential, planned education and outreach efforts within the applicant's service territory (e.g., public meetings, stakeholder working groups, steering committees, etc.).
- Workforce Development: Indicate if any requested grant funding will be used for training, recruitment, retention, or reskilling of project workers required for the proposed project (optional)
  - Examples include number of workers expected to be trained and/or upskilled, apprenticeship programs, etc.

<sup>&</sup>lt;sup>2</sup> SAIDI – (System Average Interruption Duration Index): Measures average outage duration time (by minutes) for every customer served during reporting period.

<sup>&</sup>lt;sup>3</sup> SAIFI – (System Average Interruption Frequency Index): Measures average frequency of power interruptions for every customer served during reporting period.



Some project concepts are eligible for Categorical Exclusions (CX) from NEPA
 Environmental Assessment or NEPA Environmental Impact Statement requirements.
 Do you anticipate that your proposed project would fall under a defined U.S.
 Department of Energy (DOE) CX? If so, detail the relevant CX. A full list of U.S. DOE
 CXs can be found here: 10 CFR Part 1021.pdf (energy.gov).

For the Project Description, metrics, data, and any relevant citations to support claims, estimates, or projections should be provided.

### C. Budget

Estimated Total Project Cost

For Concept Papers representing a consortium, a separate budget for each participating entity's project must be provided.

**Anticipated Subaward Amount Requested** 

Amount of Cost Match to Be Provided and the Source of Match Funds (e.g., cash, in-kind)
Provide a brief explanation of how cost estimates were determined (limit to 250 words)
Describe how the budget was developed, including how costs were assigned, if cost estimates were requested, how match values were determined, and any other pertinent information.

#### D. Schedule

Proposed project schedule

Grantees will have a three-year period of performance to complete their projects, with nocost extensions to be considered on a case-by-case basis. The period of performance, including any extensions, will not exceed five years under any circumstance.

Detail the estimated timeframe to complete the project. If the proposed project schedule exceeds three years, provide a justification (e.g., supply chain delays, staff training needs, seasonal limitations).

Estimated start date, relative to the execution of the subaward (e.g., immediately upon receipt of the subaward, within one quarter of receipt of the subaward, within one year of receiving the subaward).

Estimated lifespan of proposed activities (e.g., projected service life of components or infrastructure to be installed, duration of anticipated resilience improvements, etc.)