

DRAFT Program Narrative

GRID Resilience Formula Grant Program for Oklahoma

The [Grid Resilience Grant Program](#) (GRID), or *Preventing Outages and Enhancing the Resilience of the Electric Grid / Hazard Hardening* funded through Section 40101(d) of the Infrastructure Investment and Jobs Act (IIJA), also known as the [Bipartisan Infrastructure Law](#) (BIL), will be administered through the Oklahoma Department of Commerce (ODOC), per designation of the Governor of the State of Oklahoma.

Through GRID, the U.S. Department of Energy (DOE) will provide \$2.5 billion in formula grants to states and tribes for the purpose of improving the all-hazards resilience of electric grids. Oklahoma is projected to receive \$7,653,810 in Year 1 and \$7,508,563 in Year 2 for a total of \$15,162,373.

This draft narrative outlines Oklahoma's initial program implementation plan, including: 1) overall program goals, 2) objectives and metrics, 3) eligible resilience measures for projects, 4) the methods and criteria used for selecting and determining sub-awards for Eligible Entities, as well as the 5) distribution of funding to Eligible Entities. There is an appendix of definitions at the end of the narrative. This plan is in alignment with the program narrative requirements as provided by DOE in the [Administrative and Legal Requirements Document](#).

GRID PROGRAM OVERALL GOALS:

- To strengthen and modernize America's power grid against wildfires, extreme weather, and other natural disasters that are exacerbated by the climate crisis.
- To improve the resilience of the electric grid against disruptive events "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."¹

OBJECTIVES AND METRICS:

ODOC has identified the following draft objectives and their accompanying metrics:

Objective 1: Improve the reliability of Oklahoma's electric grid by reducing the frequency and duration of sustained interruptions and the number of customers impacted, especially for customers that experience higher than average frequency and duration of outages.

Metrics for 1²:

1. Number of customers anticipated to be impacted by the proposed project (both total number and as a percentage of a utility's total customer base).

¹ GRID Administrative and Legal Requirements Document [file:///C:/Users/234971/Downloads/FundOpp_DE-FOA-0002736_Amd_000004%20\(6\).pdf](file:///C:/Users/234971/Downloads/FundOpp_DE-FOA-0002736_Amd_000004%20(6).pdf)

² Metrics 2 – 4 are based on DOE Mini-Guide #2, Planning Objectives and Metrics for Integrated Distribution Planning Processes, April 18, 2022:

netl.doe.gov/sites/default/files/netlfile/Planning%20Objectives%20and%20Metrics%204.18.2022.pdf and the Institute of Electrical and Electronics Engineers (IEEE) 1366 Standard: <https://ieeexplore.ieee.org/document/6209381>

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

Objective 2. Promote Grid Equity – Ensure that benefits from these GRID funds are distributed equitably to Oklahomans, particularly for communities that are more susceptible or vulnerable to electric power outages and those defined under the Justice 40³ eligibility criteria.

Metrics for 2:

1. A description on how selection of resilience measure(s) for project will / did benefit vulnerable or disadvantaged communities in service area.
2. A description on strategies used to ensure all customers in service areas are positively impacted by grid resiliency efforts, especially those in vulnerable or disadvantaged areas.
3. Percentage of overall funds provided to subrecipients serving Vulnerable Communities⁴
4. Vulnerable SAIFI = total number of Vulnerable Community customers interrupted/total number of Vulnerable Community customers served
5. Vulnerable SAIDI = sum of Vulnerable Community customer interruption durations/total number of Vulnerable Community customers served
6. Vulnerable CAIDI = sum of Vulnerable Community customer interruption durations/total number of Vulnerable Community customers interrupted

³ Justice 40 <https://www.whitehouse.gov/environmentaljustice/justice40/>

⁴ See definitions section

Objective 3. Support the State's Grid Workforce – Strengthen the workforce that is responsible for implementing grid reliability and resilience projects, potentially via offering professional training and/or workforce development opportunities and consider any other efforts contributing to help Oklahoma attract, train, and retain an appropriately skilled workforce in the Grid Resilience Utility and Industry.

Draft Metrics for 3:

1. Number of workers employed to execute awarded projects;
2. Of all workers employed to execute awarded projects, percentage of workers that come from Vulnerable Populations;
3. Number of local businesses or vendors employed to execute projects funded by this Program;
4. Of all local businesses or vendors employed to execute projects funded by this Program, percentage of businesses located in Vulnerable Communities;
5. Number and description of labor standards used for direct employees, contractors, and subcontractors (e.g., project labor agreements, local hire agreements, etc.);
6. Average hourly wage or rate, by worker type, employed on the proposed project;
7. A description of engagement of potential training partners to support utility-related workforce development efforts, including any efforts to include opportunities for underrepresented or historically excluded workers, and those displaced by the energy transition across the state.

ELIGIBLE RESILIENCE MEASURES

In order to meet the program objectives described above, and DOE's program goals, ODOC will make grant awards to Eligible Entities (described in following section), at amounts not to exceed \$2,400,709, to complete the following resilience measures in their service area. Small utilities (those that sell 4,000,000 MWh in electricity or less per year) may only receive \$750,000 in awards or less. However, partial projects may also be awarded should the highest scored applications request less than the maximum award allowed for their eligibility type. More information on the application process can be found in the next section.

- weatherization technologies and equipment
- fire-resistant technologies and fire prevention systems
- monitoring and control technologies
- utility pole management
- the relocation of power lines or the reconductoring of power lines with low-sag, advanced conductors
- vegetation and fuel-load management
- the use or construction of distributed energy resources for enhancing system adaptive capacity during disruptive events, including microgrids and battery-storage subcomponents

- adaptive protection technologies
- advanced modeling technologies
- hardening of power lines, facilities, substations, of other systems
- the replacement of old overhead conductors and underground cables
- training, recruitment, retention, and reskilling of skilled and properly credentialed workers

under the Program.

METHODS AND CRITERIA USED FOR SELECTING AND DETERMINING SUB-AWARDS

As mentioned in the previous section, ODOC is planning to release a competitive Request for Application (RFA) in order to solicit applications. The following types of Eligible Entities will be allowed to apply:

1. electric grid operators;
2. electricity storage operators;
3. electricity generators;
4. transmission owners or operators;
5. distribution providers, and;
6. fuel suppliers.

In addition to Eligible Entities, there will also be eligible types. Entities may fall into the small utility company type subaward⁵ or into the general type subaward. Those who qualify under general may apply for up to a \$2,400,709 project award while those who fall into the small utility company are only qualified to receive a maximum of \$750,000 in project award funding.

While all who may be eligible under Section 40101(d) can apply, ODOC will give preference to Eligible Entities that directly provide electricity to the public and who are considered a public utility or independent electric cooperative. Priority will also be given to Eligible Entities who serve rural Oklahoma residents. ODOC will be defining what is considered rural at a later date.

Once applications have submitted, ODOC will conduct a comprehensive review of all complete and eligible grant applications, including all required supporting documentation. In accordance with the abovementioned objectives, selection of awards to Eligible Entities will be informed by a variety of criteria, including but not limited to:

- Potential of the project to minimize the frequency and duration of power outages;
- Potential benefits that would impact Communities identified as disadvantaged or vulnerable under the Justice40 Act;
- 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

⁵ See definitions

- The location of the project (the project must be located within the State of Oklahoma or tribal land.)
- Strength and thoroughness of proposed plan for reporting on the required metrics

ODOC will convene a stakeholder working group, seeking representatives from local power companies (large, small, municipally owned, cooperatively owned, rural, and urban), the Oklahoma Corporation Commission, the Oklahoma Association of Electric Cooperatives, urban and rural local governments, and other State Agencies, including the Oklahoma Construction Industries Board. This working group will guide and influence the development of key program design decisions, including the potential prioritization of eligible resilience measures to be funded under the program. Further, 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.

DISTRIBUTION OF FUNDING

ODOC plans to take five percent (5%) of the funds for administrative costs at ODOC. The remaining amount of funds will be distributed to subawards. According to the GRID grant guidance, not less than a certain amount⁶ of the total federal formula funds to the state each year must be allocated to small utilities⁷, based on the number of customers in Oklahoma served by small utilities (those that sell not more than 4,000,000 MWh of electricity per year). This percentage of customers served by small utilities has not yet been determined. In order to determine these numbers, ODOC will be looking to work with local power companies and the Oklahoma Association of Electric Cooperatives to confirm the definition of “customer” and the percentage of all customers in Oklahoma that are served by small utilities and the number of small utilities. Small utility awards cannot exceed \$750,000.

Cost Matching Requirements⁸

- Small utilities are required to provide a cost match of at least one-third (1/3) the amount of federal funding.
 - For example, a small utility receiving a \$750,000 federal award shall provide \$250,000 in cost match.
- General Eligible Entities are required to provide a cost match of at least 100% of the amount of federal funding.
 - For example, a utility receiving a \$1,000,000 federal award shall provide \$1,000,000 in cost match.

PUBLIC HEARING

ODOC will hold a public hearing on February 22, 2023, at the Oklahoma Department of Commerce, 900 N. Stiles, OKC OK 73104 in Conference Room 1:1 at 11:00 AM and on Zoom. Written comments concerning ODOC’s use of the Grid Resiliency funds may be submitted to the Oklahoma Department of Commerce, Community Development, 900 N. Stiles Ave., Oklahoma City, OK 73104, or by email to Linda Goode at Linda.Goode@okcommerce.gov. Public comment

⁶ This amount is still being determined.

⁷ See definitions

⁸ Section 40101(d)(8)

on the narrative will be received from February 8 – March 1, 2023. Comments received after 5:00 PM, March 1, 2023, will not be accepted.

Appendix of Definitions for Grid Public Hearing Program Narrative

Disadvantaged Community⁹ DOE's working definition of disadvantaged is based on cumulative burden and includes data for thirty-six (36) burden indicators collected at the census tract level.

⁹ <https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5>

These burden indicators can be grouped across the following four categories (the numbers in parenthesis are the number of indicators in each category):

Fossil Dependence (2)

Energy Burden (5)

Environmental and Climate Hazards (10)

Socio-economic Vulnerabilities (19)

Disruptive Events¹⁰ means 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.

Eligible Entity¹¹ – is defined as, an electric grid operator, an electricity storage operator, an electricity generator, a transmission owner or operator, a distribution provider, a fuel supplier

Grid Resiliency¹² – For purposes of the aforementioned program, ODOC will use the term Grid Resiliency. Grid resiliency is the ability to withstand grid stress events without suffering operational compromise or to adapt to the strain so as to minimize compromise via graceful degradation. It is in large part about what does not happen to the grid or electricity consumers.

Natural disaster is any hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, drought, fire, or other catastrophe in any part of the United States which causes, or which may cause, substantial damage or injury to civilian property or persons.

Power line¹³ is a transmission line or a distribution line, as applicable.

Program¹⁴ shall mean the Grid Resilience Formula Grant Program established under the Infrastructure Investment and Jobs Act Section 40101 on Preventing Outages and Enhancing the Resilience of the Electric Grid.

Small Utility Company¹⁵ - Small utility means a public utility and all affiliates of the public utility that collectively serve fewer than 20,000 customers. For purposes of this definition, a customer means the party responsible for payment of the utility services.

Vulnerable Community – For purposes of the aforementioned program, ODOC is defining vulnerable communities as those who fall into at least one of the following categories:

- An area designated as a disadvantaged community (DAC) by the White House Council on Environmental Quality (CEQ) via its Climate and Economic Justice Screening Tool

¹⁰ Definition set forth in [IIJA Section 40101](#)

¹¹ Definition set forth in [IIJA Section 40101](#)

¹² Definition set forth in [IIJA Section 40101](#)

¹³ Definition set forth in [IIJA Section 40101](#)

¹⁴ Definition set forth in [IIJA Section 40101](#)

¹⁵ Definition set forth in [IIJA Section 40101](#)

(CEJST)¹⁶.

- An area that is evaluated as high risk for natural hazards, as determined by the Federal Emergency Management Agency (FEMA) Multiple Hazard Index for United States Counties¹⁷.
- An area that houses high populations of electricity-dependent Oklahomans, particularly those who require electricity to operate medical devices and/or keep medications and treatments at prescribed temperatures¹⁸.

¹⁶ <https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5>

¹⁷ <https://fema.maps.arcgis.com/home/item.html?id=800f684ebadf423bae4c669cb0a1d7da>

¹⁸ <http://fema.maps.arcgis.com/home/item.html?id=ba426da1e48d4026a1299a007ed2b1f1>