

Bipartisan Infrastructure Law - SECTION 40101(d) – PREVENTING OUTAGES AND ENHANCING THE RESILIENCE OF THE ELECTRIC GRID FORMULA GRANTS

**State of Alaska
Alaska Energy Authority (AEA)
Submission Deadline: April 9, 2024**

Program Narrative

Under the authorizing statutes of Section 40101(D) of the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), and as authorized by the Office of Governor Michael Dunleavy of the State of Alaska, the Alaska Energy Authority (AEA) has been selected as the sole eligible applicant charged with administering subaward grants to eligible entities. Accordingly, this Program Narrative is provided by the AEA, which is serving as the official designated applicant applying for funding as apportioned directly to the State of Alaska, under the U.S. Department of Energy's IIJA Preventing Outages and Enhancing the Resilience of the Electric Grid Formula Grant Program.

1. Objectives and Metrics:

AEA has established the following four objectives and supporting metrics to guide decisions involving resilience investments made in conjunction with this grant.

Objective #1: Reduce the likelihood and consequences of natural hazard events (e.g., winter storms, extreme temperatures, wildfires, floods, earthquakes, landslides, etc.) causing disruption to normal grid operations and critical facilities within Alaska's most populated and economically vital communities.

Metrics (Provisional):

- Electric system reliability as measured by one of the four main IEEE 1366 metrics by which electric system reliability is measured: SAIDI, SAIFI, CAIDI, and MAIFI.
- Total number of incidents of power disruption caused by a natural hazard each year as compared to the average number of incidents within the past 10 years (total reduction of incidents after grant investment).

Objective #2: Equip Alaska's most populated and economically vital communities with modernized grid infrastructure. Grid improvements will enhance energy resilience, increase electrification, and address other evolving system needs over the coming decades.

Metrics (Provisional):

- Total project expenditures on 69kVa equipment (transmission lines or substations) or higher, reported as a percentage of total resilience expenditures.
- Miles of transmission lines and number of substations improved with resilience measures to mitigate impacts of disruptive events.
- Population served by transmission line and substation resilience improvements.
- Average age of energy asset that has been replaced or modernized on grid infrastructure.

Objective #3: Reduce the energy burden and the cost experienced by customers within disadvantaged communities or tribal lands, as well as all areas served by the resilience investment, due to inadequate electric grid infrastructure. Communities that are disadvantaged are those as identified by the U.S. Department of Energy's [Disadvantaged Communities Reporter Tool](#). The tool shows census tracts categorized as disadvantaged communities in blue and federally recognized tribal lands and U.S. territories in green. Federally recognized tribal lands and U.S. territories are considered disadvantaged communities in accordance with the Office of Management and Budget (OMB)'s [Interim Guidance](#) for the [Justice40 Initiative](#).

Metrics (Provisional):

- Average retail electric rate for residential customers in disadvantaged communities and all other areas served by the resilience investment.
- Typical monthly electric bill for residential customers for 500 kWh in disadvantaged communities and all other areas served by the resilience investment.
- Typical monthly electric bill as a percentage of community (census tract) median household income in disadvantaged communities and all other areas served by the resilience investment.

Objective #4: Increase the skilled workforce by assuring that any installed resilience measures can be operated and maintained by local workers and businesses, where possible.

Metrics (Provisional):

- Number of new, full-time equivalent (FTE) jobs created to operate and maintain grid resilience projects.
- Percentage of union vs non-union FTE jobs created to operate and maintain grid resilience projects.
- Number of apprenticeships or vocational opportunities created for members of disadvantaged communities during implementation, construction, operations, or maintenance of energy resilience projects.
- Workforce residing in state vs out-of-state for construction and operations.

2. Criteria:

Top priority will be given to resilience projects that:

- Benefit the most populated and economically vital communities.
- Address grid infrastructure vulnerabilities to flood, severe storm, and fire hazards which comprise the majority of presidentially declared disasters in Alaska and are increasing in frequencies since 1985¹.
- Serve one or more disadvantaged communities as identified by the U.S. Department of Energy's [Disadvantaged Communities Reporter Tool](#).
- Advance the economic vitality of the state through sustaining or creating good-paying jobs.

The selection of eligible entities and respective grid resilience projects will be done in accordance with AEA standardized scoring criteria, as follows:

- **Population Impacted: 30% or up to 30 points**
 1. The application should include a description of the total population served by a proposed project (no description = 0 points, less than 20,000 served = 3 points, each additional 10,000 served = 3 points with a maximum of 15 points possible).
 2. The application should include a description of how the proposed project will serve one or more census tracts defined as a disadvantaged community (no description = 0 points, each census tract is worth 3 points with a maximum of 15 points possible).
- **Risk Reduction/Resilience Effectiveness: 20% or up to 20 points**
 1. The application should include a description of how the project will reduce the current risk of disruptive events (an event in which operations of the electric grid are disrupted, preventively shut off, or cannot operate safely due to capacity constraints, redundancy and/or an equipment failure, etc. Criterion score should be based on a qualitative assessment of whether the narrative includes details regarding how the project will reduce the current risk of disruptive events; not at all = 0 points, minimally = 4 points, partially = 8 points, mostly = 12 points, entirely = 16 points, and exceeds = 20 points).
- **Extreme Weather Event Adaptation: 15% or up to 15 points**
 1. The application should include a description of the frequency and severity of extreme weather in the provider service area and how the project would mitigate the future risk of disruptive events whereby operations or the electric grid are disrupted, preventatively shut off, or cannot operate safely due to extreme weather, wildfire, or natural disaster². Criterion score should be based on a qualitative assessment of whether the narrative includes details regarding how the project will reduce future disruptive events caused by extreme weather; not at all = 0 points,

¹ <https://ready.alaska.gov/Documents/Mitigation/StatePlan/Ch08-RiskAnalysis.pdf>

² 42 U.S.C. 18711(a)(1)

minimally = 3 points, partially = 6 points, mostly = 9 points, entirely = 12 points, and exceeds = 15 points.

- **Data Sources: 5% or up to 5 points**

1. The application should include a description of where the project is documented in a data-driven planning document and/or has been identified as a provider priority via a board priority/resolution related to system resiliency, and supporting documentation is referenced and/or the location of any supporting data or narratives is linked to the application or attached (not included = 0 points, included = 2 points).
2. The application should reference any climate change model that highlights changes to the future physical environment including impacts to the safety and reliability of providing energy to utility customers (reference excluded = 0 points, reference included = 3 points).

- **Implementation Measures: 15% or up to 15 points**

1. The application should include a detailed project schedule that includes design, permits, site control, and construction timeframe breakouts.
 - a. The application schedule should indicate whether the project will go to construction within the desired 5-year period of performance. (construction timeframe not addressed = 0 points, construction is not proposed within the 5-year period of performance = 0 points, construction is proposed within the 5-year period of performance = 5 points).
 - b. The application schedule should include an appropriate level of detail and proposed timeframes should be adequate and reasonable (details and timeframes are not included = 0 points, schedule details and proposed timeframes are not adequate and reasonable = 0 points, schedule details and proposed timeframes are adequate and reasonable = 5 points).
2. The application should include a reasonably specific and/or detailed explanation of the extent to which an eligible entity plans to utilize project labor agreements, local hire agreements, and/or has or will develop a plan to attract, train, and retain a local workforce including minority/women owned businesses (explanation excluded = 0 points, specific/detailed explanation included = 5 points).

- **Community Engagement: 5% or up to 5 points**

1. The application should reference any utility public outreach plan for electronic and/or in-person stakeholder and public outreach associated with identification and development of the project (reference excluded = 0 points, reference included = 5 points).

- **Leveraging Partnerships: 10% or up to 10 points**

1. The application should include letters of support from partner organizations (letters of support excluded = 0 points, letters of support included = 2 points)
2. The application should include a description of how the applicant will provide matching funds (e.g., in-kind and/or cash contributions) that are equal to 1/3 or

more of the federal share of the project cost (non-federal matching funds equal to 1/3 of federal share = 4 points, every 5% greater than 1/3 of federal share = 1 additional point with a maximum of 8 points possible).

Alaska is served by small electricity utility providers that sell less than 4,000,000 megawatt hours of electricity per year. Accordingly, AEA anticipates sub-grantee awards will be issued to eligible entities that sell not more than 4,000,000 megawatts per year.

2. Methods:

AEA anticipates issuing a competitive solicitation for grant applications. The competitive solicitation period will be no less than 45 days in duration, and will be publicly advertised via AEA's website and media advisories to industry advocacy groups. Additionally, AEA will issue email notifications to its subscriber base. AEA's grants coordinator will be responsible for accepting applications, coordinating communications with applicants, and posting any changes or clarifications to the solicitation.

AEA's Planning Manager is responsible for coordinating the evaluation of all applications received through the competitive solicitation each year. Please refer to the **2. Criteria** section for the proposed scoring evaluation criteria, which align with AEA's stated objectives under **1. Objectives and Metrics**.

AEA anticipates requiring sub-grantees to submit quarterly status reports throughout the project performance period. This will be done to maintain updated data on project delivery and to collect the metrics as outlined in **1. Objectives and Metrics**. Additionally, AEA anticipates completing a project audit two years after project closeout.

3. Funding Distribution:

Eligible Entities to Apply

The proposed competitive solicitation process will be open to the following eligible entities holding a certificate of public convenience and necessity (CPCN) as issued by the Regulatory Commission of Alaska (RCA):

- a) an electric grid operator;
- b) an electricity storage operator;
- c) an electricity generator;
- d) a transmission owner or operator; or a State owner of transmission or generation assets without a CPCN;
- e) any other relevant entity, as determined by the Secretary (of DOE).

Additionally, AEA will accept joint applications comprised of one or more of the above eligible entities for a specific project. An eligible entity may submit no more than three grant applications under the competitive solicitation, inclusive of both single applications and joint applications with a group of eligible entities.

Minimum Grant Amount and Performance Period

AEA has established a minimum grant award amount of \$2 million. Awarded projects must start construction and preferably complete construction within a 5-year performance period. The period of performance may be extended to span the amount of time necessary for sub-grantees to complete all subaward project efforts, up to a maximum of 10 years, inclusive of the initial 5-year period, at the sole discretion of AEA and subject to the approval of DOE.

Non-federal Match Requirements

Alaska is served by small electricity utility providers that sell not more than 4,000,000 megawatts per year. Accordingly, the cost match requirement for sub-grantees is 1/3 of the Federal share of the cost of each respective project. AEA will allow the match to be provided through cash or in-kind contributions in accordance with the grant requirements. This will be set-forth in the grant agreement between AEA and each respective sub-grantee.

The match amount required for a joint application will be based on the megawatt hours of electricity sold per year for each eligible entity partnering in the joint application, not the collective megawatt hours of electricity sold as a whole. Accordingly, if the partnering eligible entities of a joint application each sell not more than 4,000,000 megawatt hours of electricity per year, the required match will be one-third of the amount of the subaward.

In addition to sub-grantee match requirements, AEA will provide a 15% cost match of the Federal allocation as required by the program.

Eligible Uses of Funds

Sub-grantees may use grant awards 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;
- The use or construction of “distributed energy resources” (“DERs”) 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; and

- Replacement of old overhead conductors and underground cables.

Funding may also be used for the training, recruitment, retention, and reskilling of skilled and properly credentialed workers in order to perform the work required for the particular resilience measures listed above.

Ineligible Uses of Funds

Ineligible project types and uses of funds include the following:

- 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; and
- Cybersecurity.

4. Equity Approach:

AEA is committed to sharing and maximizing project benefits across disadvantaged communities and tribal lands by selecting projects that invest in quality jobs, generate the greatest community benefit, and promote diversity, equity, inclusion, and accessibility.

- **Quality Jobs:** As part of its selection criteria Implementation Measures (15% weight), AEA will evaluate the extent to which an eligible entity plans to utilize project labor agreements, local hire agreements, and/or has or will develop a plan to attract, train, and retain a local workforce including minority/women owned businesses. Additionally, AEA will consider job creation estimates for each project. Projects with the greatest impact on new job creation and attracting, training, and retaining a local workforce will rank the highest under the Implementation Measures selection criteria. Sub-grantees will also be required to adhere to all terms and conditions of the grant agreement, including those that pertain to prevailing wages, American-made products, and a free and fair choice to join or form a union.
- **Greatest Community Benefit:** As part of its selection criteria Population Impacted (30%), AEA will evaluate the number of residents, businesses, and disadvantaged communities and/or tribal lands served by a proposed project. Residents and businesses will be reported at the borough/municipal level utilizing U.S. Census Bureau (1) ACS 5-Year Estimates for population; and (2) Business and County Business Patterns & Nonemployer Statistics data for business and nonemployer establishments. AEA is proposing to utilize the U.S. Department of Energy's [Disadvantaged Communities Reporter Tool](#) to determine if a proposed project will serve one or more census tracts defined as a disadvantaged community. Projects serving one or more of the following will rank the highest under the Greatest Community Benefit selection criteria:
 - Serving more than 50,000 residents; and

- Serving one or more disadvantaged communities.

5. Technical Assistance and Administration:

In total, AEA proposes that 5% of the annual Federal grant fund allocation be utilized for AEA project administration and technical assistance. An AEA project manager will be assigned to assist each sub-grantee whose application is selected for subaward grant funding. AEA's project management will vary according to the project management plan developed under the grant agreement with the goal of safeguarding Federal and State investment in the project. At a minimum, the AEA project manager will clarify grant requirements, review progress reports and billing, and review and accept deliverables of the grant project. The project management plan developed under the grant agreement may have sub-grantees self-manage the awarded project or have AEA manage the project. Unless AEA is the primary project manager, sub-grantees will be required to have staff or a contractor available to perform all of the duties required to adequately manage the project. AEA's project manager will also support technical assistance as needed, which is anticipated to include a broad range of eligible entity questions regarding the application process, potential projects, reporting metrics, and so forth.

6. Public Notice and Hearing:

AEA held four public hearings and facilitated two open comment periods, as follows. All meetings were made available for both in-person and virtual attendance.

Public Hearing and Comment Period #1

- Notice of Meetings Published: August 31st, 2022
- Public Meeting #1: September 7th, 2022 @ 1PM AKST / 5PM EST
- Public Meeting #2: September 13th, 2022 @ 11AM AKST / 3PM EST
- End of Public Comment Period: September 20th, 2022

Public Hearing and Comment Period #2

- Notice of Meeting Published: December 6th, 2022
- Public Meeting #3: December 13th, 2022 @ 1PM AKST / 5PM EST
- Notice of Meeting Published: January 6th, 2023
- Public Meeting #4: January 12th, 2023 @ 10:30AM AKST / 2:30PM EST
- End of Public Comment Period: January 26th, 2023

Additionally, AEA created a [website](#) specifically concerning the 40101(d) - PREVENTING OUTAGES AND ENHANCING THE RESILIENCE OF THE ELECTRIC GRID FORMULA GRANTS TO STATES AND INDIAN TRIBES where members of the public can access updates and information regarding the program.