

Grid Modernization, Reliability, Resiliency and Transmission Projects

FY2023 Request: \$0
Reference No: 64386

AP/AL: Appropriation

Project Type: Energy

Category: General Government

Location: Statewide

House District: Statewide (HD 1-40)

Impact House District: Statewide (HD 1-40)

Contact: Curtis Thayer

Estimated Project Dates: 07/01/2021 - 06/30/2026

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Brief Summary and Statement of Need:

Funding to enable Alaska Energy Authority to pursue competitive Department of Energy grant opportunities in coordination with railbelt and rural utilities. Projects will focus on enhancing resiliency of the electric grid.

Funding:	<u>FY2022</u>	<u>FY2023</u>	<u>FY2024</u>	<u>FY2025</u>	<u>FY2026</u>	<u>FY2027</u>	<u>Total</u>
1002 Fed Rcpts							\$0
1004 Gen Fund	\$250,000						\$250,000
Total:	\$250,000	\$0	\$0	\$0	\$0	\$0	\$250,000

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input type="checkbox"/> Ongoing
0% = Minimum State Match % Required		<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	0
Totals:	0	0

Prior Funding History / Additional Information:

SCS2 changed funding to only include 250k UGF

Project Description/Justification:

\$1 million UGF for the Alaska Energy Authority (AEA) to identify, assess, coordinate, and pursue U.S. Department of Energy (DOE) funding opportunities provided through the Infrastructure Investment and Jobs Act (IIJA) related to electrical grid modernization, reliability, resiliency, and transmission. AEA is a public corporation of the State of Alaska, the state’s energy office and lead agency for statewide energy policy and program development.

Sections 40101-40107 of the Infrastructure Investment and Jobs Act (IIJA) provide DOE over \$15 billion in funding to address the resilience and reliability of the nation’s electrical power grid. The legislation includes \$5 bill to support activities to reduce electrical outages and to harden the grid against disruptive events, including extreme weather, wildfire, and natural disasters. It includes \$5 bill to fund research, development, deployment, and innovative approaches to enhance electric reliability and to harden transmission, storage and distribution infrastructure. It funds \$1 bill specifically allocated to improve, modernize, and upgrade infrastructure in rural and remote areas. The legislation directs DOE to establish a "Transmission Facilitation Program" to finance construction of transmission lines and related facilities and provides \$2.5 bill initial funding to that program. DOE would be authorized to issue loans or enter public-private partnerships to finance certain eligible transmission projects.

Some of the most critical electrical infrastructure in Alaska’s Railbelt region is aged and capacity constrained. For the past several years, the Alaska Legislature and the Regulatory Commission of Alaska have made transmission reliability and coordination among public utilities a policy priority for the state and promoted the establishment of a Railbelt Electric Reliability Organization. AEA in partnership with the five Railbelt utilities have worked to identify the highest priority opportunities to remove transmission constraints and to improve throughput, to provide redundancy, and to enhance the flexibility and cost-effectiveness of the interconnected Railbelt transmission system.

Similarly, Alaska’s rural energy infrastructure has undergone significant change over the last several decades including making significant investments in renewable energy. The state’s geographical and environmental diversity necessitate the use of microgrids provide electricity in our state’s remote regions and isolated communities. Alaska has between 200- 250 operating microgrids which make the state an excellent place to research, deploy and demonstrate innovative approaches to enhancing reliability and resiliency in this area.

AEA will coordinate with Railbelt and other electric utilities, rural power companies and other energy stakeholders, to assess, plan and pursue federal funding opportunities made available in the IIJA to upgrade, modernize, and improve electrical infrastructure in Alaska. This will be a multi-agency, public and private effort including industry partners, RCA, non-profit and public utilities, operators, suppliers, academic researchers, and local governments.