

State of Alaska
FY2023 Governor's Operating Budget

**Department of Commerce, Community, and Economic
Development**
**Alaska Energy Authority Rural Energy Assistance
Component Budget Summary**

Component: Alaska Energy Authority Rural Energy Assistance

Contribution to Department's Mission

Assist in the development of safe, reliable, and efficient energy systems throughout Alaska, which are sustainable, environmentally sound, and reduce the cost of energy in rural Alaska.

Major Component Accomplishments in 2021

Circuit Rider: In FY2021, AEA's Circuit Rider program assisted 455 eligible utilities by providing remote monitoring, training, technical consultation, including 51 instances of onsite assistance, and minor repairs to their power systems. The Circuit Rider and Technical Assistance programs provide essential preventative assistance to reduce the number of emergency responses needed due to power outages in communities.

Denali Commission: The Denali Commission is the primary federal funding partner of AEA for programs and projects. There is currently about \$35 million of Denali Commission funds in AEA rural programs. AEA also anticipate \$4 million this year for a bulk fuel project in Nunapitchuk and electrical distribution upgrades in Port Heiden. AEA expects an increase in funding in the coming year and is prepared to maximize federal funding with required state match funding.

Emergency Assistance: AEA provides power-related emergency response services to rural Alaska communities as required by Alaska Statute 42.45.900 at an annual cost of \$165,000 per year.

Maintenance and Improvement: AEA and the Denali Commission are leveraging available funding by shifting focus towards maintenance and improvement projects. The goal is to maximize the useful life of rural energy infrastructure so that fewer complete facility replacements are required. This strategy has been incorporated into both the Rural Power System Upgrade and Bulk Fuel Upgrades programs.

Rural Energy Infrastructure Projects: AEA completed the inventory and assessment of eligible rural power systems per 3 Alaska Admin Code 108.110 (c), (d), and (e). In addition to the normal gathering and assessment of technical data full three-dimensional (3D) imagery of the power generation facility was captured. AEA now uses three-dimensional imaging (3D) and Geographic Information System (GIS) software to capture imagery, collect measurements, and process data to create, edit and share 3D renderings or rural power systems. This will be used for construction management, operator training, and remote assistance. The 3D platform enables AEA project managers to track key project milestones and immediately assess project information. The targeted result is accelerated productivity, decision-making, and cost savings.

Due to the success of Rural Power System Upgrade inventory and assessment program, the Denali Commission is funding AEA's effort to undertake a similar inventory and assessment program for eligible bulk fuel facilities per 3 Alaska Admin Code 108.110 (b), (d), and (e). This will be a multi-year effort and provide accurate information regarding the condition of bulk fuel facilities which will enable the same benefits realized from the power systems inventory and assessment. Major projects were completed in Akhiok, Twin Hills, Tatitlek, and Port Heiden.

Technical Assistance: AEA provided planning and technical assistance to communities by reviewing resource-specific project plans; providing feedback to communities exploring energy generation and efficiency options; analyzing community energy use; providing building energy audits; evaluating financing options for project development; helping to complete federal award applications; and providing technical assistance as needed to support community participation in the Power Cost Equalization program.

Training Programs: AEA's Rural Training Program trains community operators on skills to operate their energy infrastructure, helping utilities keep their facilities code-compliant and sustainably managed. In FY2021, 18 operators earned a certification for completion in Bulk Fuel Operations and 18 operators for Power Plant Operations from 23 communities. AEA conducted these training courses at the Alaska Vocational Technical Center in Seward, Alaska. An additional 22 communities received on-site itinerant training in bulk fuel operations. Due to the COVID-19 pandemic several classes were canceled.

Key Component Challenges

Bulk Fuel Upgrades: The Bulk Fuel Upgrade program (BFU) received \$5.5 million in state funding for the first time in several years. This comes at a time when Alaska’s approximately 400 eligible bulk fuel facilities face mounting challenges from aging infrastructure and increased ocean and river erosion. The current amount of funding does not allow for the timely replacement of existing facilities. The deferred maintenance for BFU is estimated at approximately \$800 million.

Community Turnover and Training Challenges in Rural Workforce: The turnover of trained energy infrastructure operators and managers presents a challenge to the successful operation of utilities, power plants, and bulk fuel facilities. Considerable time and expense go into the training of local personnel who often do not continue to be employed in the positions for which they were trained. Lack of funding due to improper utility management, leaving the community to use the new skills elsewhere, and migration to larger population centers all impact the longevity of the trained workforce. New options need to be explored including a secondary operator model, regionalized local circuit rider funding, and contracted operations and maintenance.

COVID-19 Impacts: The COVID-19 pandemic has impacted AEA projects and programs in several ways. Project schedules and budgets are affected primarily through increased travel difficulty and the loss of transportation in rural Alaska. There are fewer air carriers and flights. The requirements of communities differ and change frequently. This has increased the cost of logistics and delayed schedules. The Rural Power System Upgrade program Inventory and Assessment project schedule have slipped a year because of the difficulty in traveling to the 185 eligible communities. The Circuit Rider program and training programs have also experienced delays and increased costs due to the requirement of some communities to have a negative COVID-19 test within three days of travel. Additional communities have required a resolution from the tribal council approving travel.

Maintenance of Rural Infrastructure: Properly maintained energy infrastructure has a useful life of 20 years or more. Improper maintenance shortens the useful life of rural power plants, electrical distribution, and bulk fuel facilities. AEA is addressing this issue through increased Circuit Rider visits and expanded training for power plant operators, bulk fuel operators, and utility managers. This training takes place at the Alaska Vocational Technical Center in Seward, Alaska as well as itinerant training in the communities. Currently, the Denali Commission provides almost all of the funding for these efforts.

Rural Program Sustainability/Long-Term Federal Funding Stability: AEA’s rural programs support about 195 rural communities. While AEA has increased Maintenance and Improvement projects and training programs to assist rural utilities and communities to maximize the useful life of their energy infrastructure, the unmet funding need to maintain the energy infrastructure in rural Alaska grows each year. For the Rural Power System Upgrade program, the unmet deferred maintenance is approximately \$300 million. For the Bulk Fuel Upgrade program, the unmet deferred maintenance is \$800 million. If state and federal funds decline for the Rural Power System Upgrade program critical energy infrastructure that operates and wears out every day will not get built or upgraded, nor will it be optimally maintained. For the Bulk Fuel Upgrade program, it means communities are left with aging fuel tanks that may not meet the capacity needs of the community or are at risk of leaks, contamination, and/or failure.

Significant Changes in Results to be Delivered in FY2023

No significant changes are anticipated.

Statutory and Regulatory Authority

AS 42.45	Rural and Statewide Energy Programs
3 AAC 106	Loan Programs
3 AAC 107	Grant Programs
3 AAC 160	Rural Development Assistance and Bulk Fuel Storage Facility Grant Programs

Contact Information

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Component Detail All Funds
Department of Commerce, Community, and Economic Development

Component: Alaska Energy Authority Rural Energy Assistance (2600)
RDU: Alaska Energy Authority (453)

Non-Formula Component

	FY2021 Actuals	FY2022 Conference Committee	FY2022 Authorized	FY2022 Management Plan	FY2023 Governor	FY2022 Management Plan vs FY2023 Governor	
71000 Personal Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
72000 Travel	57.3	104.8	104.8	104.8	104.8	0.0	0.0%
73000 Services	3,287.0	5,255.5	5,255.5	5,255.5	5,255.5	0.0	0.0%
74000 Commodities	35.4	48.0	48.0	48.0	48.0	0.0	0.0%
75000 Capital Outlay	13.6	10.0	10.0	10.0	10.0	0.0	0.0%
77000 Grants, Benefits	0.0	100.0	100.0	100.0	100.0	0.0	0.0%
78000 Miscellaneous	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
Totals	3,393.3	5,518.3	5,518.3	5,518.3	5,518.3	0.0	0.0%
Fund Sources:							
1002 Fed Rcpts (Fed)	690.3	1,202.0	1,202.0	1,202.0	1,202.0	0.0	0.0%
1004 Gen Fund (UGF)	847.3	847.3	847.3	847.3	847.3	0.0	0.0%
1005 GF/Prgm (DGF)	0.0	50.0	50.0	50.0	50.0	0.0	0.0%
1007 I/A Rcpts (Other)	6.8	123.9	123.9	123.9	123.9	0.0	0.0%
1061 CIP Rcpts (Other)	1,161.3	1,767.8	1,767.8	1,767.8	1,767.8	0.0	0.0%
1062 Power Proj (DGF)	305.8	995.5	995.5	995.5	995.5	0.0	0.0%
1108 Stat Desig (Other)	0.0	150.0	150.0	150.0	150.0	0.0	0.0%
1169 PCE Endow (DGF)	381.8	381.8	381.8	381.8	381.8	0.0	0.0%
Unrestricted General (UGF)	847.3	847.3	847.3	847.3	847.3	0.0	0.0%
Designated General (DGF)	687.6	1,427.3	1,427.3	1,427.3	1,427.3	0.0	0.0%
Other Funds	1,168.1	2,041.7	2,041.7	2,041.7	2,041.7	0.0	0.0%
Federal Funds	690.3	1,202.0	1,202.0	1,202.0	1,202.0	0.0	0.0%
Positions:							
Permanent Full Time	0	0	0	0	0	0	0.0%
Permanent Part Time	0	0	0	0	0	0	0.0%
Non Permanent	0	0	0	0	0	0	0.0%

Change Record Detail - Multiple Scenarios with Descriptions
Department of Commerce, Community, and Economic Development

Component: Alaska Energy Authority Rural Energy Assistance (2600)

RDU: Alaska Energy Authority (453)

Scenario/Change Record Title	Trans Type	Totals	Personal Services	Travel	Services	Commodities	Capital Outlay	Grants, Benefits	Miscellaneous	Positions		NP
										PFT	PPT	
***** Changes From FY2022 Conference Committee To FY2022 Authorized *****												
FY2022 Conference Committee												
	ConfCom	5,518.3	0.0	104.8	5,255.5	48.0	10.0	100.0	0.0	0	0	0
1002 Fed Rcpts		1,202.0										
1004 Gen Fund		847.3										
1005 GF/Prgm		50.0										
1007 I/A Rcpts		123.9										
1061 CIP Rcpts		1,767.8										
1062 Power Proj		995.5										
1108 Stat Desig		150.0										
1169 PCE Endow		381.8										
Subtotal		5,518.3	0.0	104.8	5,255.5	48.0	10.0	100.0	0.0	0	0	0
***** Changes From FY2022 Management Plan To FY2023 Governor *****												
Totals		5,518.3	0.0	104.8	5,255.5	48.0	10.0	100.0	0.0	0	0	0

Line Item Detail (1676)
Department of Commerce, Community, and Economic Development
Travel

Component: Alaska Energy Authority Rural Energy Assistance (2600)

Line Number	Line Name		FY2021 Actuals	FY2022 Management Plan	FY2023 Governor
2000	Travel		57.3	104.8	104.8
Object Class	Servicing Agency	Explanation	FY2021 Actuals	FY2022 Management Plan	FY2023 Governor
2000 Travel Detail Totals			57.3	104.8	104.8
2001	In-State Non-Employee Travel	In-State Transportation - Transportation costs for travel relating to meetings and boards for non-employees.	57.3	88.8	88.8
2002	Out of State Employee Travel	Out-of-State Transportation - Transportation costs for travel relating to administration, meetings, boards and commissions.	0.0	16.0	16.0

Line Item Detail (1676)
Department of Commerce, Community, and Economic Development
Services

Component: Alaska Energy Authority Rural Energy Assistance (2600)

Line Number	Line Name		FY2021 Actuals	FY2022 Management Plan	FY2023 Governor
3000	Services		3,287.0	5,255.5	5,255.5
Object Class	Servicing Agency	Explanation	FY2021 Actuals	FY2022 Management Plan	FY2023 Governor
3000 Services Detail Totals			3,287.0	5,255.5	5,255.5
3000	Education Services	Training, educational conferences, agency memberships, tuition, books and fees for work-related courses.	14.6	20.0	20.0
3001	Financial Services	Accounting, auditing, management consulting, grantee monitoring, loan servicing and insurance related services.	63.8	10.0	10.0
3002	Legal and Judicial Services	Legal and judicial services, including costs to conduct hearings and transcription fees.	4.3	10.0	10.0
3003	Information Technology	Information Technology - Training, consulting, equipment and software leases, licensing and maintenance.	25.7	35.0	35.0
3004	Telecommunications	Local, long distance, and cellular telephone charges, television, data/network, telecommunication equipment, and other wireless charges from outside vendors.	8.4	17.6	17.6
3006	Delivery Services	Freight, courier services, and postage.	2.9	10.0	10.0
3007	Advertising and Promotions	Advertising, promotions and legal notices.	6.9	15.0	15.0
3008	Utilities	Electricity, heating fuel, water, sewage and disposal services.	1.6	22.0	22.0
3009	Structure/Infrastructure/Land	Structure, infrastructure and land repairs, maintenance, rentals and leases.	0.0	2.0	2.0

Line Item Detail (1676)
Department of Commerce, Community, and Economic Development
Services

Component: Alaska Energy Authority Rural Energy Assistance (2600)

Object Class	Servicing Agency	Explanation	FY2021 Actuals	FY2022 Management Plan	FY2023 Governor
3000 Services Detail Totals			3,287.0	5,255.5	5,255.5
3010	Equipment/Machinery	Machinery, furniture and equipment purchase, repairs, maintenance, rentals, and leases.	0.2	10.0	10.0
3011	Other Services	Other professional services.	206.3	300.0	100.0
3011	Other Services	Other professional services.	11.1	0.0	0.0
3011	Other Services	Federal funding to address rural community energy needs, including technical assistance and operator training, that is not allocated until awards are received.	0.0	700.0	700.0
3011	Other Services	General Fund Program Receipts from participation fees for AEA-sponsored trainings and conferences. These receipts will not be allocated until they are received.	0.0	50.0	50.0
3011	Other Services	Inter-agency receipts that will not be allocated until agreements are entered into.	0.0	123.9	123.9
3011	Other Services	Statutory designated program receipts in support of AEA-sponsored trainings, conferences, and events. These receipts will not be allocated until they are received.	0.0	150.0	150.0
3024	Inter-Agency Legal	Law - Department-wide	37.6	50.0	50.0
3038	Inter-Agency Management/Consulting	Commerce - AIDEA (1234)	24.5	30.0	30.0
3038	Inter-Agency Management/Consulting	Commerce - AIDEA (1234)	2,879.1	3,700.0	3,900.0

Line Item Detail (1676)
Department of Commerce, Community, and Economic Development
Commodities

Component: Alaska Energy Authority Rural Energy Assistance (2600)

Line Number	Line Name		FY2021 Actuals	FY2022 Management Plan	FY2023 Governor
4000	Commodities		35.4	48.0	48.0
Object Class	Servicing Agency	Explanation	FY2021 Actuals	FY2022 Management Plan	FY2023 Governor
4000 Commodities Detail Totals			35.4	48.0	48.0
4000	Business	Supplies for office, library, training, and instructional needs, including small equipment, tools and subscriptions.	14.3	42.0	42.0
4002	Household/Institutional	Cleaning, food, and other household supplies.	2.3	2.0	2.0
4005	Building Materials	Building materials, lumber, masonry materials.	7.3	0.0	0.0
4020	Equipment Fuel	Fuel and gasoline.	11.5	4.0	4.0

Line Item Detail (1676)

**Department of Commerce, Community, and Economic Development
Capital Outlay**

Component: Alaska Energy Authority Rural Energy Assistance (2600)

Line Number	Line Name		FY2021 Actuals	FY2022 Management Plan	FY2023 Governor
5000	Capital Outlay		13.6	10.0	10.0
Object Class	Servicing Agency	Explanation	FY2021 Actuals	FY2022 Management Plan	FY2023 Governor
5000 Capital Outlay Detail Totals			13.6	10.0	10.0
5004	Equipment	Equipment and furniture.	13.6	10.0	10.0

Line Item Detail (1676)

**Department of Commerce, Community, and Economic Development
Grants, Benefits**

Component: Alaska Energy Authority Rural Energy Assistance (2600)

Line Number	Line Name		FY2021 Actuals	FY2022 Management Plan	FY2023 Governor
7000	Grants, Benefits		0.0	100.0	100.0
Object Class	Servicing Agency	Explanation	FY2021 Actuals	FY2022 Management Plan	FY2023 Governor
		7000 Grants, Benefits Detail Totals	0.0	100.0	100.0
7001	Grants	Grants.	0.0	100.0	100.0

Revenue Detail (1681)

Department of Commerce, Community, and Economic Development

Component: Alaska Energy Authority Rural Energy Assistance (2600)

Revenue Type (OMB Fund Code) Revenue Source	Component	Comment	FY2021 Actuals	FY2022 Management Plan	FY2023 Governor
5002 Fed Rcpts (1002 Fed Rcpts)			690.3	1,202.0	1,202.0
5002 Federal General Government - Miscellaneous Grants		Federal receipts from the Denali Commission and other agencies.	690.3	1,202.0	1,202.0
5005 GF/Prgm (1005 GF/Prgm)			0.0	50.0	50.0
5104 Program Receipts Charges for Services - 3rd Party Collectns		Program Receipts - Third party collections.	0.0	50.0	50.0
5007 I/A Rcpts (1007 I/A Rcpts)			6.8	123.9	123.9
5301 Inter-Agency Receipts		Inter-agency receipts - source not yet known.	6.8	123.9	123.9
5061 CIP Rcpts (1061 CIP Rcpts)			1,161.3	1,767.8	1,767.8
5351 Capital Improvement Project Inter-Agency		Capital Improvement Project Receipts.	1,161.3	1,767.8	1,767.8
5062 Power Proj (1062 Power Proj)			305.8	995.5	995.5
5413 Power Project Loan Fund		Power Project Loan Funds.	305.8	995.5	995.5
5108 Stat Desig (1108 Stat Desig)			5.0	150.0	150.0
5205 Statutory Dsgntd Prgrm Rcpts Development - Charges for Svcs		Charges for services.	5.0	150.0	150.0
6004 Gen Fund (1004 Gen Fund)			0.9	0.0	0.0
6036 General Fund - Other Interest Earned		Return of Interest Earned - Rural Electrification Revolving Loan Fund.	0.9	0.0	0.0
6012 Rail Enrgy (1012 Rail Enrgy)			0.1	0.1	0.0
6300 Railbelt Energy Fund - Other Interest Earned		Return of Interest Earned - Railbelt Fund.	0.1	0.1	0.0
6169 PCE Endow (1169 PCE Endow)			381.8	381.8	381.8
6815 PCE Endowment Fund - Miscellaneous		Power Cost Equalization Fund receipts for program administration.	381.8	381.8	381.8

Revenue Detail (1681)

Department of Commerce, Community, and Economic Development

Component: Alaska Energy Authority Rural Energy Assistance (2600)

Revenue Type (OMB Fund Code) Revenue Source	Component	Comment	FY2021 Actuals	FY2022 Management Plan	FY2023 Governor
FUND Fund Only (1004 Gen Fund)			0.3	0.1	0.0
6095 Fund Only - Interest Earned		Return of Interest Earned - General Fund.	0.3	0.1	0.0

Inter-Agency Services (1682)

Department of Commerce, Community, and Economic Development

Component: Alaska Energy Authority Rural Energy Assistance (2600)

	FY2021 Actuals	FY2022 Management Plan	FY2023 Governor
Component Totals	2,941.2	3,780.0	3,980.0
With Department of Law	37.6	50.0	50.0
With Department of Commerce, Community, and Economic Development	2,903.6	3,730.0	3,930.0

Object Class	Servicing Agency	Explanation	FY2021 Actuals	FY2022 Management Plan	FY2023 Governor
3024	Inter-Agency Legal	Law - Department-wide	37.6	50.0	50.0
3038	Inter-Agency Management/Consulting	Commerce - AIDEA (1234) Core and allocated services, including Administrative Services and Commissioner's Office support.	24.5	30.0	30.0
3038	Inter-Agency Management/Consulting	Commerce - AIDEA (1234) Alaska Industrial Development and Export Authority personal services support.	2,879.1	3,700.0	3,900.0