

# **State of Alaska FY2005 Governor's Operating Budget**

## **Department of Community & Economic Development Alaska Energy Authority Rural Energy Operations Component Budget Summary**

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**Component: Alaska Energy Authority Rural Energy Operations**

**Contribution to Department's Mission**

The mission of the Alaska Energy Authority Rural Energy Operations component is to assist in the development of safe, reliable and efficient energy systems throughout Alaska, which are sustainable and environmentally sound, and to reduce the cost of energy in rural Alaska.

**Core Services**

The core services of the Alaska Energy Authority Rural Energy component are:

- Bulk Fuel and Rural Power Systems Upgrades
- Alternative Energy and Energy Efficiency
- Utility Systems Training
- Active Loan Programs – Power Project Fund, Bulk Fuel Revolving Loan Fund
- Administration of grants to Named Recipients

End Results	Strategies to Achieve Results
<p><b>(1) Upgrade non-code compliant bulk fuel and powerhouse facilities with code-compliant facilities in sustainable rural communities</b></p> <p><u>Target:</u> Upgrade 100% of sustainable rural Alaskan energy facilities to code compliancy  <u>Measure:</u> Percentage Code Compliant</p> <p><b>(2) Reduce the unit cost of energy in rural Alaska by 15%</b></p> <p><u>Target:</u> Reduce the amount of diesel imported into rural communities for heat and power generation by 25%  <u>Measure:</u> % change in average diesel fuel consumption per kWh, thermal and electrical, delivered to all rural communities</p>	<p><b>(1) Reduce the number of non-code compliant facilities</b></p> <p><u>Target:</u> Upgrade 13 rural facilities annually.  <u>Measure:</u> # completed upgrade projects per year</p> <p><b>(2) Upgrade equipment at rural power systems to increase diesel efficiency and utilize other energy sources</b></p> <p><u>Target:</u> 15% increase in generation efficiency (kWh produced)  <u>Measure:</u> % change in kilowatt hours produced</p> <p><b>(3) Providing energy audits and installation of energy cost saving equipment in community facilities</b></p> <p><u>Target:</u> 20% decrease in kilowatt hour usage for facilities upgraded  <u>Measure:</u> % change in Kilowatt hours used in upgraded facilities at current levels of use.</p> <p><b>(4) Manage the Bulk Fuel Revolving Loan Fund to maximize the amount available to eligible communities</b></p> <p><u>Target:</u> Loans over 90 days delinquent not more than 5%  <u>Measure:</u> % of loan delinquencies</p>

**Major Activities to Advance Strategies**

- Design/construct tank farms and powerhouses and distribution systems
- Issue/administer contracts
- Coordinate with communities and other government agencies
- Develop business plans
- Apply for grant funds
- Install metering
- Install switchgears
- Install heat recovery
- Perform energy audits
- Project management
- Install wind generating equipment
- Install wind monitoring stations
- Replace generators with high efficiency diesel generators
- Recruitment of eligible trainees
- Development of site-specific training curriculum
- Develop/expand curriculum for powerhouse training

**FY2005 Resources Allocated to Achieve Results**

**FY2005 Component Budget: \$2,827,100**

<b>Personnel:</b>	
Full time	0
Part time	0
<b>Total</b>	<b>0</b>

**Performance Measure Detail**

**(1) Result: Upgrade non-code compliant bulk fuel and powerhouse facilities with code-compliant facilities in sustainable rural communities**

**Target:** Upgrade 100% of sustainable rural Alaskan energy facilities to code compliancy

**Measure:** Percentage Code Compliant

**Analysis of results and challenges:** Upgrading facilities will allow communities to continue to receive fuel and provide power to rural residents. 41 out of 120 communities' bulk fuel facilities have been upgraded and 19 out of 120 communities Rural Power Systems have been upgraded (excludes AVEC communities). This measures the programs' progress.

**(2) Result: Reduce the unit cost of energy in rural Alaska by 15%**

**Target:** Reduce the amount of diesel imported into rural communities for heat and power generation by 25%

**Measure:** % change in average diesel fuel consumption per kWh, thermal and electrical, delivered to all rural communities

**Analysis of results and challenges:** The primary mission of AEA is to reduce the cost of energy for Alaska. This measures our progress in providing alternative power supplies and efficiency improvements.

**(1) Strategy: Reduce the number of non-code compliant facilities**

**Target:** Upgrade 13 rural facilities annually.

**Measure:** # completed upgrade projects per year

**Analysis of results and challenges:** This past year 11 facilities have been upgraded and currently 20 are scheduled for completion this year. This measures our annual progress.

**(2) Strategy: Upgrade equipment at rural power systems to increase diesel efficiency and utilize other energy sources****Target:** 15% increase in generation efficiency (kWh produced)**Measure:** % change in kilowatt hours produced**Analysis of results and challenges:** Equipment upgrades will reduce the dependency on diesel fuel. This measures generation efficiency.**(3) Strategy: Providing energy audits and installation of energy cost saving equipment in community facilities****Target:** 20% decrease in kilowatt hour usage for facilities upgraded**Measure:** % change in Kilowatt hours used in upgraded facilities at current levels of use.**Analysis of results and challenges:** Energy cost saving equipment installation will reduce the dependency on diesel fuel. Results will be assessed in each facility following the upgrade. This measures effectiveness of upgrades.**(4) Strategy: Manage the Bulk Fuel Revolving Loan Fund to maximize the amount available to eligible communities****Target:** Loans over 90 days delinquent not more than 5%**Measure:** % of loan delinquencies

As of 10/31/03, Delinquencies of Loans Disbursed per Year as a Percentage of Total Loans Disbursed in the Respective Year

Year				% Delinquent	YTD Total
2000				2.5%	2.5%
2001				0%	0%
2002				4.00%	4.0%
2003				1.40%	1.4%
2004				0%	0%

**Analysis of results and challenges:** Bulk fuel purchases reduce a community's cost of energy. As of 10/31/03, total loans over 90 days delinquent/total loans outstanding is 8.7%. This measures the ongoing viability of the program, limited loan delinquencies ensures future funds to loan.**Key Component Challenges**

The primary challenge for AEA is to schedule Denali Commission requested Bulk Fuel and Rural Power System Upgrade projects with an unpredictable funding stream.

In its continued efforts to reduce energy costs in rural Alaska in the most cost effective manner, AEA has taken an integrated program approach to analyze communities' current and planned infrastructure to determine the energy needs. A single community project may address fuel storage, power house upgrades, alternative energy and energy efficiency needs.

AEA is working with the Denali Commission to develop a community monitoring program to ensure that the Denali Commission sustainability requirements and conditions are met over the long term.

**Significant Changes in Results to be Delivered in FY2005**

No significant changes.

## Major Component Accomplishments in 2003

None.

## 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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**Alaska Energy Authority Rural Energy Operations  
Component Financial Summary**

*All dollars shown in thousands*

	FY2003 Actuals	FY2004 Authorized	FY2005 Governor
<b>Non-Formula Program:</b>			
<b>Component Expenditures:</b>			
71000 Personal Services	0.0	0.0	0.0
72000 Travel	0.0	0.0	124.5
73000 Contractual	0.0	0.0	2,679.6
74000 Supplies	0.0	0.0	18.0
75000 Equipment	0.0	0.0	5.0
76000 Land/Buildings	0.0	0.0	0.0
77000 Grants, Claims	0.0	0.0	0.0
78000 Miscellaneous	0.0	0.0	0.0
<b>Expenditure Totals</b>	<b>0.0</b>	<b>0.0</b>	<b>2,827.1</b>
<b>Funding Sources:</b>			
1002 Federal Receipts	0.0	0.0	68.3
1004 General Fund Receipts	0.0	0.0	188.6
1007 Inter-Agency Receipts	0.0	0.0	155.1
1061 Capital Improvement Project Receipts	0.0	0.0	1,198.9
1062 Power Project Loan Fund	0.0	0.0	965.2
1074 Bulk Fuel Revolving Loan Fund	0.0	0.0	51.0
1108 Statutory Designated Program Receipts	0.0	0.0	200.0
<b>Funding Totals</b>	<b>0.0</b>	<b>0.0</b>	<b>2,827.1</b>

**Estimated Revenue Collections**

Description	Master Revenue Account	FY2003 Actuals	FY2004 Authorized	FY2005 Governor
<b>Unrestricted Revenues</b>				
Unrestricted Fund	68515	0.0	0.0	188.6
<b>Unrestricted Total</b>		<b>0.0</b>	<b>0.0</b>	<b>188.6</b>
<b>Restricted Revenues</b>				
Federal Receipts	51010	0.0	0.0	68.3
Interagency Receipts	51015	0.0	0.0	155.1
Statutory Designated Program Receipts	51063	0.0	0.0	200.0
Capital Improvement Project Receipts	51200	0.0	0.0	1,198.9
Bulk Fuel Revolving Loan Fund	51270	0.0	0.0	51.0
Power Project Loan Fund	51350	0.0	0.0	965.2
<b>Restricted Total</b>		<b>0.0</b>	<b>0.0</b>	<b>2,638.5</b>
<b>Total Estimated Revenues</b>		<b>0.0</b>	<b>0.0</b>	<b>2,827.1</b>

**Summary of Component Budget Changes  
From FY2004 Authorized to FY2005 Governor**

*All dollars shown in thousands*

	<u>General Funds</u>	<u>Federal Funds</u>	<u>Other Funds</u>	<u>Total Funds</u>
<b>FY2004 Authorized</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Adjustments which will continue current level of service:</b>				
-Transfer Rural Energy Component to New RDU Alaska Energy Authority (453)	288.6	68.3	2,400.2	2,757.1
-Fund Source Change from General Fund to Power Project Fund	-100.0	0.0	100.0	0.0
<b>Proposed budget increases:</b>				
-Increase in Cost of Personal Services Charged by Alaska Industrial Development & Export Authority	0.0	0.0	70.0	70.0
<b>FY2005 Governor</b>	<b>188.6</b>	<b>68.3</b>	<b>2,570.2</b>	<b>2,827.1</b>