

State of Alaska FY2010 Governor's Operating Budget

Department of Commerce, Community, and Economic Development Alaska Energy Authority Results Delivery Unit Budget Summary

Alaska Energy Authority Results Delivery Unit

Contribution to Department's Mission

Reduce the cost of energy in Alaska.

Core Services

- Operation and maintenance of existing Authority-owned projects with maximum utility control
- Development, design and construction of sustainable, safe, reliable, efficient and environmentally sound energy systems in Alaska
- Power Cost Equalization program
- Power Project and Bulk Fuel Revolving Loan Programs
- Training, technical assistance and emergency response to rural utilities

| End Result | Strategies to Achieve End Result |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>A: The unit cost of energy in Alaska is reduced.</p> <p><u>Target #1:</u> 100% eligible electric utilities receive PCE payments.</p> <p><u>Status #1:</u> Did not meet target of 100% as 94% of the eligible electric utilities received PCE payments in FY2008.</p> | <p>A1: Reduce the number of Bulk Fuel (BF) non-code compliant facilities</p> <p><u>Target #1:</u> Upgrade 10 rural bulk fuel facilities annually.</p> <p><u>Status #1:</u> Received sufficient funding from Denali Commission to upgrade 3 rural bulk fuel facilities, did not meet target of 10.</p> <p>A2: Upgrade rural powerhouses to increase diesel efficiency</p> <p><u>Target #1:</u> 8 rural power system upgrades (RPSU) completed annually.</p> <p><u>Status #1:</u> Did not meet target of 8 rural power system upgrades completed annually as 6 were completed. In addition to these 6, 2 hydroelectric facilities were completed.</p> <p>A3: Train rural residents to manage and operate rural energy infrastructure and programs</p> <p><u>Target #1:</u> 100 rural residents trained annually to manage and operate rural energy infrastructure and programs.</p> <p><u>Status #1:</u> Exceeded target of 100 residents training with 104 rural residents in FY2008.</p> |

FY2010 Resources Allocated to Achieve Results

FY2010 Results Delivery Unit Budget: \$37,792,300

Personnel:

| | |
|--------------|----------|
| Full time | 0 |
| Part time | 0 |
| Total | 0 |

Performance

A: Result - The unit cost of energy in Alaska is reduced.

Target #1: 100% eligible electric utilities receive PCE payments.**Status #1:** Did not meet target of 100% as 94% of the eligible electric utilities received PCE payments in FY2008.

Percentage of Eligible Utilities Receiving PCE

| Fiscal Year | YTD Total |
|-------------|-----------|
| FY 2008 | 94.3% |
| FY 2007 | 98.9% |
| FY 2006 | 98.8% |
| FY 2005 | 98.8% |
| FY 2004 | 95.5% |
| FY 2003 | 95.5% |

Analysis of results and challenges: PCE payments reduce the unit cost of power to residential and community facility customers of eligible utilities. AEA provides technical assistance to utility clerks that need help preparing PCE reports; utilities that are not participating pursuant to the statutes and regulations do not receive some or all payments. 5 out of 87 utilities did not participate in FY 2008.

A1: Strategy - Reduce the number of Bulk Fuel (BF) non-code compliant facilities

Target #1: Upgrade 10 rural bulk fuel facilities annually.**Status #1:** Received sufficient funding from Denali Commission to upgrade 3 rural bulk fuel facilities, did not meet target of 10.

Number of completed BF Upgrade projects per year

| Year | YTD Total |
|------|-----------|
| 2008 | 3 |
| 2007 | 4 |
| 2006 | 7 |
| 2005 | 8 |
| 2004 | 11 |
| 2003 | 12 |
| 2002 | 8 |
| 2001 | 9 |
| 2000 | 3 |

Analysis of results and challenges: Approximately 25 remaining communities need bulk fuel facility upgrades.

Upgrading Bulk Fuel facilities reduces the unit cost of energy by replacing leaking tanks and reducing the risk of

future tank and equipment failure. Bringing these facilities into compliance with federal and state codes and regulations also makes them safer and more reliable. By eliminating fuel spills from leaking tanks, a community is able to use all fuel purchased. By following the terms of the business plans, owner operators are more able to manage their storage facilities and their fuel inventories to their greatest economic advantage.

A total of 21 projects were completed in years previous to 2000.

A2: Strategy - Upgrade rural powerhouses to increase diesel efficiency

Target #1: 8 rural power system upgrades (RPSU) completed annually.

Status #1: Did not meet target of 8 rural power system upgrades completed annually as 6 were completed. In addition to these 6, 2 hydroelectric facilities were completed.

RPSU Projects completed annually

| Year | YTD Total |
|------|-----------|
| 2008 | 6 |
| 2007 | 3 |
| 2006 | 10 |
| 2005 | 10 |
| 2004 | 4 |
| 2003 | 2 |
| 2002 | 1 |
| 2001 | 2 |

Analysis of results and challenges: Approximately 55 communities require powerhouse upgrades.

Powerhouse upgrade projects replace outdated, inefficient systems with new electronically controlled generator sets. New powerhouses contain generators of several different sizes. This allows the operator to employ the most efficient generator at various power demand levels throughout the day. At peak demand times the largest generator provides the power, while at low-demand times the smallest generator provides the power. We have also increased fuel efficiency by adding electronic fuel injectors. We have installed remote monitoring systems to improve our capacity to provide technical assistance.

A3: Strategy - Train rural residents to manage and operate rural energy infrastructure and programs

Target #1: 100 rural residents trained annually to manage and operate rural energy infrastructure and programs.

Status #1: Exceeded target of 100 residents training with 104 rural residents in FY2008.

| Fiscal Year | YTD Total |
|-------------|-----------|
| FY 2008 | 104 |
| FY 2007 | 131 |
| FY 2006 | 111 |
| FY 2005 | 112 |
| FY 2004 | 106 |
| FY 2003 | 69 |

Analysis of results and challenges: Training local residents to manage and operate rural energy infrastructure reduces the unit cost of energy by providing rural residents the skills to produce and submit PCE reports and operate and maintain energy infrastructure. PCE reports must be submitted to receive PCE payments and proper maintenance of facilities helps ensure that the facilities continue to operate in the most efficient manner. Properly maintaining a facility extends the operational life of the facility.

Key RDU Challenges

See components.

Significant Changes in Results to be Delivered in FY2010

See components.

Major RDU Accomplishments in 2008

See components and AEA capital requests.

| Contact Information |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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**Alaska Energy Authority
RDU Financial Summary by Component**

All dollars shown in thousands

| | FY2008 Actuals | | | | FY2009 Management Plan | | | | FY2010 Governor | | | |
|---------------------------------|--------------------------|--------------------------|------------------------|------------------------|-------------------------------|--------------------------|------------------------|------------------------|--------------------------|--------------------------|------------------------|------------------------|
| | General Funds | Federal Funds | Other Funds | Total Funds | General Funds | Federal Funds | Other Funds | Total Funds | General Funds | Federal Funds | Other Funds | Total Funds |
| Formula Expenditures | | | | | | | | | | | | |
| AEA Power Cost Equalization | 0.0 | 0.0 | 28,560.0 | 28,560.0 | 23,000.0 | 0.0 | 28,160.0 | 51,160.0 | 0.0 | 0.0 | 32,160.0 | 32,160.0 |
| Non-Formula Expenditures | | | | | | | | | | | | |
| AEA Owned Facilities | 0.0 | 0.0 | 206.4 | 206.4 | 0.0 | 0.0 | 1,067.1 | 1,067.1 | 0.0 | 0.0 | 1,067.1 | 1,067.1 |
| AEA Rural Energy Operations | 283.2 | 0.0 | 3,581.5 | 3,864.7 | 150.0 | 530.0 | 2,466.5 | 3,146.5 | 187.6 | 530.0 | 2,466.5 | 3,184.1 |
| AEA Technical Assistance | 100.7 | 0.0 | 0.0 | 100.7 | 100.7 | 0.0 | 0.0 | 100.7 | 100.7 | 0.0 | 0.0 | 100.7 |
| Alternative Energy & Efficiency | 0.0 | 0.0 | 0.0 | 0.0 | 411.1 | 41.9 | 467.1 | 920.1 | 771.4 | 41.9 | 467.1 | 1,280.4 |
| Totals | 383.9 | 0.0 | 32,347.9 | 32,731.8 | 23,661.8 | 571.9 | 32,160.7 | 56,394.4 | 1,059.7 | 571.9 | 36,160.7 | 37,792.3 |

Alaska Energy Authority
Summary of RDU Budget Changes by Component
From FY2009 Management Plan to FY2010 Governor

All dollars shown in thousands

| | <u>General Funds</u> | <u>Federal Funds</u> | <u>Other Funds</u> | <u>Total Funds</u> |
|------------------------------------------------------------------|----------------------|----------------------|--------------------|--------------------|
| FY2009 Management Plan | 23,661.8 | 571.9 | 32,160.7 | 56,394.4 |
| Adjustments which will continue current level of service: | | | | |
| -AEA Rural Energy Operations | 37.6 | 0.0 | 0.0 | 37.6 |
| -AEA Power Cost Equalization | -23,000.0 | 0.0 | 0.0 | -23,000.0 |
| Proposed budget increases: | | | | |
| -AEA Power Cost Equalization | 0.0 | 0.0 | 4,000.0 | 4,000.0 |
| -Alternative Energy & Efficiency | 360.3 | 0.0 | 0.0 | 360.3 |
| FY2010 Governor | 1,059.7 | 571.9 | 36,160.7 | 37,792.3 |