

Rural Power Systems Upgrades**FY2002 Request: \$10,500,000****Reference No: 32588****AP/AL:** Appropriation**Project Type:** Construction**Category:** Development**Location:** Statewide**Contact:** Robert Poe, Jr.**House District:** Statewide (HD 1-40)**Contact Phone:** (907)269-3000**Estimated Project Dates:** 07/01/2002 - 06/30/2007**Brief Summary and Statement of Need:**

This appropriation is requested for expected federal funds and state match for capital improvements and new electric power systems in rural Alaska. Where required, lack of state matching funds will prevent the federal contribution.

Funding:	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	Total
Fed Rcpts	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$10,000,000	\$60,000,000
G/F Match	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$3,000,000
Total:	\$10,500,000	\$10,500,000	\$10,500,000	\$10,500,000	\$10,500,000	\$10,500,000	\$63,000,000

<input checked="" type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input checked="" type="checkbox"/> On-Going
5% = 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

Additional Information / Prior Funding History:

Match Funding: FY 95-FY 96 500,000; FY 97 600,000 Federal funding was received as part of a larger federal energy program appropriation, which contained several programs. Prior funding history for this larger appropriation: FY 96 1,000,000; FY 97 10,000,000; FY 98 30,000,000; FY 99 0.0; FY 00 30,450,000

Project Description/Justification:**Purpose of the Appropriation**

In rural Alaska, 193 communities are served by 99 independent electric utilities:

- 88 utilities each serve a single village.
- 11 utilities serve the remaining 105 villages.

For most of these utilities, the power plant and distribution system do not meet accepted utility standards for safety, reliability, and environmental protection.

The former Division of Energy examined conditions in 52 of the 88 single-village utilities in 1995 and updated the condition assessments in March 1998. Scores ranging from "good" to "unserviceable" were assigned to major components and performance characteristics of the power plant and distribution system. Among the conclusions drawn from the data base are the following:

- In 29 of the 52 communities (56% of the sample), a rating of "unserviceable" is assigned to the powerhouse foundation, floor, or roof.

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"Unserviceable" means that the condition represents a health or safety hazard, or that necessary repairs cannot be made for less than replacement cost.

■ In 20 of the 52 communities (39% of the sample), extensive fuel contamination was found in or around the powerhouse.

■ In 34 of the 52 communities (65% of the sample), the distribution system was found unserviceable with respect to poles, conductor, voltage, or line losses.

Electric utility systems are part of the basic infrastructure of rural communities and are fundamental to the operation of other community facilities, the maintenance of present living standards, and to the prospects for economic development. Due to high costs and limited economies of scale, most local communities cannot make the capital investments needed to meet accepted utility standards for safety, reliability, and operating efficiency.

As funds are available, the State contributes to these capital investments through the Rural Power System Upgrade (RPSU) program. Depending on the condition of existing facilities, these investments can include new generators, new controls, upgrades and modifications to distribution lines, or entirely new powerplants and distribution systems.

The primary source of funds for RPSU projects over the last two years has been the Denali Commission which has committed \$7.2 million towards the 10 current projects listed below. The Alaska Energy Authority (AEA) sought and obtained \$2.4 million of additional funds from other sources, bringing the total funding commitment for these 10 projects to \$9.6 million as follows:

CURRENT PROJECTS

Community	Projected Cost
Arctic Village	\$745,000
Atka (Hydro)	675,000
Deering	961,400
Golovin	375,400
Hughes	965,000
Kotlik	1,255,000
Koyukuk	520,000
Nome	775,000
Old Harbor (Hydro)	1,875,000
Tuntutuliak (piling & site preparation)	1,410,500
Total Projected Cost	\$9,557,300

The breakdown of the \$2,400,000 of supplemental funding obtained by AEA for current projects is as follows:

Source of Supplemental Funding	Amount
State funds	\$ 800,000
Other federal funds	700,000
Local funds	900,000
TOTAL	\$2,400,000

For FY02, AEA intends to submit the following projects to the Denali Commission for funding:

PROPOSED FOR FY02

Community	Projected Cost
Stevens Village (powerhouse)	\$1,158,000
Newtok	473,500
Manokotak	1,038,500
Karluk	623,500
Chefornak	1,012,500
Tuluksak	1,168,500

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Napakiak	695,000
Kongiganak	703,000
Telida	802,500
Akhiok	325,500
Akiachak	975,500
Platinum	835,000
Ruby	326,000
Stevens Village (distribution)	394,000
Tuntutuliak	495,000
TOTAL FY02 PROPOSED FUNDING	\$11,026,000

The FY02 workplan for the Denali Commission includes 10,000,000 for rural power system upgrade projects. This is shown below along with other federal funds and local in-kind contributions that AEA anticipates will be made available for this purpose:

Federal Source	FY02 Amount
Denali Commission	\$10,000,000
CDBG	400,000
Local In-Kind Contributions	100,000
Total	\$10,500,000

AEA's request for \$500,000 in State general funds for FY02 is equal to the remaining gap between the project budgets totaling \$11,000,000 million and the anticipated funding of \$10,500,000 listed immediately above.

The following table summarizes the proposed funding for FY02 and shows the percentage contribution from each funding source:

Source of Funds	Percent of Total Amount	Project Costs
Denali Commission	\$10,000,000	90.9 %
CDBG Grants	400,000	3.6 %
Local In-Kind Contributions	100,000	.9 %
State Funds	500,000	4.5 %
TOTAL	\$11,000,000	99.9 %

SUMMARY OF REQUEST

Based on the plans and expectations outlined above, AEA requests the following:

1. 500,000 in State general funds.
2. Authority to for federal funds from the Denali Commission in the amount of \$10,000,000.

The request for federal authority does not include the anticipated CDBG funding outlined above because, although these funds will be used for project costs and will be managed by AEA, they are issued directly to the local grantee by the granting agency. As a result, AEA does not need expenditure authority in connection with these funds.

MATCHING DENALI COMMISSION FUNDS

The Denali Commission has adopted a policy requiring a minimum 30% match from other funding sources for rural energy projects. The matching funds can come from any source including other federal funds, state funds, local funds, or local in-kind contributions. As stated in its FY02 work plan, the Denali Commission intends to issue funds for rural energy projects in the following amounts:

Bulk fuel tank farm upgrade and replacement	\$15,350,000
Electric utility upgrades	10,000,000

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TOTAL	\$25,350,000
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Of this amount, \$7,600,000 is estimated to come from the annual interest earnings of the Trans Alaska Pipeline Liability Fund (TAPL). It is AEA's position that TAPL interest earnings should be considered State funds even though they are passed through the Denali Commission. This is because the State contributes to the TAPL fund as an owner of oil and the funds in question represent the interest earnings on the State's contribution. By federal statute, these interest earnings must be returned to the State and must be used for rural tank farm improvements.

Based on this assumption, the 30% match sought by the Denali Commission would apply only to the remaining funds after deducting the TAPL interest earnings as follows:

Denali Commission grants for rural energy projects	\$25,350,000
MINUS interest earnings on TAPL fund	<u>- 7,600,000</u>
TOTAL - Basis for calculating match	\$17,750,000

The 30% match does not apply separately to the tank farm program and to the electric utility program but rather to both programs in the aggregate. In other words, it is acceptable if supplemental funding for one of the two programs falls short of 30% as long as it exceeds 30% for the other program, and as long as the 30% target is met for the two programs combined. The 30% target for both programs combined is \$7,600,000 calculated as follows:

\$17,750,000 = 70% of \$25,350,000
\$25,350,000 X 30% = \$7,600,000

AEA proposes to meet the \$7,600,000 match in FY02 for the two combined programs as follows:

Bulk Fuel System Program

EPA grant	\$3,000,000
ICDBG-HUD grants	1,500,000
CDBG grants	400,000
State Funds	1,600,000

Electric Utility Program

CDBG grants	400,000
State Funds	500,000
Total Cash Match	\$7,400,000

Local In-Kind Contributions	<u>200,000</u>
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TOTAL MATCH	\$7,600,000
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Impact on the State Operating Budget

Ownership and operating responsibility for these projects is placed entirely with local electric utilities. The State has no continuing role in connection with the projects after construction is complete. As a result, upgrade and replacement of these electrical systems has no upward impact on the State operating budget.

By reducing the operating costs of electric utilities, upward pressure on the Power Cost Equalization (PCE) program can be reduced although it is anticipated that the annual State outlay for PCE will soon reach \$15,700,000 million.

By improving reliability, the incidence of power system emergencies in rural Alaska should also be reduced along with corresponding State expenditures.

Project Selection Criteria

AEA gives priority to electric utility systems that are in the worst condition. Over the last several years, AEA has built a detailed database of electric utility conditions and characteristics. Deficiencies of each utility have been scored with respect to generating equipment, distribution systems, powerhouse structures, and other major physical components.

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Rural systems are then ranked according to the level of these deficiencies. Additional criteria that are applied to the project selection process include the following:

- Imminent threat to health and safety.
- Imminent threat of system failure during winter conditions.
- Financial need based on the level of existing rates, average income, availability of other financing, and project cost compared with utility revenue.
- Local commitment and contribution to the project.
- The utility's ability to operate and maintain the facility without future state assistance or the community's willingness to join an established, qualified regional utility.
- Projects required in order to meet efficiency guidelines under the Power Cost Equalization Program.

Once upgraded, the rural utility is required to employ a qualified operator to ensure that the system is properly operated and maintained, thereby protecting the state's investment in the system.