Power Cost Equalization Program Hearings

Alaska State Legislature

Official Business

State Capitol
Juneau, AK 99801-1182

DATE: March 8, 1996

TO: Members of the House/Senate Finance Committees

FROM: Senators Frank and Halford
Representatives Hanley and Foster
Co - Chairs, Finance Committees

RE: PCE Hearing

Enclosed is a preliminary packet of information regarding the Power Cost Equalization (PCE) program. Please bring this packet to the joint finance committee meeting **Thursday 9 a.m., March 14th in Senate Finance chambers.**

The PCE program is funded through annual appropriations from the Power Cost Equalization and Rural Electric Capitalization Fund. Projections based upon current withdrawal rates suggest that the fund would be depleted, for all intents, following the FY 99 appropriation. This situation warrants our collective attention. Accordingly, the finance committee chairs have taken the initiative to provide a forum for the administration and the Alaska Rural Electric Cooperatives Association (ARECA) to present recommendations for consideration.

Following an introduction of guests by Mr. Dave Hutchens, ARECA, Mr. Brad Reeves, General Manager, Kotzebue Electric Cooperative, will briefly review the PCE program. Commissioner Mike Irwin, DCRA and Mr. Percy Frisby, Director of the Division of Energy, DCRA, will summarize current operations and FY 97 proposed funding levels. Mr. Reeves will then present a recommendation for administrative and legislative consideration.

JT HOUSE & SENATE FINANCE MEETING
MARCH 14, 1996
9:00 AM

POWER COST EQUALIZATION

Section A	Cost Reduction Options Report to the Commissioner (Draft)
Section B	Impact of Funding Reduction to 85% of Program Requirements
Section C	FY95 Disbursements by House District
Section D	Legislative History of the PCE Program
Section E	Legislative History of PCE, 1986 Update

Distributed by
Representative Richard Foster
Co-Chair, House Finance

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POWER COST EQUALIZATION PROGRAM

COST REDUCTION OPTIONS
REPORT TO THE COMMISSIONER
(DRAFT)

Prepared by
Department of Community & Regional Affairs
Division of Energy

Jt House & Senate Finance Meeting
March 14, 1996

Distributed by
Representative Richard Foster
Co-Chair, House Finance

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DEPARTMENT OF COMMUNITY AND REGIONAL AFFAIRS

DIVISION OF ENERGY

POWER COST EQUALIZATION PROGRAM

COST REDUCTION OPTIONS
REPORT TO THE COMMISSIONER
OCTOBER 25, 1995

Percy Frisby
Director

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POWER COST EQUALIZATION PROGRAM
COST REDUCTION REPORT
TO THE COMMISSIONER

This report has been prepared in response to the current financial situation of the Power Cost Equalization (PCE) and Rural Electric Capitalization Fund. This fund, which was established under the same legislation that transferred the PCE program from the Alaska Energy Authority to the Department of Community and Regional Affairs, Division of Energy (Division), is in a critical situation if it is to comply with Chapter 18 SLA 1993, which states the Legislature's intent to fund the Power Cost Equalization and Rural Electric Capitalization Fund through 2013. In this report, various options for reducing the cost of the program will be presented. In the appendix, three scenarios of the fund will be presented which will project funding requirements should the program remain unchanged or reduce its outlay modestly. It is the intention of this report to be fiscally and socially responsible.

As can be seen in Figure 1., at the beginning of FY 96, the PCE fund had a balance of $63,085,000. At current spending levels, and allowing for a modest increase in spending, the PCE program requirements are expected to exhaust the fund in the first half of FY 2000. This scenario assumes that the Four Dam Pool Transfer Fund allocations will continue into the future. If not, than the fund will be depleted near mid FY 99, three years from now.

Figure 1.

	1996	1997	1998	1999	2000	2001
Beginning Fund Balance	$63,085	$47,744	$33,288	$18,182	$2,372	$0
PCE/REC Fund Investment Income	2,898	2,288	1,499	674	0	0
Four Dam Pool (FDP) Transfer Fund	2,547	4,462	4,562	4,634	4,706	4,773
Total	5,445	6,750	6,061	5,308	4,706	4,773
PCE Outlay	19,386	19,774	20,169	20,573	7,007	4,773
Rural Electric Grants (3% of balance)	1,400	1,432	998	545	71	0
Total	20,786	21,206	21,167	21,118	7,078	4,773
Surplus (Shortage) = (2-3)	(15,341)	(14,456)	(15,106)	(15,810)	(2,372)	0
Ending Fund Balance	$47,744	$33,288	$18,182	$2,372	0	0

In January 1992, the former Alaska Energy Authority prepared a report to the Alaska Legislature on various options to reduce the cost of the PCE program. Since that report, small changes have been made to the PCE program which have had a negligible impact on total program costs, which are currently budgeted at $19,385,600 for FY 96. The end result is that the current program is going to need a major commitment of future funding to maintain the program as is, or, the program will require major revision to reduce its costs of operations in order to extend its life. In actuality, the program needs both.

In this report, the Division has examined various alternatives to reduce the cost of the PCE program. The Division has not examined additional sources of funding for the PCE program, outside of legislative appropriation. Our analysis has included options to revise the formula used in rate calculations and the exclusion of user classes from program participation.

To understand the basis of formula revisions, it is important to understand the basis of determining the underlying PCE rate. There are five elements that enter into the calculation of the PCE rate:

1. The utility's total eligible costs. These consist of all costs considered verifiable and reasonable by the Alaska Public Utilities Commission (APUC) and include such items as fuel, lubricants, maintenance, depreciation, insurance, utility management, etc.

2. The utility's total sales. This figure is important because the fixed costs of the utility's plant is absorbed into the utility's base rate calculation. More sales lead to a lower fixed cost per kWh sold.

3. The PCE "floor". That is, the minimum rate that must be paid by all consumers after PCE reimbursement. AS 42.45.100(a)(1) addresses the purpose of the PCE program, which is to equalize "...power cost per kilowatt-hour statewide at a cost close or equal to the mean of the cost per kilowatt-hour in Anchorage, Fairbanks and Juneau...".

4. The PCE "ceiling". That is, the maximum eligible costs to which PCE can be applied. Currently, this rate is set by statute at 52.5 cents per kilowatt hour (kWh).

5. The percentage of eligible costs between the floor and the ceiling that PCE will reimburse. The maximum percentage allowed by statute is 95%.

ALTERNATIVES FOR REDUCING PCE PROGRAM COSTS

Eligible Costs

Eligible costs are those which are considered verifiable and reasonable. Some of these costs have been reduced by using more stringent methods of determining eligibility. For example, generation efficiency standards have been implemented that take into account fuel consumption. If the utility consumes more fuel than the standards allow for the

number of kWh produced, then the eligible fuel costs will be reduced to reflect amount of fuel the utility would have consumed had the efficiency standard been met.

Another way to reduce eligible costs is through improved production or management efficiency, or where possible, to help reduce prices faced by the utility such as the price of fuel. The Division continues to assist PCE utilities within the limits of available funds to effect such savings through a variety of strategies including the installation of more efficient generation and distribution systems, improved maintenance that extends equipment life and improves equipment efficiency. It also assists utilities with various strategies to reduce purchased fuel costs including installation of bulk fuel storage facilities, assistance in establishing bulk fuel cooperatives and loans for bulk fuel purchases. The Division is also working with utilities that are developing fully integrated fuel storage and electrical power generation and distribution systems.

Total Sales

While high fuel prices certainly contribute to the high cost of electrical generation, the absence of economies of scale explains at least an equal share of the problem. PCE rates would be substantially lower if over the long run utilities were able to substantially increase their sales and the increased sales were not eligible for PCE reimbursement.

While this appears to be a logical approach to reducing costs to the consumer, the reality is that where there are substantial commercial loads, many users find it more cost effective to produce their own power because of the high local rates. In many areas, residential loads are relatively low, and the opportunity to increase them will not exist until the cost of electricity is substantially reduced.

Raising the Minimum Floor Price per Kilowatt Hour

The PCE "floor" is the target rate for the entire PCE program and is based on the average cost per kilowatt-hour in Anchorage, Fairbanks and Juneau. The floor was established by statute the first year of the program (FY 1985) at 8.5 cents per kWh. The floor was subsequently changed to 9.5 cents per kWh in FY 94 and the APUC is currently proposing to increase the floor to 9.7 cents per kWh.

Increasing the PCE "floor" would reduce the cost of the program by changing the target of the program. One of the merits of this option is that the program would more accurately reflect the cost of producing electricity in the bush, versus trying to tie the cost of power directly to the urban areas. All PCE customers would share the impact equally.

The PCE "floor" price is calculated by the APUC as follows:

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Residential Sales within Fairbanks Anchorage & Juneau

Utility	(KWH)	($)	($/KWH)
AEL&P	132,265,000	$11,432,911	0.0864
Chugach	448,105,080	$44,041,352	0.0983
FMUS	28,181,236	$2,766,667	0.0982
GVEA	45,806,100	$4,490,584	0.0980
MEA	82,446,176	$8,983,345	0.01091
ML&P	147,067,000	$14,018,897	0.0953
Total	883,870,592	$85,733,756	0.0970

Figure 2. below is an exercise demonstrating the impact of raising the floor of the program in .5 cent increments. For the purposes of the exercise, we have utilized FY 95 eligible kilowatt-hours of 133,807,042.

Figure 2.

Current Base	Cent Increase	Revised Base	Residential	Commercial	Community Facilities	Total Savings
9.5	0.5	10.0	$451,000	$87,187	$130,847	$669,035
9.5	1.0	10.5	$902,001	$174,375	$261,695	$1,338,070
9.5	1.5	11.0	$1,353,001	$261,562	$392,542	$2,007,106
9.5	2.0	11.5	$1,804,002	$348,750	$523,389	$2,676,141
9.5	2.5	12.0	$2,255,002	$435,937	$654,237	$3,345,176
9.5	3.0	12.5	$2,706,002	$523,125	$785,084	$4,014,211
9.5	3.5	13.0	$3,157,003	$610,312	$915,931	$4,683,246
9.5	4.0	13.5	$3,608,003	$697,500	$1,046,779	$5,352,282

The impact of raising the floor price of the program is that it does not differentiate between high and low users. It also does not differentiate between those who truly need assistance and those who don't.

Lowering the Maximum Eligible Cost per Kilowatt Hour

The maximum eligible cost per kilowatt-hour, or "ceiling", was established by statute in the first year of the program (FY 85). This amount has not been adjusted since program inception. Utility costs per kilowatt-watt hour above this ceiling are not eligible for PCE reimbursement.

Decreasing the maximum costs covered in calculating the PCE rate would lower the cost to the program. However, most of the costs are not attributable to utilities with rates that approach the existing "ceiling". Although this is a cost reduction that should be considered, all indications suggest that it would have a disproportionate impact on many of the smaller rural communities.

Figure 3, below illustrates the impact of decreasing the statutory maximum. Based upon the current formula, the maximum PCE a program participant could receive is 40.85 cent/kWh. If the statutory maximum was decreased from 52.5 cents/kWh to 42.5 cents/kWh, the PCE participants could receive no more than 31.35 cents/kWh. Therefore any utility currently receiving more than 31.35 cents/kWh would have their PCE level adjusted accordingly, so as not to exceed this maximum. Overall, because the average PCE rate is 14 cents/kWh, the reduction in the ceiling does not appear to have a significant impact on the program until the statutory maximum is substantially reduced.

Figure 3.

52.5 - 9.5 = 43.0 x 95% =	40.85
42.5 - 9.5 = 33.0 x 95% =	31.35
32.5 - 9.5 = 23.0 x 95% =	21.85
22.5 - 9.5 = 13.0 x 95% =	12.35

Lowering the Percentage of Covered Eligible Costs per KWH

The maximum percentage established by statute for PCE reimbursement of eligible costs is 95% and has been maintained since program inception. Program costs could be lowered by lowering the reimbursement percentage rate, which would therefore lower the PCE rate for all PCE consumers. This option would reduce the PCE expenditure percentage from 95% down to any number of options, say 90, 85, 80, 75 or 70%. This option does reduce the cost of the program and would effect all consumers equally. Projected savings of reducing the PCE reimbursement percentage based on the FY 96 appropriation is as follows:

Figure 4.

Reimbursement Percentage	Program Costs	Savings
95%	$18,379,309	0
90%	$17,408,296	$ 971,013
85%	$16,444,885	$1,934,424
80%	$15,481,475	$2,897,834
75%	$14,518,064	$3,861,245
70%	$13,541,273	$4,838,036

The difficulty in administering the PCE program with a reduced reimbursement percentage is the way it treats all customers the same. The poverty level customer using 150 kWh per month would lose the same percentage of PCE as the heaviest user in the community. If PCE is to be utilized to assist in a basic lifestyle, then this option does not do so.

Delete Eligibility for Commercial Users **Projected Savings $2,395,158**

In the past it has been argued that any cuts to the PCE program should first be borne by commercial PCE customers. Implementation of PCE regulations FY 89 eliminated multiple meters. Additional changes were implemented in FY 94 that reduced the maximum eligible to 700 kWh per month and eliminated state and federal office/facilities. The net result has been a reduction in the percentage of the program utilized for commercial customers from 21% to approximately 13%.

The FY 95 PCE Statistics Report shows that the annual eligible commercial load was 17,521,632 kWh for 5,422 commercial customers, or monthly average of 305 kWh (17,521,632/5,422/12=269). At an average FY 95 PCE rate of 14 cents per kWh, that represents $37.66 per business per month, an amount that is arguably insignificant. However, the actual distribution figures are not readily available.

Delete Eligibility for Schools **Total Savings $181,987**

In previous years, consideration was given to the elimination of public schools as an eligible commercial customer, however, they were not excluded. Elimination of public schools would result in modest savings for the program and should be addressed.

Lowering the Maximum Eligible Kilowatt Hours

Probably the area where the most impact can be made on the overall cost of the PCE program is in the area of the maximum eligible kilowatt hours allowed per residential customer. The Division analyzed the data from thirteen of the largest utilities, representing approximately 70% of PCE customers. These utilities provided the Division data from one high consumption month (December 1994) and from one low consumption month (June 1995) and from this data, the Division calculated an average usage month.

The data collected was organized to demonstrate projected program savings as the maximum eligible kWh was lowered from 700 kWh to 500, 400, 300 and 200 kWh per month. As can be seen in Figure 5. below, substantial program savings are not achieved until the maximum eligible kWh is lowered from 700 kWh to 300 kWh per month. at which time the program would save approximately 35%, or $4,586,000. Bear in mind that the average eligible monthly PCE consumption value for residential customers

during FY 95 was 334 kWh. While a further reduction to 200 kWh would achieve substantial savings, the cuts would most likely have a devastating impact on many rural customers.

The advantage of reducing the maximum eligible kWh is that it would more approximate a needs based program. While all customers would still be eligible for some PCE, the program would be modified to assist in providing a basic level of electrical service. From previous studies, Alaskans most in need are already using less energy and therefore would be impacted very little, if at all. Those customers who can afford to use more power still are able to have some assistance for a basic level of service, however, they would be required to pay for a higher consumption lifestyle.

Figure 5.

Eligible kWh Allowed	% Reduction Program Costs	Total Program Savings
500kWh	10.10%	$1,318,116
400kWh	19.69%	$2,569,674
300kWh	35.14%	$4,586,000
200kWh	52.74%	$6,882,915

It is clear from the above that reducing the maximum eligible kilowatts to somewhere between 300kWh and 400kWh would substantially reduce the cost of the program, thereby extending the life of the PCE fund, and PCE would still provide a basic subsistence level of subsidy.

Reduce Legislative Request

The simplest way to reduce the cost of the program is to request less funding in any given fiscal year. If the goal was to save 40% of the program costs, the request could be put forward as 40% less than what the funding requirements would be if the program was funded at 100%.

The advantage of this method is that you would know exactly what the funding would be and the program administrator would adjust PCE payments accordingly; each customer would receive 40% less. The disadvantage is that it would hit all classes of customer regardless of any other criteria such as consumption level. The poverty class consumer would receive the same percentage cut as the person using the maximum eligible kWh.

Prioritizing Customer Eligibility

From a historic perspective Community Facilities are the fastest growing customer category receiving PCE funding. Figure 6. below summarizess the consumption of each customer class since FY88 and the corresponding percentage for the category.

Figure 6.

Fiscal Year	Residential Eligible kWh		Commercial Eligible kWh		Community Facilities Eligible kWh		Total
FY88	77,680,953	64.99%	24,880,361	20.82%	16,964,191	14.19%	119,525,505
FY89	79,626,166	65.41%	25,905,395	21.28%	16,200,763	13.31%	121,732,324
FY90	85,101,432	65.33%	27,150,456	20.84%	18,004,419	13.82%	130,256,307
FY91	86,066,286	65.82%	24,998,992	19.12%	19,703,287	15.07%	130,768,565
FY92	82,434,414	66.38%	19,574,309	15.76%	22,184,712	17.86%	124,193,435
FY93	84,891,516	66.38%	19,654,897	15.37%	23,331,451	18.25%	127,877,864
FY94	88,044,035	67.61%	17,810,060	13.68%	24,360,570	18.71%	130,214,665
FY95	90,460,362	67.32%	17,497,427	13.02%	26,414,122	19.66%	134,371,911

An increase in the number of communities participating in the program, increased construction of new housing units, and/or a basic 2% increase in annual consumption easily explains the modest increase in residential consumption.

As demonstrated above, savings in commercial consumption are substantially offset by the increase in community facility consumption. Without the elimination of State and Federal offices/facilities and multiple meters, the cost to the program would be substantially greater.

This option would rank in the order of priority the various customer classifications. Residential customers would receive the first, or greatest, priority should funding availability continue to decline. Secondly, the State and Federal governments have invested and continue to invest large sums of money for the development and maintenance of sanitation facilities in rural Alaska. These facilities demand a major amount of electrical consumption for their operation and create a major expenditure for the community. Considering the State's investment in these facilities, it would be detrimental for these communities to suddenly lose PCE funding. To protect this investment, the definition of "Community Facility" should be redefined to limit eligibility to facilities essential to life, health and safety. This definition would include water and sewer facilities, public outdoor lighting, community washeteria, firehall, health clinic and village public safety office.

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APPENDIX

The following projected cash flows illustrate what would happen to the Power Cost Equalization and Rural Electric Capitalization Fund if the following scenarios materialized:

A. The program operating until the year 2013, with no additional appropriations from the legislature. PCE would be paid out at 62.6% of current rates for a total of $7.25 million, increasing at 2% per annum.

B. The program is continued as is, with annual appropriations of $12.2 million, increasing at 2% per annum sufficient to allow the fund to operate until the year 2013.

C. The program cuts only schools and commercial customers and receives annual appropriations of $9.3 million, increasing at 2% per annum.

Power Cost Equalization (PCE) and Rural Electric Capitalization (REC) Fund

Projected Cash Flow

as of October 25, 1995

Major Proposed Changes:

- No annual appropriation to sustain fund.
- PCE program pays all customers at a rate to extend fund to 2013.

		1996	1997	1998	1999	2000	2001	2002
Fund Balance at beginning of Fiscal Year		$63,085	$47,884	$46,300	$44,634	$42,851	$40,947	$38,909
Revenue								
Transfer from General Fund		0	0	0	0	0	0	0
1	PCE/REC Fund Investment Income	3,038	2,640	2,556	2,465	2,369	2,265	2,154
2	Four Dam Pool (FDP) Transfer Fund allocation	2,647	4,462	4,562	4,634	4,706	4,773	4,884
	Total	5,585	7,102	7,118	7,099	7,075	7,038	7,039
Expenditure								
3	PCE Outlay	19,386	7,250	7,395	7,543	7,694	7,848	8,005
	Rural Electric Grants (3% of balance)	1,400	1,437	1,389	1,339	1,286	1,228	1,167
	Total	20,786	8,687	8,784	8,882	8,979	9,076	9,172
	Surplus (Shortage) = (2-3)	(15,201)	(1,584)	(1,666)	(1,783)	(1,904)	(2,038)	(2,133)
Fund Balance at end of Fiscal Year = (1+2-3)		$47,884	$46,300	$44,634	$42,851	$40,947	$38,909	$36,776

Reduction of PCE Credit to Residential Consumer

	Current Rate	Reduction Amount	New Rate
Kwig	0.2353	0.1473	0.0880
Bethel	0.1025	0.0642	0.0383

Assumptions:

1. Interest assumed at 5.5% per annum.
2. FY95 reflects actual FDP Transfer Fund allocation (40% of total debt service). Following years allocations are estimated. However, this revenue may be interrupted due to lack of legislative appropriation for allocation of monies from the FDP Transfer Fund, or lack of revenue to the FDP Transfer Fund itself.
3. PCE outlay assummed to grow at 2% per annum.

Power Cost Equalization (PCE) and Rural Electric Capitalization (REC) Fund

Pro Forma Cash Flow

as of October 25, 1995

Major Proposed Changes:

- Annual general fund appropriation of $9.3 million increasing by 2% per year.
- PCE program eliminates schools and commercial customers.

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
$36,653	$34,254	$31,656	$28,842	$25,807	$22,545	$19,046	$15,303	$11,305	$7,040	$2,500
10,473	10,683	10,898	11,114	11,337	11,563	11,795	12,031	12,271	12,517	12,767
2,308	2,180	2,042	1,892	1,730	1,555	1,368	1,168	954	725	482
4,848	4,873	4,891	4,912	4,934	4,958	4,982	5,005	5,027	5,050	5,074
17,629	17,736	17,829	17,918	18,000	18,077	18,145	18,204	18,252	18,292	18,323
18,929	19,307	19,693	20,087	20,489	20,899	21,317	21,743	22,178	22,621	23,074
1,100	1,028	950	866	774	676	571	459	339	211	75
20,028	20,335	20,643	20,952	21,263	21,575	21,888	22,202	22,517	22,833	23,149
(2,399)	(2,599)	(2,814)	(3,034)	(3,263)	(3,498)	(3,743)	(3,998)	(4,265)	(4,541)	(4,826)
$34,254	$31,656	$28,842	$25,807	$22,545	$19,046	$15,303	$11,305	$7,040	$2,500	($2,326)

Power Cost Equalization (PCE) and Rural Electric Capitalization (REC) Fund

Pro Forma Cash Flow

as of October 25, 1995

Major Proposed Changes:

- Annual general fund appropriation of $12.2 million increasing by 2% per year.
- PCE expenditure to continue as is, increasing 2% per year.

		1996	1997	1998	1999	2000	2001	2002
	Fund Balance at beginning of Fiscal Year	$63,085	$47,884	$46,303	$44,640	$42,860	$40,959	$38,924
	Revenue							
1	Transfer from General Fund	0	12,200	12,444	12,693	12,947	13,206	[illegible]
2	PCE/REC Fund Investment Income	3,038	2,967	2,889	2,806	2,716	2,619	[illegible]
3	Four Dam Pool (FDP) Transfer Fund allocation	2,647	4,462	4,562	4,634	4,706	4,773	[illegible]
	Total	6,685	19,629	19,895	20,132	20,369	20,598	[illegible]
	Expenditure							
4	PCE Outlay	19,386	19,774	20,169	20,573	20,984	21,404	[illegible]
	Rural Electric Grants (3% of balance)	1,400	1,437	1,389	1,339	1,286	1,229	[illegible]
	Total	20,786	21,210	21,558	21,912	22,270	22,632	[illegible]
	Surplus (Shortage) = (2-3)	(15,201)	(1,581)	(1,663)	(1,780)	(1,901)	(2,035)	[illegible]
	Fund Balance at end of Fiscal Year = (1+2-3)	$47,884	$46,303	$44,640	$42,860	$40,959	$38,924	$36,739

Reduction of PCE Credit to Residential Consumer

	300kWh	400kWh	500kWh
Kwig	No impact on Residential Rates		
Bethal	No Impact on Residential Rates		

Assumptions:

1. Transfer from general fund assumed to increase at 2% per year.
2. Interest assumed at 5.5% per annum.
3. FY95 reflects actual FDP Transfer Fund allocation (40% of total debt service). Following years allocations are estimated. However, this revenue may be interrupted due to lack of legislative appropriation for allocation of monies from the FDP Transfer Fund, or lack of revenue to the FDP Transfer Fund itself.
4. PCE outlay assumed to grow at 2% per annum.

Power Cost Equalization (PCE) and Rural Electric Capitalization (REC) Fund

Projected Cash Flow

as of October 25, 1995

Major Proposed Changes:

- No annual appropriation to sustain fund.
- PCE program pays all customers at a rate to extend fund to 2013.

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
$36,716	$34,329	$31,743	$28,942	$25,921	$22,673	$19,189	$15,461	$11,479	$7,230	$2,707
0	0	0	0	0	0	0	0	0	0	0
2,031	1,899	1,755	1,600	1,433	1,253	1,061	855	635	401	152
4,848	4,873	4,891	4,912	4,934	4,958	4,982	5,005	5,027	5,050	5,074
6,879	6,772	6,646	6,512	6,367	6,211	6,043	5,860	5,662	5,451	5,226
8,165	8,328	8,495	8,664	8,838	9,014	9,195	9,379	9,566	9,758	9,954
1,101	1,030	952	868	778	680	576	464	344	217	81
9,266	9,358	9,447	9,533	9,615	9,695	9,770	9,842	9,911	9,974	10,034
(2,387)	(2,586)	(2,801)	(3,021)	(3,249)	(3,484)	(3,728)	(3,983)	(4,248)	(4,523)	(4,808)
$34,329	$31,743	$28,942	$25,921	$22,673	$19,189	$15,461	$11,479	$7,230	$2,707	($2,101)

Power Cost Equalization (PCE) and Rural Electric Capitalization (REC) Fund

Pro Forma Cash Flow

as of October 25, 1995

Major Proposed Changes:

- Annual general fund appropriation of $9.3 million increasing by 2% per year.
- PCE program eliminates schools and commercial customers.

		1996	1997	1998	1999	2000	2001	2002
	Fund Balance at beginning of Fiscal Year	$63,085	$47,884	$46,290	$44,615	$42,821	$40,907	$38,858
	Revenue							
1	Transfer from General Fund	0	9,300	9,486	9,676	9,869	10,067	10,268
2	PCE/REC Fund Investment Income	3,038	2,889	2,809	2,723	2,631	2,532	2,426
3	Four Dam Pool (FDP) Transfer Fund allocation	2,547	4,462	4,562	4,634	4,706	4,773	4,826
	Total	5,585	16,651	16,857	17,032	17,207	17,372	17,519
	Expenditure							
4	PCE Outlay	19,386	16,808	17,144	17,487	17,837	18,194	18,557
	Rural Electric Grants (3% of balance)	1,400	1,437	1,389	1,338	1,285	1,227	1,166
	Total	20,786	18,245	18,533	18,825	19,121	19,421	19,724
	Surplus (Shortage) = (2-3)	(15,201)	(1,594)	(1,676)	(1,793)	(1,915)	(2,049)	(2,204)
	Fund Balance at end of Fiscal Year = (1+2-3)	$47,884	$46,290	$44,615	$42,821	$40,907	$38,858	$36,653

Reduction of PCE Credit to Residential Consumer

	300kWh	400kWh	500kWh
Kwig	No impact on Residential Rates		
Bethel	No Impact on Residential Rates		

Assumptions:

1. Transfer from general fund assumed to increase at 2% per year.
2. Interest assumed at 5.5% per annum.
3. FY95 reflects actual FDP Transfer Fund allocation (40% of total debt service). Following years allocations are estimated. However, this revenue may be interrupted due to lack of legislative appropriation for allocation of monies from the FDP Transfer Fund, or lack of revenue to the FDP Transfer Fund itself.
4. PCE outlay assumed to grow at 2% per annum.

Power Cost Equalization (PCE) and Rural Electric Capitalization (REC) Fund

Pro Forma Cash Flow

as of October 25, 1995

Major Proposed Changes:

- Annual general fund appropriation of $12.2 million increasing by 2% per year.
- PCE expenditure to continue as is, increasing 2% per year.

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
$36,735	$34,352	$31,770	$28,973	$25,956	$22,712	$19,233	$15,510	$11,532	$7,289	$2,771
13,739	14,014	14,294	14,580	14,872	15,169	15,473	15,782	16,098	16,420	16,748
2,400	2,276	2,139	1,992	1,833	1,661	1,477	1,280	1,069	844	604
4,848	4,873	4,891	4,912	4,934	4,958	4,982	5,005	5,027	5,050	5,074
20,987	21,162	21,324	21,484	21,638	21,788	21,932	22,067	22,194	22,313	22,426
22,26	22,714	23,168	23,631	24,104	24,586	25,078	25,579	26,091	26,613	27,145
1,102	1,031	953	869	779	681	577	465	346	219	83
23,370	23,744	24,121	24,501	24,883	25,267	25,655	26,045	26,437	26,831	27,228
(2,383)	(2,582)	(2,797)	(3,017)	(3,244)	(3,479)	(3,723)	(3,978)	(4,243)	(4,518)	(4,802)
$34,352	$31,770	$28,973	$25,956	$22,712	$19,233	$15,510	$11,532	$7,289	$2,771	($2,031)

B

POWER COST EQUALIZATION PROGRAM

IMPACT OF FUNDING REDUCTION TO 85% OF PROGRAM REQUIREMENTS

(Sample Year FY95)

Prepared by
Department of Community & Regional Affairs
Division of Energy

Jt House & Senate Finance Meeting
March 14, 9:00 AM

Distributed by
Representative Richard Foster
Co-Chair, House Finance

Department of Community and Regional Affairs
Division of Energy

Power Cost Equalization Program
Impact of Funding Reduction to 85% of Program Requirements
(Sample year FY95)

Utility/Community	Elect Dist.	FY95 Program Requirements	15% Reduction	85% of FY95 Program Requirements
Angoon	5	212,141.24	31,821.19	180,320.05
Chilkat Valley	5	46,158.84	6,923.83	39,235.01
Coffman Cove	5	80,788.86	12,118.33	68,670.53
Craig	5	259,194.67	38,879.20	220,315.47
Hollis	5	11,735.83	1,760.37	9,975.46
Hoonah	5	423,169.53	63,475.43	359,694.10
Hydaburg	5	55,246.75	8,287.01	46,959.74
Kake	5	323,962.23	48,594.33	275,367.90
Kasaan	5	22,884.72	3,432.71	19,452.01
Klawock	5	354,451.00	53,167.65	301,283.35
Skagway	5	103,819.75	15,572.96	88,246.79
Whale Pass	5	1,030.43	154.56	875.87
Elfin Cove Electric Utility	5	23,808.42	3,571.26	20,237.16
Gustavus Electric Company	5	296,666.09	44,499.91	252,166.18
Haines Light & Power Company, Inc.	5	213,252.66	31,987.90	181,264.76
Pelican Utility Company	5	12,062.43	1,809.36	10,253.07
Tenakee Springs Electric Utility	5	52,328.15	7,849.22	44,478.93
Thorne Bay Public Utility	5	40,786.58	6,117.99	34,668.59
Yakutat, City of	5	173,845.02	26,076.75	147,768.27
Subtotal Election District 5		2,707,333.20	406,099.98	2,301,233.22
Old Harbor	6	135,982.21	20,397.33	115,584.88
Akhiok, City of	6	12,695.86	1,904.38	10,791.48
Alutiiq Power Company (Karluk)	6	25,782.23	3,867.33	21,914.90
Larsen Bay Utility Company	6	14,560.00	2,184.00	12,376.00
Ouzinkie, City of	6	56,882.22	8,532.33	48,349.89
Subtotal Election District 6		245,902.52	36,885.38	209,017.14
Chenega Bay IRA Village Council	35	20,776.99	3,116.55	17,660.44
Cordova Electric Association	35	725,843.28	108,876.49	616,966.79
Tatitlek Electric Utility	35	8,242.08	1,236.31	7,005.77
Subtotal Election District 35		754,862.35	113,229.35	641,633.00

Allakaket/Alatna	36	9,818.65	1,472.80	8,345.85
Anvik	36	49,070.68	7,360.60	41,710.08
Bettles	36	54,223.89	8,133.58	46,090.31
Chauthbaluk	36	47,170.22	7,075.53	40,094.69
Chistochina	36	27,319.53	4,097.93	23,221.60
Crooked Creek	36	58,640.35	8,796.05	49,844.30
Dot Lake	36	14,593.99	2,189.10	12,404.89
Grayling	36	83,191.50	12,478.73	70,712.78
Healy Lake	36	10,390.96	1,558.64	8,832.32
Holy Cross	36	118,552.21	17,782.83	100,769.38
Huslia	36	92,560.54	13,884.08	78,676.46
Kaltag	36	98,218.94	14,732.84	83,486.10
Lower Kalskag	36	88,941.34	13,341.20	75,600.14
Marshall	36	125,844.61	18,876.69	106,967.92
Mentasta	36	18,196.53	2,729.48	15,467.05
Minto	36	112,665.04	16,899.76	95,765.28
Nulato	36	150,648.78	22,597.32	128,051.46
Pilot Station	36	151,422.43	22,713.36	128,709.07
Red Devil	36	22,202.36	3,330.35	18,872.01
Russian Mission	36	67,018.16	10,052.72	56,965.44
Shageluk	36	58,986.95	8,848.04	50,138.91
Sleetmute	36	46,640.96	6,996.14	39,644.82
Stony River	36	23,150.99	3,472.65	19,678.34
Tetlin	36	20,468.07	3,070.21	17,397.86
Tok	36	238,509.47	35,776.42	202,733.05
Upper Kalskag	36	60,687.22	9,103.08	51,584.14
Aniak Light & Power Company, Inc.	36	255,583.01	38,337.45	217,245.56
Beaver Joint Utility	36	37,868.08	5,680.21	32,187.87
Birch Creek Village Electric Utility	36	2,809.52	421.43	2,388.09
Chalkyitsik Energy Systems	36	6,080.43	912.06	5,168.37
Chitina Electric, Inc.	36	36,606.10	5,490.92	31,115.19
Circle Electric Utility	36	53,151.60	7,972.74	45,178.86
Eagle Power Company	36	100,659.47	15,098.92	85,560.55
Far North Utilities (Central)	36	60,367.82	9,055.17	51,312.65
Galena, City of	36	141,774.87	21,266.23	120,508.64
Gwitchyaa Zhee Utilities (Ft. Yukon)	36	166,188.39	24,928.26	141,260.13
Koyukuk, City of	36	12,506.31	1,875.95	10,630.36
Manley Utility Corporation	36	71,254.79	10,688.22	60,566.57
McGrath Light & Power	36	294,298.40	44,144.76	250,153.64
Nikolai Light & Power	36	69,348.10	10,402.22	58,945.89
Northway Power & Light	36	86,066.13	12,909.92	73,156.21
Rampart Village Energy Systems	36	1,383.80	207.57	1,176.23
Ruby, City of	36	67,653.07	10,147.96	57,505.11
Stevens Village Energy Systems	36	18,579.94	2,786.99	15,792.95
Takotna Community Association	36	38,261.28	5,739.19	32,522.09
Tanana Power Company	36	83,232.44	12,484.87	70,747.57
Subtotal Election District 36		3,452,807.92	517,921.19	2,934,886.73
Ambler	37	164,956.68	24,743.50	140,213.18
Anaktuvuk Pass	37	36,719.95	5,507.99	31,211.96
Atqasuk	37	31,000.50	4,650.08	26,350.43

Kaktovik	37	30,823.27	4,623.49	26,199.78
Kiana	37	173,627.61	26,044.14	147,583.47
Kivalina	37	106,490.96	15,973.64	90,517.32
Noatak	37	170,337.01	25,550.55	144,786.46
Noorvik	37	230,557.61	34,583.64	195,973.97
Nuiqsut	37	39,916.54	5,987.48	33,929.06
Point Hope	37	59,493.45	8,924.02	50,569.43
Point Lay	37	23,578.15	3,536.72	20,041.43
Selawik	37	192,053.27	28,807.99	163,245.28
Shishmaref	37	187,467.55	28,120.13	159,347.42
Shungnak	37	125,503.08	18,825.46	106,677.62
Wainwright	37	51,534.14	7,730.12	43,804.02
Wales	37	75,375.07	11,306.26	64,068.81
Buckland, City of	37	35,238.18	5,285.73	29,952.45
Diomede Joint Utilities	37	68,770.20	10,315.53	58,454.67
Ipnatchiaq Electric Company (Deering)	37	66,131.04	9,919.66	56,211.38
Kobuk Valley Electric Cooperative	37	42,799.36	6,419.90	36,379.46
Kotzebue Electric Association	37	547,370.68	82,105.60	465,265.08
Subtotal Election District 37		2,459,744.30	368,961.65	2,090,782.66
Alakanuk	38	116,100.34	17,415.05	98,685.29
Andreafsky	38	54,856.84	8,228.53	46,628.31
Brevig Mission	38	61,113.70	9,167.06	51,946.65
Chevak	38	159,932.25	23,989.84	135,942.41
Elim	38	116,057.65	17,408.65	98,649.00
Emmonak	38	321,104.86	48,165.73	272,939.13
Gambell	38	193,911.86	29,086.78	164,825.08
Hooper Bay	38	210,093.79	31,514.07	178,579.72
Koyuk	38	104,681.09	15,702.16	88,978.93
Mekoryuk	38	80,482.75	12,072.41	68,410.34
Mountain Village	38	285,333.59	42,800.04	242,533.55
Pitkas Point	38	40,581.30	6,087.20	34,494.11
Savoogna	38	150,267.64	22,540.15	127,727.49
Scammon Bay	38	125,395.66	18,809.35	106,586.31
Shaktoolik	38	100,057.96	15,008.69	85,049.27
St. Mary's	38	184,590.76	27,688.61	156,902.15
St. Michael	38	107,918.01	16,187.70	91,730.31
Stebbins	38	116,659.65	17,498.95	99,160.70
Toksook Bay	38	148,039.56	22,205.93	125,833.63
Tununak	38	99,275.18	14,891.28	84,383.90
Golovin Power Utilities	38	54,910.68	8,236.60	46,674.08
Kotlik Electric Services	38	98,277.23	14,741.58	83,535.65
Nightmute Power Plant	38	26,918.50	4,037.78	22,880.73
Nome Joint Utility System	38	351,822.03	52,773.30	299,048.73
Sheldon Point Electric Company	38	26,519.65	3,977.95	22,541.70
Telida Village Utility	38	7,855.63	1,178.34	6,677.29
Teller Power Company	38	104,564.00	15,684.60	88,879.40
Unalakleet Valley Electric Cooperative	38	176,452.75	26,467.91	149,984.84

Unqusraq Power Company (Newtok)	38	77,310.02	11,596.50	65,713.52
White Mountain Utilities	38	68,002.53	10,200.38	57,802.15
Subtotal Election District 38		3,769,087.46	565,363.12	3,203,724.34
Eek	39	82,717.74	12,407.66	70,310.08
Goodnews Bay	39	85,062.14	12,759.32	72,302.82
Kasigluk	39	136,337.40	20,450.61	115,886.79
New Stuyahok	39	129,650.73	19,447.61	110,203.12
Nunapitchuk	39	121,805.06	18,270.76	103,534.30
Quinhagak	39	155,440.26	23,316.04	132,124.22
Togiak	39	259,152.01	38,872.80	220,279.21
Akiachak Native Community Electric Co.	39	142,990.04	21,448.51	121,541.53
Akiak Power Utilities	39	31,108.25	4,666.24	26,442.01
Atmautluak Joint Utilities	39	33,524.76	5,028.71	28,496.05
Bethel Utilities Corporation, Inc.	39	812,928.02	121,939.20	690,988.82
Ekwok Electric, Inc.	39	43,169.81	6,475.47	36,694.34
Kipnuk Light Plant	39	104,922.50	15,738.38	89,184.13
Koliganek Village Council	39	39,335.86	5,900.38	33,435.48
Kuiggluum Kallugvia (Kwethluk)	39	103,982.44	15,597.37	88,385.07
Kwig Power Company (Kwigillingok)	39	95,558.29	14,333.74	81,224.55
Manokatak Power Company	39	47,444.50	7,116.68	40,327.83
Napakiak Ircinraq Power Company	39	116,714.72	17,507.21	99,207.51
Napaskiak Electric Utility	39	64,074.40	9,611.16	54,463.24
Naterkaq Light Plant (Chefornak)	39	58,534.30	8,780.15	49,754.16
Nushagak Electric Cooperative, Inc. (Dillingham)	39	524,500.24	78,675.04	445,825.20
Platinum, City of	39	3,531.75	529.76	3,001.99
Puvurnaq Power Company (Kongiganak)	39	76,216.14	11,432.42	64,783.72
Tuntutuliak Community Service Assoc.	39	68,599.08	10,289.86	58,309.22
Subtotal Election District 39		3,337,300.44	500,595.07	2,836,705.37
Akutan Electric Utility	40	61,294.96	9,194.24	52,100.72
Andreanof Electric Corporation (Atka)	40	22,261.63	3,339.24	18,922.39
Chignik Lake Electric Utility, Inc.	40	70,080.83	10,512.12	59,568.71
Chignik, City of	40	36,893.39	5,534.01	31,359.38
Egegik Light & Power Company	40	61,582.39	9,237.36	52,345.03
False Pass Electric Association	40	20,248.26	3,037.24	17,211.02
G & K Inc. (Cold Bay)	40	71,359.30	10,703.90	60,655.41
I-N-N Electric Cooperative	40	332,040.48	49,806.07	282,234.41
Iguigig Village Council	40	26,356.01	3,953.40	22,402.61
King Cove, City of	40	97,200.41	14,580.06	82,620.35
Kokhanok Village Council	40	50,636.82	7,598.52	43,058.30
Levelock Electric Cooperative	40	68,786.86	10,318.03	58,468.83
Naknek Electric Association, Inc.	40	344,319.30	51,647.90	292,671.41
Nelson Lagoon Electric Cooperative, Inc.	40	46,501.89	6,975.28	39,526.61
Pedro Bay Village Council - Electric	40	21,875.95	3,281.39	18,594.56
Perryville, City of	40	12,945.88	1,941.88	11,004.00
Pilot Point Village Council	40	35,008.39	5,251.26	29,757.13
Port Heiden, City of	40	15,759.88	2,363.98	13,395.90
Sand Point Electric Company	40	375,349.72	56,302.46	319,047.26
St. George Municipal Electric Utility	40	75,574.50	11,336.18	64,238.33

St. Paul Municipal Electric Utility	40	110,102.42	16,515.36	93,587.06
Tanalian Electric Cooperative, Inc (Pt. Alsworth).	40	44,275.66	6,641.35	37,634.31
Umnak Power Company (Nikolski)	40	20,376.54	3,056.48	17,320.06
Unalaska Electric Utility	40	207,468.78	31,120.32	176,348.46
Subtotal Election District 40		2,228,320.25	334,248.04	1,894,072.21
Grand Total		18,955,358.44	2,843,303.77	16,112,054.67

C

POWER COST EQUALIZATION PROGRAM

FY95 DISBURSEMENTS BY HOUSE DISTRICT

Prepared by
Department of Community & Regional Affairs
Division of Energy

Jt House & Senate Finance Meeting
March 14, 1996

Distributed by
Representative Richard Foster
Co-Chair, House Finance

Department of Community and Regional Affairs
Division of Energy

Power Cost Equalization Program
FY95 Disbursements by House District

Utility/Community	Elect Dist.	FY95 Program Requirements
Angoon	5	212,141.24
Chilkat Valley	5	46,158.84
Coffman Cove	5	80,788.86
Craig	5	259,194.67
Hollis	5	11,735.83
Hoonah	5	423,169.53
Hydaburg	5	55,246.75
Kake	5	323,962.23
Kasaan	5	22,884.72
Klawock	5	354,451.00
Skagway	5	103,819.75
Whale Pass	5	1,030.43
Elfin Cove Electric Utility	5	23,808.42
Gustavus Electric Company	5	296,666.09
Haines Light & Power Company, Inc.	5	213,252.66
Pelican Utility Company	5	12,062.43
Tenakee Springs Electric Utility	5	52,328.15
Thorne Bay Public Utility	5	40,786.58
Yakutat, City of	5	173,845.02
Subtotal Election District 5		2,707,333.20
Old Harbor	6	5,982.21
Akhiok, City of	6	12,695.86
Alutiiq Power Company (Karluk)	6	25,782.23
Larsen Bay Utility Company	6	14,560.00
Ouzinkie, City of	6	56,882.22
Subtotal Election District 6		245,902.52
Chenega Bay IRA Village Council	35	20,776.99
Cordova Electric Association	35	725,843.28
Tatitlek Electric Utility	35	8,242.08
Subtotal Election District 35		754,862.35
Allakaket/Alatna	36	9,818.65

Anvik	36	49,070.68
Bettles	36	54,223.89
Chauthbaluk	36	47,170.22
Chistochina	36	27,319.53
Crooked Creek	36	58,640.35
Dot Lake	36	14,593.99
Grayling	36	83,191.50
Healy Lake	36	10,390.96
Holy Cross	36	118,552.21
Huslia	36	92,560.54
Kaltag	36	98,218.94
Lower Kalskag	36	88,941.34
Marshall	36	125,844.61
Mentasta	36	18,196.53
Minto	36	112,665.04
Nulato	36	150,648.78
Pilot Station	36	151,422.43
Red Devil	36	22,202.36
Russian Mission	36	67,018.16
Shageluk	36	58,986.95
Sleetmute	36	46,640.96
Stony River	36	23,150.99
Tetlin	36	20,468.07
Tok	36	238,509.47
Upper Kalskag	36	60,687.22
Aniak Light & Power Company, Inc.	36	255,583.01
Beaver Joint Utility	36	37,868.08
Birch Creek Village Electric Utility	36	2,809.52
Chalkyitsik Energy Systems	36	6,080.43
Chitina Electric, Inc.	36	36,606.10
Circle Electric Utility	36	53,151.60
Eagle Power Company	36	100,659.47
Far North Utilities (Central)	36	60,367.82
Galena, City of	36	141,774.87
Gwitchyaa Zhee Utilities (Ft. Yukon)	36	166,188.39
Koyukuk, City of	36	12,506.31
Manley Utility Corporation	36	71,254.79
McGrath Light & Power	36	294,298.40
Nikolai Light & Power	36	69,348.10
Northway Power & Light	36	86,066.13
Rampart Village Energy Systems	36	1,383.80
Ruby, City of	36	67,653.07
Stevens Village Energy Systems	36	18,579.94
Takotna Community Association	36	38,261.28
Tanana Power Company	36	83,232.44
Subtotal Election District 36		3,452,807.92
Ambler	37	164,956.68
Anaktuvuk Pass	37	36,719.95
Atqasuk	37	31,000.50

Kaktovik	37	30,823.27
Kiana	37	173,627.61
Kivalina	37	106,490.96
Noatak	37	170,337.01
Noorvik	37	230,557.61
Nuiqsut	37	39,916.54
Point Hope	37	59,493.45
Point Lay	37	23,578.15
Selawik	37	192,053.27
Shishmaref	37	187,467.55
Shungnak	37	125,503.08
Wainwright	37	51,534.14
Wales	37	75,375.07
Buckland, City of	37	35,238.18
Diomede Joint Utilities	37	68,770.20
Ipnatchiaq Electric Company (Deering)	37	66,131.04
Kobuk Valley Electric Cooperative	37	42,799.36
Kotzebue Electric Association	37	547,370.68
Subtotal Election District 37		2,459,744.30

Alakanuk	38	116,100.34
Andreafsky	38	54,856.84
Brevig Mission	38	61,113.70
Chevak	38	159,932.25
Elim	38	116,057.65
Emmonak	38	321,104.86
Gambell	38	193,911.86
Hooper Bay	38	210,093.79
Koyuk	38	104,681.09
Mekoryuk	38	80,482.75
Mountain Village	38	285,333.59
Pitkas Point	38	40,581.30
Savoogna	38	150,267.64
Scammon Bay	38	125,395.66
Shaktoolik	38	100,057.96
St. Mary's	38	184,590.76
St. Michael	38	107,918.01
Stebbins	38	116,659.65
Toksook Bay	38	148,039.56
Tununak	38	99,275.18
Golovin Power Utilities	38	54,910.68
Kotlik Electric Services	38	98,277.23
Nightmute Power Plant	38	26,918.50
Nome Joint Utility System	38	351,822.03
Sheldon Point Electric Company	38	26,519.65
Telida Village Utility	38	7,855.63
Teller Power Company	38	104,564.00
Unalakleet Valley Electric Cooperative	38	176,452.75

Unqusraq Power Company (Newtok)	38	77,310.02
White Mountain Utilities	38	68,002.53
Subtotal Election District 38		3,769,087.46
Eek	39	82,717.74
Goodnews Bay	39	85,062.14
Kasigluk	39	136,337.40
New Stuyahok	39	129,650.73
Nunapitchuk	39	121,805.06
Quinhagak	39	155,440.26
Togiak	39	259,152.01
Akiachak Native Community Electric Co.	39	142,990.04
Akiak Power Utilities	39	31,108.25
Atmautluak Joint Utilities	39	33,524.76
Bethel Utilities Corporation, Inc.	39	812,928.02
Ekwok Electric, Inc.	39	43,169.81
Kipnuk Light Plant	39	104,922.50
Koliganek Village Council	39	39,335.86
Kuiggluum Kallugvia (Kwethluk)	39	103,982.44
Kwig Power Company (Kwigillingok)	39	95,558.29
Manokatak Power Company	39	47,444.50
Napakiak Ircinraq Power Company	39	116,714.72
Napaskiak Electric Utility	39	64,074.40
Naterkaq Light Plant (Chefornak)	39	58,534.30
Nushagak Electric Cooperative, Inc. (Dillingham)	39	524,500.24
Platinum, City of	39	3,531.75
Puvurnaq Power Company (Kongiganak)	39	76,216.14
Tuntutuliak Community Service Assoc.	39	68,599.08
Subtotal Election District 39		3,337,300.44
Akutan Electric Utility	40	61,294.96
Andreanof Electric Corporation (Atka)	40	22,261.63
Chignik Lake Electric Utility, Inc.	40	70,080.83
Chignik, City of	40	36,893.39
Egegik Light & Power Company	40	61,582.39
False Pass Electric Association	40	20,248.26
G & K Inc. (Cold Bay)	40	71,359.30
I-N-N Electric Cooperative	40	332,040.48
Iguigig Village Council	40	26,356.01
King Cove, City of	40	97,200.41
Kokhanok Village Council	40	50,656.82
Levelock Electric Cooperative	40	68,786.86
Naknek Electric Association, Inc.	40	344,319.30
Nelson Lagoon Electric Cooperative, Inc.	40	46,501.89
Pedro Bay Village Council - Electric	40	21,875.95
Perryville, City of	40	12,945.88
Pilot Point Village Council	40	35,008.39
Port Heiden, City of	40	15,759.88
Sand Point Electric Company	40	375,349.72

St. George Municipal Electric Utility	40	75,574.50
St. Paul Municipal Electric Utility	40	110,102.42
Tanalian Electric Cooperative, Inc (Pt. Alsworth).	40	44,275.66
Umnak Power Company (Nikolski)	40	20,376.54
Unalaska Electric Utility	40	207,468.78
Subtotal Election District 40		2,228,320.25
Grand Total		18,955,358.44

D

LEGISLATIVE HISTORY

OF THE

POWER COST EQUALIZATION

PROGRAM

Jt House & Finance Meeting
March 14, 9:00 AM

Distributed by
Representative Richard Foster
Co-Chair, House Finance

Legislative Research Agency

Alaska State Legislature

130 Seward Street, Suite 218
Juneau, Alaska 99801-2196

Phone: (907) 465-3991
Fax: (907) 463-3351

March 13, 1995

MEMORANDUM

TO: Representative Richard Foster

FROM: Linda Brooks
Legislative Analyst

RE: **Legislative History of the Power Cost Equalization Program**
Research Request 95.159

You requested a legislative history of the Power Cost Equalization (PCE) program. The purpose of this program is to reduce the electric rates paid by rural consumers to levels comparable to those paid by consumers in Anchorage, Fairbanks, and Juneau.

During the past fifteen years, four different programs have subsidized rural electric rates.

- Power Production Cost Assistance Program (PPCA) Fiscal Year 1981 (FY 81)
- Power Cost Assistance Program (PCA) FY 82 into FY 85
- Power Cost Equalization Program (PCE) FY 85 into FY 94
- Power Cost Equalization and Rural Electric Capitalization Fund (PCE-REC) FY 94 to present

The four programs share some common characteristics. Each program reimbursed rural utilities a percentage of their eligible costs when those costs exceeded a certain "entry" rate. For example, the first program, PPCA, reimbursed 85 percent of a utility's costs in excess of 7.65 cents/kwh to generate and transmit electricity. Each program also set a maximum "ceiling" rate. In the case of the PPCA program, the ceiling rate was 40 cents/kwh. Therefore, the PPCA program reimbursed a utility for 85 percent of its eligible costs over 7.65 cents/kwh but below 40 cents/kwh.

When costs exceeded the ceiling rate of 40 cents/kwh, the initial PPCA program paid 100 percent of a utility's excess costs. Subsequent programs differ from PPCA in that they did not reimburse *any* costs beyond their ceiling rates. The first PPCA program also defined "eligible costs" differently from the three subsequent programs. Basically, PPCA reimbursed a utility for production and transmission costs but not for distribution and administration costs. The subsequent programs permitted reimbursement for all of these costs.

The biggest difference between the initial and successor programs was the imposition of caps on costs eligible for reimbursement on a per customer basis. The initial PPCA program reimbursed a utility for *all* of its eligible costs regardless of who consumed the electricity. All three successor programs limited reimbursement to apply to only a certain amount of kilowatt hours sold to each residential or commercial customer but made special provisions for community facilities (see paragraph below.) For example, the PCA program reimbursed eligible costs for the first 600 kwh/month consumed by each residential or commercial customer. If a customer exceeded the cap of 600 kwh/month, then he or she received no subsidy for amounts of electricity consumed in excess of the 600 kwh/month.

The three successor programs treated community facilities in a manner distinct from other types of customers. Sales of electricity to community facilities qualified for a subsidy on the basis of a set number of kilowatt hours per month per community resident. For example, the PCA program reimbursed eligible costs for providing community facilities with electricity on the basis of 55 kwh/month per resident. If a community had 100 residents, then the first 5,500 kwh of electricity sold to community facilities would qualify for the subsidy: conversely, consumption in excess of 5,500 kwh/month would receive no subsidy.[1]

We present the primary differences between the four rural electric assistance programs in the following table:

Comparison of PPCA, PCA, PCE and PCE-REC

	PPCA FY 81	PCA FY 82 - FY 85	PCE FY 85 - FY 94	PCE-REC FY 94 -Present
Entry Rate	7.65 cents/kwh	12 cents/kwh	8.5 cents/kwh	9.5 cents/kwh
Ceiling Rate	40.0 cents/kwh	45.0 cents/kwh	52.5 cents/kwh	52.5 cents/kwh
Percentage of Eligible Costs Reimbursed	85 percent	95 percent	95 percent	95 percent
Paid Eligible Costs in Excess of the Ceiling Rate	Yes	No	No	No
Consumption Cap for Residential and Commercial Customers	None	600 kwh/month	750 kwh/month	700 kwh/month
Consumption Cap for Community Facilities	None	55 kwh/month per resident	70 kwh/month per resident	70 kwh/month per resident

[1] The programs defined community facilities as water and sewer facilities, public outdoor lighting, charitable educational facilities, or community buildings whose operations were not paid for by the state, the federal government, or private commercial interests.

The formula of the newest program, the Power Cost Equalization and Rural Electric Capitalization Fund, varies from the formula of its immediate predecessor, the Power Cost Equalization Program, in two aspects. The entry rate rose by one penny from 8.5 cents/kwh to 9.5 cents/kwh. The cap for reimbursing eligible costs for commercial and residential consumption also fell from 750 kwh/month to 700 kwh/month per customer. The higher entry rate and lower consumption cap reduce somewhat the subsidies paid to rural utilities.

The legislature created the Power Cost Equalization and Rural Electric Capitalization Fund in 1993 as part of Senate Bill 106; a bill that originally sought to only fund electrical power intertie projects between urban centers. Indeed, the history of the state's rural electric assistance programs is intertwined with the state's efforts to build hydroelectric projects to provide urban areas with inexpensive power. We include pages 7 - 13 of *The Power Cost Equalization Program*, an energy policy report prepared for the governor's energy policy task force in 1988 as Attachment A. These pages provide a concise history of rural electric assistance programs from their inception through 1987. Since 1987 the difficulty of continuing to fund Power Cost Equalization Program was frequently discussed, but the program remained unchanged until it was replaced by the Power Cost Equalization and Rural Electric Capitalization Fund in 1993.

When Senator Bert Sharp introduced Senate Bill 106 in 1993, the original bill proposed to fund the construction of power transmission interties between Anchorage and the Kenai Peninsula, between Healy and Fairbanks, and between the Swan Lake and Tyee Lake hydroelectric projects. Rural legislators opposed the bill, since it funded only urban intertie projects. The final version of the bill that became Ch 18 SLA 93 contained several provisions besides the intertie projects.[2] Section 5 of CH 18 SLA 93 rewrote and renumbered the statutes of the PCE program creating the, "Power Cost Equalization and Rural Electric Capitalization Fund." This newest fund provides for less generous subsidies than the older PCE program. However, the House and Senate Finance Committees' substitute bills varied in one key area: the House version declared the legislature's intent to maintain a minimum annual balance of $17 million annually in the Power Cost Equalization and Rural Electric Capitalization Fund through the year 2013.[3] The House version prevailed, and in exchange for somewhat lower subsidies, rural legislators secured a declaration

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[2]Senate Bill 106 was not the only bill that dealt with the power cost equalization program. House Bill 216, a bill that only dealt with the power cost equalization program, actually passed before Senate Bill 106. House Bill 216 raised the ceiling rate to 9.82 cents/kwh, lowered the cap for residential and commercial customers to 700 kwh/month, and exempted state and federal facilities other than public schools from the program. Senate Bill 106 was passed at the end of the legislative session. Governor Hickel signed Senate Bill 106 into law and vetoed House Bill 216.

[3]The new Power Cost Equalization and Rural Electric Capitalization Fund received an initial appropriation of $66.9 million with 3 percent of the fund available for rural electric project grants.

of intent that the rural electric subsidies should continue through the year 2013: a significant declaration in an era of budget cuts.

While the legislature waited until 1993 to modify the PCE program, members of the legislature frequently discussed and introduced various proposals for changing the program. We include *Power Cost Equalization*, a report prepared in 1990 for the Senate State Affairs Committee as Attachment B. The report examined how various adjustments to the PCE formula used to reimburse rural utilities for their eligible costs would achieve three goals: (1) contain long-range program costs; (2) mitigate the effects of a budget shortfall on residential and low-income consumers; and (3) create incentives for utilities to cut costs and for consumers to use electricity more efficiently. The report concluded with five recommendations:

- Eliminate subsidization of the electric rates paid by federal and state governments and state-funded schools. The report said the state should not subsidize the federal government and suggested that the elimination of subsidies to state agencies and schools would encourage more appropriate energy related purchases on the part of these organizations.

- Prioritize funding of electric subsidies to benefit first residential then community facility and then commercial customers in the event of insufficient appropriations. (Note: the rural electric assistance programs were not created as entitlement programs. Currently, AS 42.45.110(i) states that if, "appropriations are insufficient for payment in full, the amount paid to each electric utility is reduced on a pro rata basis.)

- Reduce the cap for subsidizing residential and commercial customers from 750 kwh/month to 500 kwh/month.

- Reduce the community facility cap from 70 kwh/month per resident to 50 kwh/month per resident.

- Raise the entry rate to be equal to the statewide average rate.

The last recommendation to raise the entry rate to the statewide average rate may sound puzzling. The older PCE and present Power Cost Equalization and Rural Electric Capitalization Fund attempt to bring rural electric rates down to a level close to the weighted average rate paid by consumers in Anchorage, Fairbanks, and Juneau. If PCE sought to reimburse rural utilities so that their consumers paid rates comparable to those paid by consumers in Anchorage, Fairbanks, and Juneau, then how could the PCE entry rate be lower than the actual statewide average rate? In part the answer stems from the fact that not all rural electric utilities are eligible to participate in the PCE programs. Only utilities that used diesel to generate more than 75 percent of their electricity in 1984 and did not exceed certain residential consumption levels in 1983 qualify for

assistance.[4] Therefore some rural communities such as Glennallen and Paxson do not qualify for assistance, and their customers paid 20.2 cents/kwh and 19.9 cents/kwh respectively in 1988, rates that are about double those paid by Anchorage, Fairbanks, and Juneau consumers. Nevertheless, most rural utilities do qualify for the program. In 1990 about 103 of the state's approximately 130 utilities were eligible to receive PCE funding. These 103 utilities, however, serve just 10.8 percent of all electric utility customers in Alaska.[5]

In comparing the recommendations of the 1990 report to the actual changes made to the PCE program in 1993, one finds that the legislature acted to some extent on three of the recommendations. The new Power Cost Equalization and Rural Electric Capitalization Fund eliminates subsidies for federal and state government facilities but kept subsidies for state-funded schools. The new program also raised the entry rate from 8.5 cents/kwh to 9.5 cents/kwh, but 9.5 cents/kwh is still below the statewide average rate (that was 10.6 cents/kwh in 1988.) In terms of consumption caps, the new program reduced the cap for reimbursement for commercial and residential customers from 750 kwh/month to 700 kwh/month, a 50 kwh/month reduction but not as sweeping as the recommended 250 kwh/month reduction.

Nevertheless, if the legislature follows through on its intent, as declared in Ch 18 SLA 93, to flat-fund the power equalization cost program at a minimum of $17 million annually, then further changes to the equalization formula will have no bearing on the amount expended by the state.[6] Seventeen million dollars is an insufficient amount to fully reimburse utilities for all of their eligible costs. Therefore, the current statutes direct the Department of Community and Regional Affairs to divide the $17 million on a pro rata basis among the utilities.[7]

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[4]Alaska Statute 42.45.150(2) defines an eligible electric utility as one that during calendar year 1983 had a residential consumption level of power eligible for power cost equalization under form AS 44.83 of less than 7,500 megawatt hours or had a residential consumption level of power eligible for power cost equalization under form AS 44.83 of less than 15,000 megawatt hours if the utility served two or more municipalities or unincorporated communities. The utility also had to use diesel fired generators to produce more than 75 percent of its electricity in calendar year 1984.

[5]*Power Cost Equalization*, report prepared for the Senate State Affairs Committee in 1990, p. 3.

[6]The FY 95 appropriation of $18,635,000 for power cost equalization was actually higher than the minimum of $17 million.

[7]Ch 18 SLA 93 transferred responsibility for administering the PCE program from the Alaska Energy Authority to the Department of Community and Regional Affairs.

As a final note, we should explain why the name of the PCE program changed to the Power Cost Equalization and *Rural Electric Capitalization Fund.* Rural Electric Capitalization refers to a provision of the new program that allows the Department of Community and Regional Affairs to award grants to eligible utilities for small power projects designed to reduce the cost of generating or transmitting power. However, the department may not allocate more than 3 percent of the balance in the Power Cost Equalization and Rural Capital Assistance Fund as grants in any one year.

We hope this information is useful to you. If you have any further questions please don't hesitate to call.

Attachments

ATTACHMENT A

The Power Cost Equalization Program, p. 7-13
Governor's Energy Policy Task Force

Energy Policy Report:

The Power Cost Equalization Program

Prepared for the Governor's Energy Policy Task Force

Division of Policy
Office of the Governor
January 1988

STATE OF ALASKA STEVE COWPER, GOVERNOR

III. HISTORY OF THE PCE PROGRAM

The Electrification of Rural Alaska

The electrification of rural Alaska essentially began during the late 1950's when the Bureau of Indian Affairs (BIA) installed diesel generators in schools that it had built or was building in many villages. However, power from these generators was not available for residential or commercial use.[4]

During the 1960's, the BIA continued to bring schools and electricity to the rural villages. By this time, all of the larger rural communities and some of the villages had utilities to serve residential and commercial consumers. In 1965, the smaller communities that were served by utilities included Unalakleet, Point Hope, McGrath, and Naknek in Western Alaska; Glenallen, Fort Yukon, and Tok in the Interior; and Craig, Hydaburg, Skagway, Haines, Pelican, Hyder, Yakutat, Hoonah, and Metlakatla in Southeast Alaska.[3] In 1968, the Alaska Village Electric Cooperative (AVEC) was organized to electrify a number of villages in rural Alaska. Between statehood (1959) and FY70, 16 unincorporated villages received electrification grants from the State.[4]

By the mid-70's, about 85 rural communities, mostly with less than 200 residents, were without a centralized power utility.[4] However, that was soon to change. In 1977, the Trans-Alaska pipeline began operation and revenues from North Slope oil became a major source of revenue for the State. The State was now able to provide funding for many of the basic essentials that were lacking in many villages, such as electricity.

Development of the PPCA Program

The first attempt to provide a State subsidy for rural electric rates was apparently in 1978, when the Alaska Public Interest Research Group proposed a lifeline rate as part of a utility reform bill that it had drafted. This bill was introduced in the Legislature that year but it had no hearings. The lifeline rate recognized the economic hardships that escalating oil prices were creating in rural Alaska. The proposal would have had the State provide a subsidy for the first 200 KWH per month consumed by residential customers of rural utilities. During the interim, the Legislature established a State Energy Policy Committee to work on a comprehensive list of energy issues that included rate subsidies.[5]

Later that year, the Governor's Office held discussions with other agencies regarding what assistance, if any, should the State provide relative to the electrical needs of its residents. One important concern at the time was the financial stability of rural utilities, particularly AVEC. This effort led to a report in April 1979 by Arthur Young and Company for the Division of Energy and Power Development entitled A Discussion Of Considerations

Pertaining To Rural Energy Policy Options that suggested a State subsidy of electric rates for rural consumers.

In 1979, world oil prices nearly tripled and the State's unrestricted revenues increased from $1.1 billion in FY 79 to $2.5 billion in FY 80. This set the stage for the State's rural electrification programs during the early 1980's. The surge in revenues allowed the State to increase its electrification grants. But higher oil prices also greatly increased the cost of generating electricity in rural Alaska. The Legislature needed a double-barrelled approach if it were to not only provide rural Alaska with electricity but also make it affordable.

Arthur Young and Company prepared a second report, dated January 1980, for Representative Nels Anderson entitled A Concept for Power Production Assistance To Electric Utilities. This report described in detail how the State could subsidize the power generation costs of rural utilities. Based on the program proposed in the report, Representative Anderson introduced a bill that year to establish the Power Production Cost Assistance (PPCA) program. This bill became part of HCS SB 438, the omnibus energy bill. Following is a description of PPCA and its amended versions, PCA and PCE.

In addition to the PPCA Program, 1980 (FY81) marked the beginning of several other State energy programs which affected rural Alaska. These programs are described in Appendix A.

A. Power Production Cost Assistance

The PPCA program was designed so that the State, rather than the consumer, would pay for a portion of the generation and transmission (but not distribution) costs incurred by eligible utilities. Only residential customers, community facilities, and charitable organizations of eligible utilities were allowed to benefit from the program. The type of costs that were eligible for payment were referred to as power production costs and included the following:

- fuels
- purchased power
- operation and maintenance
- depreciation
- taxes
- insurance
- interest on debt

The monthly PPCA payment for a utility was calculated by subtracting its actual power production costs from an adjusted cost that was to be set each year by the Alaska Public Utilities Commission (APUC). The adjusted cost consisted of a base cost of 7.65 cents per KWH (adjusted annually for inflation) plus 15 percent of the eligible costs up to 40 cents per KWH. This meant that the PPCA program paid for

85 percent of a utility's eligible costs that were between 7.65 and 40 cents per KWH and 100 percent of the costs over 40 cents per KWH.

The only criteria that a utility had to meet to qualify for the program was to have production costs that exceeded the base level and to document its costs to APUC's satisfaction. Administration of the program was divided between two agencies. The APUC was to verify production costs and establish the adjusted cost, and the APA was to make payments to the utilities.

Governor Jay Hammond voiced a number of objections to the new legislation. In a letter to the Legislature he stated, "The current design of this electric power subsidy program has a number of defects. The distribution of benefits is inequitable, inefficiencies are encouraged, incentives to conserve energy and search for alternatives are diminished, program administration is cumbersome, and total cost is uncertain. I gave serious thought to vetoing the bill in order to prevent the creation of a program, which I believe establishes a dangerous precedent. However, because of the many worthwhile and crucially needed elements of the bill, I feel I must accept the power production subsidy as well. However, I intend to submit legislation which will modify the subsidy design in order to reduce the problems noted above."

The Legislature appropriated $2.8 million for the program but Governor Hammond, by veto, reduced this to $1.4 million. However, towards the end of its first year, the program was running out of money and $1.2 million of this funding was restored by a supplemental appropriation.

B. Power Cost Assistance

In 1981, Governor Hammond introduced legislation to amend the PPCA program. The proposed amendments were to make the program more equitable but restrict its growth by:

- allowing payment for administrative and distribution costs as well as production costs,
- simplifying reporting requirements so that utilities without sophisticated accounting records could partake in the program,
- limiting the subsidy to the first 200 KWH per month per consumer,
- raising the entry level to 15 cents per KWH, and
- adding 2 cents per KWH hour each year for ten years at which time the program would be terminated.

Fiscal constraints were not in tune with most of the Legislature that year. State revenues were at a record high and expected to increase in future years.

continuing appropriations for major power projects and programs, became the omnibus energy bill.

The PCE program received an appropriation of $16.3 million for the remainder of FY 85 (Oct.-June) plus a continuing appropriation in SB 409 of $21.7 million every following year. The Susitna and Bradley lake projects were also given continuing appropriations. Trustees of Alaska, a public interest organization, legally challenged the constitutionality of continuing appropriations and won. The next session, the Legislature repealed the continuing appropriations which made mute any further appeal of this decision.

The goal of the Power Cost Equalization (PCE) program was to provide rural utilities with sufficient subsidy so that rates to their consumers would nearly equal mean rate for Anchorage, Fairbanks and Juneau utilities. This was accomplished by:

- Establishing the base rate at 8.5 cents per KWH for the first year (FY 85) with annual adjustments by the APUC (although no adjustments have yet to occur).
- Increasing the ceiling to 52.5 cents per KWH.
- Keeping the subsidy share at 95 per cent of eligible costs.
- Increasing the cap for community facilities from 55 to 70 KWH per month per resident.
- Increasing the cap for all other customers from 600 to 750 KWH per month.

Conditions were established in order to eliminate urban areas and Four Dam Pool utilities from participating in the PCE program. Only utilities that had sold less than 7,500 MWH's to residential customers in 1983 and used diesel engines to generate more than 75 percent of its load in 1984 were eligible for the program. This eliminated Kodiak and Port Lions from the program and precluded Valdez, Petersburg, Wrangell, and Ketchikan from entering the program.

Table 1 provides a statistical history of the PPCA/PCA/PCE program. The growth trends indicated by some of these statistics were reduced when Copper Valley Electric Association no longer participated in the PCA program in FY 83 and when Kodiak Electric Association was excluded from participating in the PCE Program. Each of these utilities accounted for a substantial number of customers and KWH consumption.

D. Pending Legislation

In 1987, Governor Steve Cowper proposed two significant changes to PCE: (1) a 20 percent reduction in the PCE budget for FY 88, and (2) House Bill 182 to amend the PCE program.

1. At the time, full funding for the PCE program was expected to cost about $16.8 million which would be 22 percent more than the FY 87 revised appropriation of $13.8 million. The Governor's budget proposed an FY 88 appropriation of $11.1 million for the PCE program, a reduction of 20 percent from FY 87, which was consistent with cuts in revenue sharing and municipal assistance budgets. However, because of an expected $3.2 million carry-over from FY 87, the actual level of funding would have been $14.3 million.

   The 1987 Legislature appropriated $15.1 million to the PCE program. This appropriation, together with a larger than expected carry-over of $4.2 million from previous years, funded the program at $19.3 million for FY 88. This level is expected to nearly provide full funding for the program.

2. House Bill 182, which amends the PCE program, was introduced by Governor Cowper in the first session of the Fifteenth Legislature. The principal objective for introducing this bill was to establish residential customers as the first priority, community facilities as the second priority, and commercial customers as the third priority for program funding if appropriations should not be enough to cover the cost of the program for the entire fiscal year. As the statutes now read, budget shortfalls are to be prorated, which means that all classes of consumers would experience proportional reductions in benefits.

   Other statutory changes proposed by Governor Cowper would:

   - reduce the cap for community facility users from 70 to 50 KWH per month per resident,
   - reduce the cap for residential and commercial users from 750 to 500 KWH per month,
   - redefine "community facility" to include only facilities essential to public health, safety and welfare.

   The House Labor and Commerce Committee amended HB 182, the most significant amendment being a provision that reduced the cap on eligible PCE consumption from 500 KWH per month to 250 KWH per month over a period of five years. With this amendment, PCE would become essentially a lifeline rate. The legislation is now under consideration in the House Resources Committee.

Table 1

Power Cost Equalization Summary Statistics

	PPCA FY 81*	PCA FY 82	PCA FY 83	PCA FY 84	PCA FY 85**	PCE FY 85**	PCE FY 86	PCE FY 87***	PCE FY 88
Appropriations ($)	2,657,600	9,300,000	8,300,000	8,300,000	2,800,000	16,300,000	21,700,000	15,067,900	15,067,900
Disbursements ($)	2,745,050	6,464,548	8,283,686	8,715,806	1,967,231	11,585,693	17,784,601	18,223,722	
Participating Utilities	16	34	49	64	63	82	96	94	
Communities Served	70	87	114	129	122	141	155	187	
Population Served	36,456	45,971	47,008	61,757	60,164	60,753	62,823	83,290	
Total Customers Served	8,903	13,487	17,270	21,636		22,568	24,065	24,060	
Community Facilities Customers						1,072	1,107	1,184	
Residental, Commercial Customers						21,496	22,958	23,798	
Disbursements Per Resid. & Commercial Customers($)	252	479	479	403	Included under PCE.	630	774	881	
Total KWH Sold						153,656,938	224,915,466	237,828,868	
Total Eligible KWH	40,818,974	75,011,538	83,636,208	97,550,787	19,627,042	75,949,798	108,338,880	111,952,089	
Eligible KWH Per Customer	4,584	5,562	4,829	4,509		3,518	4,719	4,705	
Eligible KWH Community Facilities						11,360,226	16,550,730	18,570,528	
Eligible KWH Per Community Facilities						10,597	14,951	14,242	
Eligible KWH Residential & Commercial						64,589,572	91,788,150	95,373,541	
Eligible KWH Per Residential & Commercial						3,005	3,998	4,008	
Fuel Consumed (Gallons)						14,405,290	20,998,076	18,837,478	
Total Fuel Costs ($)						18,315,950	23,178,187	18,317,868	
Average Fuel Cost Per Gallon ($)						1.27	1.10	0.92	
Fuel Efficiency KWH Sold Per Gallon						10.6	10.7	12.0	
Total Operating Costs ($)						18,751,634	30,677,615	28,857,852	
Operating Costs Per KWH (¢)						12.3	13.8	12.1	
Average PCA/PCE Rate (¢)	5.5	8.6	9.9	8.9	10.0	15.3	16.4	14.5	

* PPCA program did not begin until October 1980.

** The PCE program became effective in October 1985.

*** Includes data up to August 1987 which should include about 90% of the final payments for FY 87.

ATTACHMENT B

Power Cost Equalization, Senate State Affairs Committee Report

POWER COST EQUALIZATION

SENATE STATE AFFAIRS COMMITTEE

SECOND SESSION

16TH ALASKA STATE LEGISLATURE

Senator Pat Pourchot, Chairman

Report to the Senate

February 1990

POWER COST EQUALIZATION

INTRODUCTION

Power Cost Equalization (PCE) is a state program that subsidizes rural electric rates using a formula based on the fuel and non-fuel costs of rural utilities. In the past, the legislature has always been able to fully fund the program, and, as a result, the PCE program has come to be viewed as an entitlement program. In recent years, as state revenues have declined and program costs have steadily increased there has been growing concern about what effect a budget shortfall would have on PCE recipients.

This report examines the current program and a variety of modifications in light of three criteria:

1. Ability to contain long-range program costs;

2. Ability to mitigate the effects of a budget shortfall on residential and low-income consumers; and

3. Incentives for utilities to cut costs and for consumers to use electricity more efficiently.

BACKGROUND

Power Cost Equalization (PCE) is the latest in a series of electric power subsidy programs (Power Production Assistance (PPA) Program, FY 81; Power Cost Assistance (PCA) Program, FY 82 - FY 35; PCE Program, FY85 - Present) offered by the State of Alaska to offset the high cost of electricity to rural residents. PCE is designed to reduce rural electric costs to levels close or equal to the mean value of the cost per kilowatt-hour (kwh) in Anchorage, Fairbanks and Juneau.

Operation of Current Program

The current program is jointly administered by Alaska Energy Authority (AEA) and the Alaska Public Utilities Commission (APUC). The APUC examines utility costs and determines the PCE rate for each utility. The AEA disburses funds to utilities.

The program pays 95% of a utility's eligible costs above $.085/kwh and below $.525/kwh. The maximum PCE rate based on the formula is currently $.418/kwh ([52.5 - 8.5] x .95).[1]

PCE Formula
(eligible fuel and nonfuel costs/kwh* - 8.5 cents) x .95 = PCE rate * or average rate per eligible kwh sold, whichever is less; capped at 52.5 cents per kwh

All of a utility's customers are eligible to receive benefits under the program, however different consumption caps apply to different classes of customers. Residential and commercial customers are eligible for PCE subsidized rates on consumption up to 750 kwh/month. Community facilities receive PCE subsidized rates on consumption up to 70 kwh/month/resident. Community facilities include water and sewer facilities, public outdoor lighting, charitable educational facilities, and community buildings whose operations are not paid for by the state or federal government or private commercial interests. The commercial customer category includes all non-residential and non-community facility customers.

Utility Profile

Utilities eligible for funding under PCE are limited to those which: 1) used diesel generation for more than 75% of electrical consumption in calendar year 1984; and 2) did not exceed certain residential consumption levels in calendar year 1983.[2]

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[1] In FY 88 there were only two utilities receiving the maximum rate; in FY 89 there were three. See section on Utility Profile for more information on rates.

[2] "[D]uring calendar year 1983 had a residential consumption level of power eligible for power cost equalization under this chapter of less than 7,500 megawatt hours or had a residential consumption level of power eligible for power cost equalization under this chapter of less than 15,000 megawatt hours if the utility served two or more municipalities or unincorporated communities" AS 44.83.162(p)(3)(B)

One hundred and three of the state's approximately 130 utilities are eligible to receive funding under the PCE program. Although most utilities are beneficiaries under the program the percentage of state customers represented is rather small, 10.8%. In terms of kwh's sold the percentage is even smaller, 6.4%. Generally, PCE customers pay higher electric rates and consume less per month than their urban counterparts. As Table 1 shows, the average PCE utility charges its customers a rate (27.5 cents/kwh) which is approximately two and one half times the statewide average rate (10.6 cents/kwh). The average PCE subsidy of 14.3 cents/kwh helps to bring rural rates close to the statewide average.

Table 1
Comparative Statistics

	Utilities Receiving PCE Funding FY88	All AK Electric Utilities CY88	Percent of Total
Number of Residential Customer	18,825	191,698	9.8
Number of Total Customers	24,457	227,020	10.8
MWH's Sold	256,653	4,019,398	6.4
Average KWH per month per customer	875	1475	
Average Rate (without PCE)	27.5 cents	10.6 cents	
Average Rate (with PCE)	13.2 cents	10.6 cents	

Source: Alaska Electric Power Statistics 1960-1988, Alaska Energy Authority and Alaska Systems Coordinating Council, September 1989; First Annual Statistical Report of the Power Cost Equalization Program, Alaska Energy Authority, December 15, 1988.

Approximately 66% of PCE utilities are not rate regulated by the APUC and most serve fewer than 100 customers. These smaller utilities follow a pattern similar to that found between PCE utilities in general and the rest of the utilities in the state: higher rates and lower monthly consumption. Table 2 shows that the smallest 25 PCE utilities sell less than one percent of kwh's sold by all PCE utilities. Average monthly consumption per customer for the smallest utilities is less than one-fifth that of the largest PCE utilities.

Table 2
PCE Utility Profile FY 88

Utilities ranked by kwh sold	KWH sold (mill.)	Total Customers	KWH per Customer per Month	Disbursements ($ mill.)	Disb per Cust	Ave Elig kwh per month	Ave PCE rate
First 24	237	19,746	1000	$13.4	$683	496	14
Second 24	13	2,359	459	$1.9	$820	333	23
Third 24	5	1,395	299	$1.0	$685	280	24
Last 25	2	955	175	$.4	$428	211	27

Source: Alaska Electric Power Statistics 1960-1988, Alaska Energy Authority and Alaska Systems Coordinating Council, September 1989; First Annual Statistical Report of the Power Cost Equalization Program, Alaska Energy Authority, December 15, 1988.

There is a good deal of variation in the PCE rates for each utility, ranging from 3.0 cents/kwh to 41.8 cents/kwh in FY 88. Two-thirds of the utilities have average PCE rates between 10 cents/kwh and 30 cents/kwh (Table 3).

Table 3
PCE Rates FY 88

	3.0 - 9.9 cents/kwh	10.0 - 19.9 cents/kwh	20.0 - 29.9 cents/kwh	30.0 - 39.9 cents/kwh	40.0 - 41.8 cents/kwh
No. of Utilities	12	29	35	18	4

Source: First Annual Statistical Report of the Power Cost Equalization Program, Alaska Energy Authority, December 15, 1988.

In FY 88 there were 17 PCE communities with effective residential rates (i.e., residential rates per kwh after the PCE subsidy is added) of less than 10 cents per kwh. Table 3a compares the PCE subsidized rates of these communities with the residential rates charged by southcentral Alaska and Fairbanks utilities not in the PCE program.

Table 3a

Comparison of Residential Rates:

PCE Utilities with Effective Rates under 10 cents/kwh (FY 88) with Rates of Other* Utilities not Eligible for PCE Funding(1988)

PCE Utilities with effective residential rates less than $.10/kwh	Effective Residential Rate	Other* Communities (Utilities) not eligible for PCE	Residential Rate for 500 kwh/month
Bethel Utility Corp.	9.9 cents	Anchorage (CEA)	7.8 cents
Circle Electric Utility	8.5	Anchorage (AML&P)	9.5
Gustavus Electric Co.	8.5	Cordova (CEC)	12.8
Koliganek Village. Council	8.5	Glennallen (CVEA)	20.2
Manokotak Natives Ltd.	8.9	Homer/Seldovia (HEA)	10.9
Napakiak Ircinraq Power	8.5	Kodiak/Port Lions (KDEA)	15.1
Nome Joint Utility	6.3	Palmer (MEA)	10.8
North Slope Borough[1]	--	Paxson (PLI)	19.9
Anaktuvuk	2.5	Seward (SES)	8.1
Atqasuk	1.5	Valdez (CVEA)	17.5
Kaktovik	4.5	Fairbanks (GVEA)	11.0
Nuiqsut	1.5	Fairbanks (FMUS)	9.5
Pt. Hope	4.5	*Not all inclusive	
Pt. Lay	2.5		
Wainwright	4.5		
Port Heiden	8.5		
Tatitlek Electric Utility	9.8		
Tulkisarmute Inc.	8.5		

Source: Alaska Electric Power Statistics 1960-1988, Alaska Energy Authority and Alaska Systems Coordinating Council, September 1989; First Annual Statistical Report of the Power Cost Equalization Program, Alaska Energy Authority, December 15, 1988.

Customer Profile

In FY 88, residential customers used 65% of total PCE eligible kwh's, commercial customers used 21% and community facility customers used 14%. Table 4 shows the dollar breakdown by customer category based on 1989 disbursements of $18.2 million.

[1]NSB rates were achieved through supplemental borough subsidies which have since been disallowed by the APUC. In 1990 all PCE recipients should have minimum effective rates of at least 8.5 cents/kwh.

Table 4
Disbursements by Customer Category

Customer Category	PCE Elig. KWH	Percent of Total	Disbursements (FY 89)	Ave. PCE Elig. KWH/month (FY 88)
Residential	79.4 m	65	11.8 m	382
Commercial	25.6 m	21	3.8 m	474
Comm. Facil.	16.1 m	14	2.6 m	2,366

Source: AEA, Data provided in February, 1990; First Annual Statistical Report of the Power Cost Equalization Program, AEA, December 15, 1988; AEA, Office of Internal Programs and Budget.

The AEA does not collect regular monthly data on all the groups that constitute the commercial category. However, based on sample data from February 1987, this category is approximately 19% schools, 15% federal and state government and 66% other commercial.

Table 5
Commercial Customers

Commercial Customers	Percent of Commercial	Estimated Disbursements
Schools	19	.72 million
Fed & State Govt	15	.57 million
Other	66	2.51 million

Source: Energy Policy Report: The Power Cost Equalization Program, Division of Policy, Office of the Governor, January 1988; AEA, Office of Internal Programs and Budget.

Based on an AEA survey[1] of 1988 calendar year usage, approximately 77% of residential use is below the 500 kwh/month level. Approximately 91% of residential use is below the 750 kwh/month level (Table 6). Average PCE eligible kwh/month was 382 for residential users compared to 445 for all other PCE customers.

[1] Customer Usage Survey of Several Utilities that Participate in the Power Cost Equalization Program (Draft), AEA, December 1989.

Table 6
Residential Usage CY 88

Electric Usage KWH per month	% of PCE Customers	% of PCE Customers
1 -100	16.4	76.5
101 - 200	17.5	
201 - 300	17.7	
301 - 400	14.4	
401 - 500	10.5	
501 - 600	7.2	14.2
601 - 700	5.0	
701 - 750	2.0	
> 750	9.3	9.3

Source: Customer Usage Survey of Several Utilities that Participate in the Power Cost Equalization Program (Draft), AEA, December 1989.

In comparing PCE statistics (FY 86) with U.S. Census Bureau income data (1985), the AEA made the following observations relating to income, community size and PCE disbursements.

1. Most utilities that have a high PCE rate serve communities that have low per capita income.

2. Communities with low per capita income also tend to have low consumption per customer.

3. Communities that have low per capita income usually have fewer customers.

These observations suggest a fourth generalization: low income customers tend to use fewer kwh/month than higher income customers. Unfortunately, due to lack of data, it is not possible to quantify the relationship between income and usage levels.

Program Costs

Increased benefits and participation under PCE and its predecessors have escalated the cost of the programs from $2.2 million in FY 81 to $18.3 million in FY 89 (Table 7). The AEA has requested $18.4 million for FY 91, but actual disbursements are expected to be between $19.2 million and 20.7 million, depending on fuel costs.

Table 7
Funding

	Appropriation	Disbursements	Per Customer	# Utilities
FY 81	$2.7 million	$2.2 million	$180	13
FY 82	9.3	6.4	359	31
FY 83	8.3	8.3	421	48
FY 84	8.3	8.7	385	61
FY 85	19.1	13.8	637	83
FY 86	21.7	17.8	766	94
FY 87	13.8	16.8	686	97
FY 88	15.1	17.2	703	98
FY 89	19.9	18.2	724	102
FY 90	18.4	19.0 - 19.5 (est)	N/A	N/A
FY 91	18.4 (est)	19.2 - 20.7 (est)	N/A	N/A

Source: First Annual Statistical Report of the Power Cost Equalization Program, Alaska Energy Authority, December 15, 1988; AEA, Office of Internal Programs and Budget.

Much of the growth of the cost of rural electric assistance in the early years (1981 - 1985) is attributable to the increased participation under the PPA and the PCA programs. During this time the number of utilities receiving electric subsidies rose from 13 to 83. In 1986, as participation began to reach a saturation point, the dramatic increase in program costs was largely due to increased benefits available under PCE. Compared to PCA, the PCE program lowered the entry rate, raised the ceiling rate and increased the consumption limits (Table 8).

Table 8
Comparison of PPCA, PCA AND PCE

	Amount per KWH Criteria		
	PPCA	PCA	PCE
AMOUNT/KWH			
Entry Rate (cent/KWH)	7.65	12.0 + 1.0/yr	8.5
Ceiling Rate (cent/KWH)	40.0	45.0	52.5
Eligible Costs Allowed	85%	95%	95%
Eligible Costs Over Ceiling	100%	0%	0%
CONSUMPTION LIMITS			
Community Facilities (KWH/Month)	No Limit	55/Resident	70/Resident
All Others (KWH/Month)	No Limit	600	750

Source: Energy Policy Report: The Power Cost Equalization Program, Division of Policy, Office of the Governor, January 1988.

Since 1986 the cost of the program has continued to grow (except for FY 87, due to steeply falling fuel prices), primarily due to increased consumption. Between FY 86 and FY 89 total eligible kwh's increased from 108 million to 121 million, increasing program costs by $ 0.4 million.

Table 8a
Eligible Consumption FY 89

	Res. and Commer.	Commun. Fac.	Total
Eligible kwh	105.3 m	16.1 m	121.4
Maximum Elig kwh	216.7	55.7	272.4
Maximum Cost	$30.6	$7.9	$38.5
Elig as % of max	49%	29%	45%

Source: Calculated from AEA data provided February 1990

As demand (i.e., kwh/month per customer) grows so will eligible kwh's of consumption. In 1989 eligible kwh's were approximately 45% of maximum eligible consumption (Table 8a).[1] The cost of the program with maximum eligible consumption would have been $38 million in FY 89 rather than $18.2 million.

Table 9
Program Costs by Fuel and Non-fuel Components

	FY 86	FY 87	FY 38	FY 89
Total PCE Disbursements	$17.8m	$16.8m	$17.2m	$18.2m
Fuel Portion	42.2%	37.7%	35.3%	33.0%
Non-fuel Portion	57.8%	63.3%	64.7%	67.0%
Fuel Portion	$7.5m	$6.3m	$6.1m	$6.0m
Non-fuel Portion	$10.3m	$10.6m	$11.1m	$12.2m

Source: APUC, Data provided in January 1990; AEA, Office of Internal Programs and Budget

As can be seen by examining Table 9, growth of program costs cannot be attributed to increased fuel costs. Since 1986 utilities have benefitted from both declining fuel prices and savings achieved through bulk fuel purchases. PCE disbursements related to non-fuel costs have more than offset declining fuel costs. Between FY 86 and

[1]Maximum eligible consumption would occur if all customers consumed up to their respective caps of 750 kwh/month for residential and commercial and 70 kwh/month/resident for community facilities.

FY 89 PCE payments related to fuel costs have declined by $1.5 million while PCE payments related to non-fuel costs have risen by $1.9 million, a net increase in program cost of $0.4 million. Possible causes for increases in non-fuel costs include: 1) costs for increased generating capacity driven by increased demand; 2) PCE related incentives to increase non-fuel costs; and 3) better reporting of costs by utilities to the APUC.

APUC Regulations

The 15th legislature directed the APUC, AEA and DCRA to review and evaluate possible modifications to the PCE program with specific attention to fuel efficiency and administrative expense standards. On April 13, 1989 the APUC adopted an order codifying existing policies and procedures, promulgating standards for defining costs, and establishing new efficiency standards. The efficiency regulations will go into effect Oct. 1, 1990.

Since the inception of PCE, problems have been caused by the inconsistent use of the words "costs" and "rates" in the PCE statute. The statute uses the words "costs" and "rates" both synonymously and with different meanings. The APUC regulations attempt to clarify the ambiguity and confusion that surround the use of these terms.[1]

The new efficiency standards apply to electrical generation and line loss. A five-tiered system, for different sized utilities, will be phased in over three years.[2] The APUC maintains that "the

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[1]In response to a January 30, 1987 Legislative Audit the APUC has also proposed to change AS 44.83.162(a) to read:

> The power cost equalization fund is established as a separate fund for the purpose of equalizing power rates [cost] per kilowatt-hour state-wide at a rate [cost] close or equal to the mean of the cost per kilowatt-hour in Anchorage, Fairbanks, and Juneau...

[2]For utilities that rely on all-diesel generation a combined generating efficiency line loss standard has been established that measures the kilowatt hours sold per gallon consumed. Utilities are tiered according to kwh sales.

A separate set of standards has been established for utilities that do not rely exclusively on diesel generation (six out of 102 utilities). The line loss standard is measured as:

(kwh generated or purchased - kwh sold)/kwh generated or purchased

minimum standards for October 1990 should be achievable by most utilities through adoption of reasonable operating practices such as:[1]

1. metering of all customers consuming electric power;

2. assuring that meters are correctly wired and registering properly;

3. maintaining diesel engines and other equipment in good operating condition;

4. matching the best available generator to load size;

5. maintaining adequate security over fuel supplies; and

6. identifying and correcting major causes of high line losses.

AEA Programs

The AEA has a number of ongoing programs designed to improve the efficiency of many of the small rural utilities. In FY 90 $4,150,000 of the capital budget was appropriated for:

Operation and Technical and Emergency Assistance -- "Consists of programs (1) to provide a wide range of technical assistance to rural communities and utilities in identifying upgrades or replacements to their existing power systems in order to improve operations, and (2) to effectively deal with power system emergencies as they occur."

Circuit Rider Program -- "Provides regularly scheduled preventative maintenance and operations assistance to rural electric utilities that have received financial or technical aid from the state."

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and must be less than 12%. The generating efficiency standards measure kwh generated (as opposed to kwh sold for all diesel utilities) per gallon consumed. Utilities are tiered by annual kwh of diesel generation.

[1]In a separate statement to the APUC order, Commissioner Sokolov advocated supplementing efficiency standards with a comprehensive program to encourage the smallest PCE utilities to use standardized equipment and to improve operation and maintenance.

PCE Utility Efficiency Improvements -- "Supports improved efficiencies for utilities/communities receiving PCE, through upgrading or replacement of inefficient generators, bulk fuel tanks, waste heat recovery systems, conservation measures and metering."

Another program which is currently receiving serious consideration is AEA's Regional Electric Utilities in Rural Alaska proposal. This program would consolidate the operations of rural utilities into one of several regional utilities in three phases:

1. Develop cooperative arrangements for bulk fuel purchasing, a circuit rider preventive maintenance program, and insurance coverage.

2. Provide technical assistance to smaller utilities that want to merge into a regional utility, which should result in a more efficient and centralized management structure.

3. Consider opportunities for including other utility services, such as water, sewer, and solid waste, under the management of the regional electric utility in order to further improve the economies of scale.

ANALYSIS

Evaluation of Current Program

Criteria 1: Cost Containment -- The costs of the PCE program are no longer in a steep incline, as the number of utilities participating in the program has reached a saturation point and as fuel costs and benefits have stabilized. However, unless the program formula is changed, the appropriations necessary to fully fund the program will grow as non-fuel costs continue to rise (Table 9). Furthermore, at some point savings achieved through bulk fuel purchases will plateau and program costs will once again become sensitive to rising fuel prices.

Costs will also probably continue to rise as long as demand grows on the part of consumers who are currently below their

respective caps. If all PCE customers were consuming at the statutory caps (750 kwh for residential and commercial, 70 kwh/month/resident) program costs in FY 89 would have been approximately $38.5 million.[1]

Criteria 2: Mitigating the Effects on Low Income and Residential Customers -- The PCE program is not an entitlement program, therefore funding can be reduced below levels required by the formula. In the event appropriations were to fall below full funding levels, the PCE rate for each utility would be prorated. While all PCE recipients would receive a proportional cut, those with higher PCE rates would lose a greater absolute amount of subsidy. Because users with higher PCE rates tend to come from communities with lower per capita income, a funding cut would tend to have a greater absolute effect on lower income consumers.

In addition, under current statutes there is no procedure for mitigating the effects of a program cutback on any particular group or groups. Therefore residential customers would not receive any preference over community facility or commercial customers.

Finally, the PCE program has in some cases created an inequitable relation between PCE and non-PCE recipients. As the PCE statutes makes clear, the program is designed to reduce rural electric costs to levels close or equal to the mean value of the cost per kwh in Anchorage, Fairbanks and Juneau. Unfortunately the PCE program does not apply to all utilities state-wide. There are a number of non-PCE recipient communities with rates much higher than many PCE recipient communities (Table 3a). For example, without PCE both Nome and Kodiak would both have average residential rates of approximately 15 cents/kwh. Yet, because Nome received PCE, its residential rate for up to 750 kwh/month in FY 88 was only 6.3 cents/kwh, while Kodiak residents paid the full 15 cents/kwh.

Criteria 3: Efficiency Incentives -- The current program offers little, if any, incentive for consumers to conserve electricity until they have already exceeded the 750 kwh monthly cap. Because the formula covers 95% of the cost over 8.5 cents of an additional

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[1] Furthermore the maximum program cost is not static from year to year but rather increases with increases in fuel costs, the PCE rate, population and the number or residential and commercial customers.

kwh, consumers don't face the true cost of producing electricity and are encouraged to consume more than they would otherwise.

Likewise, the PCE program provides very little incentive for utilities to reduce costs. Cutting costs reduces a utility's total PCE funding and may actually result in a lower PCE rate to consumers.

Finally, the efficiency standards recently adopted by the APUC do not apply to non-fuel costs and are only expected to result in a program saving of $100,000 in the first year.

Reduce 750 KWH/Month Cap : Commercial and/or Residential Users

Criteria 1: Cost Containment -- Table 10 shows the program savings achievable by reducing the 750 kwh cap to progressively lower levels. For example, a 500 kwh cap would reduce program costs by approximately $2.2 million (12.2%). Reducing the cap even further to the current average PCE eligible usage for residential and commercial customers (396 kwh/month) would save $3.6 million (20%).

Another benefit of a reduced residential and commercial cap is that it brings the maximum eligible consumption much closer to actual eligible consumption, potentially reducing the cost of the program over the long run. Eligible residential and commercial consumption is currently 48% of maximum eligible consumption. In FY 88, under a 500 kwh cap, eligible consumption would have been 72% of maximum, reducing the maximum potential cost of the program from $38 million to $28 million.

Table 10
Program savings from reducing eligible KWH per month ($m)

	500 KWH Cap	400 KWH Cap	300 KWH Cap	200 KWH Cap
Residential	$1.? m	$2.2 m	$3.7 m	$6.0 m
Commercial	1.0	1.4	1.9	2.5
Total	2.2	3.6	5.6	8.5

Source: Based upon data provided by the AEA, January 3, 1990.

Criteria 2: Mitigating the Effects on Low Income and Residential Customers -- The effect on low income groups of lowering the 750 kwh cap would depend on whether it was uniformly

applied to residential and commercial users. Obviously a cap reduction limited to commercial users would have little effect on residential users, regardless of whether they were high or low income.

With respect to just residential users, a cap reduction limited to 500 kwh would tend to favor low income users over other residential users because low income users tend to consume fewer kwh/month than others. Seventy-seven percent of residential use is already below the 500 kwh cap (see Table 6).

Criteria 3: Efficiency Incentives -- Any lowering of the cap would provide incentives for consumers to conserve electricity. As the cap is lowered a greater percentage of consumers will exceed the cap and begin paying higher rates. Higher rates will discourage consumption at levels above the cap.

One of the problems that the current program presents to utilities is that the PCE subsidy actually stimulates demand. This artificially induced demand places pressure on utilities to increase generating capacity, as witnessed by the growing non-fuel portion of PCE program costs. In this type of situation, there is always the danger that, if the PCE subsidy were to end suddenly, demand would fall leaving utilities with a great deal of excess capacity, a cost for which consumers would still have to pay. Lowering the cap closer to average consumption, will diminish an artificial stimulus to growth of consumption and reduce the degree of excess capacity.

Reduce 70 KWH/Month/Resident Cap for Community Facilities

Criteria 1: Cost Containment -- Community facilities represent a relatively small percentage of PCE program costs (14%). If community facilities were eliminated, program savings would be $2.6m (based on FY 89 disbursements of $18.2 m) which is only $.4 m more than the program savings from reducing the residential/commercial cap to 500 kwh/month/resident.

The current cap of 70 kwh/month/resident is well above the current average of approximately 20 kwh/month/resident. Based on calendar year 1988 sample data, reducing the cap from 70 kwh to 50 kwh would have yielded program savings of only $27,500.

Eligible kwh consumption for community facilities in FY 88 was approximately 30% of maximum eligible consumption. In other words, if community facilities were all consuming at 70 kwh/month/resident the cost of PCE for this class of customer would be $7.9 million rather than $2.4 million. A 50 kwh/month/resident cap would reduce the maximum cost from $7.9 million to $5.7 million. A reduced cap, although of little significance in the short run, could yield cost savings over the long run as consumption per resident increases.

Table 12
Program savings from lowering community facility cap

	50 kwh cap	40 kwh cap	30 kwh cap
Program Savings	$27,500	N/A	N/A

Source: Customer Usage Survey of Several Utilities that Participate in the Power Cost Equalization Program (Draft), AEA, December 1989.

Criteria 2: Mitigating the Effects on Low Income and Residential Customers -- Reducing the community facility cap would not directly effect residential users. However, it may indirectly effect residents through increased taxes to support the higher costs of operating local government facilities.

Criteria 3: Efficiency Incentives -- In the short term, lowering the cap would have only a marginal impact on conservation. Current usage levels are so low for so many communities that lowering the cap to 50 kwh would leave most communities unaffected. Over the long term, lowering the cap would encourage conservation as community facility consumption approaches upper limits of allowable electric usage.

Reduce Percent Reimbursed

Criteria 1: Cost Containment -- The PCE rate is currently determined in part by calculating 95% of a utility's eligible costs per kwh. Reducing the percentage could lead to significant programs savings. For example, reducing the percentage to 85% of eligible costs would reduce program costs by about $2.2 million (Table 13), roughly equivalent to reducing the 750 kwh cap to 500 kwh.

Table 13

Program savings ($m) by reducing 95% reimbursed to:

	90%	85%	80%	75%	70%
Program Savings	1.1	2.2	3.3	4.4	5.5

Criteria 2: Mitigating the Effects on Low Income and Residential Customers -- This approach would be more regressive than lowering the kwh/month cap for residential users. Whereas lowering the cap favors low income, low monthly use customers, reducing the percent reimbursed would involve an across the board cut. Although each utility's PCE rate would be reduced by an equal percent, consumers of utilities with higher PCE rates would experience greater absolute decreases in their subsidy. Since communities with high PCE rates also tend to have low per capita income, this method would tend to hurt low income customers more than lowering the monthly kwh cap.

Criteria 3: Efficiency Incentives -- Any change that increases rates will encourage lower consumption. However, by leaving the kwh/month cap at 750 there will still be a substantial gap between average eligible usage and the cap. In the long run this will still encourage increased consumption.

Raise 8.5 cent entry rate

Criteria 1: Cost Containment -- Raising the entry rate could produce sizeable reductions in program costs. Table 14 shows that raising the entry rate to slightly above 10 cents would achieve programs savings comparable to lowering the residential and commercial caps to 500 kwh or comparable to reducing the percent reimbursed to 85%.

Table 14

Program savings from raising the entry rate

	$.10 entry rate	$.12 entry rate	$.14 entry rate
Program Savings	$1.8m	$4.2m	$6.3m

Source: Based upon data provided by the AEA, January 18, 1990.

Criteria 2: Mitigating the Effects on Low Income and Residential Customers -- Raising the entry rate would effect all consumers but not all consumers equally. The absolute change in PCE rates will be the same for all consumers, however, the percentage change will vary depending on the actual PCE rate. For example, a one cent increase in the entry rate would reduce all consumers PCE subsidy by .95 cents/kwh. However, .95 cents represents 31.7% of Pelican Utility's FY 88 average PCE rate (3 cents) but only 2.5% of Manley's FY 88 average PCE rate (38 cents).

Because communities with low per capita income tend to have higher PCE rates this modification of the PCE formula would probably favor low income consumers. It would not favor residential customers over commercial and community facility customers unless a specific distinction were made.

Raising the entry rate would reduce some of the inequity experienced by low-income consumers receiving service from utilities that do not qualify for PCE subsidies. As Table 3a shows there are a number of utilities in southcentral Alaska alone which charge residential rates which are significantly higher than the effective residential rates of a number of PCE eligible utilities.

One proposal for making the PCE program more equitable would be to peg the entry rate to the statewide average rate rather than the mean value of costs in Anchorage, Fairbanks and Juneau. This would have the immediate effect of raising the entry rate to about 10 cents/kwh. This approach would also tie the entry rate to an index which is easier to define and calculate than the current index.

Criteria 3: Efficiency Incentives -- Efficiency incentives are the same as described in the section Reduced Percent Reimbursed.

Reduce Maximum Eligible Cost

Criteria 1: Cost Containment -- Marginal decreases in the maximum eligible cost would produce only very small cost savings, compared to the other alternatives discussed above. The bulk of PCE funds go to the largest utilities which tend to have lower costs per kwh. Table 15 shows the program savings that could be achieved by this formula adjustment.

Table 15

Program savings from lowering the ceiling rate

	50.0 cents	47.5 cents	45.0 cents	42.5 cents	40.0 cents
Program Savings	$5,561	$32,933	$98,633	$175,270	$283,294

Source: Based upon data provided by the AEA, January 18, 1990.

Criteria 2: Mitigating the Effects on Low Income and Residential Customers -- This PCE formula change is perhaps the most regressive of all the alternatives because it targets the smaller utilities which tend to represent communities with low per capital income.

Criteria 3: Efficiency Incentives -- It is unlikely that this alternative would lead to any significant conservation. The total number of customers represented by utilities with very high PCE rates is very small.

Eliminate Subsidy for Federal and State Governments and State Funded Schools

Criteria 1: Cost Containment -- Currently federal and state governments and state funded schools receive PCE subsidies as commercial customers. This represents program costs of approximately $1.2 million (Table 5).

Criteria 2: Mitigating the Effects on Low Income and Residential Customers -- Residential and low-income users would not be effected.

Criteria 3: Efficiency Incentives -- The AEA has documented cases in which state funded schools have equipped their kitchen facilities with all electric appliances. While this may be cost effective for the school district, it involves a hidden cost to the state because it greatly increases the cost of the PCE program.

Prioritize Funding in the Event of a Budget Shortfall

Criteria 1: Cost Containment -- By requiring that funding goes first to residential, then commercial, then community facility customers, program cutbacks may be more politically palatable.

Criteria 2: Mitigating the Effects on Low Income and Residential Customers -- This proposed change has obvious benefits to residential and low-income residential customers because they would be first in line for available funds.

Criteria 3: Efficiency Incentives -- This proposal would not effect conservation.

Energy Credits

This report has limited discussion of alternatives to changes in the pararneters of the PCE formula. It has not considered the substitution of alternative formulas. For example, there are other generic subsidy programs which do not focus on utility costs in the way the PCE program does. One such alternative is an energy credit program proposed by the State Consumer Advocate, Alan Mitchell, which provides greater incentives to consumers to conserve electricity and utilities to cut costs. Unfortunately, consideration of this approach and other generic approaches are beyond the scope of this report. An explanation of how Mr. Mitchell's energy credit program works is attached to this report as an appendix.

CONCLUSIONS AND RECOMMENDATIONS

Based on the above analysis the following modifications to the PCE formula are recommended:

1. Eliminate commercial subsidies to federal and state governments and state funded schools. There is little reason for the state to subsidize federal spending. Elimination of subsidies to state agencies and schools which are funded with state dollars will encourage more appropriate energy related purchases on the part of these organizations. State agencies and state funded schools would not be financially effected as long as PCE program savings are passed on as budget supplements in recognition of higher energy costs. Program savings: $1.21 million ($550,000 for state and federal agencies; $660,000 for schools). Savings to State of Alaska (if program savings are passed on to state agencies and schools): less than $550,000.

2. Prioritize funding to residential then community facility then commercial customers in the event of insufficient appropriations.
Program savings: Equal to budget shortfall.

3. Reduce residential and commercial cap to 500 kwh/month. This will reduce program costs and encourage conservation. This program change is less regressive than other methods which also achieve sizeable program cost reductions.
Program savings: $2.2 million.

4. Reduce community facility cap to 50 kwh/month/resident. This change will be negligible in terms of programs savings but will discourage excessive growth of demand by users in this category.
Program savings: $27,500.

5. Raise entry rate to be equal to the statewide average rate. This would improve the equity of the program and make adjustment of the entry rate less problematic. Program savings: $1.8 million.

Table 16

Recommendations and Program Savings

PROGRAM CHANGE	PROGRAM SAVINGS
Eliminate commercial subsidies to federal and state government agencies and schools.	$1.2 million
Prioritize funding to residential then community facility and then commercial customers.	Equal to budget shortfall
Reduce residential and commercial cap to 500 kwh/month.	$2.2 million
Reduce community facility cap to 50 kwh/month/resident.	$27,500
Change entry rate to statewide average rate.	$1.8 million
TOTAL[1]	$5 million

[1]Because some of the proposed cuts are overlapping, the total is less than the sum of the parts.

APPENDIX

Analysis North

Alaska's Utility Consumer Advocate

911 West 8th Avenue, Suite 204 Anchorage, Alaska 99501 907-272-3425

A Proposal to Modify the Power Cost Equalization Program

By Alan Mitchell

1. **Existing PCE Program.** This box shows the bill of a customer in a hypothetical utility using 300 kWh under the current PCE program. The PCE subsidy is 25 cents per kWh used.

Usage = 300 kWh		
Energy Charge:	300 kWh x $0.40/kWh =	$120
PCE Credit:	300 kWh x **$0.25/kWh** =	($75)
		===
Net Bill:		$45

2. **First Modification: Determine the PCE rate by a formula instead of by the actual costs of operating the utility.** With the existing PCE program, the 25 cent/kWh subsidy is determined from the actual costs of operating the utility. The modification illustrated in this step changes the program to base the PCE subsidy rate on a *formula* instead of actual costs. In the example of this hypothetical utility, the formula determined that the PCE rate should be 23 cents/kWh.

Usage = 300 kWh		
Energy Charge:	300 kWh x $0.40/kWh =	$120
PCE Credit:	300 kWh x **$0.23/kWh** =	($69)
		===
Net Bill:		$51

This modification serves to restore the incentive to the utility to operate more cost-efficiently. Any reductions in operating cost do *not* cause a reduction in the amount of subsidy received. It also dramatically reduces the utility reporting requirements of the program, since actual cost records are not needed to determine the PCE subsidy rate. The rate is determined by a formula based on the size of the utility receiving the subsidy, the utility's geographical location (a proxy for fuel cost), and the total funding for the PCE program. This change to a formula-based system also lessens the chance for abuse of the program and improves its fairness.

3. **Second Modification, convert a portion of the PCE credit to a fixed credit (a credit independent of usage).** One problem with the program described in the previous step is that it does not improve the incentive for consumers to use energy-efficient equipment. If a consumer reduces their demand by a kWh, they lose 23 cents of subsidy. By changing the structure of the subsidy so that a portion of it is independent of usage, this disincentive to conserve can be

reduced.

Usage = 300 kWh		
Energy Charge:	300 kWh x $0.40/kWh =	$120
PCE *Usage* Credit:	300 kWh x $0.13/kWh =	($39)
PCE *Fixed* Credit:		**($30)**
Net Bill:		$51

In the example bill to the right, the total amount of subsidy is the same as the program in the previous box, but it is structured differently. The usage-based subsidy is 13 cents per kWh consumed, and a fixed $30 subsidy is also applied to the bill. This $30 figure does not change if the consumer uses more or less electricity. If the consumer reduces their demand by one kWh, they only lose 13 cents of subsidy, instead of the 23 cents under the previous system.

This program proposal differs from the program that Conrad Zipperian of RurAL CAP and I have proposed in the past. In our past proposal, we proposed to make the PCE subsidy entirely fixed; i.e. there would be no component of the subsidy that would increase with usage. With a totally fixed subsidy, the incentive to conserve would be fully restored. A decrease in usage would cause no decrease in the amount of subsidy received. In this regard, a fixed credit program is better than the current proposal.

Usage = 300 kWh		
Energy Charge:	300 kWh x $0.40/kWh =	$120
PCE *Fixed* Credit:		**($69)**
Net Bill:		$51

The bill to the right illustrates the old proposal. A fixed credit of $69 is applied to bill. This credit would be the same for a customer using more or less electricity than 300 kWh.

One of the problems with this structure is that low-usage consumers would have very low bills, probably less than comparable urban households. This situation is illustrated in the next bill that shows a customer who uses only 200 kWh/month.

Usage = 200 kWh		
Energy Charge:	200 kWh x $0.40/kWh =	$80
PCE *Fixed* Credit:		**($69)**
Net Bill:		$11

Under the totally fixed credit system, this customer has a bill of $11. Such a low bill would seem unfair to urbanites. It may also seem unfair to other households in the same community, because the low-usage household is likely to be a household with few occupants. A small household would receive

as much subsidy under a fixed credit plan as a household with many occupants.

The PCE proposal with both a fixed and a usage-based component alleviates this problem, as illustrated in the bill to the right. The 200 kWh/month customer has a bill of $24, given this hypothetical division of the subsidy between fixed and usage-based components. The sacrifice relative to a program with no usage-based component is some loss of incentive to conserve electricity.

Usage = 200 kWh		
Energy Charge:	200 kWh x $0.40/kWh =	$80
PCE *Usage* Credit:	200 kWh x $0.13/kWh =	($26)
PCE *Fixed* Credit:		($30)
Net Bill:		$24

E

LEGISLATIVE HISTORY

OF THE

POWER COST EQUALIZATION

PROGRAM: 1986 UPDATE

Jt House & Finance Meeting
March 14, 9:00 AM

Distributed by
Representative Richard Foster
Co-Chair, House Finance

Ala ka State Legisl..ture
Senate

86-000794

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State Capitol
Juneau, Alaska 99811

MEMORANDUM

To: Senator Frank Ferguson

From: Richard Rainery
Senior Analyst
Rural Research Agency

Date: May 28, 1986 RR

Subject: The Power Cost Equalization Program: An Update

The Power Cost Equalization Program (PCEP) was established by the 1984 Legislature to assist Alaskan consumers faced with extreme electric power costs. Alaska is an anomaly; some of its urban areas enjoy consumer electric rates which are among the lowest in the nation, while, conversely, in some rural communities, power costs are prohibitively high. In an effort to ameliorate this disparity, the Legislature has, since 1980, enacted several programs intended to assist those citizens of the state burdened with high power costs. The PCEP is the latest of efforts aimed directly at power costs. Now that a full year's data on the operation of the PCEP is available, the opportunity is at hand to briefly review the program's operation and to compare it to its predecessor, the Power Cost Assistance Program (PCAP). The main thrust of this effort, following a brief review of the law, will be to determine whether there is yet any indication of a basis in fact for criticisms of the program which were made at the time it was enacted and which have been periodically repeated since then.

I. The Law

Alaska Statutes 44.83.162 - 165 provide the basis in law for the Power Cost Equalization Program. The major 1984 changes to the law are discussed in this section. The intent of the PCEP, as established in section 162, is to stabilize statewide power costs at a cost "close or equal to the mean of the cost per kilowatt-hour in Anchorage, Fairbanks, and Juneau". Power cost equalization funds are distributed to eligible electric utilities, rather than to individual consumers. Two distinct consumer classes are eligible:

1) Community facilities, for which sales equal to 70 kilowatt-hours (kwh) per month per community resident are eligible. The previous standard was 55 kwh per month;
2) All other customers, for which consumption of not more than 750 kwh per month per customer is eligible. The PCAP limit was 600 kwh per month.

The minimum cost of power at which a utility can qualify for equalization aid is 8.5 cents/kwh and the maximum cost which will be assisted is 52.5 cents/kwh. Under the PCAP, the cost floor eligible for assistance was an increasing amount, rising by one cent with the advent of each new fiscal year. The level was 15 cents/kwh at the time the PCAP was superseded by the PCEP. The PCAP ceiling was 45 cents/kwh.

Eligible utilities must have had, in 1983, residential consumption eligible for equalization of less than 7,500 megawatt hours (15,000 for utilities serving more than one community) and must have, in 1984, relied upon diesel fuel to generate more than 75% of consumption. Public, private or cooperative utilities may participate if statutory standards are met.

II. Some Facts About the Program

The present status of the PCEP will be discussed in this section. The current shape of the program, based upon a full calender year's data (1985), can then be compared to the 1983 data gathered by this agency during the original design of the PCEP in 1984. Comparisons between the two programs, since they are essentially similar but for the price and consumption standards discussed in the preceding section, can reasonably be made. The changes in these two standards and associated changes in the shape of the program make it possible to examine changes in cost and usage patterns and furthermore to possibly infer the validity of some criticisms of the PCEP that have lingered since its inception. All statistics discussed in section exclude numbers for the community facility customer category.

* According to APA figures, as of the end of 1985, utilities in 151 communities were participating in the PCEP. Those communities had a population of just over 60,000, perhaps 11% of the state's total population. The largest community served is Nome with 3,732 inhabitants (July 1984 estimate) and the smallest Iguigig with 33. About 21,250 utility customers were enjoying the benefits of this State program. As of December 31, 1983, the PCAP served about 115 communities, with about 17,200 customers. The number of communities participating has increased by over 30% and the number of customers by almost [illegible]% in two years time. Part of that increase did occur prior to the creation of the PCEP in the spring of 1984. At least two communities

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have dropped out since the PCEP became law on October 1, 1984 (Kodiak and Port Lions, which are now receiving hydroelectric power from the Terror Lake project). The number of communities participating in the program, in its various forms, since its inception in 1980 has steadily increased. At the end of the first fiscal year, FY 1981, during which assistance for power costs was provided by the State, utilities serving 68 communities were participating. By the end of FY 82 the number of communities had increased by 28% to 87. 110 communities were on the list at the close of FY 83, a 26% increase. In light of these numbers, the 30% increase over two years hardly seems unusual. In the absence of other evidence, it is not a conclusive indication that the drop in prices attributable to the PCEP caused many utilities to jump on the bandwagon that would not have done so even at the higher consumer prices under the PCAP.

The deletion of the rising cost eligibility floor mechanism of the PCAP will have the effect of allowing an ever-increasing number of communities that would have become ineligible for assistance after sometime October 1, 1984 to continue participating. A few communities had been disqualified for the PCAP under this provision; the absence of the rising floor should keep the number of utilities eligible for the PCEP relatively constant over time. If the PCAP were still in force, the floor cost would be $.16/kwh as of July 1, 1985. Surprisingly, according to unpublished Alaska Public Utilities Commission statistics, no additional utilities would have been disqualified by this time, although an occasional KWH block in a customer class here and there might now fall below the limit. It would be some years before the rising floor would have had a significant effect on the utility and customer base of the PCEP.

* In 1983, the PCAP assisted utilities in costs of producing and generating about 47,500,000 kwh. In 1985, about 86,250,000 kwh were sold at a reduced price thanks to the PCEP. The subsidized sales level represents about 43% of the approximately 195,000,000 kwh total sales by participating utilities to all customers except community facilities. If community facilities sales are included, the subsidized level is about 47%. These percentages are based on data from the first six months of FY 1986. The 80% increase in subsidized sales from 1983 to 1985 can be attributed to several factors. The growth in the number of utilities and customers receiving aid has been discussed above. In addition, the average length of time during the year that utilities have participated has increased from 9.5 months to 10.5 months (10%). These two factors are certain influences, probably accounting for about 60% of the increase. Beyond these two elements, things become a little murky. Some part of the increase

may be due to improved data collection and recording by the Alaska Power Authority since 1983 with the computerization of PCEP files. The data available in 1986 may simply be more complete than that gathered in 1984. Other factors, which will be treated in following pages, include historically documented trends of increasing power use in rural Alaska and the 25% increase in the level of individual consumption subsidized by the State with the inception of the PCEP.

* Although AS 44.83.162(d) establishes the minimum cost of power at which utilities will begin to be eligible for equalization funds to be 8.5 cents/kwh, that number is misleading as a benchmark for several reasons. Although the intent of the law is to equalize statewide power costs to the mean of costs in Anchorage, Fairbanks, and Juneau, this actual mean cost is still considerably less than this statutory minimum. The mean consumer rate for 1984 for these three cities was only slightly over seven cents per kilowatt hour (Rural Research Agency, "Impact of the Revaluation of Cook Inlet Natural Gas Royalty Rates on the Power Cost Equalization Program", April 11, 1985). Consumer rates are somewhat higher than the cost of power, as defined in the PCEP. While urban costs have surely increased somewhat, the statutory minimum is still likely between 15% and 20% higher than the urban mean. The PCEP has actually reduced consumer power rates to about 13 cents/kwh (on the average, as of November 1985). No one purchasing power from a utility participating in the PCEP pays only 8.5 cents/kwh. The reasons are several, including these:

  1) the program covers only 95% of costs above that minimum (the average price of power in eligible communities during 1983 was about 27 cents/kwh);

  2) it does not recompense any costs above 52.5 cents (at least 20 utilities, Arctic Village was tops at 70 cents per kwh for residential customers, had rates, for part or all of consumption, in excess of this maximum);

  3) not all elements of utility rate structures are deemed eligible for reimbursement by the APUC; profit margin (return on equity) is statutorily excluded;

  4) many utilities' documented costs are actually higher than the rates charged to consumers for certain consumption blocks (the difference is made up as rates increase for greater consumption), but only the lower of actual rates or costs are figured in PCEP calculations.

* For the first fiscal year of the PCEP's operation, FY 1985, $16,300,000 was appropriated for the program. That figure is a proration of our 1984 estimate of the

$21,700,000 required to fund the PCEP for the full year, since the program's inception date was October 1, 1984. This original estimate assumed immediate participation by all eligible communities (presuming all these communities had utilities, which is not at all certain) not then part of the program, which we believed numbered about 95. We did not predict any increase in consumption by individual customers, although eligible monthly consumption levels were hiked by 25%. The actual FY 85 expenditure for the PCEP was $12,165,800, less than 75% of the allocated amount. The FY 86 funding for PCEP was $21,700,000 and the actual expenditure (projected as of March 30, 1986 by APA) will be about $18,764,000, 86.5% of the allocation. In FY 84, the last full year of the PCAP, about $9 million was disbursed. The Governor's FY 87 PCEP budget proposal called for $19,588,000, although on March 20, 1986, APA revised its estimate of need up to $21.7 million, a level over 10% below 1984 predictions of the necessary amount. The amount contained in the FY 87 operating budget is $17,630,000, nearly 20% less than the FY 86 allocation and about 6% less than APA projected FY 86 expenditures.

* Although the law calls for an annual adjustment in power costs of individual utilities eligible for equalization aid, any rate change must be examined by the APUC to determine if revised costs are eligible for compensation. There is no mechanism to alter the basic eligibility floor as average urban costs eventually rise to meet and surpass it. In any case, it will be several years before the mean of urban power costs begins to approach the 8.5 cent statutory standard. It is certain, barring totally unforeseen circumstances, that urban consumers will never pay rates equalling actual average rates to PCEP participants. In the coming fiscal year, 1987, funding for the program will certainly be insufficient to cover basic costs and that allocations to individual utilities will have to be prorated, thus hiking actual rates paid by consumers by at least 6%, presuming no growth in eligible consumption over FY 86. This is an unlikely presumption, as our analysis in the following section of historical consumption of power in rural Alaska would suggest.

* The limited data presently available implies that eligible sales under both the PCAP and the PCEP are usually less than average consumption by residential consumers. The distinction between residential consumers and other consumers is important, because commercial and industrial users have long been using in excess of the monthly kwh limits of both programs (see next section). Residential consumers have been well below eligible usage limits. As the following table indicates, in fifteen of twenty comparisons, the monthly level of PCAP/PCEP assisted kwh was less than monthly average residential consumption. While the community sample is somewhat limited and the

Table I

Selected Power Consumption Averages
(KWH per month per customer)

Utility	1983 Res.	1983 PCAP	1984 Res.	1985 PCEP
THREA	385	379	438	414
Yakutat	561	437	580	503
Cordova	447	372	450	395
Ft. Yukon	154	204	154	219
AVEC	210	231	216	250
Kotzebue	421	358	449	428
Bethel	404	331	418	385
Dillingham	478	385	450	409
McGrath	296	283	307	296
Naknek	449	499	435	404

Source: Alaska Power Administration, 1984 & 1985; Alaska Power Authority, 1983 & 1986.

second comparison, between 1984 residential consumption and 1985 PCEP eligible is not as valid as one based on same year data, the implications of this information are significant. What it suggests is that there may be space for power consumption eligible for assistance under the PCEP to expand <u>without actual overall consumption levels increasing.</u> In the first place, it is certain that these PCAP and PCEP consumption levels are inflated above eligible residential consumption levels alone since the former include commercial and other customers. In the second place, it is a fairly safe assumption that the impact of increased future consumption per customer in classes other than residential will have a negligible impact on PCEP eligible consumption. This also is discussed in the next section (also see attached table entitled Rural Power Consumption).

III. The Issues of Contention

Several aspects and ramifications of the PCEP have attracted criticism and concern from various quarters. The critics make three major points which are interrelated to a significant degree. These perceived flaws in the program cross the line dividing fiscal policy concerns from predictions of impacts on consumption patterns and are, as well, philosophical in nature.

A) Incentive to Increase Consumption:

The major criticism, from which the others spring, is the assertion that the financial subsidy that equalization provides to individual consumers encourages them to increase power consumption. The logic is that reduced monthly power

bills will tempt consumers that have not been utilizing the full 750 kwh/month which may be subsidized to consume part or all of the difference. This reflects the assumption that the demand for electricity by these consumers is, in economic jargon, price elastic. The theory is that a drop in the cost of a good or service will cause individuals to consume more of it; ergo, cheaper power will trigger an increase in demand for it. Relatively sudden increases in demand for power, in turn, may tax the generation and distribution capacity of many existing power systems, particularly in rural Alaska. Neither phenomenon is to be desired, in terms of public fiscal policy or of energy planning and conservation policy.

The scenario may have some basis in theory, but its relevance in this particular situation is unproven. Unfortunately, a number of sources have asserted, as fact, that the PCEP and its predecessors have induced or will induce increased consumption. No substantial evidence supporting this contention has been unearthed, compiled, or offered by its advocates. There is, in fact, evidence that suggests that increases in consumption directly attributable to power cost subsidies have yet to occur, despite the fact that some utilities are now in their sixth year of participation in assistance programs. An examination, by this agency, ("Electric Power Consumption and Price", July 3, 1985) of ten years of annual changes in power consumption and prices for a sample of rural communities, indicated that increases in average monthly consumption by individual consumers has been the norm since the mid-seventies. The survey suggested that changes in average monthly power consumption for residential customers from year to year have been relatively constant in varied price environments; consumption has climbed when prices were rapidly increasing, increasing at a moderate pace, or declining. No discernible correlation in terms of price changes and consumption changes existed for the sample, which included the Alaska Village Electric Cooperative (48 villages) and the major regional centers, among others.

Comparison of 1983 PCAP and 1985 PCEP price and consumption data does reveal increases in consumption somewhat above the levels suggested as normal by the July 1985 survey. There are several problems with directly comparing PCAP/PCEP data and the data in that survey. The PCAP/PCEP information includes all customers, not just residential consumers, and cannot be broken down by the various utility rate classes. Additionally, it is obvious that the ten years of data on consumption and price patterns in the July 1985 sample are more valuable than two years of data. The likelihood that any anomalies will be smoothed out or made apparent is greater for the longer term data base. Conversely, the survey, while it covered some 66 communities, does not include the entire data base of PCAP/PCEP utilities as does the information we are about to consider. In any case, herewith are some of the salient revelations of the 1983/1985

data for participants in the Power Cost Assistance Program and the Power Cost Equalization Program (again excluding consumption in the community facility category, a relatively minor portion of the overall totals). Details of the data are to be found in the tables attached to this memorandum.

- Calender year 1985 PCEP data shows only one community with average eligible consumption in excess of 600 kwh/month per customer and but four over 500, of the 148 examined. Recall that the eligible limit is presently 750 kwh and was 600 kwh up until October 1984. For all PCEP utilities the monthly average was 385.6 kwh, 51.4% of the allowable total. In 1983, only seven of 111 communities reported over 400 kwh consumption per month and none over 500 kwh. The PCAP average was 290.3 kwh, 48.4% of the eligible limit at the time. One should be cautious in contrasting these two program average consumption levels, however; they are not closely comparable. They are composed of differing groups of utilities and the average length of program participation during the year is also different.

- While data available limits direct comparisons, for those communities (30) that participated during both years for a full twelve months, consumption, on an annual basis, increased 5%, while prices fell 6%, again annually. This is somewhat more than the typical change in consumption identified by the 1985 survey (2-3%), but the PCAP/PCEP statistics we gathered include all customers except community facilities. Consumption for commercial and other classes of customers has historically been much higher than for residential consumers. This likely skews comparisons to some degree. As an example, the data in the following table show consumption by rate classifications for two rural regions in 1980, 1983, and 1984. Additionally, in the last column it shows, in theory, how the higher consumption patterns of nonresidential customers could have skewed total PCAP and PCEP eligible consumption averages in 1983 and 1984. This column lists what the average consumption eligible under the programs would have been if we assume that all actual residential consumption was eligible and that each other customer consumed the allowable limit (adjusted to reflect that the limit changed during the course of the year in 1984). While a simplistic and imprecise calculation, it is valuable for several reasons. It clarifies the order of magnitude under discussion. It suggests how commercial usage affected overall levels. Those additional PCEP/PCAP eligible kwh could have raised total eligible consumption averages from 5% to 23% over residential averages in these examples. Additionally, the commercial consumption levels displayed make it apparent that this customer class has been utilizing well in excess of the amounts eligible for assistance from the State since before the inception of

Table II

Average Power Consumption Per Customer
(KWH/Month)

Year	Res.	Comm.	Total	Eligible
Northwest Arctic				
1980	238	1710	635	-
1983	330	2276	626	378
1984	318	3242	792	390
Southwest				
1980	380	4087	1148	-
1983	487	2603	904	512
1984	428	3882	1140	475

Source: Alaska Power Administration, 1981 & 1984; Alaska Power Authority, 1985.

these programs. So, any increase in eligible per customer consumption, for the greatest part, would have to originate within the residential sector.

- While the minimum level of costs assisted dropped by 6.0 cents per kwh (averaging the one cent increase from 14 to 15 cents at the onset of FY 84 over the whole calender year of 1983) from 14.5 to 8.5 (over 41%) between 1983 and 1985, the average rate for power to PCAP/PCEP consumers fell only about 2.5 cents (17%). This drop did not represent a windfall to the average PCEP participant, representing about a $10 difference in monthly power bills, based on 1985 PCEP eligible consumption levels.

- Statistical tests (least squares regression) revealed no significant relationship between changes in costs of power to individual consumers from 1983 to 1985 and changes in consumption over the same period (for communities reporting 12 months data for both years). Actual prices paid by consumers after deducting State aid to utilities were the independent variables in our calculation, with consumption the dependent variable. No statistically meaningful relationship was detected linking the level or direction of price changes with the level or direction of consumption changes. A coefficient of determination (r^2) of .02 was obtained with this test. Nor did such tests discover any correlation between prices and consumption in 1983 or 1985 (across all communities). The r^2 value in this case was .08. The pattern of differences in power prices between communities could not be statistically tied in direct way to the differences in power consumption from utility to utility. An r^2 value close to one would indicate a strong determining effect of the independent variable upon the dependent variable. A value close to

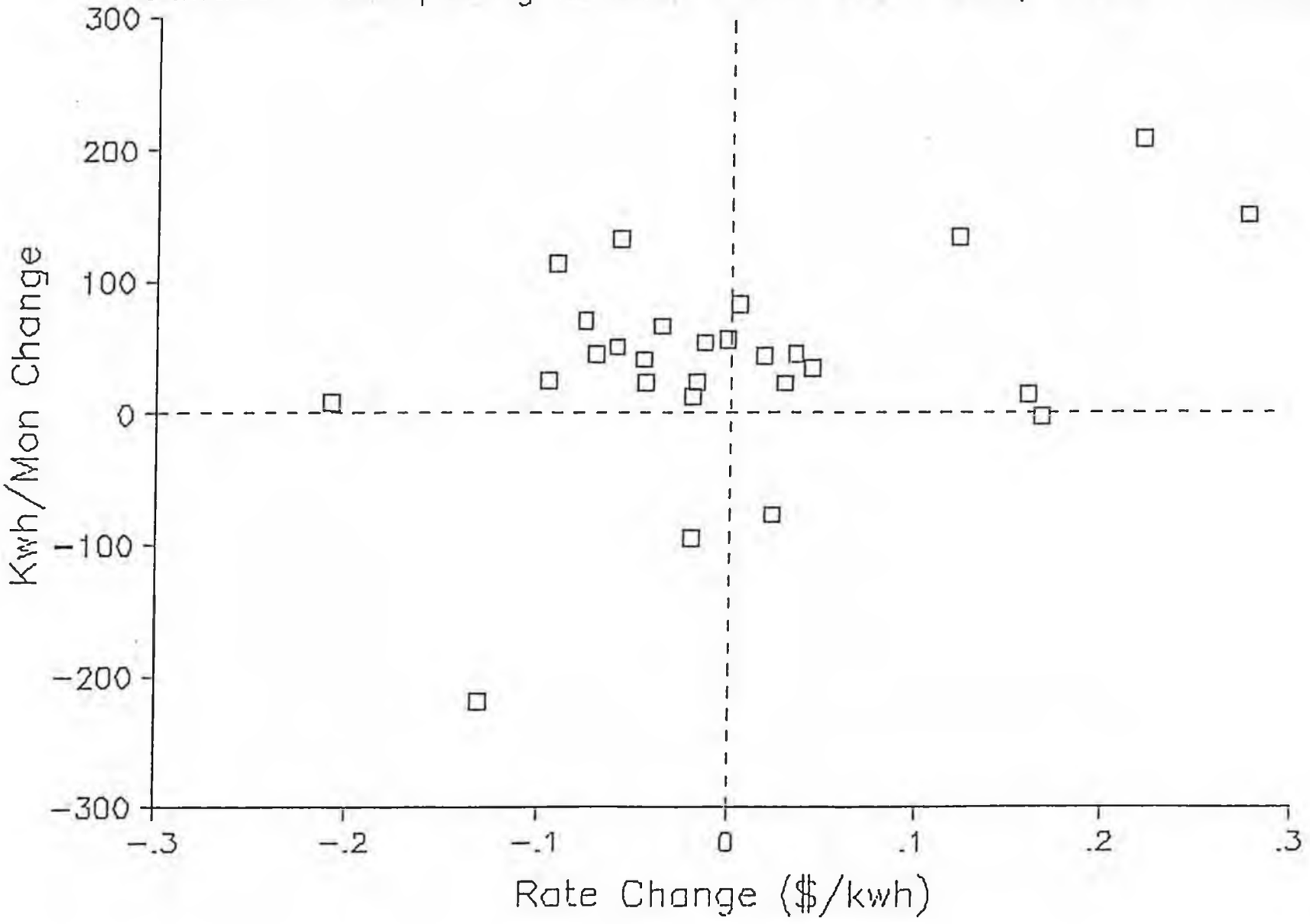
zero, as in these cases, demonstrates a weak relationship between the two values. The 1975 to 1984 survey discussed earlier confirms these findings. This does not mean that there is not some relationship between electric power price and consumption in rural Alaska. If there is, however, it resists solid statistical definition with the evidence available. It is most likely that price is but one factor in a complex multivariate relationship, pieces of which we have discussed in a general way herein, as w 1l as in other documents.

- Electric rates paid by consumers, deducting PCA or PCE utility rates, actually increased from 1983 to 1985 in 14 of the 30 communities (27 utilities) reporting twelve months data for both years. All but one of these increases were over 10%; seven utilities reported hikes of over 20%. In twelve of the same fourteen communities, eligible consumption also rose. In all but one instance, consumption also rose more than 10%; eight of these increases were over 30%. This phenomenon further confounds the idea that there is a direct relationship between power costs and usage in rural Alaska. A calculation of the price elasticity of demand for power would not reflect reality in this situation. The accompanying graph (Changes in Rural Power Consumption and Price) rather strikingly illustrates this. The scattergram depicts the absence of relation between changes in cost and usage for 1983 and 1985 upon which a meaningful elasticity measure could be based. While fourteen observations fall into the decreasing price/increasing consumption quadrant, which would indicate that demand was elastic, there are as many (13) which fall outside that quadrant, weakening any conclusion of elasticity. Demand is simply not predictably or "logically" responsive to price for these communities.

- It has been contended that an inevitable side effect of the lowered consumer power costs produced by the PCAP and PCEP has been to make electric space heating cost competitive with fuel oil thermal energy. This may be true in a few communities, but it is unlikely to be a broad based verity. Those arguments have assumed that PCEP subsidized power actually costs consumers only 8.5 cents/kwh, which, of course, it does not. A few simple examples will demonstrate that, on a cost per British Thermal Unit (BTU) basis, subsidized electricity is generally still likely more expensive than fuel oil as a space heating energy source. A gallon of standard no. 1 heating fuel oil contains a potential thermal energy content of 138,000 BTU. Most rural dwellings have rather inefficient heating units, probably capable of converting only about 40% or 50% of those potential BTU (55,200 or 69,000, respectively) into actual heat energy. A kilowatt hour of electricity can produce 3413 BTU and modern

Changes in Rural Power Consumption and Price

Utilities Participating in Both PCAP and PCEP, 1983 – 1985



electric heaters can be assumed to be 100% efficient; the actual heat produced by one kwh would therefore be 3413 BTU. To produce 69,000 BTU with electricity would require 20.2 kwh. At the average November 1985 consumer cost of power minus PCE, 12.67 cents, the cost of 20.2 kwh would be $2.56. To produce 55,200 BTU would require 16.2 kwh, at a cost of $2.05. The average cost of no. 1 fuel oil in rural Alaska is below both of these prices (a July 1985 study by the Rural Research Agency, Alaska's Public Energy Resources, estimated the price at $1.93 per gallon in 1984). The costs of obtaining portable electric space heaters or retrofitting a home heating system to electric heat would be an additional investment that could "short circuit" any moves away from oil spaceheating before they occur at all.

It is true that a number of utilities' power costs to consumers fall below the 12.67 cent per kilowatt hour average. However, in most cases, those are larger or less isolated communities in which the cost of fuel oil also falls below the average cost in rural Alaska. One might argue that the typical efficiency of fuel oil heaters in rural Alaska is even less than 40%. Downward trends in fuel oil prices, which eventually must penetrate even rural Alaska, could offset this. The prices of fuel oil have likely fallen, or will shortly fall, somewhat since 1983 or 1984, while the power prices developed herein are more recent and not necessarily falling. A March 20, 1986 Alaska Power Authority memorandum noted that it is difficult to draw a direct relationship between decreases in fuel prices and power rates. If we assume that fuel costs have held steady since 1983 or 1984, then power costs in perhaps fifteen small villages (about 10% of PCEP utilities), most under 300 population, may be at a level to render electric space heating competitive. If fuel costs have fallen in any of these communities, then the potential cost competitiveness of electric heat might be erased. Included in this group are the seven villages of the North Slope Borough. The Borough adds its own subsidy for power rates in these communities in addition to the PCEP, so it is somewhat misleading to include them in the group. There is probably a very small group of communities, then, in which PCEP has resulted in power rates low enough to justify electricity as a space heat source. The question is whether consumers will recognize this or will experiment until it becomes obvious.

It must be recognized that socioeconomic factors other than the price of power are likely to influence consumption in rural Alaska. To begin with, present levels of monthly usage in rural Alaska are well below the 750 kwh limit of the program. They are nearly all below the old PCAP limit of 600 kwh per month. For smaller villages, such as those that comprise the Alaska Village Electric Cooperative's

membership, monthly eligible consumption in 1985 was 250 kwh. In regional centers, such as Bethel or Nome, it was about 400 kwh. It takes some faith in the consumptive urges of the rural Alaskan to imagine how their use of electricity could increase so radically as to threaten the limits of the program in the foreseeable future. Residential consumption increases, and decreases, from 1975 to 1984, have usually been less than 5% annually, but given the probable influence of commercial sales, it is possible that the increases experienced from 1983 to 1985 are not all that much different than the ten year historical trends.

There are at least two elements to the issue that critics of the appetite enhancing powers of the PCEP seem to fail to appreciate. Both suggest that it is unlikely that demand for electricity in rural Alaska is terribly elastic. First, it may be that the really significant increases in demand for power in the bush have already occurred, during the middle to late 1970s, coincident with the pipeline construction boom, attendant population increases, and the proliferation of community electrical systems in formerly unserved communities. A saturation point may have been attained and only small, steady increases will be experienced in the future. The small annual changes evident during the 1980s, fo lowing the large growth in the seventies (for an analysis of this period, see the Institute of Social and Economic Research's November 11, 1980 report The Impact of Rising Energy Costs on Rural Alaska) may be evidence that such is the case. It is only over the last decade or so that many of the energy consuming appliances and other conveniences of Western society have begun to really penetrate rural Alaska. The ISER study showed that consumption in AVEC communities was growing at a 9.5% annual clip from 1974 - 1978, while, at the same time, prices were climbing at 16.7% per annum. None of the utilities in our sample came close to matching either sustained growth rate from 1978 to 1984 (see attached table, Rural Power Consumption). It is worth noting that the survey did show that two years, 1979 and 1983, produced minor decreases in monthly consumption, compared to previous years.

Secondly, the presumption that rural power customers, having realized a savings on their monthly electric bill, will automatically re-invest that savings in consumption hikes, is only that. While anecdotal accounts of such behavior exist, an equally supportable hypothesis is that such savings will be put to alternative uses. Data produced by sources from the U. S. Census on down to various studies of specific communities confirm that income levels in much of rural Alaska are well below those of the state as a whole and urban areas in particular. A small boost in disposable income such as that produced by the change in power costs caused by the enactment of the PCEP is likely to be far more significant to a rural family than an urban family, again generally speaking. A poorer family will find alternative essential

uses for that cash, such as fuel oil, food, hunting and fishing equipment, or winter clothing purchases. Reductions in federal programs, which have provided transfer payments and other economic boosts to rural Alaska, and the general downturn in State capital and operating expenditures, also extremely important to rural Alaskans, will exacerbate the lack of disposable income. It is interesting to note that the authors of the 1980 ISER study based their projections of future power use in part on the assumption that that "...household energy is responsive only to changes in real income and not to changes in real energy prices." The evidence is clear that the temptation to assume that consumption of power in rural Alaska is directly and only related to the price of power should be resisted. The underlying causes of changes in power demand are more complex than that, involving many socioeconomic variables.

B) The Expectation of Subsidized Power:
It has also been asserted that the PCEP creates an expectation of subsidized power rates and a consequent dependence on rates that do not reflect the true cost of power. The kicker is that, given the present fiscal prospects of the State of Alaska, it cannot be confidently predicted that the present program will continue indefinitely. The reduction of PCEP funding in the FY 87 operating budget leaves the program with $17,630,000, 6% below projected FY 86 expenditures. It is a common and logical argument that the existence of any government subsidy resulting in direct cash outlays to its beneficiaries or in reductions of cash outlays required of its beneficiaries is likely to breed a dependence of some degree upon that subsidy. It cannot be denied that the demise of the PCEP would result in a rate shock for the customers of participating utilities. It cannot be denied either that if other energy cost subsidies in Alaska were discontinued, the citizens affected could also be subject to rate shocks.

State and federal energy cost subsidies in Alaska and across the rest of the nation are not uncommon. On the federal side, programs such as the Low Income Home Energy Assistance Program and Rural Electrification Administration low interest loans nationally and the Alaska Power Administration's hydroelectric projects at Snettisham and Eklutna in Alaska, are examples. The State of Alaska subsidizes energy costs in several fashions. It has contributed to low electric and thermal energy prices in the Cook Inlet region by failing to charge royalties on natural gas commensurate with current values of that resource, as required by law. Legislation (SB 309) to allow the Department of Natural Resources (DNR) to base royalty gas prices on contract prices rather than market value passed the Legislature in this session as a result of concern over the impact on utility rates of the March 1985 DNR decision to collect current market value for royalties. The "Four Dam Pool" hydroelectric projects' financing package

repayment scheme for State loans incorporates, in effect, interest rates set below current market rates. In this instance, the debt service provision masks the true cost of power produced by Four Dam Pool projects by reducing the level of debt service included in rate structures, probably to the range of 5%.

A subsidy, then, can assume many forms and can aid different groups of citizens. Rural Alaskans are not the only Alaskans whose energy bills are subsidized by the State or by the federal government. A subsidy is a subsidy, whatever shape or name it may assume. Not all of these examples are strictly comparable to that of PCEP, of course. Four Dam Pool projects will be producing energy long after the debt is retired. Low priced royalty gas, while helping to keep consumer energy costs down, will also produce reduced contributions to the State treasury through the sale of publicly owned natural resources. There is obviously some difference in the short and long term impacts of each "subsidy".

Finally, it should be noted that rural Alaskans are not unaware of the possibility that the PCEP "plug" will be pulled one day and the pain that will result thereupon. That eventuality has been recognized by a number of local utility officials and others. Rural Alaskans have, in recent years, become quite familiar with the meaning of public program eliminations and reductions. It seems rather unlikely, with the last two years' preoccupation in Alaska with declining State revenues, that they are totally unprepared for an eventual end to the program. That will not forestall the gathering outcry at that time, as should be evident by the storm of protest stirred up over the relatively minor potential impact on Anchorage utility rates attributable to the reassessment of Cook Inlet natural gas royalty values.

C) Conservation and Alternative Technology:
It is maintained that the PCEP does nothing to encourage energy conservation measures, either by utilities or by consumers, nor does it offer any incentive to utilities to explore alternative energy sources or technologies. The PCEP statute does include a section (AS 44.83.162 (1)) directing that these goals be part of the program. Utilities are required to "cooperate with appropriate state agencies" in implementing conservation programs and alternatives to diesel power generation. Without having studied the situation, it is probably safe to say that such cooperation has yet to recast the face of rural power production. The statute directs cooperation, but there are and have been a number of agencies, both public and non-profit, whose goal has been to promote energy conservation and alternative energy development. These range from weatherization of existing structures to wind-driven power generation pilot projects to reconnaissance studies on future power needs and options for

provision to evaluation of existing generation and distribution systems. If there has been a failure to realize any real movement as a result of the statutory requirement, it probably is a result of several factors, which include the following:

1) a lack of coordination between the agencies constituting the different parts of the puzzle (PCEP administration, energy conservation, and alternative generation development, as examples);

2) a lack of sufficient resources to make real progress in the latter two areas;

3) the absence of viable alternatives to diesel generation in most communities.

It cannot be denied that the PCEP softens what is usually considered the single most influential impetus to conservation and innovation, that being price. The OPEC price shocks of the 1970s and subsequent changes in the patterns of consumption of petroleum products bear witness to the power of price. If utilities can continue to expect power costs to be subsidized by the State, a necessary incentive to invest in conservation programs and to replace inefficient systems may be missing. The same misdirection could filter down to the level of individual consumer habits. The presumed impact of PCEP assistance on rural consumption patterns has already been discussed and it bears repeating that it is not at all certain just how consumption responds to changes in price. Nor, however, can the program be described as a conservation incentive.

IV. Summary

The truth of the long term consequences of PCEP for rural Alaska are unknown in large measure at this time. Predicted surges in consumption have yet to occur. It is known that, for many rural Alaskans, the program has provided immediate relief from electric power costs most Alaskans would find inconceivably high. It has not yet been proven that the program has affected consumption patterns in any significant fashion. It may be that PCEP subsidized consumption for residential customers will continue to climb until it is close to equalling overall consumption, but there is no concrete reason to believe that overall levels should be pushed higher simply because power is cheaper.

It should also be recognized that the PCEP is not the only public energy subsidy presently extended to a segment of the citizenry of the state, and that dependence upon any form of subsidy by its beneficiaries may be reasonably asserted. The issue is not a simple one, nor a well understood one, despite

claims to the contrary. At present, the Power Cost Equalization Program exists in a virtual vacuum of valid, relevant information. There is, unfortunately, no shortage of conjecture and opinion extant. The answers to the questions concerning the impact of the PCEP simply will not be coherent and meaningful until more information is available. That will not happen until the program has been in operation for a longer period of time, perhaps in as few as another two or three years, perhaps longer.

Rural Power Consumption
1978-1984
Average KWH/Month per Customer

Utility	1978	1979	Change	1980	Change	1981	Change	1982	Change	1983	Change	1984	Change
THREA													
Res	368	351	-4.6%	333	-5.1%	338	1.5%	374	10.7%	385	2.9%	438	13.8%
Comm	2306	2696	16.9%	3193	18.4%	2920	-8.5%	2505	-14.2%	1928	-23.0%	2001	3.8%
Total	647	663	2.5%	676	2.0%	631	-6.7%	679	7.6%	683	.6%	760	11.3%
Haines													
Res	528	515	-2.5%	473	-8.2%	456	-3.6%	439	-3.7%	471	7.3%	476	1.1%
Comm	1957	1986	1.5%	2197	10.6%	2096	-4.6%	2527	20.6%	2193	-13.2%	2327	6.1%
Total	895	880	-1.7%	897	1.9%	900	.3%	941	4.6%	903	-4.0%	935	3.5%
Yakutat													
Res	640	743	16.1%	597	-19.7%	548	-8.2%	548	.0%	561	2.4%	580	3.4%
Comm	13672	13618	-.4%	11385	-16.4%	8333	-26.8%	9453	13.4%	10659	12.8%	10708	.5%
Total	1835	1702	-7.2%	1362	-20.0%	1235	-9.3%	1332	7.9%	1350	1.4%	1296	-4.0%
Cordova													
Res	513	506	-1.4%	492	-2.8%	524	6.5%	474	-9.5%	447	-5.7%	450	.7%
Comm	2748	3490	27.0%	3312	-5.1%	3387	2.3%	3001	-11.4%	2828	-5.8%	3292	16.4%
Total	1125	1294	15.0%	1251	-3.3%	1276	2.0%	1178	-7.7%	1079	-8.4%	976	-9.5%
Glennallen													
Res	387	392	1.3%	377	-3.8%	371	-1.6%	399	7.5%	397	-.5%	416	4.8%
Comm	5901	4597	-22.1%	4622	.5%	4613	-.2%	4613	.0%	4675	1.3%	5091	8.9%
Total	1606	1461	-9.0%	1477	1.1%	1446	-2.1%	1502	3.9%	1520	1.2%	1518	-.1%
Ft Yukon													
Res	148	139	-6.1%	142	2.2%	155	9.2%	159	2.6%	154	-3.1%	154	.0%
Comm	812	1147	41.3%	1040	-9.3%	1616	55.4%	1185	-26.7%	1275	7.6%	1275	.0%
Total	467	530	13.5%	504	-4.9%	613	21.6%	551	-10.1%	514	-6.7%	514	.0%
AVEC													
Res	172	168	-2.3%	169	.6%	175	3.6%	197	12.6%	210	6.6%	216	2.9%
Comm	733	744	1.5%	795	6.9%	915	15.1%	915	.0%	1027	12.2%	1607	56.5%
Total	424	422	-.5%	434	2.8%	419	-3.5%	490	16.9%	479	-2.2%	485	1.3%
Barrow													
Res	277	316	14.1%	366	15.8%	417	13.9%	461	10.6%	455	-1.3%	426	-6.4%
Comm	4831	4998	3.5%	4544	-9.1%	5769	27.0%	6067	5.2%	6001	-1.1%	5471	-8.8%
Total	963	956	-.7%	990	3.6%	1254	26.7%	1492	19.0%	1587	6.4%	1533	-3.4%
Kotzebue													
Res	432	448	3.7%	441	-1.6%	374	-15.2%	463	23.8%	421	-9.1%	449	6.7%
Comm	5276	5347	1.3%	5500	2.9%	4588	-16.6%	4136	-9.9%	4043	-2.2%	4162	2.9%
Total	1209	1297	7.3%	1295	-.2%	1221	-5.7%	1237	1.3%	1133	-8.4%	1135	.2%

Utility	1978	1979	Change	1980	Change	1981	Change	1982	Change	1983	Change	1984	Change
Bethel													
Res	346	337	-2.6%	382	13.4%	383	.3%	425	11.0%	404	-4.9%	418	3.5%
Comm	4751	5023	5.7%	6230	24.0%	6229	.0%	5657	-9.2%	4719	-16.6%	4823	2.2%
Total	1135	1046	-7.8%	1262	20.7%	1263	.0%	1204	-4.7%	1059	-12.0%	1118	5.6%
Dillingham													
Res	372	417	12.1%	432	3.6%	426	-1.4%	463	8.7%	478	3.2%	450	-5.9%
Comm	1915	2751	43.7%	2598	-5.6%	2783	7.1%	3214	15.5%	3122	-2.9%	2972	-4.8%
Total	807	902	11.8%	929	3.0%	951	2.4%	1019	7.2%	1005	-1.4%	980	-2.5%
Kodiak													
Res	526	500	-4.9%	409	-18.2%	504	23.2%	530	5.2%	518	-2.3%	502	-3.1%
Comm	5712	5670	-.7%	5736	1.2%	5579	-2.7%	5257	-5.8%	4480	-14.8%	4504	.5%
Total	1610	1531	-4.9%	1484	-3.1%	1470	-.9%	1472	.1%	1338	-9.1%	1388	3.7%
McGrath													
Res	236	144	-39.0%	266	84.7%	280	5.3%	269	-3.9%	296	10.0%	307	3.7%
Comm	2639	2140	-18.9%	2682	25.3%	2495	-7.0%	2364	-5.3%	2454	3.8%	2585	5.3%
Total	1290	893	-30.8%	1098	23.0%	1009	-8.1%	904	-10.4%	914	1.1%	920	.7%
Naknek													
Res	477	460	-3.6%	474	3.0%	440	-7.2%	407	-7.5%	449	10.3%	435	-3.1%
Comm	3114	2773	-11.0%	2573	-7.2%	2728	6.0%	2803	2.7%	2359	-15.8%	2646	12.2%
Total	1198	1237	3.3%	1263	2.1%	1220	-3.4%	1127	-7.6%	1102	-2.2%	1126	2.2%

Source: Alaska Power Administration; utilities.
VII:cons RRA, 5/12/86

19__ Power Cost Assistance Program
Consumption and Price

Utility	Mon	Elig. Cust	Elig. Sales	Sales/ Cust.	Rate - PCA
Akiachak	12	84.6	78725	77.5	.1460
Craig	1	369.0	173059	469.0	.1405
Hydaburg	1	147.0	57574	391.7	.1405
Tok*	1	400.0	240000	600.0	.1405
Atka	12	24.5	70858	241.0	.0031
Atmautluak	11	54.5	136907	228.4	.2314
AVEC	6	4027.5	5582003	231.0	.1931
Bethel	12	1612.8	6396099	330.5	.1394
Bettles	12	35.1	149833	355.7	.1895
Chefornak	7	48.0	108577	323.1	.1459
Cordova	6	1172.5	2614155	371.6	.1111
Eagle	10	56.9	72801	127.9	.1910
Egegik	7	45.7	80908	252.9	.1545
Cold Bay	12	66.3	339728	426.8	.1529
Galena	12	208.0	700636	280.7	.1515
Golovin	5	52.2	37315	143.0	.1555
Gustavus	4	39.8	50570	317.7	.1555
Fort Yukon	12	248.9	609067	203.9	.1187
Haines	12	684.5	3117447	379.5	.1248
Hughes	12	35.8	51056	118.8	.3150
I-N	10	129.3	351035	271.5	.1518
Kotlik	11	91.8	181045	179.3	.1425
Kotzebue	6	884.8	1900893	358.1	.1323
Kwethluk	12	113.2	426631	314.1	.1480
Levelock	12	30.6	75986	206.9	.2160
Manley HS	12	37.3	109517	244.7	.2331
Manokotak	12	71.8	278475	323.4	.1413
McGrath	12	215.4	731338	282.9	.1277
MKEC	12	109.0	154901	118.4	.1542
Naknek	12	527.6	3159846	499.1	.1414
Napakiak	12	67.7	369566	455.1	.2354
Napaskiak	8	63.9	110767	216.8	.2955
Nelson Lgn	11	23.7	128959	494.1	.1502
Nikolai	10	35.8	62687	175.1	.2055
Nome	12	1398.5	6028481	359.2	.1615
NSB	7	501.0	1042425	297.2	.2172
Northway	12	83.3	274936	274.9	.1654
Dillingham	12	801.8	3702738	384.9	.1255
Ouzinkie	12	66.0	243960	308.0	.1331
Pelican	8	110.5	323084	365.5	.1420
Kongiganak	8	53.3	113073	265.2	.3813
Ruby	12	95.2	210893	184.6	.0555
Sand Point	12	357.0	1084381	253.1	.1172
Takotna	12	31.6	64580	170.3	.2235
Tanana	12	157.3	412074	218.3	.1789
Tatitlek	12	31.6	93015	245.3	.1923
Tetlin	4	26.0	12228	117.6	.1646
Thorne Bay	7	105.1	303592	412.7	.1591
THREA	6	777.7	1769510	379.2	.1550
Tuntutuliak	6	62.8	53676	142.5	.3907
Unalakleet	6	226.8	497594	365.7	.1446
Unalaska	12	279.5	1215855	362.5	.2299
Yakutat	12	254.7	1334841	436.7	.1414
TOTAL	9.5	17235.1	47489900	290.9	.1525

Excludes community facility customers and consumpt
Monthly eligible average.
* More than maximum eligible kwh claimed.
Rate - PCA: Consumer rate/eligible Kwh minus PCA/K

Source: APA, Monthly PCAP Statistics, FY 83 & 84

1985 Power Cost Equalization Program
Consumption and Price

Utility	Mon	Elig. Cust.	Elig. Sales	Sales/ Cust.*	Rate - PCE
Akiachak	12	92.1	315957	285.9	.3660
Akiak	9	60.0	150930	279.5	.1693
Akutan	7	32.7	78401	342.5	.0923
Craig	12	529.2	2080450	327.6	.0950
Hydaburg	12	168.0	637691	316.3	.0946
Skagway	12	470.9	1971155	348.8	.1058
Tok	12	488.2	2174060	371.1	.1095
Allakaket	7	53.6	30914	82.4	.1957
Atka	12	35.3	165754	391.3	.2790
Aniak#	12	78.8	870386	750.0	.1543
Atmautluak	10	59.1	200089	338.6	.1029
AVEC	12	4300.6	12874601	249.5	.1364
Beaver	7	43.4	29385	96.7	.1195
Bethel	12	1635.0	7550297	384.8	.1255
Bettles	12	49.8	237637	397.7	.1431
Chalkyitsik	4	32.0	14238	111.2	.1309
Chefornak	12	64.3	223847	290.1	.1224
Chignik	12	47.9	209257	364.1	.1253
Chitina	12	31.5	106399	281.5	.1033
Cordova	12	1299.9	6164433	395.2	.0902
Diomede	7	33.0	53160	230.1	.1848
Eagle	12	56.6	138415	203.8	.1660
Eagle Villag	6	17.3	15724	151.5	.1320
Egegik	12	62.8	222104	294.7	.2147
False Pass	3	21.0	16859	267.6	.1857
Cold Bay	12	69.8	468651	559.5	.0942
Galena	12	237.2	928665	326.3	.1863
Golovin	12	54.8	129024	196.2	.1377
Gustavus	12	95.4	275076	240.3	.1043
Fort Yukon	12	284.0	745127	218.6	.2779
Haines	12	737.0	3859278	436.4	.1231
Hughes	12	39.0	59756	127.7	.1063
I-N-N	12	220.3	801138	303.0	.1107
Igiugig	12	21.4	42893	167.0	.2493
Deering	11	44.6	188407	384.0	.1961
King Cove	8	144.4	425608	368.4	.1372
Kokhanok	7	27.4	28533	148.8	.1672
Kobuk	4	24.5	16270	166.0	.2597
Koliganek	10	48.6	88689	182.5	.0958
Kotlik	7	99.6	165338	237.1	.1008
Kotzebue	12	932.8	4788745	427.8	.1246
Kwethluk	12	128.0	535220	348.5	.1915
Kwigillingok	12	48.4	201007	346.1	.2437
Larsen Bay	12	48.0	172221	299.0	.1729
Levelock	12	51.1	170175	277.5	.1393
Manley HS	6	45.3	72110	265.3	.1490
Manokotak	12	76.2	318074	347.8	.0958
McGrath	12	226.3	804944	296.4	.1072
Chuathbaluk	12	37.8	68330	150.6	.1720
Crooked Cr	12	31.2	68909	184.1	.1720
Sleetmute	12	31.0	60806	163.5	.1720
Stony River	12	19.0	34429	151.0	.1720
Naknek	12	606.6	2941121	404.0	.1209
Napakiak	12	80.1	226605	235.8	.1043
Napaskiak	12	77.1	245616	265.5	.2054
Nelson Lgn	12	26.5	160659	505.2	.1018
Nightmute	9	32.7	89542	304.3	.2567
Nikolai	12	36.3	73904	169.7	.1820
Nome	12	1512.4	7442047	410.1	.1013
Anaktuvuk Ps	12	74.9	378332	420.9	.0890
Atqasuk	12	51.8	311036	500.4	.0890
Kaktovik	12	61.4	343978	466.9	.0890
Nuiqsut	12	99.5	523459	438.4	.0890
Point Hope	12	169.9	936397	459.3	.0890
Point Lay	12	44.3	183592	345.4	.0890
Wainwright	12	140.8	636913	377.0	.0890
Northway	12	88.7	341563	320.9	.0945
Dillingham	12	961.3	4715153	408.7	.1071

Utility	Mon	Elig. Cust.	Elig. Sales	Sales/ Cust.*	Rate - PCE
Ouzinkie	12	74.0	204782	230.6	.1561
Pedro Bay	9	23.6	46944	221.0	.1180
Pelican	5	117.0	246109	420.7	.1211
Perryville	10	26.8	84152	314.0	.2054
Pilot Point	11	31.5	122689	354.1	.0983
Port Heiden	6	40.3	84566	349.7	.0908
Kongiganak	12	57.1	196423	286.7	.1267
Rampart	5	29.0	17309	119.4	.1957
Ruby	12	113.0	246843	182.0	.2218
Sand Point	12	356.7	1436490	335.6	.1212
Sheldon Pt	5	18.6	16592	178.4	.3989
St George	3	69.0	83352	402.7	.0994
St Paul	12	137.0	1080321	657.1	.2884
Stevens Vllg	9	34.3	29570	95.8	.1320
Takotna	12	31.8	115964	303.9	.3456
Tanana	12	165.8	480266	241.4	.2077
Tatitlek	12	32.0	137844	359.0	.1003
Teller	5	72.0	77317	214.8	.0983
Tenakee Spr	12	81.8	158466	161.4	.1787
Tetlin	12	26.3	51878	164.4	.0977
Thorne Bay	12	169.3	737664	363.1	.1496
THREA	12	865.8	4299722	413.8	.1332
Tuntutuliak	12	65.0	189105	242.4	.2681
Nikolski	12	30.9	71830	193.7	.2450
Unalakleet	12	241.4	1186199	409.5	.1339
Unalaska	12	332.3	1547334	388.0	.1344
Newtok	12	41.1	97459	197.6	.2948
White Mtn	3	52.0	20734	132.9	.1018
Yakutat	12	262.6	1585262	503.1	.1045
TOTAL	10.5	21248.4	86252669	385.6	.1267

Excludes community facility customers and sales.
* Monthly eligible average kwh.
# Consumption in excess of eligible level claimed.
Rate-PCE: Consumer rate/eligible kwh minus PCE/kwh.

Source: APA, Monthly PCE Statistics, FY 85 & 86.

Changes in Power Consumption and Price 1983-1985
For Utilities Participating in Both PCAP and PCEP

Utility	1983 Sales/ Cust.*	1985 Sales/ Cust.*	% Change	1983 Rate - PCA	1985 Rate - PCE	% Change
Akiachak	77.5	285.9	268.7%	.1460	.3660	150.7%
Craig	469.0	327.6	-30.1%	.1405	.0950	-32.4%
Hydaburg	391.7	316.3	-19.2%	.1405	.0946	-32.7%
Tok**	600.0	371.1	-38.1%	.1405	.1095	-22.1%
Atka	241.0	391.3	62.4%	.0031	.2790	8900.0%
Atmautluak	228.4	338.6	48.3%	.2314	.1029	-55.5%
AVEC	231.0	249.5	8.0%	.1931	.1364	-29.4%
Bethel	330.5	384.8	16.4%	.1394	.1255	-10.0%
Bettles	355.7	397.7	11.8%	.1895	.1431	-24.5%
Chefornak	323.1	290.1	-10.2%	.1459	.1224	-16.1%
Cordova	371.6	395.2	6.3%	.1111	.0902	-18.8%
Eagle	127.9	203.8	59.3%	.1910	.1660	-13.1%
Egegik	252.9	294.7	16.5%	.1545	.2147	39.0%
Cold Bay	426.8	559.5	31.1%	.1529	.0942	-38.4%
Galena	280.7	326.3	16.2%	.1515	.1863	23.0%
Golovin	143.0	196.2	37.2%	.1555	.1377	-11.4%
Gustavus	317.7	240.3	-24.4%	.1555	.1043	-32.9%
Fort Yukon	203.9	218.6	7.2%	.1187	.2779	134.1%
Haines	379.5	436.4	15.0%	.1248	.1231	-1.4%
Hughes	118.8	127.7	7.4%	.3150	.1063	-66.3%
I-N-N#	271.5	303.0	11.6%	.1518	.1107	-27.1%
Kotlik	179.3	237.1	32.3%	.1425	.1008	-29.3%
Kotzebue	358.1	427.8	19.5%	.1323	.1246	-5.8%
Kwethluk	314.1	348.5	10.9%	.1480	.1915	29.4%
Levelock	206.9	277.5	34.1%	.2160	.1393	-35.5%
Manley HS	244.7	265.3	8.4%	.2331	.1490	-36.1%
Manokotak	323.4	347.8	7.5%	.1413	.0958	-32.2%
McGrath	282.9	296.4	4.8%	.1277	.1072	-16.1%
MKEC	118.4	162.8	37.5%	.1542	.1720	11.5%
Naknek	499.1	404.0	-19.0%	.1414	.1209	-14.5%
Napakiak	455.1	235.8	-48.2%	.2354	.1043	-55.7%
Napaskiak	216.8	265.5	22.5%	.2955	.2054	-30.5%
Nelson Lgn	494.1	505.2	2.3%	.1502	.1018	-32.2%
Nikolai	175.1	169.7	-3.1%	.2055	.1820	-11.4%
Nome	359.2	410.1	14.2%	.1615	.1013	-37.3%
NSF	297.2	429.7	44.6%	.2172	.0890	-59.0%
No hway	274.9	320.9	16.7%	.1654	.0945	-42.9%
Di lingham	384.9	408.7	6.2%	.1255	.1071	-14.7%
Ouzinkie	308.0	230.6	-25.1%	.1331	.1561	17.3%
Pelican	365.5	420.7	15.1%	.1420	.1211	-14.7%
Kongiganak	265.2	286.7	8.1%	.3813	.1267	-66.8%
Ruby	184.6	182.0	-1.4%	.0555	.2218	299.6%
Sand Point	253.1	335.6	32.6%	.1172	.1212	3.4%
Takotna	170.3	303.9	78.4%	.2235	.3456	54.6%
Tanana	218.3	241.4	10.6%	.1789	.2077	16.1%
Tatitlek	245.3	359.0	46.3%	.1923	.1003	-47.8%
Tetlin	117.6	164.4	39.8%	.1646	.0977	-40.6%
Thorne Bay	412.7	363.1	-12.0%	.1591	.1496	-6.0%
THREA	379.2	413.8	9.1%	.1550	.1332	-14.1%
Tuntutuliak	142.5	242.4	70.2%	.3907	.2681	-31.4%
Unalakleet	365.7	409.5	12.0%	.1446	.1339	-7.4%
Unalaska	362.5	388.0	7.0%	.2299	.1344	-41.5%
Yakutat	436.7	503.1	15.2%	.1414	.1045	-26.1%
TOTAL	290.9	356.1	22.4%	.1525	.1234	-19.1%

Calender year 1983 PCA and 1985 PCE.
1983 - average 9.5 months data per utility, 1985 - 11.6 months
Rate - PCE: $ full rate/eligible kwh minus PCE/kwh.
Rate - PCA: $ full rate/eligible kwh minus PCA/kwh.
* Monthly average PCAP or PCEP eligible sales (kwh).
** More than maximum eligible kwh claimed, 1983.
# Two communities in 1983, three in 1985.

Source: APA, Fy 83-86, APUC 1985.
Rural Research Agency 3/20/86. VII:pceap

Change[illegible]n Rural Power Consumption and Price
For Utilities Participating in Both PCAP and PCEP
(12 months data)

Utility	1983 Sales/ Cust.*	1985 Sales/ Cust.*	% Change	1983 Rate - PCA	1985 Rate - PCE	% Change
Akiachak	77.5	285.9	268.7%	.1460	.3660	150.7%
Atka	241.0	391.3	62.4%	.0031	.2790	8900.0%
Bethel	330.5	384.8	16.4%	.1394	.1255	-10.0%
Bettles	355.7	397.7	11.8%	.1895	.1431	-24.5%
Cold Bay	426.8	559.5	31.1%	.1529	.0942	-38.4%
Galena	280.7	326.3	16.2%	.1515	.1863	23.0%
Fort Yukon	203.9	218.6	7.2%	.1187	.2779	134.1%
Haines	379.5	436.4	15.0%	.1248	.1231	-1.4%
Hughes	118.8	127.7	7.4%	.3150	.1063	-66.3%
Kwethluk	314.1	348.5	10.9%	.1480	.1915	29.4%
Levelock	206.9	277.5	34.1%	.2160	.1393	-35.5%
Manokotak	323.4	347.8	7.5%	.1413	.0958	-32.2%
McGrath	282.9	296.4	4.8%	.1277	.1072	-16.1%
MKEC	118.4	162.8	37.5%	.1542	.1720	11.5%
Naknek	499.1	404.0	-19.0%	.1414	.1209	-14.5%
Napakiak	455.1	235.8	-48.2%	.2354	.1043	-55.7%
Nome	359.2	410.1	14.2%	.1615	.1013	-37.3%
Northway	274.9	320.9	16.7%	.1654	.0945	-42.9%
Dillingham	384.9	408.7	6.2%	.1255	.1071	-14.7%
Ouzinkie	308.0	230.6	-25.1%	.1331	.1561	17.3%
Ruby	184.6	182.0	-1.4%	.0555	.2218	299.6%
Sand Point	253.1	335.6	32.6%	.1172	.1212	3.4%
Takotna	170.3	303.9	78.4%	.2235	.3456	54.6%
Tanana	218.3	241.4	10.6%	.1789	.2077	16.1%
Tatitlek	245.3	359.0	46.3%	.1923	.1003	-47.8%
Unalaska	362.5	388.0	7.0%	.2299	.1344	-41.5%
Yakutat	436.7	503.1	15.2%	.1414	.1045	-26.1%
TOTAL	339.9	375.3	10.4%	.1455	.1267	-12.9%

Calender year 1983 PCAP and 1985 PCEP.
Rate - PCA: $ full rate/eligible kwh minus PCA/kwh
Rate - PCE: $ full rate/eligible kwh minus PCE/kwh.
* Monthly average PCAP or PCEP eligible sales (kwh).

Source: APA, FY 83-86; APUC, 1985.
Rural Research Agency 3/20/86. VII:pceap1

STATISTICAL REPORT

of the

POWER COST EQUALIZATION

PROGRAM

Fiscal Year 1995

July 1, 1994 - June 30, 1995

Eighth Edition
December, 1995

State of Alaska
Tony Knowles, Governor

Department of Community and Regional Affairs
Mike Irwin, Commissioner

Division of Energy
Percy Frisby, Director

The State of Alaska's Department of Community and Regional Affairs, Division of Energy, complies with Title II of the Americans with Disabilities Act of 1990. This publication is available in alternative communication formats upon request. Please contact the Division at (907) 269-4500 or TDD# (800) 269-4555 to make any necessary arrangements.

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPARTMENT OF COMMUNITY AND REGIONAL AFFAIRS

DIVISION OF ENERGY

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December 14, 1995

Director's Statement

Fiscal year 1995 represents the first full year of program operations by the Division of Energy since the enactment of SLA 1993 legislation that transferred the Power Cost Equalization (PCE) program from the former Alaska Energy Authority. The 1993 legislation included other important milestones for the PCE program: 1) established the Power Cost Equalization and Rural Electric Capitalization (PCE/REC) Fund; 2) endowed the PCE/REC Fund with $66.9 million, plus an annual allocation up to about $4.5 million from the Four Dam Pool Transfer Fund; 3) established the legislative intent to annually fund the PCE program, from the PCE/REC Fund and the General Fund, at a minimum of $17 million through the year 2013.

Current projections for the PCE/REC Fund show that the fund will be exhausted by the first quarter of FY 2000, just over three more fiscal years. The life of the Fund could be further shortened if the annual allocations from the Four Dam Pool Transfer Fund are not realized at the projected levels. This would be far short of the legislative intent if General Fund appropriations are not forthcoming.

Fiscal year 1995 was the fifth year where the program experienced a funding shortfall. Payments were made at 100% of the full PCE rate for July through April and were reduced to 85% for May and June.

This report provides program data for the year ended June 30, 1995. Statistical data on prior years PCE and similar programs are also available. If you would like additional copies of this report or information on prior years, please contact my office at (907) 265-4500.

Percy Frisby
Director

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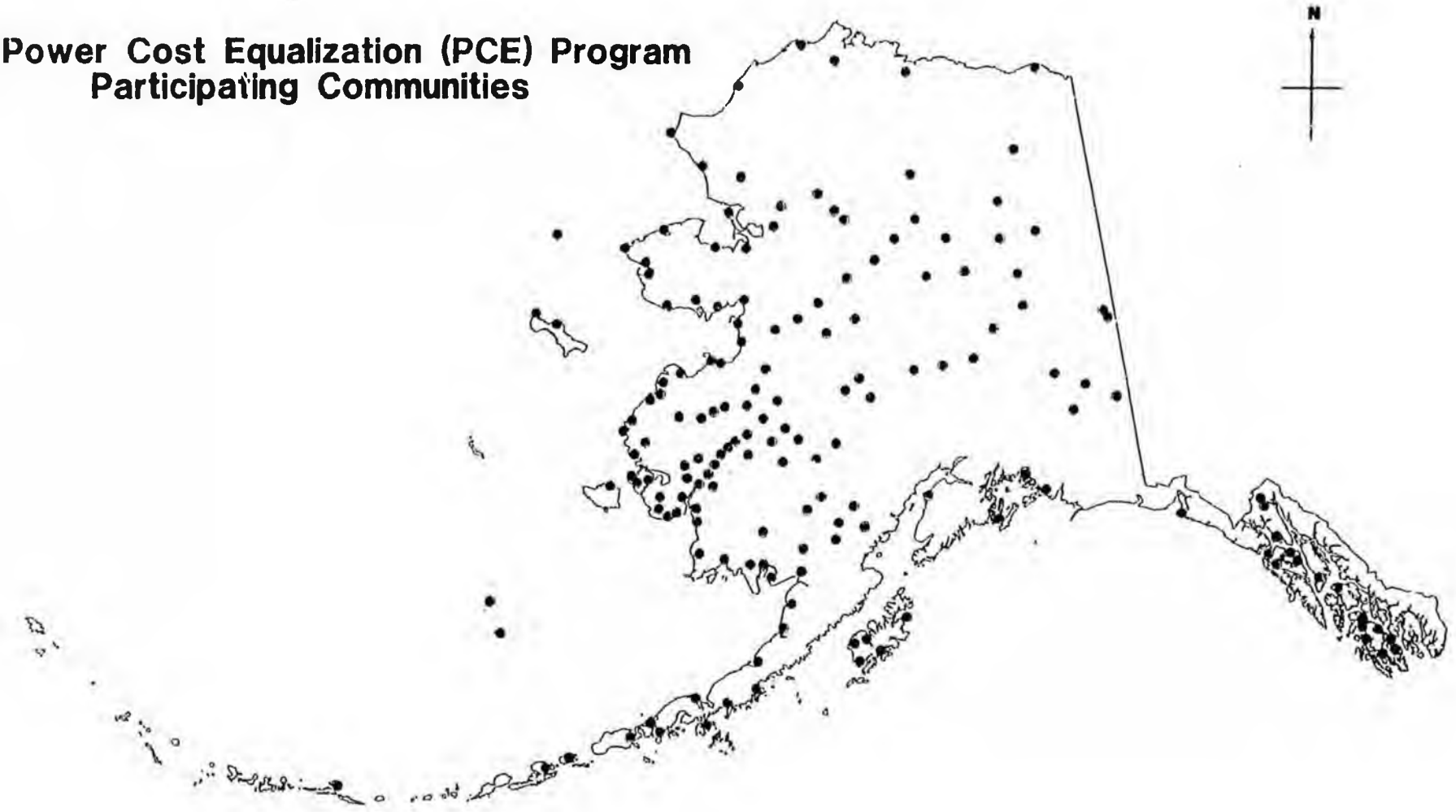
Power Cost Equalization (PCE) Program
Participating Communities



FY95 - POWER COST EQUALIZATION PROGRAM PARTICIPATING UTILITIES

Akhiok, City of
Akiachak Native Community Electric Co.
Akiak Power Utilities
Akutan Electric Utility
Alaska Power & Telephone
- Alatna
- Allakaket
- Bettles
- Chistochina
- Craig
- Dot Lake
- Healy Lake
- Hollis
- Hydaburg
- Mentasta
- Skagway
- Tetlin
- Tok

Alaska Village Electric Cooperative, Inc.
- Alakanuk
- Mountain Village
- Amber
- Noatak
- Andreafsky
- Noorvik
- Anvik
- Nulato
- Brevig Mission
- Nunapitchuk
- Chevak
- Old Harbor
- Eek
- Pilot Station
- Elim
- Pitkas Point
- Emmonak
- Quinhagak
- Gambell
- Russian Mission
- Goodnews Bay
- Savoonga
- Grayling
- Scammon Bay
- Holy Cross
- Selawik
- Hooper Bay
- Shageluk
- Huslia
- Shaktoolik
- Kaltag
- Shishmaref
- Kasigluk
- Shungnak
- Kiana
- St. Mary's
- Kivalina
- St. Micheal
- Koyuk
- Stebbins
- Lower Kalskag
- Togiak
- Marshall
- Toksook Bay
- Mekoryuk
- Tununak
- Minto
- Upper Kalskag
- New Stuyahok
- Wales

Alutiiq Power Company (Karluk)
Aniak Light & Power Company
Atmautluak Joint Utilities
Beaver Joint Utilities
Bethel Utilities Corporation, Inc.
Buckland, City of
Chalkyitsik Energy Systems
Chenega Bay IRA Village Council
Chignik, City of
Chignik Lake Electric Utility, Inc.
Chitina Electric, Inc.
Circle Electric, Inc
Coffman Cove Utility Association (Coffman Cove, Whale Pass)
Cordova Electric Cooperative, Inc.
Diomede Joint Utilities
Eagle Power Company (Eagle, Eagle Village)
Egegik Light & Power Co.
Ekwok Electric, Inc.
Elfin Cove Electric Utility
False Pass Electric Association
Far North Utilities (Central, Circle Hot Springs)
G & K, Inc. (Cold Bay)
Galena, City of
Golovin Power Utilites
Gustavus Electric Company
Gwitchyaa Zhee Utilities (Ft. Yukon)
Haines Light & Power Company, Inc.
Hughes Power & Light
Igiugig Electric Company
I-N-N Electric Cooperative (Iliamna, Newhalen, Nondalton)
Ipnatchiaq Electric Company (Deering)
King Cove, City of
Kipnuk Light Plant
Kobuk Valley Electric Cooperative
Kokhanok Village Council
Koliganek Village Council
Kotlik Electric Service
Kotzebue Electric Association, Inc.
Koyukuk, City of
Kuiggluum Kallugvia (Kwethluk)
Kwig Power Company (Kwigllingok)
Larsen Bay Utility Company
Levelock Electric Cooperative
Manley Utility Company
Manokotak Power Company
McGrath Light & Power
Middle Kuskokwim Electric Coop.
- Chauthbaluk
- Sleetmute
- Crooked Creek
- Stony River
- Red Devil

Naknek Electric Association, Inc. (King Salmon, Naknek, South Naknek)
Napakiak Ircinraq Power Company
Napaskiak Electric Utility
Naterkaq Light Power (Chefornak)
Nelson Lagoon Electric Cooperative, Inc.
Nightmute Power Plant
Nikolai Light & Power Utility
Nome Joint Utility System
North Slope Borough Power & Light
- Anakutuvuk Pass
- Pt. Hope
- Atqasuk
- Pt. Lay
- Nuiqsut

Northway Power & Light, Inc.
Nushagak Electric Cooperative, Inc. (Dillingham, Aleknagik)
Ouzinkie, City of
Pedro Bay Village Council
Pelican Utility Company
Perryville, City of
Pilot Point Village Council
Platinum, City of
Port Heiden, City of
Puvurnaq Power Company (Kongiganak)
Rampart Village Energy Systems
Ruby, City of
Sand Point Electric Company
Sheldon Point Electric Company
Stevens Village Energy System
St. George Municipal Electric Utility
St. Paul Municipal Electric Utility
Takotna Community Association
Tanalian Electric Cooperative, Inc. (Port Alsworth)
Tanana Power Company
Tatitlek Electric Utility
Telida Village Utility
Teller Power Company
Tenakee Springs Electric Utility
Thorne Bay Public Utility
Tlingit-Haida Regional Electric Authority
- Angoon
- Kassan
- Hoonah
- Klawock
- Kake

Tuntutuliak Community Service Association
Umnak Power Company (Nikolski)
Unalakleet Valley Electric Cooperative
Unalaska Electric Utility
Ungusraq Power Company (Newtok)
White Mountian, City of
Yakutat, City of

Prior program participants not currently active:

Arctic Village Electric Company, Inc
Clarks Point, City of
Tuluksak Traditional Council Power Utility
Venetie Village Electric

HIGHLIGHTS OF THE POWER COST EQUALIZATION PROGRAM:

An electric utility participating in the Power Cost Equalization Program (PCE) program must: a) provides electric service to the public for compensation; b) during calendar year 1983, have had less than 7,500 megawatt hours of residential consumption or less than 15,000 megawatt hours if two or more communities were served; and c) during calendar year 1984, have used diesel-fired generators to produce more than 75% of its electrical consumption.

The program covers a utility's eligible power costs that are more than 9.5¢/kwh but no higher than 52.5¢/kwh. The rate of assistance cannot exceed 95% of the eligible power costs and the amount of assistance cannot exceed 40.85¢/kwh. The program applies to actual power sold up to 700 kwh/customer/month and up to 70 kwh/resident/month for community facilities.

The PCE rate is determined by the Alaska Public Utilities Commission. Two categories of costs are used in determining the PCE rate: a) fuel expenses: the cost of fuel, including transportation; and b) non-fuel expenses: other costs such as salaries, insurance, taxes, power plant parts and supplies, interest and other reasonable costs.

Utilities then submit monthly reports to the Alaska Energy Authority that documents eligible power sold. The Energy Authority calculates the amount of PCE on a monthly basis and issues payment to the utility that flows through to the customer in the form of a reduced monthly electric bill.

This program is governed by Alaska Statutes 42.45.110 - 170 and the Alaska Administrative Code 3 AAC 94.305 - 330; 3 AAC 52.600 - 690.

Note: Fiscal Year 1995 was the fifth year in which the PCE program experienced a funding shortfall. Payments disbursed during FY95 were made at 100% of full rate for July through April and were reduced to 85% for May and June.

POWER COST EQUALIZATION (PCE) PROGRAM STATISTICS

	Fiscal year 1995	Fiscal year 1994	Percent change 1994-1995
Participation statistics			
Population served	75,776	73,392	3.2%
Communities served	175	173	1.2%
Participating utilities	95	95	0.0%
Total residential customers	22,361	21,732	2.9%
Total commercial customers	5,299	5,202	1.9%
Total community facilities customers	1,361	1,366	-0.4%
Total customers	29,021	28,300	2.5%
Production statistics			
Total mwh sold (mwh)	359,569	340,102	5.7%
PCE eligible mwh - residential (mwh)	90,689	87,857	3.2%
PCE eligible mwh - commercial (mwh)	17,528	17,773	-1.4%
PCE eligible mwh - community facilities (mwh)	26,447	24,344	8.6%
Total PCE eligible mwh as a percent of total mwh sold	37%	34%	8.8%
Average monthly PCE eligible kwh - residential (kwh)	343	340	0.9%
Average monthly PCE eligible kwh - commercial (kwh)	278	286	-2.8%
Average monthly PCE eligible kwh - community facilities (kwh)	1,619	1,515	6.9%
Average monthly PCE eligible kwh - community facilities (kwh)/per resident	29	28	3.6%
Financial statistics			
Average price of fuel oil ($/gallon)	$1.01	$0.97	4.1%
Total gallons of fuel oil consumed (gallons)	27,361,416	26,663,700	4.5%
Total cost of fuel oil ($)	$27,616,949	$27,391,271	0.8%
Total operating costs ($)	$47,200,227	$48,431,445	-2.5%
PCE legislative funding appropriations	$18,635,000	$17,920,000	*
Total PCE payments ($)	$18,493,448	$17,516,024	*
Average PCE payment per eligible kwh ($)	$0.138	$0.135	*
Average annual required PCE payment per customer ($)	$637	$619	*
Efficiency statistics			
Kwh sold per gallon of fuel oil (kwh)	12.9	12.8	0.8%
Operating expenses per total kwh sold ($)	$0.131	$0.127	3.1%

* FY95 payments were made on a pro-rata basis. Comparison of the percentage of change is not applicable.

Correction reflects the elimination of duplicate total kilowatt hour sales reported for AVEC during FY94.

State of Alaska
Department of Community & Regional Affairs
Division of Energy

FY95 - Power Cost Equalization Program Statistics by Utility/Community

Utility/Community	[a] Population	[b] Number of Customers: Residential	[c] Number of Customers: Commercial	[d] Number of Customers: Community Facilities	[e] PCE Eligible kwh: Residential (kwh)	[f] PCE Eligible kwh: Commercial (kwh)	[g] PCE Eligible kwh: Community Facilities (kwh)	[h] PCE Eligible kwh: Total (kwh)
Akhiok, City of	84	26	3	5	69,948	16,058	70,560	156,566
Akiachak Native Community Electric Co.	483	138	31	8	309,701	77,556	54,243	441,500
Akiak Power Utilities	301	82	5	5	180,646	18,354	1,239	200,239
Akutan Electric Utility	482	38	9	10	141,163	48,075	121,764	311,002
Alaska Power & Telephone								
Alatna - See Allakaket								
Allakaket	216	68	16	5	26,158	9,412	8,402	43,972
Bettles	43	19	28	2	73,265	79,726	6,664	159,655
Chistochina	60	27	7	1	98,389	40,352	3,516	142,257
Craig	1,488	577	225	31	2,953,436	800,163	756,430	4,510,029
Dot Lake - See Tok								
Healy Lake	47	10	3	3	10,824	6,983	12,408	30,215
Hollis	150	42	15	0	165,560	37,582	0	203,142
Hydaburg	415	142	42	9	717,743	85,212	155,821	958,776
Mentasta	96	23	8	3	36,190	26,791	45,266	108,247
Skagway	730	451	176	32	1,959,027	646,577	602,219	3,207,823
Tetlin	87	34	5	2	80,081	21,074	13,584	114,739
Tok	1,938	560	149	4	2,487,144	570,595	86,405	3,144,144
Alaska Village Electric Cooperative (AVEC)								
Alakanuk	623	122	14	9	306,999	58,419	74,675	440,093
Ambler	304	78	15	9	338,551	71,962	162,486	572,999
Andreafsky - See St. Mary's								
Anvik	93	42	7	4	119,542	32,934	31,956	184,432
Brevig Mission	239	57	5	5	144,326	28,027	54,055	226,408
Chevak	629	138	12	11	436,750	56,786	104,592	598,128
Eek	267	73	7	7	237,675	22,114	52,748	312,537
Elim	290	75	9	5	280,147	41,645	128,744	450,536
Emmonak	774	182	28	12	727,882	98,192	456,810	1,282,884
Gambell	566	124	13	13	473,070	71,513	208,743	753,326
Goodnews Bay	259	75	9	6	222,868	34,056	67,408	324,332
Grayling	198	57	13	9	174,601	56,870	95,809	327,280
Holy Cross	275	77	13	9	303,729	61,335	96,515	461,579
Hooper Bay	902	181	13	11	608,554	54,742	148,883	812,179
Huslia	242	72	6	13	247,262	32,588	55,962	335,812
Kaltag	254	67	9	11	230,893	47,141	106,232	384,266
Kasigluk - See Nunapitchuk								
Kiana	405	107	16	11	450,347	61,309	133,825	645,481
Kivalina	369	67	7	9	290,932	28,961	66,566	386,459
Koyuk	281	68	11	8	267,424	39,263	92,080	398,767
Lower Kalskag	485	119	15	10	405,043	67,099	77,963	472,152
Marshall	309	81	16	10	286,141	46,083	172,576	504,800
Mekoryuk	202	81	13	7	217,534	52,708	40,926	311,168

NOTES: N/A = Data not available. *** = Calculations cannot be made due to: 1) Lack of data or 2) Circumstances that have been footnoted.
Column m. Operating Expenses consists of: salaries, insurance, taxes, supplies, interest, and other and verifiable reasonable costs.
Column p. is a calculated PCE rate based on 12 months of data. Column x is the actual PCE rate on a particular date, June 30, 1995.

FY95 - Power Cost Equalization Program by Utility/Community

[i]	[j]	[k]	[l=k/j]	[m]	[n]	[o=n/(b+c+d)]	[p=n*100/h]	[q=h/i*100]	[r=c/b/12]	[s=f/c/12]	[t=g/a/12]	[u=m*100/i]	[v=i/j]	*Rate Data/Calculations 6/30/95 (rounded values)* [w]	[x]	[y=w-x]
Total kwh Sold (kwh)	Fuel (diesel) (gallons)	Fuel (diesel) ($'s)	Average Price of Fuel ($/gallon)	Total Operating Expenses ($'s)	Required PCE Payments ($'s)	Average Annual Required PCE Payment per Customer ($'s)	Average Cents PCE Payment per Eligible kwh (cents)	Percent Eligible kwh versus Total kwh Sold (%)	Average monthly Eligible kwh per Residential Customer (kwh)	Average monthly Eligible kwh per Commercial Customer (kwh)	Average Community facilities eligible kwh per Community Population (kwh)	Operating Expenses per Total kwh Sold (cents)	kwh Sold per Gallon of Fuel (Efficiency) (kwh/gallon)	Utility's Avg. Residential Rate (based on 500 kwh) (cents/kwh)	Power Cost Equalization Rate (cents/kwh)	Effective Residential Rate (cents/kwh)
263,956	26,771	$34,048	$1.27	$22,509	$12,254	$360	7.8	59.3%	223	446	70	8.5	9.9	38.0	6.5	31.5
600,577	66,007	$101,344	$1.54	$233,963	$140,101	$795	31.7	73.5%	187	212	9	39.0	9.1	50.0	27.9	22.2
677,620	66,065	$73,419	$1.11	$79,198	$30,263	$328	15.1	29.6%	184	296	0	11.7	10.3	39.0	12.3	26.7
444,502 (1)	28,611	$24,241 (2)	***	$119,692	$59,151	$1,042	19.0	70.0%	313	454	21	26.9	15.5	32.3	17.1	15.2
64,442	7,842	$8,623	$1.10	$11,327 (3)	$8,674	$97	19.7	68.2%	32	49	3	17.6	8.2	33.9	21.1	12.8
818,831	73,290	$82,464	$1.12	$246,565 (3)	$52,930	$1,080	33.2	19.5%	329	234	13	30.1	11.2	51.8	28.7	23.1
186,569	18,321	$14,405	$0.79	$47,215 (3)	$26,694	$759	18.8	76.2%	304	469	5	25.3	10.2	35.6	16.0	19.7
14,571,413 (4)	1,030,985	$798,074	$0.77	$823,563 (3)	$252,020	$303	5.6	31.0%	426	297	42	5.7	14.1	15.8	5.4	10.4
36,377	5,901	$5,232	$0.89	$24,124 (3)	$10,201	$638	33.8	83.1%	90	194	22	66.3	6.2	48.2	29.2	19.0
326,302	29,082	$21,781	$0.75	$65,285 (3)	$11,399	$201	5.6	62.3%	330	209	0	20.0	11.2	15.8	5.4	10.4
1,493,691	115,097	$107,052	$0.93	$91,878 (3)	$53,827	$279	5.6	64.2%	421	170	31	6.2	13.0	15.8	5.4	10.4
211,711	19,425	$15,235	$0.78	$52,030 (3)	$17,554	$510	16.2	51.1%	133	265	39	24.6	10.9	30.7	14.1	16.6
7,749,589 (5)	362,156	$249,162	$0.69	$640,033 (3)	$101,843	$155	3.2	41.4%	362	306	69	8.3	21.4	12.2	2.1	10.1
220,093	22,415	$23,631	$1.05	$40,425 (3)	$20,032	$489	17.5	52.1%	195	390	13	18.4	9.8	29.0	15.8	13.2
9,401,977	721,176	$487,988	$0.68	$253,103 (3)	$247,102	$347	7.9	33.4%	370	320	4	2.7	13.0	21.3	7.2	14.1
962,161	81,608	$89,333	$1.09	$0	$113,505	$787	25.8	45.7%	210	358	10	see total	11.8	42.9	22.2	20.8
994,672	80,673	$160,487	$1.99	$0	$160,380	$1,572	28.0	57.6%	362	400	45	see total	12.3	50.8	28.5	22.3
333,371	30,428	$32,741	$1.08	$0	$48,000	$903	26.0	55.3%	236	392	29	see total	11.0	43.5	22.7	20.9
418,075	35,960	$40,484	$1.13	$0	$59,710	$891	26.4	54.2%	213	431	19	see total	11.6	44.5	23.5	21.1
1,133,897	108,740	$119,795	$1.10	$0	$156,737	$971	26.2	52.7%	263	381	14	see total	10.4	44.2	23.2	21.0
507,118	42,726	$47,852	$1.12	$0	$80,792	$929	25.9	61.6%	271	263	16	see total	11.9	43.1	22.3	20.8
644,145	54,792	$58,463	$1.07	$0	$113,395	$1,274	25.2	69.9%	311	386	37	see total	11.8	43.2	22.4	20.8
1,972,684	183,487	$197,834	$1.08	$0	$313,734	$1,414	24.5	65.0%	334	291	49	see total	10.8	43.1	22.3	20.8
1,589,666	135,900	$154,447	$1.14	$0	$189,581	$1,265	25.2	47.4%	317	458	31	see total	11.7	43.0	22.2	20.8
485,908	43,050	$48,299	$1.12	$0	$83,228	$925	25.7	66.7%	248	315	22	see total	11.3	43.6	22.7	20.9
459,375	41,609	$43,618	$1.05	$0	$81,359	$1,030	24.9	71.2%	255	365	40	see total	11.0	42.1	21.5	20.6
632,342	53,375	$57,440	$1.08	$0	$115,925	$1,171	25.1	73.0%	329	393	29	see total	11.8	42.6	21.9	20.7
1,827,846	155,936	$169,727	$1.09	$0	$205,161	$1,001	25.3	44.4%	280	351	14	see total	11.7	42.4	21.8	20.7
534,615	46,086	$54,311	$1.18	$0	$90,450	$994	26.9	62.8%	286	453	19	see total	11.6	45.9	24.6	21.3
540,022	46,075	$48,550	$1.05	$0	$96,136	$1,100	25.0	71.2%	285	436	35	see total	11.7	41.8	21.2	20.5
1,066,399	90,446	$141,499	$1.56	$0	$169,453	$1,265	26.3	60.5%	351	319	28	see total	11.8	45.6	24.3	21.3
825,247	74,831	$117,711	$1.57	$0	$104,028	$1,253	26.9	46.8%	362	345	15	see total	11.0	46.1	24.7	21.4
703,838	59,659	$64,460	$1.08	$0	$102,357	$1,177	25.7	56.7%	328	297	27	see total	11.8	43.2	22.4	20.8
733,834	71,636	$78,455	$1.10	$0	$146,379	$1,017	31.0	64.3%	284	373	13	see total	10.2	45.7	24.4	21.3
733,813	60,873	$65,949	$1.08	$0	$123,008	$1,150	24.4	68.8%	294	240	47	see total	12.1	42.4	21.7	20.7
713,781	58,976	$63,638	$1.08	$0	$78,733	$780	25.3	43.6%	224	338	17	see total	12.1	41.5	21.0	20.5

(1) Hydroelectric generation provided 185,210 kwh (42%).
(2) Represents 11 of 12 months.
(3) Estimated value provided by the utility.
(4) This value includes sales to THREA-Klawock.
(5) Hydroelectric generation provided 3,076,920 kwh (40%).

State of Alaska
Department of Community & Regional Affairs
Division of Energy

FY95 - Power Cost Equalization Program Statistics by Utility/Community

Utility/Community	[a] Popu-lation	[b] Number of Customers: Resi-dential	[c] Number of Customers: Commer-cial	[d] Number of Customers: Commu-nity Facilities	[e] PCE Eligible kwh: Residential (kwh)	[f] PCE Eligible kwh: Commercial (kwh)	[g] PCE Eligible kwh: Community Facilities (kwh)	[h] PCE Eligible kwh: Total (kwh)
Minto	218	69	[illegible]	5	296,971	46,339	118,119	461,429
Mountain Village	789	179	[illegible]	14	729,939	74,706	286,496	1,091,141
New Stuyahok	413	86	[illegible]	9	387,420	35,644	78,246	501,310
Noatak	333	86	5	12	379,287	35,460	158,952	573,699
Noorvik	543	121	14	6	550,497	51,997	236,319	838,813
Nulato	372	102	12	15	360,198	58,595	164,458	583,251
Nunapitchuk	935	202	24	14	760,255	70,398	129,252	830,667
Old Harbor	309	102	12	10	355,295	53,254	103,706	512,255
Pilot Station	511	107	8	11	432,794	20,887	127,243	580,924
Pitkas Point - See St. Mary's								
Quinhagak	535	135	16	7	429,431	48,407	114,067	591,905
Russian Mission	287	50	6	4	205,691	31,147	15,278	252,116
St. Mary's	644	174	33	17	661,027	143,712	263,123	804,756
St. Michael	332	74	12	5	252,385	62,038	105,145	419,568
Savoonga	557	127	12	11	407,609	55,114	103,072	565,786
Scammon Bay	382	96	13	7	371,369	48,368	55,434	475,171
Selawik	639	148	16	7	511,786	74,491	92,257	678,534
Shageluk	160	40	5	5	121,411	31,831	47,116	200,358
Shaktoolik	202	50	7	5	243,217	43,387	99,346	385,950
Shishmaref	533	139	9	10	479,944	43,209	162,842	685,995
Shungnak	235	54	10	10	251,031	45,535	146,841	443,407
Stebbins	448	86	10	9	271,719	58,705	127,242	457,666
Togiak	778	177	14	16	703,852	56,838	239,810	1,000,500
Toksook Bay	527	98	8	9	412,780	41,026	105,428	559,234
Tununak	333	75	11	12	254,367	57,515	63,950	375,832
Upper Kalskag - See Lower Kalskag								
Wales	146	54	7	5	152,565	48,261	86,256	287,082
Total								
Alutiiq Power Company (Karluk)	71	23	3	4	54,743	19,307	8,266	82,316
Andreanof Electric Corporation (Atka)	85	24	5	2	47,987	17,516	41,067	106,570
Aniak Light & Power Company, Inc.	564	161	26	2	760,667	152,157	59,112	971,936
Atmautluak Joint Utilities (7)								
Beaver Joint Utility	102	62	13	10	65,599	28,643	33,876	128,118
Bethel Utilities Corporation, Inc.	5,015	1,652	280	21	7,080,070	842,149	1,343,413	9,265,632
Birch Creek Village Electric Utility (7)								
Buckland, City of	364	79	5	6	271,288	25,064	8,345	304,697
Chalkyitsik Energy Systems (7)								
Chenega Bay IRA Village Council (7)								
Chignik, City of	191	58	16	12	186,341	47,886	96,948	331,175
Chignik Lake Electric Utility, Inc.	132	38	7	8	177,631	14,259	40,047	231,937
Chitina Electric, Inc.	49	23	19	1	74,077	95,594	13,883	183,554
Circle Electric Utility	107	34	11	5	104,439	63,497	22,869	190,805
Coffman Cove Utility Association								

NOTES: N/A = Data not available. *** = Calculations cannot be made due to: 1) Lack of data or 2) Circumstances that have been footnoted.
Column n. Operating Expenses consists of: salaries, insurance, taxes, supplies, interest, and other and verifiable reasonable costs.
Column p. is a calculated PCE rate based on 12 months of data. Column x is the actual PCE rate on a particular date, June 30, 1995.

FY95 - Power Cost Equalization Program
by Utility/Community

[i]	[j]	[k]	[l=k/j]	[m]	[n]	[o=n/(b+c+d)]	[p=n*100/h]	[q=h/i*100]	[r=e/b/12]	[s=f/c/12]	[t=g/a/12]	[u=m*100/i]	[v=i/j]	*Rate Data/Calculations 6/30/95 (rounded values)* [w]	[x]	[y=w-x]
Total kwh Sold (kwh)	Fuel (diesel) (gallons)	Fuel (diesel) ($'s)	Average Price of Fuel ($/gallon)	Total Operating Expenses ($'s)	Required PCE Payments ($'s)	Average Annual Required PCE Payment per Customer ($'s)	Average Cents PCE Payment per Eligible kwh (cents)	Percent Eligible kwh versus Total kwh Sold (%)	Average monthly Eligible kwh per Residential Customer (kwh)	Average monthly Eligible kwh per Commercial Customer (kwh)	Average Community facilities eligible kwh per Community Population (kwh)	Operating Expenses per Total kwh Sold (cents)	kwh Sold per Gallon of Fuel (Effieiency) (kwh/gallon)	Utility's Avg. Residential Rate (based on 500 kwh) (cents/kwh)	Power Cost Equalization Rate (cents/kwh)	Effective Residential Rate (cents/kwh)
562,873	49,105	$39,293	$0.80	$0	$110,484	$1,315	23.9	82.0%	359	386	45	see total	11.5	40.3	20.0	20.2
2,124,302	190,628	$210,095	$1.10	$0	$279,386	$1,276	25.6	51.4%	340	239	30	see total	11.1	43.3	22.5	20.8
847,516	65,656	$71,752	$1.09	$0	$127,018	$1,233	25.3	59.2%	375	371	16	see total	12.9	42.2	26.5	15.7
1,062,653	98,939	$213,735	$2.16	$0	$166,246	$1,614	29.0	54.0%	368	591	40	see total	10.7	52.1	29.6	22.5
1,313,167	116,735	$182,704	$1.57	$0	$223,981	$1,589	26.7	63.9%	379	310	36	see total	11.2	48.9	27.0	21.9
842,377	70,206	$74,904	$1.07	$0	$147,318	$1,142	25.3	69.2%	294	407	37	see total	12.0	42.7	22.0	20.7
1,809,353	171,455	$187,922	$1.10	$0	$252,448	$1,051	30.4	45.9%	314	244	12	see total	10.6	44.8	23.7	21.1
669,002	55,238	$69,209	$1.25	$0	$132,853	$1,071	25.9	76.6%	290	370	28	see total	12.1	44.3	23.2	21.0
940,620	85,617	$94,827	$1.11	$0	$148,074	$1,175	25.5	61.8%	337	218	21	see total	11.0	42.9	22.2	20.8
964,677	82,998	$90,868	$1.09	$0	$151,963	$962	25.7	61.4%	265	252	18	see total	11.6	43.8	22.9	20.9
504,435	44,026	$48,267	$1.10	$0	$65,368	$1,082	25.9	50.0%	343	433	4	see total	11.5	43.5	22.6	20.9
2,571,842	222,607	$244,575	$1.10	$0	$273,325	$1,220	34.0	31.3%	317	363	34	see total	11.6	43.8	22.9	20.9
812,789	67,317	$69,821	$1.04	$0	$105,382	$1,158	25.1	51.6%	284	431	26	see total	12.1	42.5	21.8	20.7
1,068,756	98,753	$101,635	$1.03	$0	$146,903	$978	26.0	52.9%	267	383	15	see total	10.8	43.4	22.6	20.8
850,208	73,866	$79,754	$1.08	$0	$122,709	$1,059	25.8	55.9%	322	310	12	see total	11.5	42.9	22.2	20.8
1,272,879	120,054	$188,652	$1.57	$0	$188,202	$1,101	27.7	53.3%	288	388	12	see total	10.6	48.0	26.3	21.7
249,804	26,719	$31,611	$1.18	$0	$57,606	$1,152	28.8	80.2%	253	531	25	see total	9.3	51.3	29.0	22.4
645,052	53,995	$58,010	$1.07	$0	$97,745	$1,577	25.3	59.8%	405	517	41	see total	11.9	42.6	21.9	20.7
1,125,856	98,589	$155,786	$1.58	$0	$183,077	$1,159	26.7	60.9%	288	400	25	see total	11.4	45.9	24.6	21.3
1,021,505	86,431	$173,593	$2.01	$0	$122,490	$1,655	27.6	43.4%	387	379	52	see total	11.8	50.3	28.2	22.2
964,433	78,679	$81,459	$1.04	$0	$113,923	$1,085	24.9	47.5%	263	489	24	see total	12.3	42.2	21.6	20.6
1,892,837	151,478	$168,287	$1.11	$0	$253,074	$1,223	25.3	52.9%	331	338	26	see total	12.5	43.0	22.3	20.8
898,540	77,908	$84,124	$1.08	$0	$144,605	$1,257	25.9	62.2%	351	427	17	see total	11.5	43.0	22.1	20.9
649,545	56,274	$60,562	$1.08	$0	$96,908	$989	25.8	57.9%	283	436	16	see total	11.5	43.6	22.7	20.9
495,125	42,161	$49,272	$1.17	$0	$73,578	$1,115	25.6	58.0%	235	575	49	see total	11.7	42.7	22.0	20.7
				$10,440,648 (6)								23.7				
139,114	18,414	$29,045	$1.58	$53,572	$25,132	$842	30.5	59.2%	200	536	10	38.5	7.6	53.4	26.8	26.5
284,764	34,397	$41,233	$1.20	$23,411	$21,726	$701	20.4	37.4%	167	292	40	8.2	8.3	38.0	20.2	17.8
2,122,375	184,375	$216,108	$1.17	$593,563	$250,017	$1,323	25.7	45.8%	394	488	9	28.0	11.5	43.1	22.4	20.8
224,494	24,579	$30,892	$1.26	$72,347	$37,155	$437	29.0	57.1%	88	184	28	32.2	9.1	50.5	22.6	27.9
32,137,131 (8)	2,447,111	$3,263,582	$1.33	$1,800,000 (3)	$792,294	$406	8.6	28.8%	357	251	22	5.6	13.1	22.6	8.7	13.9
604,538	61,746 (9)	$85,827 (9)	***	$41,798	$33,459	$372	11.0	50.4%	286	418	2	6.9	9.8	33.0	9.5	23.5
651,456	72,620	$59,505	$0.82	$89,867	$35,765	$416	10.8	50.8%	268	249	42	13.8	9.0	28.0	10.2	17.8
267,589 (10)	6,312 (11)	$13,177 (11)	***	$92,484	$68,677	$1,296	29.6	86.7%	390	170	25	34.6	***	41.2	22.4	18.7
223,996	24,571	$21,750	$0.89	$97,767	$35,657	$836	19.4	81.9%	272	419	24	43.6	9.1	40.7	16.5	24.2
256,446	28,427	$23,675	$0.83	N/A	$52,080	$1,042	27.3	74.4%	256	481	18	***	9.0	48.0	23.0	25.0

(3) Estimated value provided by the utility.
(6) Represents "Total Operating Expenses" for all communities served.
(7) This utility has less than 12 months of data and is summarized on page 9a.
(8) Includes sales to Napakiak Ircinraq Power Company.
(9) Represents 8 of 12 months.
(10) Purchased 241,440 kwh (90%) of its power from Bering Straits School District.
(11) Represents 3 of 12 months.

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FY95 - Power Cost Equalization Program Statistics by Utility/Community

Utility/Community	[a] Population	[b] Number of Customers: Residential	[c] Number of Customers: Commercial	[d] Number of Customers: Community Facilities	[e] PCE Eligible kwh: Residential (kwh)	[f] PCE Eligible kwh: Commercial (kwh)	[g] PCE Eligible kwh: Community Facilities (kwh)	[h] PCE Eligible kwh: Total (kwh)
Coffman Cove	238	95	26	4	475,999	69,820	59,331	605,150
Whale Pass (7)								
Cordova Electric Association	2,735	953	546	51	4,680,940	1,248,722	1,910,664	7,840,326
Diomede Joint Utilities	173	42	7	6	147,259	39,449	45,543	232,251
Eagle Power Company	166	124	35	5	264,775	80,983	9,891	355,649
Egegik Light & Power Company	122	57	20	10	212,120	69,247	39,107	320,474
Ekwok Electric, Inc.	87	44	5	4	164,726	17,706	29,853	212,285
Elfin Cove Electric Utility	65	28	27	3	100,723	104,716	23,196	228,635
False Pass Electric Association	88	27	5	7	90,967	20,106	28,333	139,406
Far North Utilities (Central)	140	58	31	1	110,801	129,591	5,061	245,453
G & K Inc. (Cold Bay)	137	38	41	3	141,335	76,492	73,594	291,421
Galena, City of	756	203	69	11	695,779	183,169	291,904	1,170,852
Golovin Power Utilities	150	54	9	8	144,500	35,206	56,934	236,640
Gustavus Electric Company	151	231	55	1	678,742	220,938	26,926	926,606
Gwitchyaa Zhee Utilities (Ft. Yukon)	729	258	53	15	659,468	158,378	203,506	1,021,352
Haines Light & Power Company, Inc.	1,461	686	235	9	3,497,149	868,574	395,024	4,760,747
I-N-N Electric Cooperative	423	179	61	11	726,940	173,660	152,274	1,052,874
Iguigig Village Council	33	15	5	4	40,052	22,713	18,561	81,326
Ipnatchiaq Electric Company (Deering)	160	42	6	5	173,149	26,394	64,159	263,702
King Cove, City of	900	172	46	23	651,953	122,977	545,921	1,320,851
Kipnuk Light Plant	470	119	16	10	542,669	57,939	75,247	675,855
Kobuk Valley Electric Cooperative	97	25	7	6	63,169	23,805	54,278	141,252
Kokhanok Village Council	152	40	3	4	102,102	23,427	27,420	152,949
Koliganek Village Council	181	60	7	0	163,039	29,364	0	192,403
Kotlik Electric Services	532	116	7	8	396,730	37,930	104,740	539,400
Kotzebue Electric Association	2,952	799	134	24	4,240,243	300,941	1,558,901	6,100,085
Koyukuk, City of (7)								
Kuiggluum Kallugvia (Kwethluk)	641	139	5	9	415,245	33,188	54,079	502,512
Kwig Power Company (Kwigillingok)	278	68	12	2	309,109	41,347	13,386	363,842
Larsen Bay Utility Company (7)								
Levelock Electric Cooperative	105	48	8	9	164,355	29,429	87,278	281,062
Manley Utility Corporation	96	55	19	11	112,681	62,996	3,521	179,198
Manokatak Power Company	416	99	14	8	273,309	42,247	62,073	377,629
McGrath Light & Power	524	164	38	8	796,539	176,224	300,772	1,273,535
Middle Kuskoskwim Electric Cooperative								
Chauthbaluk	120	33	4	5	81,272	24,198	14,809	120,279
Crooked Creek	106	28	9	2	93,702	44,962	10,838	149,502
Red Devil	53	13	9	1	28,011	28,208	657	56,876
Sleetmute	106	34	6	2	73,472	33,979	11,932	119,383
Stony River	51	21	4	3	31,267	23,397	4,494	59,158
Total								

NOTES: N/A = Data not available. *** = Calculations cannot be made due to: 1) Lack of data or 2) Circumstances that have been footnoted.
Column m, Operating Expenses consists of: salaries, insurance, taxes, supplies, interest, and other and verifiable reasonable costs.
Column p, is a calculated PCE rate based on 12 months of data. Column x is the actual PCE rate on a particular date, June 30, 1995.

FY95 - Power Cost Equalization Program by Utility/Community

[i]	[j]	[k]	[l=k/j]	[m]	[n]	[o=n/(b+c+d)]	[p=n*100/h]	[q=h/i*100]	[r=c/b/12]	[s=f/c/12]	[t=g/a/12]	[u=m*100/i]	[v=i/j]	*Rate Data/Calculations 6/30/95 (rounded values)* [w]	[x]	[y=w-x]
Total kwh Sold (kwh)	Fuel (diesel) (gallons)	Fuel (diesel) ($'s)	Average Price of Fuel ($/gallon)	Total Operating Expenses ($'s)	Required PCE Payments ($'s)	Average Annual Required PCE Payment per Customer ($'s)	Average Cents PCE Payment per Eligible kwh (cents)	Percent Eligible kwh versus Total kwh Sold (%)	Average monthly Eligible kwh per Residential Customer (kwh)	Average monthly Eligible kwh per Commercial Customer (kwh)	Average Community facilities eligible kwh per Community Population (kwh)	Operating Expenses per Total kwh Sold (cents)	kwh Sold per Gallon of Fuel (Efficiency) (kwh/gallon)	Utility's Avg. Residential Rate (based on 500 kwh) (cents/kwh)	Power Cost Equalization Rate (cents/kwh)	Effective Residential Rate (cents/kwh)
1,247,382	99,617	$82,287	$0.83	$142,268 (3)	$79,083	$633	13.1	48.5%	418	224	21	11.4	12.5	23.0	10.6	12.4
21,168,332 (12)	1,579,651	$1,308,027	$0.83	$2,764,152	$707,708	$457	9.0	37.0%	409	191	58	13.1	***	23.5	8.0	15.5
463,195	42,977	$54,647	$1.27	$269,282	$67,188	$1,222	28.9	50.1%	292	470	22	58.1	10.8	43.0	25.1	17.9
600,476	52,830	$43,072	$0.82	$173,322	$98,244	$599	27.6	59.2%	178	193	5	28.9	11.4	39.0	24.8	14.2
668,801	71,774	$111,250	$1.55	$165,012 (3)	$59,892	$694	18.7	47.9%	313	292	27	24.7	9.3	50.0	16.7	33.3
220,744 (13)	4,350 (14)	$7,495 (14)	***	$51,664	$42,313	$800	19.9	96.2%	316	281	29	23.4	***	40.0	13.1	26.9
300,102	33,565	$38,526	$1.15	$19,287	$23,122	$397	10.1	76.2%	300	320	30	6.4	8.9	19.8	8.8	11.0
183,717	25,626	$20,778	$0.81	$30,727	$19,798	$508	14.2	75.9%	281	335	27	16.7	7.2	36.0	12.2	23.8
382,418	33,128	$21,842	$0.66	$254,093	$58,783	$653	23.9	64.2%	159	348	3	66.4	11.5	50.4	20.7	29.7
4,008,580	234,385	$281,795	$1.20	$687,336	$69,546	$847	23.9	7.3%	310	155	45	17.1	17.1	34.6	20.4	14.1
6,970,858	563,979	$669,645	$1.19	$1,026,930	$139,388	$491	11.9	16.8%	285	220	32	14.7	12.4	31.0	8.4	22.6
415,717	43,167	$52,161	$1.21	$82,121	$53,807	$749	22.7	56.9%	221	312	32	19.8	9.6	38.0	18.5	19.5
1,285,423	118,678	$130,546	$1.10	$481,432	$289,407	$1,008	31.2	72.1%	245	337	15	37.5	10.8	43.3	27.6	15.7
2,150,325	230,958	$289,032	$1.25	$457,883	$161,738	$496	15.8	47.5%	213	249	23	21.3	9.3	30.9	13 9	16.9
10,655,568 (15)	826,072	$540,281	$0.65	$926,326	$207,009	$223	4.3	44.7%	425	308	23	8.7	12.9	16.4	4.8	11.6
1,864,779	159,720	$179,626	$1.12	$600,386	$319,262	$1,270	30.3	56.5%	339	236	30	32.2	11.7	45.5	27.1	18.5
153,583	18,786	$27,231	$1.45	$33.409	$25,644	$1,036	31.5	53.0%	223	349	47	21.8	8.2	58.3	26.8	31.5
453,258	39,922	$72,374	$1.81	$83,932	$64,947	$1,225	24.6	58.2%	344	367	33	18.5	11.4	38.5	21.5	17.1
2,691,825	176,811	$131,221	$0.74	$191,819	$90.509	$376	6.9	49.1%	316	224	51	7.1	***	20.0	5.2	14.8
1,123,074	119,762	$135,690	$1.13	$240,405	$101,989	$703	15.1	60.2%	380	302	13	21.4	9.4	30.8	14.1	16.7
192,399 (16)	0	$0	***	N/A	$41,852	$1,092	29.6	73.4%	208	283	47	***	***	53.0	25.8	27.2
176,269 (17)	5,033 (14)	$12,480 (14)	***	$44,.37	$49,208	$1,047	32.2	86.8%	213	651	15	25.4	***	55.1	30.0	25.1
247,868 (18)	5,840 (11)	$9,094 (11)	***	$66,015	$36,692	$550	19.1	77.6%	227	350	0	26.6	***	40.0	11.4	28.7
729,540	85,875	$107,709	$1.25	$148,586	$96,201	$734	17.8	73.9%	285	452	16	20.4	8.5	30.0	15.3	14.7
21,105,313	1,432,386	$1,236,843	$0.86	N/A	$535,843	$560	8.8	28.9%	442	187	44	***	14.7	20.3	7.1	13.3
883,065	96,599	$156,294	$1.62	$160,253	$101,432	$663	20.2	56.9%	249	553	7	18.1	9.1	44.0	19.0	25.0
426,539	42,978	$47,676	$1.11	$135,899	$93,429	$1,136	25.7	85.3%	378	283	4	31.9	9.9	50.0	20.0	30.0
493,256	46,071	$53,776	$1.17	$138,705	$62,388	$960	22.2	57.0%	285	307	69	28.1	10.7	44.8	23.0	21.8
272,793	25,459	$19,934	$0.78	$157,431	$69,650	$929	38.9	65.7%	171	276	3	57.7	10.7	54.6	34.7	19.9
837,556	98,527	$117,778	$1.20	$100,349	$46,150	$381	12.2	45.1%	230	251	12	12.0	8.5	35.0	12.1	22.9
2,939,965	251,036	$326,523	$1.30	$570,654	$287,796	$1,373	22.6	43.3%	406	386	48	19.4	11.7	35.7	20.0	15.8
186,801	20,573	$28,433	$1.38	$0	$45,921	$1,093	38.2	64.4%	205	504	10	see total	9.1	60 3	34.7	26.1
203,908	21,792	$30,112	$1.38	$0	$57,243	$1,468	38.3	73.3%	279	416	9	see total	9.4	60.8	34.7	26.1
125,060	16,159	$22,329	$1.38	$0	$21,464	$933	37.7	45.5%	180	261	1	see total	7.7	60.8	34.7	26.1
200,142	31,223	$43,130	$1.38	$0	$45,461	$1,082	38.1	59.6%	180	472	9	see total	6.4	60.8	34.7	26.1
120,534	16,129	$22,288	$1.38	$0	$22,440	$801	37.9	49.1%	124	487	7	see total	7.5	60.8	34.7	26.1
				$357,141 (6)								42.7				

(3) Estimated value provided by the utility.
(6) Represents "Total Operating Expenses" for all communities served.
(7) This utility has less than 12 months of data and is summarized on page 9a.
(11) Represents 3 of 12 months.
(12) Hydroelectric generation provided 2,460,608 (12%).
(13) Purchased 205,560 kwh (93%) from Southwest Regional School District.
(14) Represents 4 of 12 months.
(15) Purchased a total of 769,542 kwh (7%) from Southern Energy, Onsite Energy and Northern Timber Corporation.
(16) Purchased 245,400 kwh (100%) of its power from Alaska Village Electric Cooperative.
(17) Purchased 132,047 kwh (75%) from Lake & Peninsula School District.
(18) Purchased 236,280 kwh (95%) from Southwest Regional School District.

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FY95 - Power Cost Equalization Program Statistics by Utility/Community

Utility/Community		[a] Population	[b] Number of Customers: Residential	[c] Number of Customers: Commercial	[d] Number of Customers: Community Facilities	[e] PCE Eligible kwh: Residential (kwh)	[f] PCE Eligible kwh: Commercial (kwh)	[g] PCE Eligible kwh: Community Facilities (kwh)	[h] PCE Eligible kwh: Total (kwh)
Naknek Electric Association, Inc.		1,482	581	196	33	2,741,700	673,867	1,006,194	4,421,761
Napakiak Ircinraq Power Company	(7)								
Napaskiak Electric Utility		348	87	4	2	274,080	27,205	6,933	308,218
Naterkaq Light Plant (Chefornak)		346	74	10	3	317,530	40,833	21,403	379,766
Nelson Lagoon Electric Cooperative, Inc.		83	35	5	3	171,666	25,205	20,402	217,273
Nightmute Power Plant		178	35	5	1	123,321	23,200	3,949	150,470
Nikolai Light & Power		108	50	7	6	114,551	32,854	90,720	238,125
Nome Joint Utility System		4,184	1,403	213	31	6,029,871	831,276	1,594,727	8,455,874
Northway Power & Light		113	101	13	3	396,503	88,046	30,817	515,366
North Slope Borough Power & Light									
Anaktuvuk Pass		284	74	33	1	333,226	103,121	26,700	463,047
Atqasuk		231	44	33	3	278,780	95,087	37,383	411,250
Kaktovik		222	69	29	3	332,464	95,616	40,020	468,100
Nuiqsut		389	88	40	3	401,431	82,183	61,435	545,049
Point Hope		696	155	52	6	779,612	97,809	68,492	945,913
Point Lay		139	50	20	2	218,205	75,897	15,847	309,949
Wainwright		536	136	47	4	560,807	120,845	99,826	781,478
Total									
Nushagak Electric Cooperative, Inc. (Dillingham)		2,232	867	335	37	4,370,417	855,146	833,632	6,059,195
Ouzinkie, City of		216	74	8	5	278,630	53,152	94,186	425,968
Pedro Bay Village Council - Electric	(7)								
Pelican Utility Company		235	187	34	12	400,017	75,363	115,916	591,296
Perryville, City of		108	36	5	0	102,185	20,192	0	122,377
Pilot Point Village Council		99	40	16	0	157,109	45,956	0	203,065
Platinum, City of	(7)								
Port Heiden, City of		132	53	30	1	146,050	48,041	3,280	197,371
Puvurnaq Power Company (Kongiganak)		294	65	4	2	262,624	24,205	5,383	292,212
Rampart Village Energy Systems	(7)								
Ruby, City of		206	103	17	10	172,936	44,817	136,367	354,120
St. George Municipal Electric Utility		203	52	24	5	239,764	82,958	125,784	448,506
St. Paul Municipal Electric Utility	(7)								
Sand Point Electric Company		1,095	277	179	20	1,267,941	355,455	514,808	2,138,204
Sheldon Point Electric Company		133	36	4	5	73,401	26,641	74,638	174,680
Stevens Village Energy Systems	(7)								
Takotna Community Association		62	22	9	8	66,221	42,954	48,730	157,905
Tanalian Electric Cooperative, Inc.		75	51	15	0	156,767	63,033	0	219,800
Tanana Power Company		361	109	44	11	289,336	93,688	92,047	475,071
Tatitlek Electric Utility	(7)								
Telida Village Utility	(7)								
Teller Power Company	(7)								

NOTES: N/A = Data not available. *** = Calculations cannot be made due to: 1) Lack of data or 2) Circumstances that have been footnoted.
Column m, Operating Expenses consists of: salaries, insurance, taxes, supplies, interest, and other and verifiable reasonable costs.
Column p, is a calculated PCE rate based on 12 months of data. Column x is the actual PCE rate on a particular date, June 30, 1995.

FY95 - Power Cost Equalization Program by Utility/Community

[i]	[j]	[k]	[l=k/j]	[m]	[n]	[o=n/(b+c+d)]	[p=n*100/h]	[q=h/i*100]	[r=e/b/12]	[s=f/c/12]	[t=g/a/12]	[u=m*100/i]	[v=i/j]	*Rate Data/Calculations 6/30/95 (rounded values)* [w]	[x]	[y=w-x]
Total kwh Sold (kwh)	Fuel (diesel) (gallons)	Fuel (diesel) ($'s)	Average Price of Fuel ($/gallon)	Total Operating Expenses ($'s)	Required PCE Payments ($'s)	Average Annual Required PCE Payment per Customer ($'s)	Average Cents PCE Payment per Eligible kwh (cents)	Percent Eligible kwh versus Total kwh Sold (%)	Average monthly Eligible kwh per Residential Customer (kwh)	Average monthly Eligible kwh per Commercial Customer (kwh)	Average Community facilities eligible kwh per Community Population (kwh)	Operating Expenses per Total kwh Sold (cents)	kwh Sold per Gallon of Fuel (Efficiency) (kwh/gallon)	Utility's Avg. Residential Rate (based on 500 kwh) (cents/kwh)	Power Cost Equalization Rate (cents/kwh)	Effective Residential Rate (cents/kwh)
18,239,875	1,333,171	$945,100	$0.71	$2,077,177	$337,159	$417	7.6	24.2%	393	287	57	11.4	13.7	23.5	8.5	15.0
442,594	46,141	$52,739	$1.14	$101,114	$62,833	$676	20.4	69.6%	263	567	2	22.8	9.6	45.0	15.3	29.8
494,196	47,018	$58,124	$1.24	$89,908	$56,532	$650	14.9	76.8%	358	340	5	18.2	10.5	32.0	12.7	19.3
313,304	37,717	$68,178	$1.81	$48,021 (19)	$45,381	$1,066	20.9	69.3%	414	420	20	***	8.3	42.0	18.6	23.4
276,155	30,609	$36,119	$1.18	$153,321	$26,332	$642	17.5	54.5%	294	387	2	55.5	9.0	40.0	15.8	24.2
393,834	31,556	$56,779	$1.80	$32,275	$67,335	$1,069	28.3	60.5%	191	391	70	8.2	12.5	50.0	27.1	22.9
29,037,373	1,958,454	$1,469,229	$0.75	$2,582,728	$342,766	$208	4.1	29.1%	358	326	32	8.9	14.8	18.2	4.1	14.1
1,627,430	165,821	$140,948	$0.85	$138,833	$84,134	$719	16.3	31.7%	327	564	23	8.5	9.8	32.7	14.2	18.5
2,125,013	195,912	$377,033	$1.92	$0	$35,898	$332	7.8	21.8%	375	260	8	see total	10.8	15.0	5.5	9.5
1,845,816	154,164	$184,286	$1.20	$0	$30,272	$378	7.4	22.3%	528	240	13	see total	12.0	15.0	5.5	9.5
1,602,418	166,044	$215,855	$1.30	$0	$30,012	$297	6.4	29.2%	399	280	15	see total	9.7	15.0	5.5	9.5
2,014,450	200,289	$235,770	$1.18	$0	$39,080	$298	7.2	27.1%	380	171	13	see total	10.1	15.0	5.5	9.5
3,553,494	317,913	$385,411	$1.21	$0	$57,958	$272	6.1	26.6%	420	156	8	see total	11.2	15.0	5.5	9.5
1,551,796	143,867	$223,463	$1.55	$0	$23,020	$321	7.4	20.0%	363	323	10	see total	10.8	15.0	5.5	9.5
3,139,633	277,916	$349,570	$1.26	$0	$50,222	$269	6.4	24.9%	343	215	16	see total	11.3	15.0	5.5	9.5
				$3,049,209 (6)								19.3				
15,843,346	1,180,569	$827,240	$0.70	$2,172,321	$512,255	$413	8.5	38.2%	420	213	31	13.7	13.4	20.5	7.2	13.2
615,864 (20)	25,153 (2)	$26,455 (2)	$1.05	$140,908	$55,517	$638	13.0	69.2%	314	548	36	22.9	***	30.0	11.5	18.5
3,215,804 (21)	96,258	$106,858	$1.11	$164,506	$11,776	$50	2.0	18.4%	179	183	41	5.1	***	15.1	1.7	13.4
343,004	31,116	$37,339	$1.20	$95,685	$12,687	$309	10.4	35.7%	237	337	0	27.9	11.0	30.0	8.7	21.3
354,536	44,822	$59,334	$1.32	$20,527	$34,207	$611	16.8	57.3%	327	239	0	5.8	7.9	31.7	14.7	17.1
512,043	58,842	$75,314	$1.28	$38,231	$15,339	$183	7.8	38.5%	230	133	2	7.5	8.7	30.0	6.8	23.2
383,420	45,354	$47,270	$1.04	$123,608	$74,690	$1,052	25.6	76.2%	337	504	2	32.2	8.5	45.0	18.1	26.9
490,761	69,724	$126,414	$1.81	$60,102	$66,119	$509	18.7	72.2%	140	220	55	12.2	7.0	54.0	16.0	38.0
924,888	77,725	$91,585	$1.18	$197,632	$73,919	$910	16.5	48.5%	382	288	52	21.4	11.9	30.0	15.2	14.8
3,391,680	262,255	$250,894	$0.96	$608,720	$366,396	$769	17.1	63.0%	381	165	39	17.9	12.9	28.1	14.8	13.2
355,083	35,269	$40,037	$1.14	$57,521	$25,956	$578	14.9	49.2%	170	567	47	16.2	10.1	50.0	13.2	36.8
206,819	19,064	$28,003	$1.47	$35,859	$37,067	$950	23.5	76.3%	251	398	65	17.3	10.8	48.1	20.5	27.6
481,399	41,987	$56,012	$1.33	$51,297	$43,104	$653	19.6	45.7%	256	350	0	10.7	11.5	33.7	19.5	14.2
1,457,470	129,870	$187,298	$1.44	$396,433	$81,338	$496	17.1	32.6%	221	177	21	27.2	11.2	42.7	14.9	27.8

(2) Represents 11 of 12 months.
(6) Represents "Total Operating Expenses" for all communities served.
(7) This utility has less than 12 months of data and is summarized on page 9a.
(10) Represents 10 of 12 months.
(20) Hydroelectric generation provided 422,480 kwh (69%).
(21) Hydroelectric generation provided 2,377,640 kwh (74%).

State of Alaska
Department of Community & Regional Affairs
Division of Energy

FY95 - Power Cost Equalization Program Statistics by Utility/Community

Utility/Community	[a] Population	[b] Number of Customers: Residential	[c] Number of Customers: Commercial	[d] Number of Customers: Community Facilities	[e] PCE Eligible kwh: Residential (kwh)	[f] PCE Eligible kwh: Commercial (kwh)	[g] PCE Eligible kwh: Community Facilities (kwh)	[h] PCE Eligible kwh: Total (kwh)
Tenakee Springs Electric Utility	103	84	24	11	184,448	61,822	32,100	278,370
Thorne Bay Public Utility (7)								
Tlingit-Haida Regional Electrical Authority								
Angoon	725	168	22	7	857,439	104,596	189,803	1,151,838
Chilkat Valley	80	79	4	0	226,358	24,418	0	250,776
Hoonah	939	288	49	16	1,566,228	285,940	465,758	2,317,926
Kake	739	258	38	10	1,329,954	200,835	237,249	1,768,038
Kasaan	46	23	10	1	99,029	24,839	705	124,573
Klawock	765	337	74	9	1,574,029	302,128	60,804	1,936,961
Total								
Tuntutuliak Community Service Assoc.	300	73	8	3	246,732	41,543	35,651	323,926
Umnak Power Company (Nikolski)	35	16	5	4	41,523	21,881	22,621	86,025
Unalakleet Valley Electric Cooperative	723	247	40	13	950,622	120,996	484,751	1,556,369
Unalaska Electric Utility	4,317	425	107	38	2,134,581	482,375	2,837,669	5,454,625
Unqusraq Power Company (Newtok)	242	49	5	4	182,783	30,957	14,249	227,989
White Mountain Utilities	182	67	9	3	207,357	39,116	107,755	354,228
Yakutat, City of	671	253	49	16	1,300,895	233,803	274,291	1,808,989
Total (Utilities with 12 mos. of data)	72,674	21,451	5,124	1,253	88,388,632	17,093,509	25,563,131	130,574,975

The following utilities have less than 12 months of data. The months of data are in parentheses after the utility name.

Alaska Power & Telephone - Whale Pass (1)	75	19	6	2	4,709	3,491	50	8,250
Atmautluak Joint Utilities (11)	262	54	3	4	185,549	19,780	7,534	212,863
Birch Creek Village Electric Utility (3)	42	20	3	3	4,768	3,148	2,865	10,781
Chalkyitsik Energy Systems (4)	53	24	18	1	18,061	7,487	0	25,548
Chenega Bay IRA Village Council (7)	94	21	4	3	60,861	11,888	17,078	89,827
Koyukuk, City of (10)	129	52	6	1	52,579	22,845	7,708	83,132
Larsen Bay Utility Company (5)	150	51	11	4	72,397	20,229	4,524	97,150
Napakiak Ircinraq Power Company (11)	330	85	10	4	252,400	44,402	43,903	340,705
Pedro Bay Village Council - Electric (9)	42	24	4	4	48,479	23,567	19,895	91,941
Platinum, City of (6)	49	22	1	1	12,834	2,170	1,377	16,381
Rampart Village Energy Systems (1)	68	30	4	4	2,660	1,542	1,014	5,216
St. Paul Municipal Electric Utility (11)	694	143	38	34	793,549	72,828	431,326	1,297,703
Stevens Village Energy Systems (9)	102	35	2	6	28,527	9,180	37,942	75,649
Tatitlek Electric Utility (4)	108	36	10	4	36,244	5,420	10,347	52,011
Telida Village Utility (11)	11	4	2	0	9,329	14,001	0	23,330
Teller Power Company (11)	259	82	14	21	168,594	64,483	57,936	291,013
Thorne Bay Public Utility (9)	634	208	40	30	548,985	108,372	239,994	897,351
Grand Total (all available data)	75,776	22,361	5,299	1,361	90,689,157	17,528,342	26,446,624	134,193,826

NOTES: N/A = Data not available. *** = Calculations cannot be made due to: 1) Lack of data or 2) Circumstances that have been footnoted.
Column m, Operating Expenses consists of: salaries, insurance, taxes, supplies, interest, and other and verifiable reasonable costs.
Column p, is a calculated PCE rate based on 12 months of data. Column x is the actual PCE rate on a particular date, June 30, 1995.

FY95 - Power Cost Equalization Program by Utility/Community

[i]	[j]	[k]	[l=k/j]	[m]	[n]	[o=n/(b+c+d)]	[p=n*10\^h]	[q=h/i*100]	[r=e/b/12]	[s=f/c/12]	[t=g/a/12]	[u=m*100/i]	[v=i/j]	*Rate Data/Calculations 6/30/95 (rounded values)* [w]	[x]	[y=w-x]
Total kwh Sold (kwh)	Fuel (diesel) (gallons)	Fuel (diesel) ($'s)	Average Price of Fuel ($/gallon)	Total Operating Expenses ($'s)	Required PCE Payments ($'s)	Average Annual Required PCE Payment per Customer ($'s)	Average Cents PCE Payment per Eligible kwh (cents)	Percent Eligible kwh versus Total kwh Sold (%)	Average monthly Eligible kwh per Residential Customer (kwh)	Average monthly Eligible kwh per Commercial Customer (kwh)	Average Community facilities eligible kwh per Community Population (kwh)	Operating Expenses per Total kwh Sold (cents)	kwh Sold per Gallon of Fuel (Efficiency) (kwh/gallon)	Utility's Avg. Residential Rate (based on 500 kwh) (cents/kwh)	Power Cost Equalization Rate (cents/kwh)	Effective Residential Rate (cents/kwh)
347,285	33,220	$36,655	$1.10	$53,393	$51,444	$435	18.5	80.2%	183	216	26	15.4	10.5	36.0	14.9	21.1
1,840,150	154,094	$121,067	$0.79	$0	$207,141	$1,051	18.0	62.6%	425	396	22	see total	11.9	33.4	19.1	14.3
330,343	75,337	$61,450	$0.82	$0	$45,054	$543	18.0	75.9%	239	509	0	see total	4.4	33.4	19.1	14.3
4,046,245	314,474	$251,409	$0.80	$0	$413,524	$1,172	17.8	57.3%	454	486	41	see total	12.9	33.4	19.1	14.3
4,283,574	371,830	$283,913	$0.76	$0	$316,405	$1,034	17.9	41.3%	430	449	27	see total	11.5	33.4	19.1	14.3
150,607	21,857	$15,740	$0.72	$0	$22,394	$659	18.0	82.7%	359	207	1	see total	6.9	33.4	19.1	14.3
4,197,599 (22)	0	$0	***	$0	$346,640	$826	17.9	46.1%	389	343	7	see total	***	33.4	19.1	14.3
				$2,572,799 (6)								17.3				
584,287	50,849	$56,181	$1.10	$176,030	$67,039	$802	20.7	55.4%	282	457	10	30.1	11.5	46.0	19.6	26.4
103,454	14,395	$17,418	$1.21	$29,754	$19,668	$787	22.9	83.2%	216	365	54	28.8	7.2	40.0	21.1	18.9
3,925,630	314,052	$265,273	$0.84	$502,949	$172,194	$573	11.1	39.6%	320	252	56	12.8	12.5	24.0	9.7	14.3
28,580,648 (23)	1,961,683	$1,359,352	$0.69	$2,739,348	$202,151	$355	3.7	19.1%	418	376	55	9.6	14.6	18.7	3.8	14.9
262,348	27,882	$35,968	$1.29	$76,592	$75,738	$1,306	33.2	86.9%	311	516	5	29.2	9.4	54.0	33.2	20.8
603,630	53,407	$60,480	$1.13	$160,069	$66,597	$843	18.8	58.7%	258	362	49	26.5	11.3	38.3	16.4	21.9
7,153,963	533,517	$530,166	$0.99	$787,646	$169,534	$532	9.4	25.3%	428	394	34	11.0	13.4	21.5	7.9	13.7
350,797,967 (24)	27,160,731	$26,802,953	$0.99	$46,152,359	$17,980,099	$646	13.8	37.2%	343	278	29	13.2	12.9			

Please note; The calculated values may be skewed due to insufficient data.

26,592	2,529	$2,355	$0.93	$197 (3)	$876	$32	10.6	31.0%	248	582	1	0.7	10.5	0.0	0.0	0.0
329,492	38,328	$49,000	$1.28	$81,956	$32,617	$535	15.3	64.6%	312	599	3	26.8	6.2	46.8	13.3	33.5
17,466	2,819	$3,918	$1.39	$4,678	$2,810	$108	26.1	61.7%	79	350	23	26.8	6.2	60.0	26.1	33.9
51,351	14,328	$17,042	$1.19	$8,798	$6,080	$143	23.8	49.8%	189	106	0	17.1	3.6	40.0	23.8	16.2
168,749	19,928	$24,583	***	$11,429	$20,149	$720	22.4	53.2%	414	425	26	6.8	8.5	40.0	19.7	20.3
183,068	17,716	$23,227	$1.31	$26,313	$12,506	$212	15.0	45.4%	101	381	6	14.4	10.3	45.0	15.0	30.0
186,981 (25)	0	$0	***	$9,934	$14,564	$221	15.0	52.0%	284	368	6	5.3	***	40.0	15.6	24.4
556,969 (26)	0	$0	***	$65,073	$113,805	$1,150	33.4	61.2%	270	404	12	11.7	***	51.9	28.1	23.8
101,300	15,668	$23,192	$1.48	$17,105	$21,876	$684	23.8	90.8%	224	655	53	16.9	6.5	60.0	23.5	36.5
46,723	0	$0	***	$2,295	$3,532	$147	21.6	35.1%	97	362	5	4.9	***	0.0	0.0	0.0
11,836	1,335	$1,589	$1.19	$1,247	$1,318	$35	25.3	44.1%	89	386	15	10.5	8.9	60.0	26.5	33.5
4,313,682	352,402	$435,986	$1.24	$219,324	$108,754	$507	8.4	30.1%	506	174	57	5.1	12.2	34.0	6.1	27.9
111,437	19,244	$23,536	$1.22	$17,503	$18,025	$419	23.8	67.9%	91	510	41	***	5.8	55.0	20.8	34.2
87,562	11,611	$6,568	***	$3,893	$7,632	$153	14.7	59.4%	252	136	24	4.4	***	39.0	12.9	26.1
31,368	7,024	$16,403	$2.34	$7,767	$7,474	$1,246	32.0	74.4%	212	636	0	24.8	4.5	100.0	26.6	73.4
778,017	48,317	$70,540	$1.46	$301,936	$101,894	$1,041	35.0	37.4%	187	419	19	38.8	16.1	53.8	30.6	23.1
1,768,098	149,436	$116,057	$0.78	$268,419	$39,435	$142	4.4	50.8%	293	303	42	15.2	11.8	25.0	4.5	20.5
359,568,658 (24)	27,861,416	$27,616,949	$1.01	$47,200,227	$18,493,448	$637	13.8	37.3%	***	***	***	13.1	12.9			

(3) Estimated value provided by the utility.
(6) Represents "Total Operating Expenses" for all communities served.
(7) This utility has less than 12 months of data and is summarized on page 9a.
(22) Purchased 100% of its power from AP&T.
(23) Purchased 4,477,200 kwh (16%) from Unisea, Inc.
(24) This value has been reduced be 4,946,967 kwh to eliminate double counting of kwh where power is sold/purchased between utilities participating in the PCE program.
(25) Hydroelectric generation provided 316,911 kwh.
(26) Purchased 100% of its power from Bethel Utilities.

Data for the Power Cost Equalization Annual Statistics come from utility monthly PCE reports submitted by the participating utilities. Division of Energy staff reviews the report for completeness, otherwise data submitted by the utilities is not altered.

POWER COST EQUALIZATION PROGRAM
HISTORICAL TRENDS
Fiscal Year 1985 - 1995

	Fiscal Year 85	Fiscal Year 86	Fiscal Year 87	Fiscal Year 88	Fiscal Year 89	Fiscal Year 90	Fiscal Year 91	Fiscal Year 92	Fiscal Year 93	Fiscal Year 94	Fiscal Year 95
PARTICIPATION											
Participating Utilities	83	94	97	99	97	96	96	96	96	95	95
Communities Served	149	162	164	168	166	165	160	164	166	173	175
Population Served	59,007	62,042	63,025	66,131	66,444	68,764	67,223	67,922	69,626	73,392	75,776
CUSTOMERS											
Residential & Commercial	20,967	22,175	23,372	23,431	24,110	24,990	24,711	25,096	26,219	26,934	27,660
Community Facilities	1,023	1,040	1,093	1,070	1,080	1,133	1,195	1,276	1,285	1,366	1,361
Total Customers	21,990	23,215	24,465	24,501	25,190	26,123	25,906	26,372	27,504	28,300	29,021
FUNDING											
Appropriations ($)	$19,100,000	$21,700,000	$13,840,299	$15,000,000	$19,724,000	$16,814,000	$16,912,100	$15,029,700	$18,026,700	$17,920,000	$18,635,000
Disbursements ($)	$13,770,449	$17,785,390	$16,771,338	$17,018,680	$17,104,631	$17,785,256	$19,607,435	$15,731,165	$17,341,042	$17,516,024	$18,493,448
Disbursements/Customer ($)	$636	$766	$686	$695	$679	$681	$757	$575	$630	$619	$637
CONSUMPTION											
Total MWH Sold (MWH)	160,804	225,414	242,621	261,762	270,265	293,086	286,508	309,552	313,535	340,102	359,569
PCE Eligible MWH Residential & Commercial	66,253	91,788	97,578	102,561	105,531	112,251	111,065	102,009	104,545	105,630	108,217
PCE Eligible KWH/Month/Cust, Resid & Comrcl	348	347	354	367	376	385	379	339	332	327	326
PCE Eligible MWH Community Facilities	14,099	16,551	17,014	16,964	16,200	18,004	19,703	22,185	23,331	24,344	26,447
Elig. KWH/Month/Capita, Community Facilities	21.8	22.3	22.8	21.5	21.2	23.0	25.0	27.0	28.0	28.0	29.0
Total PCE Eligible MWH (MWH)	95,353	108,339	114,592	119,525	121,732	130,255	130,769	124,193	127,877	129,974	134,194
Eligible KWH/Month/Cust, Total Customers	390	392	397	409	415	428	427	392	388	383	385
COSTS											
Average Price of Fuel Oil ($/gallon)	$1.174	$1.170	$1.013	$0.996	$0.874	$0.920	$1.050	$1.000	$0.990	$0.970	$1.010
Total Gallons of Fuel Oil Consumed (gallons)	14,861,722	20,994,795	20,155,802	23,128,769	23,124,266	24,827,962	23,540,785	24,251,425	24,932,287	26,663,700	27,861,416
Total Cost of Fuel Oil ($)	$18,706,253	$23,284,918	$18,930,252	$21,948,620	$21,154,979	$22,865,957	$24,631,042	$24,222,958	$25,246,066	$27,391,271	$27,616,949
Total Operating Costs ($)	$20,179,674	$31,707,920	$29,053,402	$32,415,081	$32,058,897	$40,998,307	$38,058,236	$42,014,478	$43,974,601	$48,431,445	$47,200,227
EFFICIENCY RATIOS											
KWH Sold per Gallon of fuel oil (kwh/gallon)	10.6	10.7	11.0	11.3	11.7	11.8	12.2	12.8	12.6	12.8	12.9
Operating Expenses per total KWH Sold ($/kwh)	$0.154	$0.140	$0.122	$0.124	$0.119	$0.140	$0.133	$0.136	$0.140	$0.127	$0.131
RATES											
Average PCA/PCE per Eligible KWH ($/kwh)	$0.156	$0.164	$0.146	$0.143	$0.141	$0.139	$0.150	$0.122	$0.135	$0.135	$0.138