

HB

182

HOUSE COMMITTEE REPORT

(7)

Date referred: 3/16/87

FURTHER REFERRALS: Resources
Finance

DATE: _____

The Labor & Commerce Committee has considered HB 182

"An Act relating to the power cost equalization program.

RECOMMENDS:

- replace with CSHB 182 the same title
- attached amendment(s) a new title
- do pass
- do not pass
- no recommendation
- individual recommendations
- additional referral to the _____ Committee

ADOPTS: _____ letter of intent

ATTACHES NEW FISCAL NOTE(S):

- fiscal impact same as previous fiscal note published _____
- zero fiscal note same as previous zero fiscal note published _____
- zero with analysis

SIGNING DO PASS:

Dave Douley

SIGNING OTHER RECOMMENDATIONS:

W.C. Fouché DO NOT PASS
Ellis no rec.
Alto Kraus no rec
Cliff Hansen no rec
Walt Furness none
Sam Williams NO REC

Dave Douley
 Chairman's signature

final version

w01407hB

Original sponsor: Rules/Governor

1 IN THE HOUSE

BY THE LABOR AND
COMMERCE COMMITTEE

2 CS FOR HOUSE BILL NO. 182 (L&C)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 FIFTEENTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act relating to the power cost equalization
7 program."

8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

9 * Section 1. FINDINGS. The legislature finds that

10 (1) the power cost equalization program has substantially im-
11 proved the health, safety, and quality of life in rural parts of the state;

12 (2) the cost of electricity in rural parts of the state is
13 substantially higher than the cost in the rest of the state;

14 (3) rural parts of the state rely less on a cash economy and
15 therefore rural residents may have more difficulty paying cash for high
16 energy costs;

17 (4) access to a certain level of electric power at affordable
18 rates is a basic right and necessity in the state;

19 (5) the power cost equalization program has allowed many more
20 rural state residents access to electric power at affordable rates than
21 before the program was available;

22 (6) most electricity in rural parts of the state is generated by
23 diesel generators that operate efficiently only at full capacity;

24 (7) an electric utility needs a certain demand for power to
25 operate efficiently and the power cost equalization program has helped
26 create this "critical mass" of demand in rural areas of the state;

27 (8) by providing a stable demand, the power cost equalization
28 program has enabled rural electric utilities to substantially improve the
29 efficiency of their operations through energy conservation, more efficient

1 generation, and improvements in end-use technology;

2 (9) the average household use of energy has not increased under
3 the power cost equalization program, although the number of new households
4 hooked up to electricity has increased;

5 (10) efficient generation and use of electrical power in rural
6 parts of the state is dependent on power usage by residential, commercial,
7 and community facility customers; representatives of rural electric util-
8 ities believe that elimination or substantial curtailment of the power cost
9 equalization subsidy for commercial users would force commercial users to
10 operate their own gasoline generators to provide their own electric power
11 and would therefore reduce the "critical mass" necessary for the electric
12 utility to operate economically;

13 (11) although the power cost equalization program has been suc-
14 cessful in providing electricity at affordable rates to consumers, without
15 leading to waste of energy resources, the current fiscal limitations in the
16 state require a reduction in many state programs and services, including
17 the power cost equalization program;

18 (12) if a reduction to the power cost equalization program is
19 necessary, it is better to accomplish the reduction by reducing the amount
20 of subsidy for each consumer and continuing to provide service under the
21 program to the largest number of consumers possible.

22 * Sec. 2. AS 44.83.162(c) is amended to read:

23 (c) An eligible electric utility is entitled to receive power
24 cost equalization for actual consumption to the extent allowed under
25 (e) of this section for sales of power to

26 (1) [FOR SALES OF POWER TO] local community facilities,
27 calculated in the aggregate for each community served by the electric
28 utility [, FOR ACTUAL CONSUMPTION OF NOT MORE THAN 70 KILOWATT-HOURS
29 PER MONTH FOR EACH RESIDENT OF THE COMMUNITY]; and

1 (2) [FOR ACTUAL CONSUMPTION OF NOT MORE THAN 750 KILOWATT-
2 HOURS PER MONTH SOLD TO] each customer in all classes served by the
3 electric utility except to customers of the utility under (1) of this
4 subsection.

5 * Sec. 3. AS 44.83.162(e) is amended to read:

6 (e) An electric utility whose customers receive power cost
7 equalization under this section shall set out in its tariff the rates
8 without the power cost equalization and the amount of power cost
9 equalization per kilowatt-hour sold. The rate charged to the customer
10 shall be the difference between the two amounts. Power cost equaliza-
11 tion paid under this section shall be used to reduce the cost of all
12 power sold to local community facilities, in the aggregate, to the
13 extent of 50 [70] kilowatt-hours per month per resident of the commu-
14 nity, and, in fiscal year 1988, to reduce the cost of the first 500
15 [750] kilowatt-hours per customer per month for all other classes
16 served by the electric utility. The subsidy for those classes shall
17 be reduced each year, beginning in fiscal year 1989, by 50 kilowatt-
18 hours per customer per month until the maximum subsidy is based on the
19 first 250 kilowatt-hours per customer per month for those classes.
20 Access to at least 250 kilowatt-hours per month at an affordable rate
21 is a basic right for each customer.

22 * Sec. 4. AS 44.83.162(j) is amended to read:

23 (j) The authority shall review the report required under (i)(1)
24 of this section and may submit the report to the commission for addi-
25 tional review before payment. After review and approval of the report
26 by the authority, the authority shall, subject to appropriation, pay
27 to each eligible electric utility an amount equal to the power cost
28 equalization per kilowatt-hour determined by the commission under (b)
29 and (d) of this section, multiplied by the number of kilowatt-hours

1 eligible for power cost equalization that were sold during the preced-
2 ing month to all customers of the utility in accordance with (c) of
3 this section. Payment shall be made by the authority within 30 days
4 after receipt from the utility of the report required under (i) of
5 this section. However, if there is a dispute between the authority
6 and the utility relating to the payment, the authority shall submit
7 the report to the commission for review within 30 days after its
8 receipt by the authority. When a report is submitted to the commis-
9 sion for review under this section, payment shall be made by the
10 authority within 30 days after submission, based on a commission
11 determination. If the authority determines that appropriations are
12 insufficient for payment in full, the amount paid to each electric
13 utility must fully fund, in descending order, residential customers,
14 community facilities, and commercial facilities until the appropria-
15 tion is fully spent. If the appropriation is insufficient for payment
16 in full to a class of eligible customers, the amount paid to customers
17 in that class must be [IS] reduced on a pro rata basis.

18 * Sec. 5. AS 44.83.162(k) is amended to read:

19 (k) If an electric utility receives power cost equalization
20 under this section, the utility shall either

21 (1) give the following notice to its electric service
22 customers eligible under this program for each period for which the
23 payment is received:

24 NOTICE TO CUSTOMER

25 For the current billing period the utility will be paid under the
26 State of Alaska's power cost equalization program (AS 44.83.162) an
27 amount to assist the utility and its customers in reducing the high
28 cost of generation of electric energy. For electric energy consumed
29 by residential customers and private commercial customers, this state

1 payment applies only to the first (insert appropriate amount) kilo-
2 watt-hours per month used by each customer. For electric energy sol-
3 to local community facilities, this state payment applies to the tota
4 number of kilowatt-hours used each month by all such facilities in th
5 community, up to a maximum of 50 kilowatt-hours, multiplied by th
6 number of residents in the community.

7 Your total electrical service cost \$
8 Less state equalization \$
9 Your charge \$
10 or

11 (2) give to its electric service customers a notice ap
12 proved by the authority, which notice provides electric service cus
13 tomers the same information provided by the notice in (1) of thi
14 subsection.

15 * Sec. 6. AS 44.83.162(o)(2) is amended to read:

16 (2) "community facility" means a facility essential to th
17 public health, safety, and welfare of the community, and includes
18 water and sewer facility, public outdoor lighting including lighti
19 for a community-owned airport strip or harbor, a community washeter
20 or freezer, a community volunteer firehall, a community health clini
21 a village public safety office, a [,] charitable educational facilit
22 or a community building whose operations are not paid for by t
23 state, the federal government, or private commercial interests;

24 * Sec. 7. AS 44.83.163(a) is amended to read:

25 (a) The power cost equalization per kilowatt-hour determin
26 under AS 44.83.162 payable to an electric utility that is subject
27 rate regulation under AS 42.05 may be adjusted by the commission if
28 (1) an increase or decrease in the electric utility's co
29 of fuel has resulted in the approval of a fuel cost rate adjustment

1 the commission;

2 (2) a permanent or interim rate increase or decrease has
3 been approved by the commission, thereby establishing a higher or
4 lower power cost; or

5 (3) an adjustment is required after the authority has
6 discovered discrepancies in its review of monthly data submitted by
7 the electric utility [; OR

8 (4) THE AUTHORITY DETERMINES THAT APPROPRIATIONS ARE INSUF-
9 FICIENT TO FINANCE FULL PAYMENTS TO ELIGIBLE ELECTRIC UTILITIES].

w01407hB
Cramer
4/9/87

Original sponsor: Rules/Governor

1 IN THE HOUSE

BY THE LABOR AND
COMMERCE COMMITTEE

2 CS FOR HOUSE BILL NO. 182 (L&C)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 FIFTEENTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act relating to the power cost equalization
7 program."

8 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

9 * Section 1. FINDINGS. The legislature finds that

10 (1) the power cost equalization program has substantially im-
11 proved the health, safety, and quality of life in rural parts of the state;

12 (2) the cost of electricity in rural parts of the state is
13 substantially higher than the cost in the rest of the state;

14 (3) rural parts of the state rely less on a cash economy and
15 therefore rural residents may have more difficulty paying cash for high
16 energy costs;

17 (4) access to a certain level of electric power at affordable
18 rates is a basic right and necessity in the state;

19 (5) the power cost equalization program has allowed many more
20 rural state residents access to electric power at affordable rates than
21 before the program was available;

22 (6) most electricity in rural parts of the state is generated by
23 diesel generators that operate efficiently only at full capacity;

24 (7) an electric utility needs a certain demand for power to
25 operate efficiently and the power cost equalization program has helped
26 create this "critical mass" of demand in rural areas of the state;

27 (8) by providing a stable demand, the power cost equalization
28 program has enabled rural electric utilities to substantially improve the
29 efficiency of their operations through energy conservation, more efficient

1 generation, and improvements in end-use technology;

2 (9) the average household use of energy has not increased under
3 the power cost equalization program, although the number of new households
4 hooked up to electricity has increased;

5 (10) efficient generation and use of electrical power in rural
6 parts of the state is dependent on power usage by residential, commercial,
7 and community facility customers; representatives of rural electric util-
8 ities believe that elimination or substantial curtailment of the power cost
9 equalization subsidy for commercial users would force commercial users to
10 operate their own gasoline generators to provide their own electric power
11 and would therefore reduce the "critical mass" necessary for the electric
12 utility to operate economically;

13 (11) although the power cost equalization program has been suc-
14 cessful in providing electricity at affordable rates to consumers, without
15 leading to waste of energy resources, the current fiscal limitations in the
16 state require a reduction in many state programs and services, including
17 the power cost equalization program;

18 (12) if a reduction to the power cost equalization program is
19 necessary, it is better to accomplish the reduction by reducing the amount
20 of subsidy for each consumer and continuing to provide service under the
21 program to the largest number of consumers possible.

22 * Sec. 2. AS 44.83.162(c) is amended to read:

23 (c) An eligible electric utility is entitled to receive power
24 cost equalization for actual consumption to the extent allowed under
25 (e) of this section for sales of power to

26 (1) [FOR SALES OF POWER TO] local community facilities,
27 calculated in the aggregate for each community served by the electric
28 utility [, FOR ACTUAL CONSUMPTION OF NOT MORE THAN 70 KILOWATT-HOURS
29 PER MONTH FOR EACH RESIDENT OF THE COMMUNITY]; and

1 (2) [FOR ACTUAL CONSUMPTION OF NOT MORE THAN 750 KILOWATT-
2 HOURS PER MONTH SOLD TO] each customer in all classes served by the
3 electric utility except to customers of the utility under (1) of this
4 subsection.

5 * Sec. 3. AS 44.83.162(e) is amended to read:

6 (e) An electric utility whose customers receive power cost
7 equalization under this section shall set out in its tariff the rates
8 without the power cost equalization and the amount of power cost
9 equalization per kilowatt-hour sold. The rate charged to the customer
10 shall be the difference between the two amounts. Power cost equaliza-
11 tion paid under this section shall be used to reduce the cost of all
12 power sold to local community facilities, in the aggregate, to the
13 extent of 50 [70] kilowatt-hours per month per resident of the commu-
14 nity, and, in fiscal year 1988, to reduce the cost of the first 500
15 [750] kilowatt-hours per customer per month for all other classes
16 served by the electric utility. The subsidy for those classes shall
17 be reduced each year, beginning in fiscal year 1989, by 50 kilowatt-
18 hours per customer per month until the maximum subsidy is based on the
19 first 250 kilowatt-hours per customer per month for those classes.
20 Access to at least 250 kilowatt-hours per month at an affordable rate
21 is a basic right for each customer.

22 * Sec. 4. AS 44.83.162(j) is amended to read:

23 (j) The authority shall review the report required under (i)(1)
24 of this section and may submit the report to the commission for addi-
25 tional review before payment. After review and approval of the report
26 by the authority, the authority shall, subject to appropriation, pay
27 to each eligible electric utility an amount equal to the power cost
28 equalization per kilowatt-hour determined by the commission under (b)
29 and (d) of this section, multiplied by the number of kilowatt-hours

1 eligible for power cost equalization that were sold during the preced-
 2 ing month to all customers of the utility in accordance with (c) of
 3 this section. Payment shall be made by the authority within 30 days
 4 after receipt from the utility of the report required under (i) of
 5 this section. However, if there is a dispute between the authority
 6 and the utility relating to the payment, the authority shall submit
 7 the report to the commission for review within 30 days after its
 8 receipt by the authority. When a report is submitted to the commis-
 9 sion for review under this section, payment shall be made by the
 10 authority within 30 days after submission, based on a commission
 11 determination. If the commission determines that appropriations are
 12 insufficient for payment in full, the amount paid to each electric
 13 utility must fully fund, in descending order, residential customers,
 14 community facilities, and commercial facilities until the appropria-
 15 tion is fully spent. If the appropriation is insufficient for payment
 16 in full to a class of eligible customers, the amount paid to customers
 17 in that class must be [IS] reduced on a pro rata basis.

18 * Sec. 5. AS 44.83.162(k) is amended to read:

19 (k) If an electric utility receives power cost equalization
 20 under this section, the utility shall either

21 (1) give the following notice to its electric service
 22 customers eligible under this program for each period for which the
 23 payment is received:

24 NOTICE TO CUSTOMER

25 For the current billing period the utility will be paid under the
 26 State of Alaska's power cost equalization program (AS 44.83.162) an
 27 amount to assist the utility and its customers in reducing the high
 28 cost of generation of electric energy. For electric energy consumed
 29 by residential customers and private commercial customers, this state

1 payment applies only to the first (insert appropriate amount) kilo-
 2 watt-hours per month used by each customer. For electric energy sold
 3 to local community facilities, this state payment applies to the total
 4 number of kilowatt-hours used each month by all such facilities in the
 5 community, up to a maximum of 50 kilowatt-hours, multiplied by the
 6 number of residents in the community.

7 Your total electrical service cost \$
 8 Less state equalization \$
 9 Your charge \$;

10 or

11 (2) give to its electric service customers a notice ap-
 12 proved by the authority, which notice provides electric service cus-
 13 tomers the same information provided by the notice in (1) of this
 14 subsection.

15 * Sec. 6. AS 44.83.162(o)(2) is amended to read:

16 (2) "community facility" means a facility essential to the
 17 public health, safety, and welfare of the community, and includes a
 18 water and sewer facility, public outdoor lighting including lighting
 19 for a community-owned airport strip or harbor, a community washeteria
 20 or freezer, a community volunteer firehall, a community health clinic,
 21 a village public safety office, a [,] charitable educational facility,
 22 or a community building whose operations are not paid for by the
 23 state, the federal government, or private commercial interests;

24 * Sec. 7. AS 44.83.163(a) is amended to read:

25 (a) The power cost equalization per kilowatt-hour determined
 26 under AS 44.83.162 payable to an electric utility that is subject to
 27 rate regulation under AS 42.05 may be adjusted by the commission if

28 (1) an increase or decrease in the electric utility's cost
 29 of fuel has resulted in the approval of a fuel cost rate adjustment by

1 the commission;

2 (2) a permanent or interim rate increase or decrease has
3 been approved by the commission, thereby establishing a higher or
4 lower power cost; or

5 (3) an adjustment is required after the authority has
6 discovered discrepancies in its review of monthly data submitted by
7 the electric utility [; OR

8 (4) THE AUTHORITY DETERMINES THAT APPROPRIATIONS ARE INSUF-
9 FICIENT TO FINANCE FULL PAYMENTS TO ELIGIBLE ELECTRIC UTILITIES].
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29

STATE OF ALASKA
THE LEGISLATURE

POUCH Y - STATE CAPITOL
JUNEAU, ALASKA 99811
907-465-3800

LEGISLATIVE AFFAIRS AGENCY
LEGISLATIVE REFERENCE LIBRARY

May, 1988

Copies of minutes listed below were originally included in this file. The minutes are available on the STAIRS database CMPR. In order to save space copies of minutes have not been left in the files.

Mary Van Nimwegen

HL+C

4-9-87

2:00 p.m.

STATE OF ALASKA 1987 LEGISLATIVE SESSION FISCAL NOTE

Revision Date: April 9, 1987

REQUEST

Bill/Resolution No.: CASHB 182 (L & C)
 Title: An Act Relating to the Power Cost Equalization Program
 Sponsor: Governor Steve Cowder
 Requestor: _____
 Date of Request: _____

FISCAL DETAIL

Agency Affected: Alaska Power Authority
 BRU: Department of Commerce & Economic Development
 Components: Power Cost Equalization Program (PCEP)

EXPENDITURES/REVENUES : (Thousands of Dollars)

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS	0	(3089.0)	(4496.7)	(5470.4)	(6433.5)	(7600.7)
MISCELLANEOUS						
TOTAL OPERATING	0	(3089.0)	(4496.7)	(5470.4)	(6433.5)	(7600.7)

CAPITAL						
---------	--	--	--	--	--	--

REVENUE						
---------	--	--	--	--	--	--

FUNDING : (Thousands of Dollars)

GENERAL FUND	0	(3089.0)	(4496.7)	(5470.4)	(6433.5)	(7600.7)
FEDERAL FUNDS						
OTHER						
TOTAL	0	(3089.0)	(4496.7)	(5470.4)	(6433.5)	(7600.7)

POSITIONS :

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS : Attach a separate page if necessary

The proposed legislation would reduce the funding requirements of the Power Cost Equalization Program through incremental restrictions on eligible consumption levels (See attached schedule for details).

Prepared by: Gloria Manni, Director Phone: 261-7210
 Division: Account. & Admin., Alaska Power Authority Date: April 10, 1987

Approved by Exec: Dir.: Robert E. LeResche Date: _____
 Agency: Alaska Power Authority

Distribution (by Agency preparing fiscal note):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

ALASKA POWER AUTHORITY
 POWER COST EQUALIZATION PROGRAM
 PROJECTED PROGRAM REQUIREMENT BY FISCAL YEAR
 RESULTING FROM PROGRAM CHANGES PROPOSED IN CSHB 182

	<u>Customers All Classes</u>	<u>Community Facilities</u>	<u>Total Subsidy</u>	<u>Admin Costs</u>	<u>Total Program Requirement</u>	<u>Program Requirements (Reduction)</u>	
						<u>%</u>	<u>\$</u>
A. FY88 Projected Program Requirements Under Existing Legislation (1):	\$ 16,360.2	\$ 3,591.3	\$ 19,951.5	\$ 137.3	\$ 20,088.8	0	0
Projected Program Requirement Under CSHB 182 (2):							
FY88	13,503.9	3,358.6	16,862.5	137.3	16,999.8	(15.4)	(3,089.0)
FY89	12,096.2	3,358.6	15,454.8	137.3	15,592.1	(22.4)	(4,496.7)
FY90	11,122.5	3,358.6	14,481.1	137.3	14,618.4	(27.2)	(5,470.4)
FY91	10,159.4	3,358.6	13,518.0	137.3	13,655.3	(32.0)	(6,433.5)
FY92	8,992.2	3,358.6	12,350.8	137.3	12,488.1	(37.8)	(7,600.7)

B. Power Cost Equalization Program Level of Subsidy

1. Customers: 750 kwh x mo
 Community Facilities: 70 kwh x mo x resident
2. Customers:
 - a. FY88, 500 kwh x mo
 - b. Beginning FY89 reduced by 50 kwh x mo each fiscal year
 until the maximum subsidy is based on 250 kwh X mo
 Community Facilities: 50 kwh x mo x resident

RCV BY: XEROX TELECOPIER 7010 : 4-11-87 12:57PM : 9075618584-
 SENT BY: A. P. A. : 4-11-87 : 11:58 : 9074653585:# 3
 9075618584-
 9074653585:# 3

**STATE OF ALASKA 1987 LEGISLATIVE SESSION
FISCAL NOTE**

No. 1

Bill Version: HB 182
Publish Date: HOUSE 3/16/87

REQUEST

Bill/Resolution No. : _____
 Title : An Act Related to the Power
Cost Equalization Program

 Sponsor : Governor Steve Cowper
 Requestor : _____
 Date of Request : _____

FISCAL DETAIL

Agency Affected : Alaska Power Authority
 BRU : 08-08-24-09-00

 Components : Power Cost Equalization
Program

EXPENDITURES/REVENUES : (Thousands of Dollars)

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES	0.0	(5,799.7)	(5,799.7)	(5,799.7)	(5,799.7)	(5,799.7)
GRANTS, CLAIMS						
MISCELLANEOUS	0.0	(5,799.7)	(5,799.7)	(5,799.7)	(5,799.7)	(5,799.7)
TOTAL OPERATING						

CAPITAL						
----------------	--	--	--	--	--	--

REVENUE						
----------------	--	--	--	--	--	--

FUNDING : (Thousands of Dollars)

GENERAL FUND	0.0	(5,799.7)	(5,799.7)	(5,799.7)	(5,799.7)	(5,799.7)
FEDERAL FUNDS						
OTHER						
TOTAL	0.0	(5,799.7)	(5,799.7)	(5,799.7)	(5,799.7)	(5,799.7)

POSITIONS :

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS : Attach a separate page if necessary

The legislation would reduce the funding requirements of the Power Cost Equalization Program in FY 88 by an estimated \$5,799.7 through restrictions on eligible consumption levels and customers. This reduction is already included in the Governor's Budget. Cost savings in FY 89-92 would probably be larger than in FY 88, but are difficult to estimate accurately; therefore, the FY 88 estimate is used for each of these years. (See attached schedule for detail.)

Prepared by: Gloria Manni, Director Phone: 261-7210
 Division: Accounting & Administration, APA Date: 3/10/87
 Executive Director:
 Approved by Commissioner: Bob LeResche Date: 3/10/87
 Agency: Alaska Power Authority, DCFD

Distribution (by Agency preparing fiscal note):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

POWER COST EQUALIZATION PROGRAM (AS 44.83.162-165)
FY 88 PROGRAM REQUIRMENTS

<u>Customer Class</u>	<u>Full Funding*</u>	<u>Governor's Budget**</u>
Residential	\$12,569.4	\$10,809.7
Commercial	3,790.8	648.6
Community Facilities	<u>3,591.3</u>	<u>2,693.5</u>
Total Grants	19,951.5	14,151.8
Administrative Costs	<u>137.3</u>	<u>137.3</u>
Total Program Costs	\$20,088.8	\$14,289.1
Funding Carryover	<u>-3,217.1</u>	<u>-3,217.1</u>
FY 88 PROGRAM REQUIREMENTS	<u>\$16,871.7</u>	<u>\$11,072.0</u>

FY 88 Reduction from Full Funding Level = \$5,799.7

* Full program funding required under the existing statutes.

** Program funding required under new legislation proposing the following changes:

Lower residential cap from 750 KWH per month to 500 KWH

Lower community facilities cap from 70 KWH per month per resident to 50 KWH. Restrict eligible community facilities to exclude non-essential services and buildings.

Lower commercial customer cap from 750 KWH per month to 500 KWH and limit eligible commercial customers to those using no more than 1,000 KWH per month.

STATE OF ALASKA 1987 LEGISLATIVE SESSION FISCAL NOTE

Revision Date : _____

REQUEST

Bill/Resolution No. : _____
 Title : An Act Related to the Power
Cost Equalization Program

 Sponsor : Governor Steve Cowper
 Requestor : _____
 Date of Request : _____

FISCAL DETAIL

Agency Affected : Alaska Power Authority
 BRU : 08-08-24-09-00

 Components : Power Cost Equalization
Program

EXPENDITURES/REVENUES : (Thousands of Dollars)

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES	0.0	(5,799.7)	(5,799.7)	(5,799.7)	(5,799.7)	(5,799.7)
GRANTS, CLAIMS						
MISCELLANEOUS	0.0	(5,799.7)	(5,799.7)	(5,799.7)	(5,799.7)	(5,799.7)
TOTAL OPERATING						

CAPITAL						
---------	--	--	--	--	--	--

REVENUE						
---------	--	--	--	--	--	--

FUNDING : (Thousands of Dollars)

GENERAL FUND	0.0	(5,799.7)	(5,799.7)	(5,799.7)	(5,799.7)	(5,799.7)
FEDERAL FUNDS						
OTHER						
TOTAL	0.0	(5,799.7)	(5,799.7)	(5,799.7)	(5,799.7)	(5,799.7)

POSITIONS :

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS : Attach a separate page if necessary

The legislation would reduce the funding requirements of the Power Cost Equalization Program in FY 88 by an estimated \$5,799.7 through restrictions on eligible consumption levels and customers. This reduction is already included in the Governor's Budget. Cost savings in FY 89-92 would probably be larger than in FY 88, but are difficult to estimate accurately; therefore, the FY 88 estimate is used for each of these years. (See attached schedule for detail.)

Prepared by: Gloria Manni, Director Phone: 261-7210
 Division: Accounting & Administration, APA Date: 3/10/87
 Executive Director: _____
 Approved by Commissioner: Bob LeResche Date: 3/10/87
 Agency: Alaska Power Authority, DCED

Distribution (by Agency preparing fiscal note):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

POWER COST EQUALIZATION PROGRAM
 FY88
 Proposed Legislation/Projected Program Requirement

<u>Program Beneficiaries</u>	<u>Full Funding Existing Legislation</u>	<u>Governor's Budget Proposed Legislation</u>	<u>LPC CS</u>
Residential Customers	\$12,569.4(a)	\$10,715.4(a.1)	
Private Commercial Customers	3,790.8(b)	1,393.5(b.1) -	3.0
Community Facilities	3,591.3(c)	1,677.1(c.1)	
Contingency	NA	365.8	
TOTAL GRANTS	<u>\$19,951.5</u>	<u>\$14,151.8</u>	<u>15.9</u>
Administration	137.3	137.3	
	<u>\$20,088.8</u>	<u>\$14,289.1</u>	<u>15.9</u>

(a) 750 kwh x mo x customer
 (b) 750 kwh x mo x customer

(a.1) 500 kwh x mo x customer
 (b.1) 500 kwh x mo x customer
 whose purchase of power does
 not exceed 1,000 kwh x mo or
 12,000 kwh annually
 (c.1) 50 kwh x mo x resident for
 facilities essential to the
 public health, safety and
 welfare of the community but
only if that facility
 operations are not paid for by
 the federal, state or private
 commercial interest.



STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

March 13, 1987

The Honorable Ben Grussendorf
Speaker of the House
Alaska State Legislature
P.O. Box V
Juneau, AK 99811

Dear Representative Grussendorf:

Under the authority of art. III, sec. 18, of the Alaska Constitution, I am transmitting a bill relating to the power cost equalization program. The primary purpose of this bill is to reallocate money under the program in order to avoid increases in power costs for most residential customers, who are the key beneficiaries of the equalization program.

If this bill or similar legislation is not enacted, present law would require the Alaska Power Authority to prorate any funding shortfall in the program equally among all customer classes. Under the funding level proposed in my FY 88 budget, this provision in present law would result in power rate increases of more than 50 percent for many rural residents. This bill would establish residential customers as the first priority for full funding and would avoid any increase in power rates for residential customers using 500 kilowatt hours or less per month. This consumption level is about 25 percent higher than the statewide average residential power use under the equalization program.

The bill does the following:

- (1) it reduces the cap for community facility users from 70 to 50 kilowatt-hours per month per resident (secs. 1 and 2 of the bill);
- (2) it reduces the cap for residential and commercial users from 750 to 500 kilowatt-hours per month (secs. 1, 2, and 4 of the bill);
- (3) it changes the means of allocating insufficient appropriations; residential users have first priority for full funding; community facilities have second priority, and commercial users have third priority; if money is insufficient to fund any class of user, the money will be distributed on a pro rata basis to the eligible users in that class (secs. 3 and 6 of the bill);

- (4) it redefines "community facility" to clarify that the subsidy is intended for facilities essential to the public health, safety, and welfare of the community, if the facility's operations are not paid for by the federal, state, or private commercial interests (sec. 5 of the bill);
- (5) it adds a new definition for "eligible customer" so that only three classes of customers are eligible for the subsidy: residential customers, private commercial customers with a limited power usage, and community facilities (sec. 5 of the bill);
- (6) it makes amendments to conform to the changes described above (sec. 7 of the bill).

This bill is just the first step in what I believe should be a more comprehensive redirection of state policy on reducing rural energy costs. We need to implement programs that provide lasting, long-term benefits to rural residents, rather than annual, one-time subsidies. Although the power cost equalization program has played a major role in reducing the cost of living in rural areas, it provides no lasting benefits and is completely dependent on the annual appropriations process.

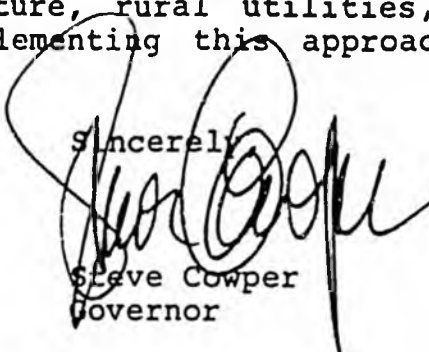
Most rural communities will probably have to rely on diesel power generation for the foreseeable future, but there is much that can be done to improve the efficiency and reduce the cost of power from these generation systems. These cost-saving measures include the replacement of oversized or inefficient generators, transmission improvements, coordination of fuel purchases among villages, and the use of more efficient lighting and refrigeration systems to reduce power demand.

These types of energy efficiency improvements can provide long-term reductions in power costs which are not dependent on annual appropriations from the legislature. Although implementing these measures will require substantial investments in rural power systems, in most cases these investments can be repaid from savings in fuel costs within a few years. The Alaska Power Authority and the Department of Community and Regional Affairs are now evaluating financing methods that would not necessitate state appropriations to make these improvements.

I believe that this shift in rural energy policy toward lasting improvements, rather than annual subsidies, will

benefit rural residents while reducing the cost of state energy assistance programs. My administration will work closely with the legislature, rural utilities, and other concerned parties in implementing this approach to rural power needs.

Sincerely,



Steve Cowper
Governor

Egegik Light & Power Company
P.O. Box 109
Egegik, Alaska 99579
March 26, 1987

Representative Adelheid Herrmann
Pouch V
Juneau, Alaska 99811

Dear Representative Herrmann:

I am writing to you in regard to HB 182, which was recently introduced in the House. This bill deals with the Power Cost Equalization (PCE) program. Specifically, it proposed to lower the limit of eligible KWH from 750 to 500 for residential and commercial customers, and from 70 to 50 KWH per resident for community facilities. It also proposes to eliminate PCE eligibility for commercial customers whose purchase of power exceeds 1,000 KWH per month or 12,000 KWH annually.

As I have indicated to you on the telephone, I am completely opposed to this bill, because of the tremendously detrimental impact it would have on the constituents of District 26, and on the state as a whole. It is my belief that those who favor this bill are unaware of the living conditions in rural Alaska and the tenuous position of many small electric utilities in rural Alaska. On the surface, it may appear that HB 182 is a way to shave thousands of dollars off the state's budget. But there is a great danger in looking only at the surface, without an in-depth understanding of the relationship between the PCE program and the rest of the state's economy.

For example, HB 182 proposes to redefine PCE eligible customers in order to eliminate those commercial customers who purchase more than 1,000 KWH per month or 12,000 KWH annually, (probably on the assumption that these larger commercial customers may not need PCE as much as smaller customers do). However, what the advocates of this bill probably do not realize is that the elimination of PCE would turn many of these larger customers away from commercial power altogether. To use the community of Egegik as an example, there are 3 large scale commercial customers who would be affected by this change: the school, the telephone company, and the cannery. It is PCE that makes commercial power cost effective for these customers. The elimination of PCE would raise each of their electric bills by almost \$300.00 per month, or approximately \$3,500.00 per year, causing them to seriously consider generating their own power. In fact, two of these three customers already have their own generators in place, so it would

not be a major problem to do so. The problem, however, is in the impact to the utility. For a utility which serves an average of only 65 customers per month, the loss of its 3 largest commercial customers would have a major impact. Many people do not realize that an electric utility's rates are based upon a given level of kilowatt hour sales. If sales drop off because of the loss of major customers, then the rates to the remaining customers would have to be raised in order to meet the utility's expenses. When electric rates are already high, as is often the case in small remote communities where diesel generation is extremely expensive, any further rate increases can cause customers to reduce their already low consumption, or default on their payments, either of which would result in the small electric utility being unable to meet its expenses.

Many rural Alaskan utilities, including Egegik Light & Power Company, have received funding from the state in the form of millions of dollars in grants and/or loans, in order to be able to provide safe and reliable electric power to Alaska's rural communities. Rate bases have been set up for these utilities which will allow them to continue to operate in a safe and reliable manner as required by law, and to repay their state loans over a prescribed period of time. And that is exactly what will take place, if the PCE program is left intact, by defeating HB 182. On the other hand, eliminating PCE for large scale commercial customers at this point in time would be like throwing a wrench into a smoothly operating machine. The final outcome could be the folding of numerous small electric utilities, and defaults on state loans by others.

Now to address the impact of HB 182 on the rural resident, if the limit of eligible KWH is lowered from 750 to 500 per month. Once again, I believe that the advocates of this proposal are simply not aware of the conditions which exist here in rural Alaska. To a lawmaker in Juneau, lowering the limit from 750 to 500 is an arbitrary decision, aimed at one goal: to save the state dollars. But to our rural residents, the difference between these two numbers can affect their actual day-to-day quality of life.

Take, for example, an Egegik resident who uses 750 KWH per month. But first, the following point must be made: 750 kilowatt hours per month is not an extravagant or even high level of electric consumption for an average household, by any modern standards. In fact, I am sure that if the proponents of this legislation would go home and look at their own electric bills, they would find that their own average usage is well over 1,000 or even 2,000 KWH per month, even if no electric heat is used.

But to proceed with the example, the Egegik customer who uses only 750 KWH per month now pays a monthly electric bill of \$128.40, after Power Cost Equalization. If the eligible PCE limit is lowered to 500 KWH, as proposed by HB 182, that same customer's bill would be \$225.83, an increase of almost \$100.00 per month! How many of the legislators in Juneau would vote for a \$100 increase in their own electric bills?

But those who are looking at this proposal only on the surface can easily point to the statistics, which show that the average rural electric customer uses less than 500 KWH per month. So the assumption follows that if the average rural customer uses less than 500 KWH, then those that use more, up to 750 KWH, must either be quite wasteful, or rich enough to afford the \$100 increase. However, as one who sees the situation at first hand, let me assure you that neither of these assumptions is true.

The typical Egegik household which uses less than 500 KWH per month of electricity, is able to do so because it has no running water; therefore, no well pump, no washer and dryer, no dishwasher, and no hot water heater. In the winter, drinking water is obtained by driving a 3-wheeler out onto a frozen lake, chopping a hole in the ice, and dipping a bucket down into it. The water is heated in a big pot on top of the oil stove. When the family needs a bath, they gather firewood, chop it up and build a fire for the steam bath, then make one trip after another to the lake for water. Their typical house is heated by the one oil stove in the kitchen. If the house has more than two rooms, the bedrooms are probably cold, as they are too far from the stove. Washing clothes is an all day affair, beginning with packing gallons of water from the lake and setting up the big wringer washer in the living room, and ending with clothes strung out all over the house, as well as frozen clothes outside on the clothesline. This is not an exaggeration, but an accurate description of the quality of life in the bush for the average resident who uses less than 500 KWH per month.

On the other hand, those households in Egegik who use more than 500 KWH per month are typically those who do have running water from a well. Far from being rich, many of these residents have suffered and saved for ten years or more, in order to purchase their well, which may cost upwards of \$5,000 or \$10,000, depending on required drilling depth. Besides the well pump and the automatic washer and dryer, they may also have a forced air furnace (oil burning), in order to distribute heat more evenly throughout the house. However, in order to stay under the present PCE limit of 750 KWH per month, this typical household would not use an electric stove, electric space heaters, or an electric hot water heater.

Yet if HB 182 is passed, this family would be faced with an almost \$100 increase in their monthly electric bill, which they almost surely could not afford, or go back to the standard of living described in the previous paragraph.

Additionally, there is the danger that if residential electric rates increase because of a reduction in PCE, then even residential customers will begin buying and using small gas generators and generating their own power. If this happens, the rural electric utilities which the state of Alaska, through grant and loan programs, has spent millions of dollars to build will be forced to close their doors.

Reducing PCE to commercial customers would also have a very detrimental impact on the state. In rural areas where transportation and construction costs are extremely high, affordable electric power is an essential ingredient for the success of small businesses. It is because of the PCE program which has made this power affordable, that small businesses have sprung up throughout rural Alaska in recent years. These commercial enterprises not only provide necessary goods and services, thereby raising the standard of living in rural areas, but they also provide year-round employment for rural residents, thus making them less dependent on state welfare and unemployment programs. The legislature has wisely appropriated state moneys in the past for educational programs, vocational training, and small business loans in order to foster and develop private individual initiative, and make rural Alaskans more self-sufficient. However, lowering PCE to commercial customers will reverse this progress toward a healthy statewide economy, by forcing many small businesses to discontinue their operations.

Community facilities are also needed to develop and sustain the growth of rural Alaska. These facilities greatly enhance the standard of living, in ways that can hardly be imagined or measured. For example, in a community such as Egegik, where the majority of residents do not have wells, the opening of the community washeteria (scheduled for 1987) is anticipated by residents in a way that only those who have done without could possibly understand. Similarly, the newly created community watering points (wells) will provide nearby residents with a safe drinking water supply, as an alternative to drinking possibly contaminated lake water. In addition, the installation of community-wide street lighting in October 1985 has reduced the crime rate in Egegik by 90%. If a reduction in PCE causes the community to shut down the well pumps or turn the street lights off, the state of Alaska will not have saved, in the long run.

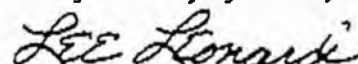
March 25, 1987

I am well aware that budget cuts must be made somewhere, and that everyone wants to save his or her "pet program". But PCE is more than just a "pet program" for rural Alaska. It is the life blood of the bush. We all know that electric power has become one of the basics of life, along with food and shelter. So much so that there are actually laws prohibiting a utility from disconnecting a customer, even for non-payment, if there are invalids, elderly, or small children residing in the household. Indeed, I am sure that those Anchorage residents who have recently experienced numerous power outages have been made increasingly aware of the value and necessity of electric power.

In fact, electric power is so important to urban Alaska that millions of state dollars have been spent just to study new ways of bringing affordable power to Alaska's cities. By comparison, the amount spent on the PCE program is small, and any reductions in that amount would not only be devastating, but extremely unfair to rural Alaskans. The PCE program is already operating at the lowest level of funding possible, in order to do what it was designed to do, make electric power affordable for rural Alaskans.

I would encourage you and your fellow rural legislators to vigorously oppose HB 182 or any other legislation which proposes to cut the Power Cost Equalization program.

Very truly yours,



Lee Leonard
Owner/General Manager
Egegik Light & Power Company



Kinetic Energy Systems INC.

11221 Olive Lane / Anchorage, Alaska 99515
(907) 344-2631

March 19, 1987

Representative Dave Donley
Alaska House of Representatives
Pouch V
Juneau, Alaska 99811

Dear Representative Donley:

I understand that House Bill 182 which deals with changes to the Power Cost Equalization (PCE) program has been referred to the Labor and Commerce Committee for consideration.

As someone who works with small village electric utilities throughout the state, I am very concerned about the fate of these small power companies should the PCE level drop substantially.

There is also a strong need to provide incentives for the villages to operate their power systems as efficiently as possible. The PCE program, as currently structured, is actually a disincentive to reduce operating costs or induce private sector investments. These small power companies also must prepare for the day (which may already have arrived) when grants for capital equipment improvements will no longer be available.

I believe the proposed concept outlined in the enclosure is a simple step that helps meet both these needs with minimal impact on the existing PCE program and its administrative procedures and costs.

Your review of my proposal will be most appreciated. Should you have any questions, please feel free to contact me.

Sincerely,



Clarissa Quinlan
President

Enclosures

POWER COST EQUALIZATION PROGRAM

PROPOSED AMENDMENT

Objective:

To promote energy efficiency measures by public electric utilities participating in the State of Alaska's Power Cost Equalization (PCE) program thereby resulting in lower operating expenses and cost savings to the State of Alaska.

Background:

As presently structured, the PCE program provides no incentive for electric utilities to improve generation and electrical distribution efficiencies. As long as existing operating costs are reasonable, they are incorporated into PCE calculations by the Alaska Public Utilities Commission (APUC).

Because no incentive exists to reduce operating expenses, small electric utilities tend to retain the status quo as far as improving operating and maintenance (O&M) procedures and equipment.

Another serious effect of the PCE program is to limit private capital investment in power production facilities. There are two primary reasons for this:

- o In many instances a large share of actual operating expenses are paid by the State, not the consumer. The economic feasibility of projects is skewed because of the State subsidy.
- o There are little or no benefits to a utility if increased energy or distribution efficiencies are achieved. The resulting cost savings mean lower PCE payments from the State with no direct benefit to the utility.

Concept/Methodology:

The proposal presented below does not address the question of PCE funding levels. This issue is best handled by State leaders and policy makers knowledgeable about budgetary and other considerations.

The general concept is to provide a simple mechanism so that the utility and the State can equally share in savings that result from the electric utility obtaining improved system operating efficiencies.

The savings incentive would be in effect no less than five years duration. PCE "Efficiency Savings Earned" must be dedicated to capital improvements by each utility.

The 'PCE "Efficiency Savings Earned" would be calculated as follows:

- (1) Determination of a historical system efficiency level for each utility.

The "base" efficiency level will be calculated from historical data already submitted to the APUC in required annual reports (unregulated utilities) and or tariff change requests (regulated utilities) prepared by each electric utility.

This base or historical reference number will be expressed in terms of Kwh/gallon; that is, the number of Kwh produced from each gallon of fuel consumed during the reporting period.

The calculations use existing information provided to the APUC in the above referenced reports. The following illustrates the proposed methodology thru use of a small utility example:

Determination of Historical Efficiency
Utility A -- Annual Report

Total Kwh Sold		
-----	=	Historical Kwh/Gallon Efficiency
Gallons Fuel Used		

480,000 Kwh		
-----	=	7 Kwh/Gallon Historical Efficiency
68,571 Gallons		

(2) Fuel Efficiency/Cost Savings Above the Historical Reference Level are Cost Shared by the State of Alaska and the Utility.

Monthly reports are submitted to the Alaska Power Authority (APA) as the basis of each monthly PCE payment. Reference highlighted sections of Attachment 1.

Monthly, a simple calculation can be made by APA staff to determine the actual system efficiency level for the month and the amount of shared savings achieved by the utility, if any.

The numbers in parenthesis represent the item number in the monthly PCE report (Attachment 1) from which the data is derived.

December "Efficiency Savings Earned" Calculation

a.	Monthly Kwh Sold ----- Historical Kwh/Gallon	=	Historical Monthly Fuel Used Reference	
	40,000 Kwh Sold ----- 7 Kwh/Gallon (Item 1 above)	=	5,714 gallons	
b.	Historical Mo. Fuel Used Reference	x	Current Price of Fuel (No. 4)	= Historical Mo. Fuel Value
	5,714 gallons	x	\$1.40/gallon	= \$7,999.60
	Less:			
	Total Monthly Fuel Expense (No. 4 x No. 7 = No.)			= \$6,587.00 -----
	Total Increased Efficiency Savings			\$1,412.60
	Divided By 2:			
	Equals:			
	Increased Efficiency Earnings by the Utility in December			\$706.30 =====

ALASKA POWER AUTHORITY
 334 West 5th Avenue
 Anchorage, Alaska 99501
 (907) 276-0001

POWER COST EQUALIZATION PROGRAM

Address _____ Utility Name Utility A
 _____ Certificate Number _____
 _____ Utility Telephone Number _____
 Number of Days in Billing Period (ended) 1 31 / December 31

This column to
 be completed by
 Submitting Utility Alaska Power Au-
 thority Use Only

I. Costs

- 1. Present Power Cost Equalization Rate (\$/KWH) Approved by Commission 15.0 /KWH
- 2. Date of Approval _____
- 3. Price of Fuel Used by Commission in Determining Power Cost Equalization \$ _____ /gal
- 4. Current Price of Fuel \$ 1.40 /gal
- 5. Total Monthly KWH Generated _____
- 6. Total Monthly KWH Sold 40,000 Kwh
- 7. Total Monthly Fuel (Gallons) Consumed 4705 Gallons
- 8. Total Monthly Fuel Expense \$ 6,587.00
- 9. Total Monthly Operating Expense (less fuel) \$ _____

II. Customers/Facilities/4

- 1. Total Number of Utility Customers (excluding Community Facilities) _____ VENDOR # _____
 - 2. Total Number of Community Facilities/1 _____ VERIFIED: _____
 - 3. Community Population/4 _____ PROJECT MGR: _____
 - 4. Date Population Certified by DCRA _____ ACCOUNTING: _____
- APPROVED FOR PAYMENT: _____
 APPROVING OFF: _____

III. KWH's Sold

- 1. Total KWH eligible for assistance sold to Utility Customers/2 (excluding Community Facilities) _____ A/C# _____
- 2. Total KWH eligible for assistance sold to Community Facilities/3/4 _____ PAYMENT: NLT _____
- 3. Total eligible KWH Sold to All Customers and Community facilities during Billing Period 25,400 x 15.0¢ = \$5310.00

IV. Certification/4

I hereby certify that the information submitted to the Alaska Power Authority in support of (name of utility) _____ (Certifying Officer)
 _____'s participation in the _____ (Date)
 Power Cost Assistance Program is true and correct to the best of my knowledge.

Efficiency Savings = 706.30
 Amount Paid \$6016.30

1 "Community Facility" means a water and sewer facility, public outdoor lighting, charitable educational facility, or community building whose operations are Not paid for by the State, Federal Government, or private commercial interest.

2 Actual consumption of not more than 750 kilowatt-hours per month sold to each customer.

3 Calculated in the aggregate for each community served by the electric utility, for actual consumption of not more than 70 kilowatt-hours per month for each resident of the community.

4 If more than 1 community is served by a utility, a total system report must be submitted in addition to a monthly report for each community.

ONSITE ENERGY

P.O. Box 9217
838 S.W. 1st, Suite 520
Portland, Oregon 97204
Telephone (503) 243-4033
FAX 243-4661

February 16, 1987

MEMORANDUM

FOR INTERESTED PARTIES

FROM ANGUS DUNCAN
ONSITE ENERGY, INC.

SUBJECT THE POWER COST EQUALIZATION PROGRAM (STATE OF ALASKA)

The State of Alaska's Power Cost Equalization (PCE) program has accomplished much of value for the bush communities that are its chief beneficiaries. Most importantly, it has made electric power affordable and therefore available, where otherwise the extremely high costs of small diesel-based systems would have prohibited their use. In this respect, the PCE has served Alaska as the REA programs brought power to the rural United States earlier this century.

The Problem

At the same time, the PCE has had unintended, and negative, consequences.

- o It has encouraged and perpetuated costly inefficiencies in the choice and operation of power systems, since there is no community incentive to manage costs through efficiency. With the State picking up costs in excess of a specified support level, the price signal to conserve or upgrade systems is eliminated.
- o It has discouraged private investment in bush community electrification, since the primary customers -- the communities -- have no incentive to improve their systems. (In other parts of the United States, non-utility third-party "energy services companies" have emerged to provide new technology and lower cost power to a variety of customers.)
- o It has cost the State of Alaska dollars that might have been better spent elsewhere; perhaps acceptable in times of State budget surpluses, but not now.

ONSITE ENERGY

The Alaska Power Authority (APA) program of loans and grants shares with the PCE many of these same attributes and drawbacks. Even in the midst of 1987's State budget crisis, and with the new Governor calling for greater private investment in Alaska's economy and infrastructure, the APA is subsidizing a community (the City of Galena) that is directly competing for new load (the Galena Air Force Base) when private financing is available for the job. The effect is to use scarce State budget resources, not as leverage to bring new capital into Alaska, but as a disincentive to exactly the kind of private investment the Governor has called for.

Solutions

Any change in these programs needs to recognize and to affirm their principal objective: manageable power costs and the extension of power systems into the bush communities. At the same time, it should result in lower costs to the State, improved efficiencies in power system design and operations, a reliable price signal to users, and economically-sound incentives to leverage new private capital into the process.

1. Offer State/Community "Shared Savings": The State should agree that any improvements in power system efficiencies and lower costs would result in only a 50% reduction in PCE payments. The community would realize the other 50% in lower power costs, down to the level of PCE support (after which the community would see the full benefit). This would provide incentives to communities to upgrade their power systems, while directly saving State funds.
2. Provide State Guarantees of Power Sales Contracts: At the same time, the State should agree to guarantee "take-or-pay" power sales contracts between communities and third-party energy services companies providing higher-efficiency, lower-cost power. This would provide the incentive and the means to leverage into the State the private capital needed for the upgrades, rather than putting this capital demand on the State. The actual costs to the State (from community defaults on contracts) should be minimal, and more than offset from the PCE and other program savings.

ONSITE ENERGY

3. Put APA Loan/Grant Programs on a Matching Basis:
Require private investment in new power systems or upgrades on a matching basis, as further leverage. At the same time, do not permit the APA to provide funds in competition with private investment when the latter is available.

Other measures can no doubt be thought of to improve this approach, and should be encouraged. But these three steps would seem to be advisable, able to be implemented quickly, and politically possible.

NEW DIRECTIONS FOR ALASKA ENERGY POLICY

by

Scott Goldsmith
Institute of Social and Economic Research
University of Alaska, Anchorage

ISER Working Paper 86.8-

October 10, 1986

INTRODUCTION

Dramatic changes have occurred in world energy markets in the last nine months, changes that will have far-reaching consequences for energy policy in Alaska. The precipitous drop in the world price of oil has sharply reduced the discretion of the state to fund energy-related projects. It has shifted the immediate prospects for the economic viability of private energy projects. Most importantly, it has altered the perceptions of experts as to the long-term evolution of supply and demand for petroleum, and with it the price of oil, the single-most important variable which has been driving energy policy making in Alaska.

The possibility of a sudden fall in the price of oil was totally ignored in the formulation of energy policy in Alaska. Decisions have been made on the basis of an ever increasing price of oil, an assumption which makes Alaska energy more attractive, valuable, and expensive with the passage of time. The sudden and complete negation of the validity of that assumption in a few short months has left people reeling. Many people see neither the immediate implications of this change nor the longer-term implications for state energy policy. This change is so basic, however, that it is necessary to completely rethink what Alaska energy policy can and should be in a world where oil is just another commodity, rather than a magic liquid with a forever increasing price.

The purpose of this working paper is to begin to lay out some of the implications of lower oil prices for Alaska energy policy and to analyze the energy policy of the state in light of these developments. From this may emerge the information to begin a dialogue on what the new directions of energy policy for Alaska should be.

OIL MARKETS IN THE NEXT DECADE

We can no longer expect the price of oil to continue to grow at or in excess of the rate of general inflation from a mid-1980s level of about \$30 a barrel. Petroleum is a commodity subject to the laws of supply and demand. When its price increases, new sources of supply will enter the market, and demand will be reduced as consumers switch to cheaper alternatives. Petroleum is unusual only in the long period of time associated with the adjustment of both supply and demand to higher price. On the supply side, when the price of oil goes up, the incentive to produce oil increases, first from existing capacity, but also from additions to capacity. It is these capacity additions which take time to enter current supply, for example, in the case of the North Slope of Alaska, anywhere from five to ten years. At the same time, an incentive is created to substitute energy from other sources for energy from oil. On the demand side, the consumption of petroleum is largely done in conjunction with a stock of investment capital--cars, furnaces, engines. An increase in the price of oil will induce consumers to use less oil, but they will do so largely through the purchase of more energy-efficient capital equipment when the existing equipment wears out.

The result is that market adjustments to petroleum price changes take many years to reach a new equilibrium. This final equilibrium will be at a lower price and greater supply than initially anticipated. The period since the increase in the price of oil in 1979 is a good example of this adjustment process. Consumption growth has been curtailed, and supply growth has accelerated in response to the price increase. Some members of OPEC have decided that the price was too high to allow them to maintain their market share. Consequently, one interpretation of recent events within OPEC is that it represents a calculated attempt to set the price at a level which will reduce not only conventional sources of oil outside of OPEC but also the incentive to invest in new supply and alternative energy sources and the incentive to pursue conservation.

Using this rationale, the OPEC ideal price for oil is one that maximizes the revenues they will receive over the long run--not so high that it induces either serious alternative resource developments or excessive conservation and not so low that they are giving the oil away as a cheap substitute for coal. It appears now that a price of \$30 rising in real terms over time would be high enough to induce those adjustments, and consequently there is at least one economic, as opposed to political, reason for OPEC to adopt a strategy which keeps prices within the range of \$12 to \$20 in real 1985 dollars over the next ten years.

THE CURRENT SITUATION

For the past nine months, all attention has been riveted on the current oil price situation. The obvious reason is that before the price of oil began to tumble, about 85 percent of state and a large proportion of local government revenues in Alaska were derived from oil and gas taxes and royalties. In addition, the petroleum industry is an important private employer in the state and generates large demands on other sectors of the economy, primarily construction, transportation, and wholesale trade and business services. The fall in the oil price contributed an additional blow to an economy that was already "soft," coming off the investment boom of the early 1980s. For state energy policy, the immediate concern was the continued ability of state government to fund energy projects such as Susitna and the power cost equalization program.

The lower oil price means less public money and less private money for the petroleum industry and for other energy industries dependent upon oil prices, such as coal and natural gas. This translates into a reduction in the rate of growth of the economy and with it, the demand for energy in the state. The slowdown in the economy also means that growth in personal income and business income will slow. Households and businesses will increasingly look for ways to cut costs, and one way will be to conserve on their use of energy.

The most obvious implications for state energy policy of oil prices in the \$12 to \$20 range for the next ten years are as follows:

- The amount of public money available to subsidize energy projects and programs will decline sharply.
- Energy demand growth will be much slower than it has been historically because of slower economic growth, reducing the need for large-scale projects to meet the demand.
- Market forces will resurface as the most important factor in the allocation and consumption of energy in the state.
- The need to subsidize energy programs and projects will decline as the real price of energy goes down relative to other goods and services and income.
- The viability of development of Alaska energy resources for export will be reduced.
- Energy conservation will continue to be an important method for reducing the cost of living and the cost of doing business in the state.

REVIEW OF CURRENT POLICY

The objective of energy policy is to provide energy at the lowest possible cost while ensuring that all citizens have access to at least minimum amounts of energy. Because of the vast amounts of money available to state government in recent years, however, cost never was the primary consideration in policy decisions. Income

redistribution and employment generation became the primary, though unstated, criteria for policy formulation. The primary objective was to spend money to create jobs and to provide income to individuals using energy programs as the vehicle. The result was a mish-mash of programs and projects which have been generally costly and contradictory, or at best poorly designed to serve their purpose. We have spent literally hundreds of millions of dollars for programs which have produced a legacy of expensive excess capacity and energy prices which distort household and business energy production and consumption decisions.

Three examples will demonstrate this: Several hundred million dollars of state funds were used to subsidize the construction of hydroelectric projects in Southeast and Southcentral Alaska. The primary benefit of this expenditure was the creation of a large number of construction jobs. The power provided by the dams is priced low because the subsidy has paid most of the cost, but the real cost of power from these dams is very high because so much money was spent on the dams. In addition, they have resulted in considerable excess and unused capacity. These dams have been a success only in the sense that their construction created a lot of jobs. The same amount of power that is consumed in those systems today could have been purchased at much lower cost to the state and its citizens. If consumers had to pay the full cost of generation of electricity from those dams rather than a rate subsidized by the state, the rates would be as high as in many parts of the Bush.

At the same time that the state was subsidizing the construction of high-cost hydropower in the Southeast and Southcentral, it has been giving consumers in rural Alaska money through the power-cost equalization program to consume high-cost electricity. Like the construction of hydropower, the apparent purpose of this program is to help consumers to pay the least price possible for their electricity. The result is that the cost of electricity now appears to be low to consumers, and they use a lot of it. There is no incentive for consumers to conserve on the consumption of a commodity that is costly. This puts additional demand on generating capacity, and new capacity is added to the system. Since the government rather than the consumer is picking up most of the cost, however, there is little or no incentive for the utility to get the cheapest or most efficient generating unit. Investments in conservation which should be made are not made, and investments in additional capacity which should not be made are made.

The third policy is the energy audit program. Under this program, households and businesses could have an audit of their energy consumption patterns performed, which included an analysis of savings from both the installation of different energy-saving devices and the institution of various conservation practices. Grants were available for the purchase of equipment and supplies which could be shown to be cost efficient. This program was designed to produce rational energy-use decisions by being targeted toward purchases which would make energy consumption more

efficient. Its shortcoming was that it was poorly administered, and, like hydroelectric construction and power cost equalization, it was primarily viewed as a combination job-producing and income-transfer program. The jobs produced were for a cadre of auditors who, because they were paid on a piecework basis, had every incentive to complete the audits as rapidly as possible. Clever auditors headed for the condos, where there were many identical units and an audit of a single unit could serve for the whole development. The income transfers were the grants for storm windows, insulation, etc. We conclude that these were the real objectives of the program based on the fact that there was never any attempt to monitor the success of the program in terms of how much energy was actually saved. No one seemed interested in whether the program was cost effective. The question of how much it was costing the government to save on energy in this manner was never asked for this program.

Of course, it would have been extremely difficult to answer that question because this and other programs primarily designed to conserve energy were operating at exactly cross purposes with those policies which subsidized the consumption of energy. One agency of government was paying consumers, either directly or indirectly, to use more energy, while another was paying consumers to buy energy-reducing equipment. Pity the poor analyst asked to measure the effectiveness of policy in this environment.

THE LEGACY OF BAD POLICY

The problem with these policies has not been that they resulted in the creation of construction jobs or that they provided increases in income to construction workers, auditors, and households in rural parts of the state. These may be valid ways to spend public money if there is money left over after necessities such as education and public safety have been funded. The problem is that by furthering these objectives under the guise of an efficient energy policy (delivering the jobs and the income through programs that subsidized the uses of energy), not only were job creation and income transfers provided inefficiently but also, as a consequence, we now have an inefficient stock of energy-using capital and distorted consumer behavior with regard to energy consumption. We could have simultaneously done a better job of creating jobs and transferring income, while at the same time creating a legacy of more efficient capital stock to meet future energy needs based upon the real cost of energy.

It is important to recognize a significant difference in the impact of the two energy programs for subsidizing consumption--the subsidization of large capital-intensive projects and the subsidization of consumption in rural Alaska. This relates to the ability of the state to continue subsidizing these programs when revenues drop. The large capital projects are in place and have been paid for. They are relatively cheap to operate and, although costly to construct, the rates based on operating costs are low.

The cost of having resource misallocation in this case has already been paid. (For the state as a whole, the continuing cost is that there is now less money in the state treasury for paying for necessities in these leaner economic times.)

In contrast, the subsidized rates in the bush, however, are a continuing obligation of the state. If and when the subsidization is discontinued, these consumers will face electricity rates which reflect the full cost of power generation. This full cost now includes the cost of the expanded generating capacity, which has been added to meet the subsidized demand. At higher rates which include the full cost of generation, demand will drop significantly. This will require further rate increases to cover costs, eventually to a level higher than they would have been if the subsidy had never been in effect. In addition, consumers now have a stock of electricity-using capital, which is not as efficient as it should be. Again, the artificially low price gave those consumers the wrong signal about what things they should have been buying. In the worst cases, people will have switched from traditional methods of space heating to electricity because of the subsidy. Such capital investments will be very expensive indeed when the price of electricity again reflects its real cost.

The individuals making these choices should not be blamed for making bad decisions. Rather, it is the fault of the state's energy policy for providing the incorrect incentives for consumers and

businesses. This is a perfect example of how the availability of a lot of public money has reduced the efficiency of the economy by allowing the government to temporarily change the price structure in such a way as to channel investments and consumption into irrational ways. Consequently, the government has an obligation not to terminate this program abruptly, leaving the affected communities with the dual burden of inefficient electric-generating facilities to pay off through high rates as well as an inefficient private capital stock.

NEW ENERGY POLICY

If \$15 to \$20 a barrel is a reasonable prognosis for the future of the price of oil and this slows the growth of the Alaska economy, the general outlines of a new energy policy emerge. This policy is less ambitious than past efforts for the simple reason that there will be less money to devote to the problem. It is more rational because it is a policy divorced from the objectives of job creation and income distribution. It is also more efficient because it places the primary responsibility on the energy industry and the private sector to make energy production and consumption choices based upon market-determined prices.

1. Market Reliance. The market should allocate energy because it can do it most cost effectively. Market prices, in general, reflect the real cost of producing and consuming different types of

energy, and decisions should be made on the basis of the real costs. We should buy and consume the lowest-cost energy.

2. Minimize Market Failures. The existing institutions do not always operate in such a way as to allow the signals of the market to reach consumers. There are a number of reasons for this: first, various types of production or consumption may produce side effects such as acid rain or excess smoke, which have costs that are not included in the price because these costs are not paid by the producer or consumer. The costs are borne by some third party who is not part of the transaction. For redressing many of these imbalances, the federal government is the proper level for government involvement. There are others which require state, or local, intervention. Policy should concern itself with the need for as well as the form of that intervention.

Second, it may be cheaper for a natural monopoly to produce, transmit, or distribute energy. If it is in the public interest to have only one firm in a market, that firm must be regulated. Policy questions center on the nature and extent of that regulation.

Third, the utilities and the energy-producing companies may have objectives which do not coincide with the objectives of individual energy consumers. In addition, these institutions may have a competitive advantage, established by law rather than by the realities of the marketplace, which prevent free competition among alternatives.

For example, the objective of a utility is to provide energy to the consumer at the lowest possible cost consistent with safety and reliability considerations. In reality, the success of a utility is often measured by the absence of rate increases. However, for the consumer, the lowest possible energy cost need not be consistent with the lowest possible rate for utility-provided power.

Consider a hypothetical electricity conservation device which could be installed at nominal cost in a house and reduce utility electricity demand by 50 percent. Most households would be interested in such a device because it would reduce their need for utility power. The utility would not be interested in such a device, however, because if a household installed one, demand and with it revenues would fall, and rates would need to rise to cover fixed costs of plant and equipment. This rate increase, of course, would not bother the consumer with the conservation device whose total bill for energy services is still lower than before, even with a higher rate for energy from the utility. Government may have a role in the stimulation of conservation in this case and in adjusting the "rules of the game" of the marketplace in general.

Finally, market information is not always available to all consumers and producers because the collection of information involves a cost. It may be cheaper for government to collect and disseminate information about options and costs of alternatives.

3. Single Objective. Energy subsidies should not be used as a means to redistribute income or to create jobs. Rather, if there are households or regions which are deserving of assistance because the cost of energy is high and incomes are low, a direct income subsidy is more appropriate than the subsidization of energy. The subsidization of energy promotes excess use and waste while a direct monetary transfer, since it can be used on any good or service, does not distort the use of energy. Since it may be difficult politically to separate these criteria, a compromise policy might be the subsidization of a lifeline level of energy consumption in very targeted instances.

4. Sensitivity to Legacy of Problems from Old Energy Policy. The distortions created by past decisions should be phased out in a way which minimizes the adverse impacts of the transition. There are households and businesses that will need to adjust their consumption patterns. The past misallocations must be recognized, and government must also recognize the good faith adjustments that consumers have made on the basis of those policies. For example, the power cost assistance program phase-out should be done in such a way as to minimize the impact on electricity rates. One possibility would be through a grant to the impacted utilities to pay off the cost of the generating equipment newly put in place during the years of subsidy.

5. Large Projects Unnecessary. The requirement to construct large projects today in anticipation of increases in demand for

energy or in anticipation of the exhaustion of existing sources of energy is no longer valid. Demand growth uncertainty will continue in Alaska, impacted both by the changed prospects for the growth of the economy and by the increased availability and incentive to use energy-saving devices. Alternative supply sources for electricity can be examined at a more leisurely pace if the growth of demand is slower, as existing supplies will last for a longer time. Decisions on new capacity can be postponed, allowing time for the development of new techniques for generating power in new, different, and more efficient ways. When expansion does become necessary, new capacity should be the most cost effective over the life of the facility, assuming both reasonable energy prices and energy demand.

Rural Alaska Community Action Program, Inc.

January 20, 1987

Representative Kay Brown
Alaska State House
Pouch V Mail Stop 3100
Juneau AK 99811

Dear Representative Brown :

I am forwarding to you several recent actions of the RurAL CAP Board of Directors regarding rural energy issues. Though these concerns and ideas have the most impact on rural people, in these difficult times in our state, all issues that have budgetary implications are statewide issues. Thus we have sent this information to all of your fellow legislators.

This year will be a difficult year for you. Many issues demand attention and financial support. It will not be an easy task to decide which plans and programs will receive support and which must be set aside. These thoughts relate to energy and I trust that you understand how much energy costs impact the lives of rural people, especially low income rural people.

Happily, the ideas and concerns presented here are ones which will save the State money, rather than increase our financial difficulties.

I hope that you or one of your aides will have time to consider the enclosed information thoroughly. However, here is a very brief summary of what is enclosed:

1. Power Cost Equalization. Resolution #86-28. RurAL CAP strongly supports the intent of the Power Cost Equalization program. Rural people need help with high energy costs. Rural areas deserve their fair share of the large amounts of money spent by the State to meet the energy needs of Alaskans.

However, RurAL CAP continues to believe that the best form of assistance that the State can provide is assistance which reduces the amount of oil needed for heating and lighting rather than artificially reducing the cost of the electricity and heating oil used.

Granted, subsidy programs reach many households simultaneously, but they also make them dependent and vulnerable to economic and political changes that can quickly reduce or eliminate the subsidy. Subsidies provide relief but offer no real solution to the problem.

Alternative technologies should be explored but we believe that the best immediate and workable approach is to improve efficiency. This can be done on the power production and energy delivery side and on the end use side. The enclosed paper presents one idea which we think deserves consideration. Something like it should be a part of any proposal.

In brief we propose: Reduce overall heating and lighting consumption with more efficient buildings, heating systems, lighting systems, and appliances. THEN, eliminate or reduce the power subsidy.

There is a great deal of skepticism in Alaska about energy conservation. However, our experience continues to verify our contention that improving efficiency does reduce consumption and energy costs in rural Alaska. It is not a simple issue, we know. But efficient supply and use of energy in rural Alaska is clearly the direction the State must move.

2. Exxon and Other Oil Overcharge Restitution Funds Resolution #86-29. RurAL CAP has been participating in a coalition of several groups that are concerned about the way in which oil overcharge monies are distributed in Alaska. This group advocates creating an advisory group which would evaluate proposals for using these funds and make recommendations to the designated agency. Decisions about the funds would be based on each proposal's merit in accordance with several criteria. We support this concept and the criteria proposed by the coalition.

3. Weatherization Resolutions #86-30 and #86-38. This program has served many low income people and helped improve the quality of their housing as well as reduce their energy costs. Many more households are eligible for this program. It deserves serious consideration for State funding.

Last year the legislature choose to virtually eliminate State revenue as funding and used Exxon overcharge funds to pay for this program. Unfortunately, Exxon money must be used in accordance with very restrictive federal Department of Energy guidelines. As a result, this year's program is far less effective than previous years.

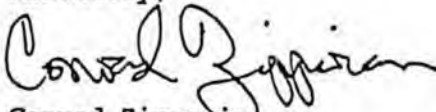
Next year the legislature should consider using a different mix of dollars to ensure adequate and flexible funding for the weatherization program.

4. An Energy Conservation Revolving Loan Fund. Resolution #86-31. Energy conservation will pay for itself in rural Alaska. One hurdle for many rural people is available capital to buy energy saving devices.

Previous State loan programs have not met rural needs. These programs were designed for cash oriented communities not subsistence oriented communities with undeveloped cash and credit mechanisms. Loans to rural residences would produce very significant energy savings. True, there would probably be a high default rate. Nonetheless, the State could leverage a great deal of energy savings and benefit for its rural residents with a properly designed loan program.

Thank you for considering these ideas. Please contact us if you have questions or would like to discuss them further.

Sincerely,



Conrad Zipperian
Energy Program Director

Enclosures

CRUDE OIL OVERCHARGE REFUNDS

Submitted to:

STATE LEGISLATIVE REPRESENTATIVES OF THE RAILBELT REGION

and

DEPARTMENT OF COMMUNITY AND REGIONAL AFFAIRS
STATE OF ALASKA

Submitted by:

MUNICIPALITY OF ANCHORAGE
ALASKA PUBLIC INTEREST RESEARCH GROUP
TRUSTEES FOR ALASKA
POWER FROM THE PEOPLE
ALASKA CENTER FOR THE ENVIRONMENT
RURAL ALASKA COMMUNITY ACTION PROGRAM

UPDATE: December 31, 1986

December 31, 1986

Page 2

EXECUTIVE SUMMARY

The signatories urge the legislators to establish a process for evaluation of energy programs that are proposed for ranking and subsequent funding from oil overcharge allocations.

The four actions requested are:

1. Appropriate all the oil overcharge funds to a single lead agency.
2. Direct the lead agency to set up an advisory committee to evaluate projects for funding.
3. Direct the lead agency to have energy project ranking based on five criteria. These criteria are supported by a broad based coalition of urban, rural and public interest groups.
4. Direct the lead agency to provide oil overcharge funds to energy projects according to the ranking as established by the advisory committee.

December 31, 1986

Page 3

Oil Overcharge Funds

On January 26, 1986, the U.S. Supreme Court ruled that the Exxon Corporation would pay over \$2 billion in refunds and interest for oil overcharges.

These oil overcharges were for oil products and by-products in the form of vehicle fuels, facilities and home heating fuels, utility power generation and industrial products.

The Supreme Court also upheld a lower court ruling that the money would be distributed to the various states to be spent on identified energy programs, as restitution to consumers who were overcharged.

Alaska's share of the settlement is \$8.26 million.

In its decision, the Federal court ruled that the Exxon funds must be governed by the guidelines and regulations of the five Federal energy programs through which they are distributed.

The funds cannot be used for administrative purposes and cannot supplant state funds appropriated for energy conservation. The interest from these funds must be used in the same manner as the principle.

The State of Alaska, upon receipt of the funds, placed the funds in a trust account.

The Exxon Corporation oil overcharge payback fund monies are to be distributed in Alaska by the Department of Community and Regional Affairs and be appropriated to the qualifying refund programs among five Federal energy programs:

- A. Energy Extension Service
- B. State Energy Conservation Program
- C. Institutional Conservation Program
- D. Low Income Weatherization Assistance
- E. Low Income Energy Assistance

For a period between July 1, 1986 and June 30, 1987, the State will apply \$2 million of its share of the Exxon funds to the low income weatherization assistance program and \$500,000 to the institutional conservation program.

The remaining \$5.76 million of the funds are to be spent over a three year period for qualifying energy conservation programs.

In addition to the Exxon settlement, other oil overcharge settlements are forthcoming. For example, \$2.6 million of Stripper Well money has been received. Unlike Exxon funds, these and other oil overcharge funds are not restricted to the five federal energy programs listed above.

December 31, 1986

Page 4

RECOMMENDATION

Distribution of Exxon and Other Oil Overcharge Restitution Funds

Oil overcharge funds represent government's method of righting a wrong. Consumers of energy products were overcharged. Restitution is directed to consumers through these funds. In that light, the funds must be used to enhance the state's response to consumers' energy needs and problems.

The overcharge restitution funds provide an opportunity to reevaluate the state's residential and consumer oriented energy programs in light of new technical developments and the state's current economic situation.

Existing programs that are benefitting consumers should continue to receive their primary support from state revenues. The state should maintain its historic commitments to these programs. Restitution funds should supplement state funding for these programs but should be used primarily to fund only those projects which meet the criteria listed below.

An advisory evaluation team should be formed to work with the Department of Community and Regional Affairs. This team should evaluate the five Federal energy programs as well as proposed programs or projects that may be eligible for restitution funds.

The advisory team should be composed of government program administrators, conservation technical experts, representatives of Native regional non-profit groups, conservation "activists", rural and urban utility representatives, etc.

Recommendations of the team would be incorporated in the review by the appropriate state decision makers.

Existing programs should also be evaluated with the same criteria as any proposed new programs. Though Exxon funds are limited to the five Federal energy programs, distribution of restitution funds through these programs should be based upon clearly defined and measurable criteria. "Historic distribution" formulas should not be applied to these funds.

Distribution of Stripper Well and other oil overcharge restitution funds should be based upon the criteria.

Criteria should include the following:

- A. Greatest direct measurable reduction of residential energy consumption for the least cost.
- B. Most significant impact on consumers most effected by overcharges.
- C. Largest number of state residents who will receive economic benefits.
- D. Return on investment to the State of Alaska.

December 31, 1986

Page 5

E. Largest number of local jobs created.

Criteria should be given a point range to weigh their impact on the final evaluation. The advisory evaluation team should determine the maximum and minimum points for each criterion.

Each program or project will receive points under each criterion. Proposals receiving the highest score will be given the strongest recommendation for funding.

Explanations of the Criteria

- A. All programs and projects should produce measurable (or calculable) energy savings. Programs which produce the greatest actual reduction of energy consumed will be given the highest rating. (i.e. fewer units of fuel used to provide the same level of service.)

Economic analysis of projects will include determination of life cycle costs and payback period. Projects with the shortest payback should generally be given a higher ranking. Benefit-to-cost ratios should be determined and considered. Projects which show extremely significant life cycle benefits could be given preference over projects with shorter paybacks.

- B. Projects should serve residents who are most adversely affected by high energy costs. This determination should be made on the basis of the percentage of annual income expended for basic energy needs: heating, lighting, and cooking.

The anticipated affect of this determination is that projects which serve low income people who live in cold regions of the state and who pay high rates for energy will be given the highest ranking.

- C. Projects that result in energy saving that create economic benefits for as many residents as possible. Economic benefits could result not only from lower utility bills but also from other factors such as lower property taxes. The principle employed here is the greatest good for the greatest number. Projects which provide small amounts of energy savings for a large number of consumers will receive a higher ranking under this criterion than projects which produce larger savings for fewer residents.
- D. Projects which return money to the State of Alaska through methods such as shared saving loans, offset energy subsidies, or as returns to the project will receive the highest ranking under this criterion.

In addition, projects which are able to utilize or leverage private funds will receive a higher ranking under this criterion.

December 31, 1986
Page 6

Returns should be as measurable and definite as possible. Anticipated returns should depend upon project performance not upon expected future decisions or actions of energy consumers.

- E. Projects should seek to provide jobs for Alaskans. On-site jobs for local residents are preferred and should receive a higher rank.

PP93/94

Rural Alaska Community Action Program, Inc.

RESOLUTION # 86 - 28

ENTITLED: URGING A GRADUAL REDUCTION OF THE POWER COST EQUALIZATION PROGRAM IN CONJUNCTION WITH A COMPREHENSIVE RURAL RESIDENTIAL ENERGY CONSERVATION PROGRAM.

WHEREAS, energy costs represent a very high percentage of the income of rural residents, and

WHEREAS, the Power Cost Equalization program has helped lessen the burden of high energy costs, and

WHEREAS, the Power Cost Equalization program does not encourage nor facilitate reducing energy consumption, and

WHEREAS, the Power Cost Equalization program is subject to the whims of the state legislature, and

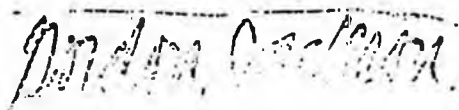
WHEREAS, the Power Cost Equalization program may be reduced or eliminated due to the poor condition of the state's economy, and

WHEREAS, gradual reductions of the PCE subsidy as well as sudden termination of the program would impose economic hardship on many rural residents,

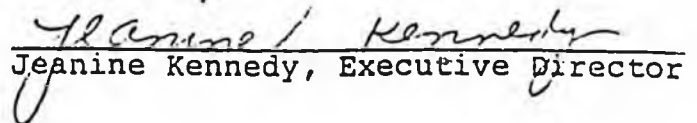
now, therefore, be it

RESOLVED: that the Board of Directors of the Rural Alaska Community Action Program does hereby urge the Governor and the Legislature of the State of Alaska to establish a comprehensive rural residential energy conservation program as the method of systematically and gradually achieving a major reduction in Power Cost Equalization program expenditures.

ADOPTED this 17th day of December, 1986 at the Annual Meeting of the Board of Directors held in Anchorage, Alaska.



Gordon Jackson, President



Jeanine Kennedy, Executive Director

Rural Alaska Community Action Program, Inc.

RESOLUTION # 86 - 29

ENTITLED: ENDORSING THE CONSERVATION COALITION'S POSITION REGARDING THE DISTRIBUTION OF OIL OVERCHARGE RESTITUTION FUNDS IN ALASKA.

WHEREAS, Rural CAP has participated in the development of this strategy, and

WHEREAS, this position is essentially the same as previously taken by the Board, and

WHEREAS, the distribution of these funds should be done in accordance with principles of energy conservation rather than political power,


now, therefore, be it

RESOLVED: that the Board of Directors of the Rural Alaska Community Action Program hereby endorses the attached position which urges the Governor and Legislature to establish a task force and a set of criteria to govern the distribution of all oil overcharge restitution funds which are received by the state, and

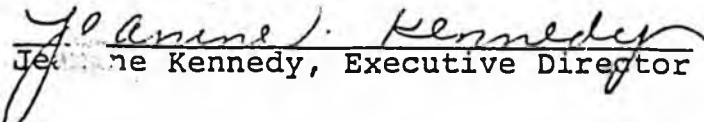
be it further

RESOLVED: that the Department of Community and Regional Affairs be directed to proceed with this process as soon as possible.

ADOPTED this 17th day of December, 1986 at the Annual Meeting of the Board of Directors held in Anchorage, Alaska.



Gordon Jackson, President



Jeanne Kennedy, Executive Director

Rural Alaska Community Action Program, Inc.

RESOLUTION # 86 - 30

ENTITLED: URGING THE USE OF STATE FUNDS OR NON-EXXON OIL OVERCHARGE RESTITUTION FUNDS TO SUPPORT THE LOW INCOME WEATHERIZATION PROGRAM.

WHEREAS, the weatherization program continues to help ease the burden of high energy costs in rural Alaska, and

WHEREAS, the State of Alaska has previously supplemented Federal allocations in order to make this program more effective in Alaska, and

WHEREAS, in 1986-87 this program was funded almost exclusively with Exxon overcharge restitution funds rather than State funds, and

WHEREAS, Exxon funds must be spent in accordance with Federal Department of Energy guidelines, and

WHEREAS, these guidelines severely restrict the ability of this program to effectively meet Alaska's needs, and

WHEREAS, other oil overcharge restitution funds which the state has received and will continue to receive (such as Stripper Well) do not have such limitations,

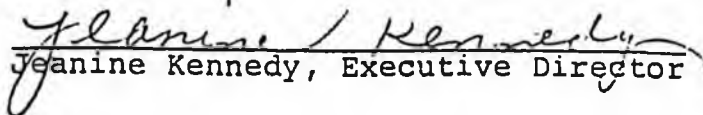
now, therefore, be it

RESOLVED: that the Board of Directors of the Rural Alaska Community Action Program urges the Governor and the Legislature of the State of Alaska not to use Exxon overcharge restitution funds as the only source of funding for the low income weatherization program in the future.

ADOPTED this 17th day of December, 1986 at the Annual Meeting of the Board of Directors held in Anchorage, Alaska.



Gordon Jackson, President




Jeanine Kennedy, Executive Director

Rural Alaska Community Action Program, Inc.

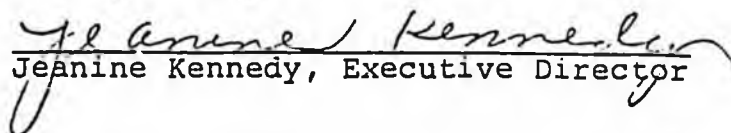
RESOLUTION # 86 - 31

- ENTITLED: URGIN; THE CREATION OF A REVOLVING LOAN FUND FOR RURAL RESIDENTS WHO WANT TO PURCHASE HIGH EFFICIENCY HEATING EQUIPMENT.
- WHEREAS, high efficiency heaters and burners are a proven and very cost-effective method of reducing fuel consumption and thus energy bills, and
- WHEREAS, the energy savings generated from the installation of these heaters and burners would enable homeowners to pay back loans in a very short period of time, and
- WHEREAS, many rural residents have very limited income and are not able to spend large amounts of money for non-essential or non-emergency items, and
- WHEREAS, bank loans and other conservation loan programs have not been effective in rural Alaska,
- now, therefore, be it
- RESOLVED: that the Board of Directors of the Rural Alaska Community Action Program urges the Governor and the Legislature of the State of Alaska to establish a rural Alaska low-interest revolving loan fund for the purchase of high efficiency oil heating equipment, and
- be it further
- RESOLVED: that this program be administered by the Department of Community and Regional Affairs through statewide social service agencies and/or regional non-profit organizations.

ADOPTED this 17th day of December, 1986 at the Annual Meeting of the Board of Directors held in Anchorage, Alaska.



Gordon Jackson, President



Jeanine Kennedy, Executive Director

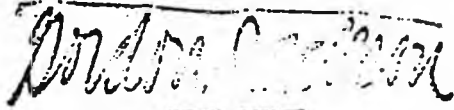
Rural Alaska Community Action Program, Inc.

RESOLUTION #86 - 38

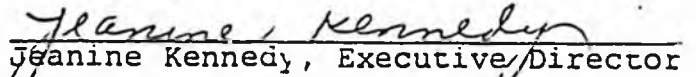
- ENTITLED: CALLING UPON THE GOVERNOR AND LEGISLATURE OF THE STATE OF ALASKA TO CONTINUE STATE FUNDING OF THE STATE CONTRIBUTION TO THE LOW-INCOME WEATHERIZATION PROGRAM
- WHEREAS, reductions in government expenditures will have a significant negative impact on rural Alaskan communities and individuals, and
- WHEREAS, fuel prices in rural Alaskan communities are among the highest in the nation, and
- WHEREAS, energy use for home heat in rural homes is high due to poor construction and inappropriate levels of insulation, and
- WHEREAS, approximately 75% of rural residential energy use is for space heat and a high proportion of household income is in many areas of the state spent on home heating oil, and
- WHEREAS, low-income recipients of weatherization have realized significant reductions in energy use and savings in home heating cost and improved levels of comfort, and
- WHEREAS, money spent in rural communities by the weatherization program have the additional benefits of creating employment, stimulating local economies, improving housing stock, and reducing energy consumption, and
- WHEREAS, only approximately 15% of the eligible homes in the state have been weatherized, and
- WHEREAS, contractors have increased their ability to provide high quality weatherization, and
- WHEREAS, the merits of the weatherization program compare favorably with other government funded energy programs, and
- WHEREAS, adequate funding of this program is critical for effective operation of the program in rural Alaska;
- now, therefore, be it

RESOLVED: that the Board of Directors of the Rural Alaska Community Action Program, Inc. supports continued funding of the low-income weatherization program at or above current funding levels.

ADOPTED this 17th day of December, 1986, at the Annual Meeting of the Board of Directors held in Anchorage, Alaska.



Gordon Jackson, President



Jeanine Kennedy, Executive Director

RESPONDING TO HIGH ENERGY COSTS IN RURAL ALASKA
A COMPREHENSIVE RESIDENTIAL CONSERVATION APPROACH

OR

REDUCING POWER COST EQUALIZATION (PCE)

Through

WEATHERIZATION
HEATING SYSTEM RETROFITS
LIGHTING RETROFITS
FREEZER/REFRIGERATOR REBATES

Prepared By:

Conrad Zipperian
Energy Program Director
Rural Alaska Community Action Program

December, 1986

THE IDEA:

Use several energy conservation measures to greatly reduce rural energy consumption and thus make subsidies unnecessary and/or less crucial as a means of equalizing the costs of energy throughout the state.

Conservation measures would include:

1. All #1 priority weatherization measures.
(Goal: Reduce heating oil costs 10-25%.)
2. A new high efficiency heater or burner.
(Goal: Reduce heating oil costs an additional 25%.)
3. A complete high efficiency lighting conversion.
(Goal: Reduce lighting costs 40%.)
4. A \$500 rebate per appliance to PCE clients that replace existing freezers and refrigerators with high efficiency models.
(Goal: Reduce appliance operation costs 60%.)

SUMMARY:

The primary goal of this project is the reduction of total energy consumption and costs in rural areas, thus providing rural residents with secure, long term relief from high energy costs in a way that is not threatened by political or economic trends and does not create a drain on the resources of the remainder of the state.

The secondary goal is the gradual elimination or significant reduction of Power Cost Equalization program expenditures. (Save the State of Alaska money.)

These conservation measures would make total residential heating and electrical costs for most households the same or less without the PCE subsidy as they currently are with the subsidy.

The project would initially require capital expenditures but these monies could be borrowed and/or combined with other funds such as those from the federal weatherization program, the Low Income Household Energy Assistance Program, or the oil overcharge restitution fund.

Two plans are evaluated in this paper:

First, install the conservation measures wherever feasible. Then,

Plan A. provide no further PCE benefits to households that participate in the program.

or

Plan B. continue to provide PCE benefits to all eligible households. (Those who participate will have lower electrical consumption as well as lower heating oil consumption.)

Plan A. would reduce PCE by \$13,255,920 in 8 years.

Plan B. would reduce PCE by \$5,598,184 in 8 years.

The program would serve PCE clients who have previously been served by the weatherization program as well as those that have not yet been served. A total of 15,504 households would be served.

PROBLEM STATEMENT:

Energy consumption in rural areas of Alaska is high. Energy costs are also high. Thus energy expenditures are high and represent a large percentage of the dollars spent by rural Alaskans.

Government subsidy programs which reduce costs but do not reduce consumption make rural residents vulnerable to political and economic changes which may result in the reduction or elimination of the subsidy.

Long range solutions to the problem of high energy bills for rural Alaskans must include reducing energy consumption without adversely affecting the quality of life. Though alternative methods of heating buildings and producing electricity exist and may have application in Alaska, improving end-use efficiency appears to be the most cost-effective and reliable approach for the present and certainly supports efforts to use alternative energy strategies.

Though to date no evidence has been presented which conclusively proves that PCE has increased rural consumption of electricity, certainly it has not fostered reduced consumption.

The PCE program provides a significant and important means of easing the burden of high rural energy costs and a way of giving a "piece of the action" of state energy expenditures to rural areas. However, the state's willingness to fund PCE may eventually end. Rural Alaskans who want to be self-sufficient and free from the uncertainties of Alaska's politics and boom-or-bust economics deserve a better program.

PCE should not be a part of the state's generosity to rural areas during "boom" times and then be withheld or reduced in "bust" times. This is not good policy for the State nor for rural residents.

The challenge in this period of decreasing state spending will be to replace or reduce PCE in a way that does not create excessive hardship for those who have come to depend upon it nor leave them vulnerable in the long run.

OTHER OPTIONS?

Proposals which merely reduce the amount of subsidy without including conservation strategies will ultimately have a negative impact on rural areas. State PCE dollars that are removed from the rural economy will cause further revenue shortfalls to homeowners, businesses and/or local governments. Withdrawing state dollars will adversely affect the standard of living of areas of the state that are currently the poorest and most in need of economic assistance and development.

Reducing the maximum number of kilowatts eligible for subsidy may help promote conservation. However, the State will not save much money

unless the current 750 KWH ceiling is drastically lowered. (The rural residential average use is about 250 KWH per month.) If it is set higher than 250 KWH it will likely not affect many PCE clients. If it is set lower than 250 it will impose a hardship on rural people unless there is a viable means for them to finance energy conservation. (Such as a zero interest loan fund.)

Households and rural governments that already have very little money will be forced to stop using energy for basic needs. Though some frivolous use occurs, most of the energy used in rural Alaska heats homes, provides light, cooks food, freezes food, and provides subsistence related transportation.

The state needs an approach which will reduce or eliminate the NEED for subsidies to rural low income residents of the state. Long range efforts to develop rural economies and increase cash income are worthwhile. However, opportunities for economic development appear very limited and subsistence will likely continue to be the primary way of life for cash poor villages in the foreseeable future.

Conservation strategies have proven effective in other parts of the world and will work as well or better in rural Alaska.

DETAILS OF THIS PROPOSAL:

The attached sheet provides calculations which support this approach. These are estimates and based on critical assumptions. Everyone who is served by the program will clearly be better off than they would be if PCE is merely gradually reduced and finally discontinued. However, not everyone will benefit as much as this example. Others will benefit more.

The program would augment the existing weatherization program. Rural residential energy consumption would be reduced to the degree that the energy bill for both heating and lighting would be lower without Power Cost Equalization than it currently is with the PCE payments for electricity.

This program could be operated through the State agency which operates the low-income weatherization program. Prior to 1986 the State provided funds and contracted with villages and other rural agencies to weatherize homes. Funds came from both federal and state sources and guidelines were established by DC&RA. The same could be done with this expanded program.

Regional non-profit agencies and existing weatherization contractors could be mobilized quickly to implement this program in rural Alaska. The program would provide jobs in regional centers as well as villages.

This conservatively calculated example uses an average total energy cost of \$1521.00 per year with the current PCE payment. \$285.00 of this is the estimated cost of electricity with PCE. (The Alaska Village Electric Coop. - AVEC - cost is \$.39 per kWh.) Consumers pay \$.095 per kWh. AVEC indicates that their average residential customer

usage is 250 kWh per month. The table indicates how 250 kWh might be used in a typical rural village home.

Fuel costs and consumption vary greatly in rural Alaska. This example is based on \$1236.00 per year for heating fuel. Conservation measures would reduce heating costs by 43%. A major portion of this reduction will result from heating system improvements.

The program would also reduce electrical consumption by 41%. This would be accomplished by replacing all existing lights with high efficiency bulbs, or electronic ballasts and watt-saver tubes.

In addition, homeowners would be given a rebate if they replaced existing low efficiency freezers and refrigerators with high efficiency models. Only households which had the appliance during the time of the program survey would be eligible for the rebate. The rebate certificate would be given to the vendor when a new high efficiency appliance was purchased. Funds would be sent to the vendor, not the homeowner.

Households which had received prior weatherization would receive a minor weatherization upgrade, a heating system retrofit, a lighting retrofit, and the appliance rebates.

After the retrofit, the total energy bill would be \$1395.00 without the PCE subsidy or \$872.00 if PCE payments continue. If PCE payments are discontinued after they are served by the program, total energy costs are calculated to be \$125.00 per year less than before the retrofit.

If the state chooses to continue the PCE program indefinitely, it would still be wise to fund this program. It would be a good long range investment that would reduce consumption and provide substantial economic benefit to homeowners. (Approximately \$650.00 savings per year per household.) The program would also provide jobs and thus be an additional stimulus to the rural economy.

SUMMARY OF THE NUMBERS:

Total Household Energy Bill With PCE Before The Program	= \$1521.00
Total Household Energy Bill After The Program Without PCE	= \$1395.00
Cost To Provide The Program Per Non-Wxed. Household	= \$3725.00
Cost To Provide The Program Per Pre-Wxed. Household	= \$1675.00

THE FINANCING PLANS:

Securing the funds to invest in a major conservation project could come from a variety of sources, including loans or bonds. This example does not evaluate the cost of such financing.

The goal of these financing schemes is to complete the project in an eight year period. Work would be done systematically on a community-by-community basis. A total of 15,504 households would be served. (There are approximately 22,000 PCE recipients.)

Each year, --\$6.3 million would be spent on the project. After a community is served, every household in the community would either receive no more PCE (Plan A) or PCE benefits would be reduced (Plan B).

PCE savings generated by the program could be used to pay for the project or to reduce PCE expenditures. The total cost of the conservation project would be \$50.6 million.

PCE annual expenditures would be reduced from \$18 million to \$4.7 million (or 0) under Plan A. or from \$18 million to \$12.4 under B.

The total cost of the combined PCE and conservation project over the eight year period would be \$148 million under Plan A. and \$175 million under Plan B. The eight year cost of the PCE program alone at the \$18 million level would be \$144 million.

UTILITY CONCERNS:

Rural utility companies face many problems, some of which the Power Cost Equalization program has helped minimize. With the subsidy typically low income households can afford to buy electricity in larger quantity. Bills are lower and more likely to be paid. If homeowners don't pay, the utilities still receive their payment from the State. PCE also allows utilities to implement more effective management and generator maintenance/upgrading programs since they have State funds to help pay for these efforts.

A persistent problem in rural communities is generator inefficiency caused by partial loading. Fuel is wasted and equipment is strained when not operated at an ideal load. This problem primarily occurs in summer months when village residents use less electricity and when school buildings are closed. This problem already exists but could become more troublesome if conservation measures are utilized in some villages.

Though this situation may create some initial problems it should not thwart conservation efforts. The primary motive for State involvement should be to provide relief to rural consumers from extremely high energy costs. In trying to achieve this goal, the State should promote strategies which supply energy services at the least cost to the consumer and to the State. Encouraging or allowing unnecessary consumption should not be used as a solution to the partial loading problem.

The partial loading problem deserves further study and a creative search for potential solutions. These solutions should be evaluated in conjunction with conservation efforts using a life-cycle cost analysis.

In the long view - and Alaska must now think in such terms - efficient energy production and efficient energy consumption should go hand in hand and will certainly prove to be the most economical approach.

AND LIGHTING RETROFIT AND A FREEZER/REFRIGERATOR REBATE PROGRAM

POSSIBLE APPLIANCES	COSTS BEFORE RETROFITTING			COSTS AFTER RETROFITTING		
	POWER USED (KWH/MTH)	W/PCE .095	NO PCE .39	POWER USED (KWH/MTH)	W/PCE .095	NO PCE .39
Coffee Maker	5	.48	1.95	5	.48	1.95
Hairdryer	1	.10	.39	1	.10	.39
Toaster	3	.29	1.17	3	.29	1.17
Clock	2	.19	.78	2	.19	.78
Freezer	100	9.50	39.00	38	3.61	14.82
Color TV	35	3.33	13.65	35	3.33	13.65
Music	8	.76	3.12	8	.76	3.12
Hot plate/micro	10	.95	3.90	10	.95	3.90
Misc appliances	11	1.05	4.29	11	1.05	4.29
Lighting	75	7.13	29.25	35	3.33	13.65
Variable	0	.00	.00	0	.00	.00
Monthly	250	23.75	97.50	148	14.06	57.72
Annual	3000	285.00	1170.00	1776	168.72	692.64
Heating Cost		1236.00	1236.00		703.00	703.00
TOTAL ENERGY COST		1521.00	2406.00		871.72	1395.64

I. RETROFIT COSTS NON-WXED

Lighting	125.00
Heating	900.00
Weatherization	2200.00
Appl. Rebate	500.00

I. Total 3725.00

II. RETROFIT COSTS PRE-WXED

Lighting	125.00
Heating	900.00
Upgrade-Wx	150.00
Appl. Rebate	500.00

II. Total 1675.00

A. ANNUAL SAVINGS - PCE ENDS

State of Ak.	885.00
Homeowner	125.36

A. Payback to State

I. Payback	4.21 Years
II. Payback	1.89 Years

B. ANNUAL SAVINGS - PCE CONTINUES

State of Ak.	361.08
Homeowner	649.28

B. Payback to State

I. Payback	10.32 Years
II. Payback	4.64 Years

FUNDING ANALYSIS

PCE Households	12000
Total Cost	44700000.00

PCE Households	3504
Total Cost	5869200.00

GRAND TOTALS 15504 Served

TOTAL COST 50569200.00

CONSIDERATIONS:

1. Consumers who use more than 257 KWH per month will not receive a net benefit from the program.
2. Figures assume all #1 Wx priorities can be done and a high efficiency heater can be installed.
3. Rebate program would require proof of existing appliance.

REVOLVING LOAN FUND
TO PROMOTE EFFICIENT USE OF HEATING OIL IN RURAL ALASKA

SUMMARY: Establish a revolving loan fund which would enable rural residents to borrow up to \$1000 to purchase either a high efficiency heater or a high efficiency (retention-head) burner.

The loan fund should be administered by the Department of Community and Regional Affairs. Contracts to approve loans and collect payments should be given to rural oriented social service agencies or rural municipal governments.

Loans should be provided for a two and one half year period at five percent interest.

The size of the fund would depend upon the approach:

A single agency fund of \$100,000 could reach 225 households in an eight year period.

A statewide multi-agency fund of \$500,000 could reach 1164 households in an eight year period.

PROBLEM STATEMENT:

High heating bills remain the greatest drain on income for rural residents. In times of economic distress, rural residents have the ability to cut back and/or do without many items that require cash. Heat, however, is essential and in many areas of the state heat is synonymous with heating oil which can only be obtained with cash.

Various programs help rural residents pay energy bills. The Low Income Household Energy Assistance Program (LIHEAP) and the Power Cost Equalization (PCE) program provide significant help for large numbers of rural residents each year. The Low Income Weatherization Program has gradually helped lower consumption and energy bills in many communities.

Even with these programs, many low income rural residents must use large amounts of their very limited cash to buy heating oil. This situation contributes to the poverty of the individual families and the community as a whole.

Money spent for oil has very little positive effect on the local village economy. Dollars are "exported" to oil companies and only a small percentage circulates in the village or state to provide jobs and other economic benefits.

This situation could be very positively changed if heating equipment in rural areas was improved. New high efficiency heating equipment could reduce oil consumption in thousands of rural homes by thirty to fifty percent!

The most common type of oil heater in rural Alaska is the drip pot burner. Some recently built HUD houses have furnaces or boilers. Virtually all of the drip pot burners could be replaced with high efficiency heaters (Monitors or comparable) and many oil burners in the furnace and boilers systems could be replaced with high efficiency burners.

These replacement units could pay for themselves through reduced energy bills in one to three years.

The cost of these high efficiency units ranges from \$500 to \$1000. Though some rural homeowners have purchased these items on their own, many do not have sufficient capital or are unwilling to spend such a large amount of their limited funds for something that is not an essential need. (A heater is essential but replacing it is not unless it breaks.) Another factor is the fact that many people still do not know enough about the new technology.

The need for efficient heating equipment in rural Alaska is very significant. The Alaskan Statewide Housing Needs Study, Phase I Report, November, 1982, indicated that there were 7,913 occupied housing units in "remote" areas of the state. The study provided not data about the number of drip pot burners. However, RURAL CAP research and experience suggests that drip pot burners or inefficient burners are used in approximately fifty percent of these homes.

The study indicated that there were 28,355 "rural" housing units in Alaska in 1980. It would be safe to conclude that fifteen to twenty-five percent of these use drip pot heaters or inefficient burners.

The Department of Energy weatherization program does allow replacement of drip pot heaters and oil burners. However, this measure has only been authorized in since 1986. In addition, though many people could use the new technology, limited funds often prevent the program from supplying the heaters. Though several items can qualify under the energy saving guidelines, comfort is often a consideration that dictates installing new windows and doors instead of replacing the heating unit.

It is difficult to predict the number of rural people who would use a loan program. Previous energy conservation loan programs have not served rural people well because they were difficult to apply for and to obtain since many people could offer no collateral. Lack of information has also been a factor.

Borrowing money has also been inconsistent with native cultural habits though many do get loans to purchase commercial fishing equipment.

PROPOSAL BENEFITS:

A low interest revolving loan fund would enable people to significantly reduce their heating oil consumption and save money. In order to be most effective, the program should be operated through agencies that

have regular on-site contact with rural people. This would ensure that the program was well publicized. It would also help ensure repayment of the loans.

Quite likely, the program would have a high default rate. Even so, the state should view the program as a way to help rural residents deal with high energy bills in a more productive way than by giving grants or subsidies.

A loan program would have the additional benefit of giving rural people a degree of ownership of their problem. It would provide an incentive to take responsibility for their situation and provide a way for them to help themselves.

FINANCIAL ANALYSIS:

Two scenarios would be feasible. One option would provide a \$100,000 fund to one agency. A second option would appropriate \$500,000 which should be distributed to several agencies.

The attached rough calculations evaluate a ten year period. After the eighth year loans would not be made. Collection efforts would continue until the end of the tenth year. All remaining funds would be returned to the State and the program would end.

These calculations assume the following:

1. Each loan would be for \$1000, 2.5 years, at 5% interest. Repayment of the loan would be monthly.
2. The fund would be banked so as to draw interest at 10%.
3. Costs of operating the program would be 15% of the amount loaned for that year. After the eighth year it would be a fixed amount.
4. All loans would be made at the beginning of the year. (This would likely not be the case but it simplifies calculations.)
5. The default schedule would be:
 - 50% repaying the complete loan.
 - 15% repaying 75% of the loan.
 - 15% repaying 50% of the loan.
 - 10% repaying 25% of the loan.
 - 10% repaying 0% of the loan.

Given these assumptions, a \$500,000 fund would enable the state to finance approximately 1164 units for a total cost of \$385,281.00. A \$100,000 fund would finance approximately 225 units for a total cost of \$82,125.

A larger program could be instituted if demand for the loans warranted it and the state chose to do so.

OFFICE OF THE GOVERNOR

OFFICE OF MANAGEMENT AND BUDGET
DIVISION OF POLICY

P.O. BOX AD
JUNEAU, ALASKA 99811
PHONE: (907) 465-3568

April 1, 1987

The Honorable Dave Donley
Representative
Alaska State Legislature
P.O. Box 17
Juneau, AK 99811

SUBJECT: HB 182 -- Power Cost Equalization

Dear Representative Donley:

At the March 26 Labor & Commerce Committee hearing on HB 182, Representative Koponen requested that our office provide additional information and comments on several issues raised during the hearing.

Current Rural Power Rates

Attachment 1 provides a list of power rates for residential and commercial customers of regulated rural utilities. Rate information for unregulated utilities is not readily available; however, the rates shown in Attachment 1 provide a good sample of utilities throughout the state.

The first table in Attachment 1 is from the Alaska Power Authority and shows total power costs, rather than customer rates; PCE payments are not reflected in these figures. PCE rates are shown in the second table, provided by the Alaska Public Utilities Commission.

An important point concerning customer rates under the PCE program is that customers pay more than the 8.5 cents per kWh specified in the PCE statutes. This 8.5 cent figure applies to the calculation of the PCE rate paid to utilities, not directly to the customer rate. The average rate paid by residential customers under the PCE program is about 13 cents per kWh.

ARECA PCE Proposal

At the March 26 hearing, Mr. Ken Johnson, representing the Alaska Rural Electrical Cooperative Association (ARECA), proposed an

Representative Donley
April 1, 1987
Page 2

alternative method of allocating reduced funding for the PCE program. Mr. Johnson's proposal included the following elements:

- Raise the current PCE floor of 8.5 cents per kilowatt-hour (kWh) to 11.25 cents per kWh, which Mr. Johnson indicates is the current rate paid by Fairbanks residential customers.
- If the previous step is not sufficient to meet funding restrictions, then reduce the 95 percent multiplier in present law to 90 percent.
- If the previous two steps are not sufficient to meet funding restrictions, reduce the current 750 kWh per month cap for residential and commercial customers to 500 kWh.

The Alaska Power Authority (APA) has estimated the funding reductions which would result from each of the elements in the ARECA proposal. For purposes of comparison, HB 182 would reduce the cost of the PCE program by about \$5.8 million.

Raising the PCE floor from 8.5 cents per kWh to 11.25 cents per kWh would reduce the funding requirement by about \$3.9 million.

Reducing the 95 percent multiplier to 90 percent, with a PCE floor of 11.25 cents, would save about \$600,000, for a combined savings of about \$4.5 million. Thus, in order to meet the PCE funding level included in the Governor's FY 88 budget, an additional \$1.3 million would have to be deleted from the program. According to ARECA's proposal, the next step would be to lower the 750 kWh per month cap to 500 kWh. However, lowering the consumption cap would result in a program cost reduction of approximately \$2.7 million -- much more than the \$1.3 million required.

It appears that in order to match the Governor's proposed funding level, the most workable variation of the ARECA proposal would be to raise the PCE floor to 11.25 cents and lower the consumption cap from 750 to 500 kWh per month. This would produce a total cost reduction of about 5.6 million. If necessary, the 95 percent multiplier could be reduced by one or two percent to match the proposed funding level. If the consumption cap were not reduced to 500 kWh per month, the multiplier would have to be reduced to about 85 percent to match the proposed funding level.

Rate Impacts of the ARECA proposal

The ARECA proposal would result in what we feel are unacceptable rate impacts for residential customers. Raising the PCE floor to 11.25 cents would require a rate increase for all customers of 2.75 cents (11.25 - 8.5). At an average residential rate of 13 cents per kWh, this would amount to a rate increase of 21 percent.

The effect of reducing the 95 percent multiplier would vary depending on the PCE rate of each utility. Using the Alaska Village Electric Cooperative (AVEC) as a mid-range example, reducing the multiplier to 85 percent would require an additional rate increase of about 16 percent, for a total rate increase of about 40 percent. If the consumption cap were reduced to 500 kWh while leaving the multiplier at 95 percent, rate increases for most residential customers would be limited to the 21 percent required by raising the floor to 11.25 cents.

In comparison to HB 182, the ARECA proposal favors large commercial customers and community facilities at the expense of small residential customers. We are flexible in our approach to reducing PCE funding; however, we feel strongly that any changes made to the program must protect those customers who need the program the most. These are the small residential customers with limited cash incomes, who might use only 2-300 kWh per month. Under the ARECA proposal, these customers would face rate increases of 20 - 40 percent.

The "200 kWh PCE" Proposal

Representative Koponen also asked that we comment on the proposal made by Mr. Alan Mitchell, under which PCE customers would be provided free electricity up to a level of approximately 200 kWh per month. While we support Mr. Mitchell's objective of increasing incentives for the use of efficiency and conservation measures, his proposal involves a major redistribution of PCE benefits from larger to smaller PCE customers. For example, a customer using only 200 kWh per month would benefit greatly from this concept, while a customer using 500 kWh or more per month would probably face substantial increases in power costs. This proposal goes well beyond the restructuring of the PCE program in HB 182, and we do not recommend that the proposal be adopted.

The Diesel "Low-Load" Problem

Representative Koponen raised this issue in response to Mr. Mitchell's testimony on the benefits of efficiency and conservation measures. Essentially, the problem is that most diesel generators are designed to operate at relatively high load factors, and at low loads of 20 or 30 percent, fuel efficiency declines and maintenance problems can develop. Representative Koponen expressed concern that conservation measures could increase these problems by reducing load levels.

This is a valid concern which must be considered on a case-by-case basis, depending on the generation capacity and load characteristics of each utility. However, we believe that conservation

Representative Donley
April 1, 1987
Page 4

measures can play still play a major role in holding down rural power costs, for several reasons. First, although diesel fuel efficiency does decline somewhat at lower loads, with the high cost of fuel in most villages, utilities can still obtain substantial savings by reducing or limiting growth in power demand.

Second, while many rural utilities tend to have oversized generators, others are nearing their generation capacity and will have to acquire additional units unless demand growth can be limited by conservation or other measures. Second, diesel generators are replaced relatively frequently in comparison to the larger power plants used in urban areas. While conservation may not be as effective in a village with an oversized generator, it can enable the utility to purchase a smaller generator to replace the oversized unit when it wears out.

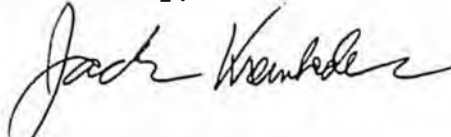
Third, some types of conservation measures can help to reduce the low-load problem. In many villages, this is a seasonal summer problem because loads are high in the winter and low in the summer. By targeting conservation measures at electrical uses which contribute to the winter peak, such as lighting, the wide swings in seasonal demand can be reduced.

The best solution to the low-load problem is the use of two or more generators in series, which allows a utility to use a small generator during its daily or seasonal low points in demand, then bring additional unit(s) as demand increases. This load following procedure is used by most of the larger rural utilities, but is not yet employed by many smaller utilities.

* * * * *

I hope this information is helpful. Please let me know if we can be of further assistance.

Sincerely,



Jack Kreinheder
Senior Analyst

MEMORANDUM

State of Alaska

TO: Jack Kreinheder, Senior Analyst
Office of the Governor
Division of Policy

DATE: March 31, 1987

FILE NO.:

THRU: TELEPHONE NO.: 261-7210

FROM: *P. Mann*
Gloria Manni, Director
Accounting & Administration

SUBJECT: Power Cost Equalization
Program (PCEP)
Analysis of FY88 Funding
Requirements

As per your request, the attached schedule summarizes the projected program requirements under decreasing percentages of power cost equalization provided to utilities per kwh sold and in combination with either the existing floor of 8.5 cents per kwh or a floor of 11.25 cents per kwh.

The variance percentages of the subsidy requirement have been calculated on the standard sample group of utilities and applied program wide. Administrative costs are not included in the projections.

The alternative closest to the \$14,289.1 program funding in the FY88 Budget of the Governor are achieved by raising the PCEP floor to 11.25 cents per kwh and decreasing the percentage of power cost equalization provided per kwh sold to 85% and 80%.

Please call me if you have any questions.

GM:tg

cc: R.E. LeResche, Director, Alaska Power Authority

Alaska Power Authority

POWER COST EQUALIZATION PROGRAM - FY88 Analysis of Projected Program Requirement March 29, 1987

<u>% of Power Costs x kwh (1)</u>	<u>Power Costs 8.5 - 52.5¢ x kwh (2)</u>	<u>% Variance From Base</u>	<u>Power Costs 11.25 - 52.5¢ x kwh (3)</u>	<u>% Variance From Base(A)</u>
95	(A) 19951.5	0	16053.0	80.46
90	18195.8	91.20	15472.4	77.55
85	17180.2	86.11	14311.2	71.73
80	16170.7	81.05	13425.4	67.29
75	15163.1	76.00	12627.3	63.29

ANALYSIS ASSUMPTIONS:

- 750 kwh x mo x customer
- 70 kwh x mo x resident/community facilities
- Decreasing percentages of power cost equalization provided x kwh sold (1)
- Power costs more than 8.5¢ and less than 52.5¢ x kwh eligible for PCEP subsidy (2)
- Power costs more than 11.25¢ and less than 52.5¢ X kWh eligible for PCEP subsidy (3)

Note:

(A) = PCEP subsidy requirements under existing legislation, as presented in the Power Authority original FY83 budget request

ATTACHMENT 1
 1985 Energy Use (Kwh) and Billing Charges (¢/Kwh)
 ALASKA UTILITIES BY REGION
 (Page 2 of 2)

Region/Community	Utility	Residential (Average Annual)			Commercial/Industrial (Average Annual)			TOTAL (Average Annual)		
		Use Kwh/Cust.	Bill \$/Cust.	Charge(1) ¢/Kwh	Use Kwh/Cust.	Bill \$/Cust.	Charge(1) ¢/Kwh	Use Kwh/Cust.	Bill \$/Cust.	Charge(1) ¢/Kwh
ARCTIC - NORTHWEST										
48 Villages	AVEC	2,777	1,257	45.3	14,007	5,692	40.6	5,962	2,467	41.3
Barrow	BU&EC	4,953	644	13.0	64,157	5,774	9.0	18,981	1,923	10.1
Deadhorse	AUI	0	0	0	656,851	167,431	25.4	656,851	167,431	25.4
Kotzebue	KtEA	6,046	1,377	22.8	52,340	11,149	21.3	14,106	30,794	21.8
Nome	NJUB	5,394	1,041	19.3	29,889	472	15.8	10,604	2,085	19.6
Unalakleet	UVEC	5,198	1,160	22.3	31,930	6,761	21.1	10,759	2,326	21.6
Regional Average		3,967	1,145	33.1	50,722	8,195	21.2	32,927	5,752	29.9
SOUTHWEST										
Aniak	APC	3,787	1,634	43.2	35,310	13,386	37.9	9,165	3,638	39.7
Bethel	BUC	5,079	970	19.1	58,598	9,832	16.8	13,495	2,363	17.5
Cold Bay	G&K	15,276	3,207	21.0	61,537	13,171	21.4	42,371	9,048	21.4
Dillingham	NEC	5,251	1,069	20.4	27,927	5,300	19.0	10,740	2,111	19.7
Egegik	EL&P	3,740	2,131	57.0	7,152	4,076	57.0	4,685	2,670	57.0
Levelock (3)	LEC	3,825	2,173	57.9	12,240	6,391	53.2	6,350	3,123	50.1
McGrath	MGL&P	3,359	1,224	36.4	13,596	5,165	38.0	8,089	3,045	37.6
Naknek	NEA	5,961	1,377	23.1	30,775	7,101	23.1	14,139	3,264	23.1
Napakiaak (3)	NHC	3,224	983	30.5	14,425	4,502	31.2	4,214	1,294	30.7
Regional Average		5,106	1,151	23.4	36,089	7,544	24.0	15,808	2,646	22.8
Alaska Average		9,027	801	14.3	74,724	5,916	9.2	19,363	1,693	9.5

NOTE: (1) These charges do not reflect the actual costs to consumers of utilities eligible under the State Power Cost Equalization Program.
 (2) Regional averages are weighted by population.
 (3) E: Estimated.

1985 Energy Use (Kwh) and Billing Charges (¢/Kwh)

ALASKA UTILITIES BY REGION

(Page 1 of 2)

Region/Community	Utility	Residential (Average Annual)			Commercial/Industrial (Average Annual)			TOTAL (Average Annual)		
		Use Kwh/Cust.	Bill \$/Cust.	Charge(1) ¢/Kwh	Use Kwh/Cust.	Bill \$/Cust.	Charge(1) ¢/Kwh	Use Kwh/Cust.	Bill \$/Cust.	Charge(1) ¢/Kwh
SOUTHEAST										
AP&T (Incl. Tok)	AP&T	4,780	789	16.5	22,580	3,424	15.2	11,086	1,679	15.1
Auke Bay	GHEA	11,346	1,639	14.4	39,161	2,741	7.0	14,496	1,923	13.3
5 Villages	THREA	5,227	1,829	35.0	23,563	8,483	36.0	8,925	3,122	35.0
Haines	HL&P	5,833	1,102	18.9	25,966	4,385	16.9	10,666	1,806	16.9
Juneau	AEL&P	12,695	922	7.3	50,858	3,830	7.5	21,019	1,545	7.3
Ketchikan	KPU	9,777	909	9.3	47,818	4,339	9.1	15,836	1,455	9.2
Metlakatla	MP&L	17,186	1,047	6.1	116,395	11,902	10.2	30,709	2,543	8.3
Petersburg	PMP&L	6,414	691	10.8	60,839	6,030	9.9	14,544	1,489	10.2
Sitka	SED	10,997	746	6.8	63,876	4,156	6.5	22,796	1,499	6.6
Wrangell	WML&P	5,611	865	15.4	24,083	2,714	11.3	10,818	1,399	12.9
Yakutat	YPI	7,008	1,339	19.1	62,286	9,984	16.0	14,419	2,498	17.3
Regional Average (2)		10,395	954	10.3	49,376	4,398	9.9	18,055	1,622	9.9
SOUTHCENTRAL										
Kodiak	KdEA	6,037	1,026	17.0	58,947	9,137	15.5	20,108	3,016	15.0
Port Lions	KdEA	3,637	655	18.0	8,909	1,532	17.2	5,065	912	18.0
Anchorage	AML&P	7,360	487	6.6	120,659	7,155	5.9	26,820	1,641	6.1
	CEA	9,658	640	6.4	76,199	4,524	5.9	16,352	1,043	6.4
	MEA	11,762	1,057	9.0	60,711	4,330	7.1	15,965	1,429	9.0
Cordova	CEC	5,688	1,378	24.2	27,538	5,262	19.1	13,346	2,709	20.3
Glennallen	CVEA	4,941	998	20.2	58,965	9,788	16.6	17,673	3,057	17.3
Homer	HEA	10,926	871	8.4	103,728	6,797	6.5	23,690	1,723	7.3
Seward	SES	10,040	1,014	10.1	35,415	3,391	9.5	19,021	1,869	9.8
Valdez	CVEA	7,994	1,223	15.3	69,353	9,952	14.3	20,860	3,025	14.5
Regional Average		9,583	742	7.8	85,587	5,871	7.4	19,505	1,435	7.5
YUKON										
Fairbanks	FMUS	5,862	511	8.7	69,738	6,314	9.1	21,626	1,942	9.0
	GVEA	8,103	871	10.7	71,935	6,710	9.3	15,503	1,548	10.0
Fort Yukon	GZUC	1,841	801	43.5	16,614	5,737	34.5	6,233	2,269	36.4
Hanley Hot Springs	MUC	2,400	573	23.8	6,700	1,670	24.9	3,014	730	24.2
Northway	NP&L	3,057	893	29.2	55,059	14,841	27.0	13,198	3,610	27.4
Tanana	TPC	5,068	1,926	38.0	81,684	29,406	36.0	9,600	3,552	37.0
Regional Average		7,613	812	10.8	69,944	6,627	9.9	16,574	1,650	10.3

ALASKA PUBLIC UTILITIES COMMISSION-ANNUAL REPORT (Fiscal Year Ending 6/30)

SAMPLE MONTHLY RESIDENTIAL ELECTRIC RATES

(As of December 31, 1985 - Fuel Cost Rate Adjustments Included Where Available)

COMMUNITY	100 KWH	500 KWH	1,000 KWH	1,500 KWH	Power Cost Equalization (1)	UTILITY SERVING COMMUNITY
Anchorage	\$ 10.43	\$ 34.16	\$ 63.83	\$ 93.49		Municipal Light & Power Department, Municipality of Anchorage d/b/a
Anchorage	11.59	36.01	66.52	97.04		Chugach Electric Association, Inc.
Andreanof	55.00	200.00	325.00	450.00	26.50¢/KWH	Andreanof Electric Corporation
Angoon	37.06	175.90	337.70	499.50	21.93¢/KWH	Tlingit-Haida Regional Electrical Authority
Aniak	42.48	202.68	395.63	588.58	22.35¢/KWH	Aniak Light and Power Company, Inc.
AVEC Communities	44.15	220.75	441.50	662.25	29.69¢/KWH	Alaska Village Electric Cooperative, Inc.
Barrow	15.00	66.00	121.56	177.12		Barrow Utilities and Electric Cooperative, Inc.
Bethel	22.38	93.46	173.86	254.27	7.26¢/KWH	Bethel Utilities Corporation, Inc.
Bettles	49.50	247.50	495.00	742.50	35.19¢/KWH	Bettles Light & Power, Inc.
Central	50.89	254.45	508.90	763.35	33.38¢/KWH	Far North Utilities
Chuathbaluk	59.00	295.00	590.00	885.00	41.80¢/KWH	Middle Kuskokwim Electric Cooperative, Inc.
Chugiak	18.44	52.18	94.35	133.01		Matanuska Electric Association, Inc.
Cold Bay	36.15	140.75	271.50	402.25	15.43¢/KWH	G & K, Inc.
Copper Center	26.40	100.10	185.10	270.10		Copper Valley Electric Association, Inc.
Craig	21.28	92.84	182.29	271.74	7.41¢/KWH	Alaska Power & Telephone Company
Crooked Creek	59.00	295.00	590.00	885.00	41.80¢/KWH	Middle Kuskokwim Electric Cooperative, Inc.
Delta Junction	19.99	59.93	101.11	142.29		Golden Valley Electric Association, Inc.
Dillingham	26.57	100.34	186.70	273.18	9.64¢/KWH	Nushagak Electric Cooperative, Inc.
Douglas	15.50	49.50	92.00	134.50		Alaska Electric Light & Power Company
Eagle River	18.44	52.18	94.35	133.01		Matanuska Electric Association, Inc.
Egegik	54.79	273.95	547.90	821.85	33.32¢/KWH	Egegik Light and Power Homer Lee Leonard d/b/a
Fairbanks	19.99	59.93	101.11	142.29		Golden Valley Electric Association, Inc.
Fort Yukon	45.01	165.09	277.69	390.29	18.66¢/KWH	Gwitchyaa Zhee Utility Company

(1) State assistance credited to customer bills on a cents/KWH basis for consumption up to 750 KWH per customer.

ALASKA PUBLIC UTILITIES COMMISSION

SAMPLE MONTHLY RESIDENTIAL ELECTRIC RATES (CONT.)

(As of December 31, 1985 - Fuel Cost Rate Adjustments Included Where Available)

COMMUNITY	100 KWH	500 KWH	1,000 KWH	1,500 KWH	Power Cost Equalization (1)	UTILITY SERVING COMMUNITY
Glennallen	\$ 26.40	\$100.10	\$185.10	\$270.10		Copper Valley Electric Association, Inc.
Haines	25.45	90.45	165.93	236.68	.0594¢/KWH	Haines Light & Power Company, Inc.
Hallbut Cove	23.32	57.62	100.50	143.38		Homer Electric Association, Inc.
Healy	19.99	59.93	101.11	142.29		Golden Valley Electric Association, Inc.
Homer	22.27	52.41	90.08	121.63		Homer Electric Association, Inc.
Hoonah	37.06	175.90	337.70	499.50	21.93¢/KWH	Tlingit-Haida Regional Electrical Authority
Hope	11.59	36.01	66.52	97.04		Chugach Electric Association, Inc.
Hydaburg	27.64	121.52	238.87	356.22	14.83¢/KWH	Alaska Power & Telephone Company
Iliamna	45.57	227.85	455.70	683.55	26.02¢/KWH	I-N-N Electric Cooperative, Inc.
Juneau	15.50	49.50	92.00	134.50		Alaska Electric Light & Power Company
Kake	37.06	175.90	337.70	499.50	21.93¢/KWH	Tlingit-Haida Regional Electrical Authority
Kasaan	37.06	175.90	337.70	499.50	21.93¢/KWH	Tlingit-Haida Regional Electrical Authority
Kenai	22.27	52.41	90.08	121.63		Homer Electric Association, Inc.
Klawock	37.06	175.90	337.70	499.50	21.93¢/KWH	Tlingit-Haida Regional Electrical Authority
Kodiak	14.93	67.15	120.20	170.75		Kodiak Electric Association, Inc.
Kotzebue	31.60	111.76	211.96	312.16	9.98¢/KWH	Kotzebue Electric Association, Inc.
Levelock	52.00	260.00	520.00	780.00	41.80¢/KWH	Levelock Electric Cooperative, Inc.
Manokotak	30.00	150.00	300.00	450.00	21.10¢/KWH	Manokotak Power Company
McGrath	39.95	188.27	361.54	534.81	28.26¢/KWH	McGrath Light & Power Company
Moose Pass	11.59	36.01	66.52	97.04		Chugach Electric Association, Inc.
Napaklak	47.00	235.00	470.00	705.00	38.50¢/KWH	Napaklak Ircinaq Power Company
Nenana	19.99	59.93	101.11	142.29		Golden Valley Electric Association, Inc.
Ninilchik	22.27	52.41	90.08	121.63		Homer Electric Association, Inc.

(1) State assistance credited to customer bills on a cents/KWH basis for consumption up to 750 KWH per customer.

ALASKA PUBLIC UTILITIES COMMISSION

SAMPLE MONTHLY RESIDENTIAL ELECTRIC RATES (CENT.)

(As of December 31, 1985 - Fuel Cost Rate Adjustments Included Where Available)

COMMUNITY	100 KWH	300 KWH	1,000 KWH	1,500 KWH	Power Cost Equalization (1)	UTILITY SERVING COMMUNITY
North Pole	\$ 19.99	\$ 59.93	\$101.11	\$142.29		Golden Valley Electric Association, Inc.
Northway	27.53	137.65	275.30	412.95	19.03¢/KWH	Northway Power & Light, Inc.
Palmer	18.44	52.18	94.35	133.01		Hatanuska Electric Association, Inc.
Pelican	15.10	75.50	151.00	226.50	2.99¢/KWH	Pelican Utility Company
Port Graham	23.32	57.62	100.50	143.38		Homer Electric Association, Inc.
Port Lions	14.93	67.15	120.20	170.85		Kodiak Electric Association, Inc.
Red Devil	59.00	295.00	590.00	885.00	41.80¢/KWH	Middle Kuskokwim Electric Cooperative, Inc.
Sand Point ⁽²⁾	30.10	142.79	280.44	418.09	6.66¢/KWH	Sand Point Electric Company, Inc.
Seldovia	23.32	57.62	100.50	143.38		Homer Electric Association, Inc.
Skagway	24.66	86.29	159.54	232.79	5.16¢/KWH	Alaska Power & Telephone Company
Sleetmute	59.00	295.00	590.00	885.00	41.80¢/KWH	Middle Kuskokwim Electric Cooperative, Inc.
Soldotna	22.27	52.41	90.08	121.63		Homer Electric Association, Inc.
Sterling	22.27	52.41	90.08	121.63		Homer Electric Association, Inc.
Stony River	59.00	295.00	590.00	885.00	41.80¢/KWH	Middle Kuskokwim Electric Cooperative, Inc.
Talkeetna	18.44	52.18	94.35	133.01		Hatanuska Electric Association, Inc.
Tanana	44.50	211.90	405.40	598.90	23.32¢/KWH	Tanana Power Company, Inc.
Teller	53.75	268.75	537.50	806.25	40.37¢/KWH	Teller Power Company Helen M. and Robert R. Blodgett d/b/a
Tok/Dot Lake	25.11	110.60	213.40	306.50	9.31¢/KWH	Alaska Power & Telephone Company
Unalakleet	32.88	106.40	198.30	290.20	11.62¢/KWH	Hatanuska Electric Association, Inc.
Valdez	23.40	87.00	164.10	240.60		Copper Valley Electric Association, Inc.
Wasilla	18.44	52.18	94.35	133.01		Hatanuska Electric Association, Inc.

(1) State assistance credited to customer bills on a cents/KWH basis for consumption up to 750 KWH per customer.

(2) Certificate No. 230 was transferred from Pelican Utility Company to Sand Point Electric Company, Inc., in 1986.

ALASKA PUBLIC UTILITIES COMMISSION

SAMPLE MONTHLY RESIDENTIAL ELECTRIC RATES (CONT.)

(As of December 31, 1985 - Fuel Cost Rate Adjustments Included Where Available)

COMMUNITY	100 KWH	500 KWH	1,000 KWH	1,500 KWH	Power Cost Equalization (1)	UTILITY SERVING COMMUNITY
Whittier	\$ 11.59	\$ 36.01	\$ 66.52	\$ 97.04		Chugach Electric Association, Inc.
Willow	18.44	52.18	94.35	133.01		Matanuska Electric Association, Inc.
Yakutat	24.06	98.50	183.80	264.10	7.17¢/KWH	Yakutat Power, Inc.

(1) State assistance credited to customer bills on a cents/KWH basis for consumption up to 750 KWH per customer.