

BILLS 1981 - 1982

CSSSB 25 cont.

LEA. Finance 1602

1602

1 authority serve without compensation, but they shall receive the same
2 travel pay and per diem as provided by law for board members.

3 * Sec. 3. AS 44.83.045(a) is amended to read:

4 (a) The directors at large shall [MUST] be residents and quali-
5 fied voters of Alaska and shall comply with the requirements of AS 39.50
6 (conflict of interests). The directors at large shall serve over-
7 lapping four-year terms. [THE FOUR ORIGINAL DIRECTORS AT LARGE HAVE
8 TERMS OF ONE, TWO, THREE, AND FOUR YEARS, RESPECTIVELY.]

9 * Sec. 4. AS 44.83.070 is amended to read:

10 Sec. 44.83.070. PURPOSE OF THE AUTHORITY. The purpose of the
11 authority is to promote, develop and advance the general prosperity and
12 economic welfare of the people of Alaska by providing a means of con-
13 structing, acquiring, financing and operating

14 (1) power projects [PRODUCTION FACILITIES] limited to fossil
15 fuel, wind power, tidal, geothermal, hydroelectric, or solar energy
16 production; and

17 (2) facilities that recover and use waste energy [CONSERVA-
18 TION FACILITIES].

19 * Sec. 5. AS 44.83.080 is amended by adding a new paragraph to read:

20 (17) to make grants for power projects in accordance with
21 AS 44.83.085.

22 * Sec. 6. AS 44.83 is amended by adding a section to read:

23 Sec. 44.83.085.. GRANTS FOR POWER PROJECTS. (a) When an appro-
24 priation is made to the authority for payment as a grant to a munici-
25 pality for a power project, the authority shall promptly notify the
26 municipality of the availability of the grant. When the authority
27 receives an agreement executed by the municipality that provides that
28 the municipality (1) will spend the grant for the purposes specified
29 in the appropriation and (2) will allow, on request, an audit by the

1 state of the uses made of the grant, the authority shall pay the grant
2 directly to the municipality.

3 (b) When an appropriation is made to the authority for payment as
4 a grant for a named recipient that is not a municipality for a power
5 project, the authority shall promptly notify the named recipient of the
6 availability of the grant and request the named recipient to submit a
7 proposal for the project for which the appropriation is made. At the
8 same time, the authority shall issue a request for proposals from other
9 persons qualified to undertake the power project in the same area. The
10 authority shall contract with the named recipient unless, with due
11 regard for any local expertise or experience among those making propo-
12 sals, the authority determines that an award of the contract to a
13 different party would better serve the public interest. If the contract
14 is awarded to another party than that named by the legislature, the
15 basis of that action shall be stated in writing at the time the grant
16 is issued.

17 (c) When an appropriation is made to the authority for payment as
18 a grant to an unincorporated community for a power project, the grant
19 shall be disbursed as follows:

20 (1) Within 45 days after the effective date of the appropria-
21 tion, the authority shall notify the governing body of the unincorpor-
22 ated community, if any, that a grant is available.

23 (2) The authority shall determine whether there is a quali-
24 fied incorporated entity in the community area which will agree to
25 receive the grant and administer it, subject to terms generally applic-
26 able to private grantees. If there is more than one such entity, the
27 authority shall select the most qualified and the grant shall be awarded
28 to that incorporated entity for the purposes of the appropriation.
29 However, the authority shall give preference to a nonprofit corporation

1 organized by a community for receipt of the grant.

2 (3) If there is no incorporated entity qualified to receive
3 the grant, the authority shall administer the program directly or
4 through contractors with whom it contracts in the area of the unincor-
5 porated community.

6 * Sec. 7. AS 44.83.162 is repealed and reenacted to read:

7 Sec. 44.83.162. POWER COST ASSISTANCE. (a) The power cost
8 assistance fund is established as a separate fund to provide financial
9 assistance to eligible electric utilities in the state. The fund shall
10 be administered by the authority as a fund distinct from other funds of
11 the authority. The fund is composed of money appropriated for the
12 purpose of providing power cost assistance to eligible electric utili-
13 ties.

14 (b) The costs used to calculate the amount of power cost assis-
15 tance for all electric utilities eligible under this section include
16 all allowable costs, except return on equity, used by the commission to
17 determine the revenue requirement for electric utilities subject to
18 rate regulation under AS 42.05. The costs used in determining the
19 power cost assistance per kilowatt-hour shall exclude any other type of
20 assistance that reduces the customer's cost of power on a kilowatt-hour
21 basis and that is provided to the electric utility within 60 days
22 before the commission determines the power cost assistance per kilowatt-
23 hour of the electric utility.

24 (c) An eligible electric utility is entitled to receive power
25 cost assistance

26 (1) for sales of power to local community facilities, cal-
27 culated in the aggregate for each community served by the electric
28 utility, for actual consumption up to 55 kilowatt-hours per month for
29 each resident of the community; and

1 (2) for actual consumption up to 600 kilowatt-hours per
2 month sold to each customer in all classes served by the electric
3 utility except to customers of the electric utility under (1) of this
4 subsection.

5 (d) The amount of power cost assistance provided per kilowatt-hour
6 under (c) of this section may not exceed 95 percent of the power costs,
7 or the average rate per eligible kilowatt-hour sold, whichever is less,
8 as determined by the commission. However,

9 (1) during the fiscal year ending June 30, 1982, the power
10 costs for which power cost assistance may be paid to an electric utility
11 are limited to power costs of more than 12 cents per kilowatt-hour and
12 less than 45 cents per kilowatt-hour;

13 (2) during each following fiscal year, the costs for which
14 power cost assistance may be paid to an electric utility are limited to

15 (A) power costs that are greater than the minimum power
16 costs specified in (1) of this subsection plus two cents per
17 kilowatt-hour for the fiscal year ending June 30, 1983, plus two
18 cents per kilowatt-hour for each fiscal year thereafter; and

19 (B) power costs of less than 45 cents per kilowatt-hour;
20 and

21 (3) the power cost assistance per kilowatt-hour may be
22 determined using kilowatt hours generated for electric utilities with
23 no historical kilowatt-hour sales data.

24 (e) An electric utility whose customers receive assistance under
25 this section shall set out in its tariff the rates without the power
26 cost assistance provided in this section and the amount of power cost
27 assistance per kilowatt-hour sold. The rate charged to the customer
28 shall be the difference between the two amounts. Power cost assistance
29 paid under this section shall be used to reduce the cost of all power

1 sold to local community facilities, in the aggregate, to the extent of
2 55 kilowatt-hours per month per resident of the community, and to
3 reduce the cost of the first 600 kilowatt-hours per customer per month
4 for all other classes served by the electric utility.

5 (f) The power cost assistance program shall be administered by
6 the authority based on a determination by the commission under (b) and
7 (d) of this section of power cost assistance per kilowatt-hour for each
8 eligible electric utility.

9 (g) An eligible electric utility may not be denied power cost
10 assistance because complete cost information is not available. An
11 eligible electric utility that is exempt from rate regulation under
12 AS 42.05 shall be assisted by the commission to provide the cost infor-
13 mation the commission considers necessary to comply with the require-
14 ments of this section. Only power costs that are supportable will be
15 considered in calculating power cost assistance. Each electric utility
16 is responsible for keeping records that provide the information neces-
17 sary to comply with the requirements of this section including, but not
18 limited to, records of monthly kilowatt-hour sales or generation,
19 monthly fuel balances, fuel purchases, and monthly utility fuel consump-
20 tion.

21 (h) For each eligible electric utility, the determination of the
22 cost of fuel by the commission shall be in accordance with the procedure
23 for approving fuel cost rate adjustments of electric utilities subject
24 to rate regulation under AS 42.05.

25 (i) Each electric utility receiving power cost assistance approved
26 by the commission shall

27 (1) report monthly to the authority within the time and in
28 the form the authority requires; and

29 (2) shall include operational equipment designed to meter

1 individual utility customer power consumption and to determine and
2 record the utility's overall fuel consumption.

3 (j) The authority shall review the report required under (i)(1)
4 of this section and may submit the report to the commission for addi-
5 tional review before payment. After review and approval of the report
6 by the authority, the authority shall, subject to appropriation, pay to
7 each eligible electric utility an amount equal to the power cost assis-
8 tance per kilowatt-hour determined by the commission under (b) and (d)
9 of this section, multiplied by the number of kilowatt-hours eligible
10 for power cost assistance that were sold during the preceding month to
11 all customers of the utility in accordance with (c) of this section.
12 Payment shall be made by the authority within 30 days after receipt
13 from the utility of the report required under (i) of this section.
14 However, if there is a dispute between the authority and the utility
15 relating to the payment, the authority shall submit the report to the
16 commission for review within 30 days after its receipt by the authority.
17 When a report is submitted to the commission for review under this
18 section, payment shall be made by the authority within 30 days after
19 submission, based on a commission determination. If appropriations are
20 insufficient for payment in full, the amount paid to each electric
21 utility is reduced on a pro rata basis.

22 (k) If an electric utility receives power cost assistance under
23 this section, the utility shall either

24 (1) give the following notice to its electric service cus-
25 tomers eligible under this program for each period for which the pay-
26 ment is received:

27 NOTICE TO CUSTOMER

28 For the current billing period the utility will be paid under the
29 State of Alaska's power cost assistance program (AS 44.83.162) to

1 assist the utility and its customers in reducing the high cost of
2 generation of electric energy.

3 Your total electrical service cost \$.....

4 Less state assistance \$.....

5 Your charge \$.....; or

6 (2) give to its electric service customers a notice approved
7 by the authority, which notice provides electric service customers the
8 same information provided by the notice in (1) of this subsection.

9 (1) In order to qualify for power cost assistance, each electric
10 utility must make every reasonable effort to minimize administrative,
11 operating, and overhead costs, including using the best available
12 technology consistent with sound utility management practices. In
13 reviewing applications for power cost assistance, the commission has
14 the authority to require the elimination of duplicative or otherwise
15 unnecessary operating expenses. Each eligible electric utility shall
16 cooperate with appropriate state agencies, including but not limited to
17 the Alaska Public Utilities Commission, the Alaska Power Authority, the
18 Alaska Energy Center, and the division of energy and power development
19 in the Department of Commerce and Economic Development, to implement
20 cost-effective energy conservation measures, and to plan for and imple-
21 ment feasible alternatives to diesel generation.

22 (m) For purposes of (c) of this section, the number of residents
23 of the community equals the number of residents of the community deter-
24 mined by the Department of Community and Regional Affairs in accordance
25 with AS 29.88.015.

26 (n) In this section,

27 (1) "commission" means the Alaska Public Utilities Commis-
28 sion;

29 (2) "community facility" means a water and sewer facility,

1 public outdoor lighting, or community building whose operations are not
2 paid for by the state, the federal government, or private commercial
3 interests;

4 (3) "eligible electric utility" or "electric utility" means
5 each corporation (whether public, cooperative, or otherwise), company,
6 individual, or association of individuals, their lessees, trustees or
7 receivers appointed by a court, that owns, operates, manages, or con-
8 trols a plant or system for the furnishing, by generation, transmission
9 or distribution, of electric service to the public for compensation;

10 (4) "energy conservation measures" include weatherization
11 and other insulating methods, utilization of waste heat, appropriate
12 sizing of new generating equipment, and other programs of the state or
13 federal government intended and available for the purpose of energy
14 conservation;

15 (5) "feasible energy projects" include projects that are
16 selected after a field reconnaissance study under AS 44.33.090 and
17 after completion of a feasibility study according to the criteria in
18 AS 44.83.181 to determine cost benefit in comparison to existing power
19 generating methods and other alternatives considered in reconnaissance
20 studies;

21 (6) "fund" means the power cost assistance fund;

22 (7) "power costs" means costs used in determining the power
23 cost assistance in accordance with (b) and (d) of this section.

24 * Sec. 8. AS 44.83 is amended by adding a new section to read:

25 Sec. 44.83.163. ADJUSTMENTS TO POWER COST ASSISTANCE. (a) The
26 power cost assistance per kilowatt-hour payable to an electric utility
27 as determined under AS 44.83.162 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 lower
4 power cost;

5 (3) an adjustment is required after the authority has dis-
6 covered discrepancies in its review of monthly data submitted by the
7 electric utility; or

8 (4) the authority determines that appropriations are insuffi-
9 cient to finance full payments to eligible electric utilities.

10 (b) An electric utility that is eligible to receive power cost
11 assistance under this section and that receives power cost assistance
12 per kilowatt-hour approved by the commission shall report monthly to
13 the authority within the time and in the form the authority requires.
14 An electric utility shall report

15 (1) the power cost assistance per kilowatt-hour approved by
16 the commission;

17 (2) the total kilowatt-hours sold to each class of customer
18 during the preceding month;

19 (3) the total kilowatt-hours eligible for power cost assis-
20 tance under this section sold to each class of customer during the
21 preceding month;

22 (4) the total kilowatt-hours generated during the preceding
23 month, if available;

24 (5) any commission-approved amendments to the schedule of
25 rates in effect during the preceding month; and

26 (6) an increase or decrease in the current unit price of
27 fuel from the base price used by the commission in the determination of
28 power costs which may be expected to result in a subsequent power cost
29 assistance adjustment.

1 (c) The provisions of AS 44.83.162 relating to determination of
2 the amount of power cost assistance and payment of the assistance apply
3 to assistance under this section.

4 * Sec. 9. AS 44.83.164 is repealed and reenacted to read:

5 Sec. 44.83.164. ASSISTANCE TO UTILITIES NOT REGULATED BY PUBLIC
6 UTILITIES COMMISSION. (a) An electric utility that is not subject to
7 rate regulation by the commission may receive power cost assistance if
8 the utility is otherwise eligible for assistance under AS 44.83.162 and
9 if the utility

10 (1) files with the commission financial data necessary to
11 determine the power cost assistance per kilowatt-hour as prescribed by
12 the commission and which is in compliance with AS 44.83.162;

13 (2) reports monthly to the authority, within the time and in
14 the form the authority requires, the information required in (b) of
15 this section;

16 (3) sets rates

17 (A) that consider the power cost assistance provided
18 under AS 44.83.162 by subtracting from its revenue requirements
19 for electric services the power cost assistance per kilowatt-hour
20 that it is eligible to receive; and

21 (B) under which the power cost assistance provided in
22 AS 44.83.162 is applied as a credit only against the cost of
23 kilowatt-hours eligible for assistance under AS 44.83.162 that are
24 consumed by each customer in any month;

25 (4) allows audits that the commission determines are neces-
26 sary to insure compliance with this section; and

27 (5) furnishes its electric service customers eligible under
28 this program a notice as specified in AS 44.83.162(k).

29 (b) An electric utility that is eligible to receive power cost

1 assistance under this section shall report in accordance with (a)(2) of
2 this section

3 (1) the power cost assistance per kilowatt-hour approved by
4 the commission;

5 (2) the total kilowatt-hours sold to each class of customer
6 during the preceding month;

7 (3) the total kilowatt-hours eligible for power cost assis-
8 tance under this section sold to each class of customer during the
9 preceding month;

10 (4) the total kilowatt-hours generated during the preceding
11 month, if available;

12 (5) any amendments to the schedule of rates in effect during
13 the preceding month; and

14 (6) an increase or decrease in the current unit price of
15 fuel from the base price used by the commission in the determination of
16 power costs which may be expected to result in a subsequent assistance
17 level adjustment.

18 (c) An electric utility that is eligible to receive power cost
19 assistance under this section may have its power cost assistance per
20 kilowatt-hour determination changed by the commission if

21 (1) an increase or decrease in the electric utility's cost
22 of fuel has been verified by the commission;

23 (2) an increase in rates has occurred based on an increase
24 in costs and has been verified by the commission;

25 (3) an adjustment is required after the authority has dis-
26 covered discrepancies in its review of monthly data submitted by the
27 electric utility; or

28 (4) the authority determines that appropriations are insuffi-
29 cient to finance full payments to eligible electric utilities.

1 (d) The provisions of AS 44.83.162 relating to determination of
2 the amount of power cost assistance and payment of the assistance apply
3 to assistance under this section.

4 (e) An application for power cost assistance by an electric
5 utility that is eligible to receive power cost assistance under this
6 section does not extend the jurisdiction of the commission beyond that
7 established by AS 42.05.

8 * Sec. 10. AS 44.83.170(f)(1)(B) is amended to read:

9 (B) shall be granted at an interest rate of [NOT LESS
10 THAN] three [OR MORE THAN FIVE] percent a year on the unpaid
11 balance unless a different interest rate is provided under (i) of
12 this section;

13 * Sec. 11. AS 44.83.170(f)(2)(B) is repealed and reenacted to read:

14 (B) shall be granted at an interest rate of three
15 percent a year on the unpaid balance unless a different interest
16 rate is provided under (i) of this section.

17 * Sec. 12. AS 44.83.170 is amended by adding a new subsection to read:

18 (i) If, by July 1, 1986, the legislature has not appropriated at
19 least \$5,000,000,000 to the power project fund, beginning on that date
20 the rate of interest on loans for which the rate of interest is estab-
21 lished in (f)(1)(B) and (f)(2)(B) of this section is six percent a year
22 on the unpaid balance.

23 * Sec. 13. AS 44.83 is amended by adding a new section to read:

24 Sec. 44.83.172. ENERGY CONSERVATION. The authority shall ensure

25 (1) that communities served by energy projects built from
26 amounts appropriated to the power project fund implement cost-effective
27 energy conservation measures for residences, commercial and public
28 buildings, and industries; and

29 (2) that communities shall fulfill their responsibilities

1 under (1) of this section by cooperating with state agencies concerned
2 with development and conservation of energy, including but not limited
3 to

4 (A) the Alaska Public Utilities Commission;

5 (B) the Alaska Energy Center;

6 (C) the division of energy and power development,
7 Department of Commerce and Economic Development; and

8 (D) the division of business loans, Department of
9 Commerce and Economic Development.

10 * Sec. 14. AS 44.83.181(a, is amended to read:

11 (a) The [UNLESS THE RECONNAISSANCE STUDY HAS BEEN DISAPPROVED BY
12 THE DIVISION OF BUDGET AND MANAGEMENT UNDER AS 44.83.179, THE] authority
13 shall complete a feasibility study and plan of finance for each proposed
14 project.

15 * Sec. 15. AS 44.83.230(4) is amended to read:

16 (4) "power project" or "project" means a plant, works,
17 system, facility, water rights, fuel deposits or sources, and real
18 estate and personal property [OF ANY NATURE WHATSOEVER], together with
19 all facilities and appurtenances related to them or necessary for the
20 purposes of them, used or useful in electrical or thermal [POWER]
21 production limited to fossil fuel, wind power, tidal, geothermal,
22 hydroelectric, or solar energy production and waste energy utilization
23 and energy conservation and the transmission, purchase, sale, exchange
24 and interchange of electrical or thermal energy [POWER], and shall
25 include any interest in them, whether divided or undivided, or any
26 right to the capacity of them;

27 * Sec. 16. AS 44.83.230(7) is repealed and reenacted to read:

28 (7) "reconnaissance study" means a field reconnaissance
29 study report completed by the office of energy management, Department

1 of Commerce and Economic Development, in accordance with AS 44.33.090;
2 * Sec. 17. AS 43.20.037(d)(1)(B)(ii) is amended to read:

3 (ii) a method of architectural design and construc-
4 tion which provides for the collection, storage and use of
5 direct radiation from the sun or which provides for the re-
6 tention of heat by the use of an amount or quality of insula-
7 tion which exceeds the amount or quality of insulation re-
8 quired by building performance standards adopted by the
9 Alaska Energy Center under AS 46.12.120; and

10 * Sec. 17. AS 44.33 is amended by adding new sections to read:

11 ARTICLE 2. ENERGY CONSERVATION AND MANAGEMENT [POWER DEVELOPMENT].

12 Sec. 44.33.031. DIVISION OF ENERGY CONSERVATION. The division of
13 energy conservation is established in the Department of Commerce and
14 Economic Development. The division is established to promote and
15 encourage the efficient use of energy resources for residential, commer-
16 cial, industrial and public uses in the state.

17 Sec. 44.33.041. DUTIES OF DIVISION. The division of energy
18 conservation shall

19 (1) establish and administer regional and local technical
20 assistance programs to encourage and assist municipalities, communi-
21 ties, and the public to develop and use energy conservation measures
22 and alternative energy systems;

23 (2) establish and maintain an energy information and techni-
24 cal assistance office to collect and publish current information con-
25 cerning energy conservation measures, alternative energy systems, and
26 state and federal energy laws, regulations and programs;

27 (3) administer the state energy audit program (AS 46.11.030);

28 (4) by regulation adopted in accordance with the Administra-
29 tive Procedure Act (AS 44.62), establish and implement a training and

1 certification program for persons who perform energy audits;

2 (5) by regulation, adopt and revise as necessary thermal and
3 lighting energy standards applicable to buildings and structures other
4 than public facilities;

5 (6) for purposes of program implementation, determine whether
6 a device qualifies as an alternative energy system or an energy conser-
7 vation improvement;

8 (7) from money appropriated by the legislature,

9 (A) make grants to school districts and regional educa-
10 tional attendance areas to plan, develop, and implement standards
11 for the design, construction, and operation of rural educational
12 facilities and energy conservation measures for rural educational
13 facilities;

14 (B) make grants for recipients eligible for grants from
15 the United States Department of Energy under the appropriate
16 technology small grants program for Alaska authorized by Title I
17 of the Department of Energy Appropriation Authorization Act of
18 1977, P.L. 95-39 (42 U.S.C. 5907a) and 10 C.F.R. 470;

19 (8) administer the energy conservation assistance program
20 established by AS 46.13.100;

21 (9) administer the bulk fuel revolving loan fund (AS 45.87);

22 (10) administer the bulk fuel storage facilities grant program
23 (AS 44.33.100).

24 * Sec. 19. AS 44.33 is amended by adding new sections to article 2 to
25 read:

26 Sec. 44.33.070. OFFICE OF ENERGY MANAGEMENT. The office of
27 energy management is established in the Department of Commerce and
28 Economic Development. The office is established to encourage, promote,
29 and assist the orderly development of the state's resources to meet the

1 present and future energy needs of the state and its people at the
2 lowest reasonable cost.

3 Sec. 44.33.075. DUTIES OF OFFICE. The office of energy manage-
4 ment shall

5 (1) collect, publish, and distribute data and information
6 relating to the use of energy resources in the state;

7 (2) promote and assist in establishing and implementing
8 regional and local energy planning programs;

9 (3) with the assistance of the Alaska Power Authority,
10 prepare and maintain a plan for the orderly development of state energy
11 resources in accordance with AS 44.33.095;

12 (4) undertake and prepare reports of field reconnaissance
13 studies to identify and evaluate the present and future energy needs in
14 accordance with AS 44.33.090;

15 (5) after consulting with the Alaska Power Authority, adopt
16 regulations

17 (A) establishing procedures to obtain the information
18 required to prepare reports of field reconnaissance studies under
19 AS 44.33.090; and

20 (B) defining criteria and measures for comparative
21 analysis of alternative energy sources;

22 (6) review feasibility studies of the Alaska Power Authority
23 to determine whether the completed studies are consistent with the plan
24 prepared in accordance with AS 44.33.095;

25 (7) provide technical support for the department in matters
26 relating to energy and coordinate policies, programs, and budgets of
27 the department which relate to energy.

28 Sec. 44.33.080. COOPERATION WITH AGENCIES. In carrying out its
29 duties, the office of energy management shall cooperate with and coor-

1 dinate its activities with those federal and state agencies which are
2 responsible for the development, use, and conservation of the natural
3 resources in the state, and shall enter into formal cooperative rela-
4 tions with the Alaska Energy Center, the Alaska Power Authority, the
5 Alaska Royalty Oil and Gas Development Advisory Board, the Alaska
6 Public Utilities Commission, the Department of Natural Resources, the
7 Department of Transportation and Public Facilities and with other state
8 agencies directly involved with the development, use, and conservation
9 of the state's energy resources.

10 Sec. 44.33.085. EMPLOYMENT OF PERSONNEL. Persons employed by the
11 office of energy management are in the partially exempt service.

12 Sec. 44.33.090. PREPARATION OF FIELD RECONNAISSANCE STUDY REPORTS.
13 (a) To identify power project alternatives and energy needs and con-
14 sumption patterns for a community, the office of energy management
15 shall, after consultation with other state agencies and after review of
16 information on alternative sources of power, complete a field reconnais-
17 sance study for each proposed new power project. A field reconnaissance
18 study prepared by the office of energy management shall

19 (1) identify the present and future demand for energy by
20 end-use within a community or region;

21 (2) survey all energy sources that are available to a com-
22 munity or region and evaluate and make recommendations concerning the
23 relative economic merits of alternative energy sources and of energy
24 conservation methods that will help to meet projected energy demand;

25 (3) assess the effect of the development of alternative
26 energy sources on the environment to determine that there are no adverse
27 effects which would make a proposed project involving local energy
28 sources inadvisable;

29 (4) include public comments from residents of the community

1 or region that is the subject of the field reconnaissance study.

2 (b) The office of energy management shall adopt regulations
3 defining

4 (1) the methods that it shall apply to determine that the
5 information required by (a) of this section is obtained; and

6 (2) standard criteria and measures for comparative analysis
7 of alternative energy sources.

8 (c) In completing a field reconnaissance study, the office of
9 energy management shall consult with the Alaska Power Authority and
10 with the Alaska Energy Center to determine the information that each
11 may require for energy planning and the development of technology.

12 (d) Each field reconnaissance study completed in accordance with
13 this section shall become part of the energy development plan provided
14 for under AS 44.33.095.

15 Sec. 44.33.095. ENERGY DEVELOPMENT PLAN. (a) The office of
16 energy management shall develop an energy development plan for the
17 state. The plan shall address the orderly development of state energy
18 resources for the purpose of providing energy to meet present and
19 anticipated energy needs of the citizens of the state by providing
20 energy at the lowest reasonable cost.

21 (b) The energy development plan shall be amended and revised as
22 the office of energy management determines necessary to meet changing
23 state energy requirements and circumstances. The plan, and any revisions
24 to it, shall be submitted annually by the office of energy management
25 to the heads of the principal departments of the executive branch
26 for review. When the heads of the principal departments of the executive
27 branch have completed review of the energy development plan, the
28 plan shall be submitted by the office of energy management to the
29 governor for his approval. A plan approved by the governor shall be

1 transmitted by him to the legislature not later than February 1 each
2 year.

3 (c) The energy development plan, and any revisions to it, shall
4 include:

5 (1) an end-use component that examines and reports on the
6 nature and amount of energy used and the purpose of its use;

7 (2) a data base component that describes and explains the
8 energy resources and applicable energy technologies that are available
9 to meet present and projected energy demands;

10 (3) an energy development component for meeting projected
11 thermal, electrical, and transportation energy needs in the state at
12 the lowest reasonable cost, including environmental and social costs,
13 consistent with acceptable standards of reliability, giving an equal
14 consideration as practicable to all types of energy sources (except
15 those based on nuclear fuels) which are technologically feasible, and
16 which promote the efficient use of facilities and fuels consistent with
17 energy conservation goals;

18 (4) an energy conservation component that includes but is
19 not limited to an enumeration of energy conservation goals for reducing
20 use of energy, identifying the region for which a goal is applicable,
21 the source or type of energy to which the goal is applicable, and the
22 specific methods or means of achieving the goals within a region;

23 (5) an energy emergency preparedness component that includes
24 specific energy emergency conservation measures that apply during times
25 of emergencies; and

26 (6) a component that reports on subjects for research,
27 development, and demonstration projects which involve alternative
28 energy systems, local energy sources, and energy conservation.

29 Sec. 44.33.100. BULK FUEL STORAGE FACILITIES GRANT FUND. (a)

1 There is established in the Department of Commerce and Economic Develop-
2 ment the bulk fuel storage facilities grant fund. Grants may be made
3 by the department from this fund to a community to acquire and install
4 community bulk storage facilities.

5 (b) Grants made under this section for the acquisition and instal-
6 lation of a bulk fuel storage facility may not exceed \$100,000 per
7 community.

8 (c) If the governing body of two or more communities determine
9 that their fuel requirements may be served by a single bulk fuel storage
10 facility, the communities may jointly apply for grants to acquire and
11 install a single bulk fuel storage facility. When communities apply
12 jointly under this subsection, the limitation in (b) of this section is
13 multiplied by the number of communities which submit the joint applica-
14 tion.

15 (d) Before a grant is made under this section, the city council
16 or, if the community is not incorporated, a responsible representative
17 body in the community shall agree in writing to maintain and operate
18 the bulk storage facility to be constructed with the proceeds of the
19 grant.

20 * Sec. 20. AS 39.25.120 is amended by adding a new paragraph to read:

21 (19) employees of the office of energy management (AS 44.33.-
22 070).

23 * Sec. 21. AS 44.47.140 is amended to read:

24 Sec. 44.47.140. LIMITATIONS. The annual cost of a [A] program of
25 the department under AS 44.47.130 in a rural area may not exceed \$40,000
26 [IN A COST A YEAR, EXCEPT THAT A GRANT OF NOT MORE THAN \$60,000 MAY BE
27 MADE UNDER AS 44.47.145 FOR A BULK FUEL STORAGE FACILITY].

28 * Sec. 22. AS 45.88.500(2)(B) is repealed and reenacted to read:

29 (B) a method of architectural design and construction

1 that

2 (i) provides for the collection, storage and use
3 of direct radiation from the sun; or

4 (ii) provides for the retention of heat by the use
5 of an amount or quality of insulation which exceeds the
6 amount or quality of insulation required by building perform-
7 ance standards adopted by the Alaska Energy Center; and

8 * Sec. 23. AS 46.11.030(c) is amended to read:

9 (c) The department may contract

10 (1) with a municipality for the performance of energy audits
11 in the municipality;

12 (2) with a nonprofit corporation for the performance of
13 energy audits in any community that the nonprofit corporation serves;

14 (3) with a public or private electric utility for the per-
15 formance of energy audits.

16 * Sec. 24. AS 46.11 is amended by adding new sections to read:

17 . . . Sec. 46.11.032. CLASSIFICATION OF AUDITS. In establishing stan-
18 dards for energy audits of residences under AS 46.11.030(a), the depart-
19 ment shall provide criteria for performance of

20 (1) abbreviated audits that

21 (A) identify the energy conservation improvements
22 defined in AS 46.13.190(4) which are appropriate to the residence;

23 (B) identify other low-cost improvements which a resi-
24 dent may make to conserve energy;

25 (C) advise the resident of possible conservation prac-
26 tices; and

27 (D) recommend areas to be analyzed in a detailed energy
28 audit;

29 (2) detailed audits that

- 1 (A) analyze building characteristics;
- 2 (B) evaluate the applicability of structural retrofit,
3 upgrading, and the replacement of energy systems with alternative
4 energy systems;
- 5 (C) recommend appropriate alternative energy systems
6 for the residence; and
- 7 (D) provide to the resident an estimate of the costs to
8 implement the recommended measures, and an estimate of the time in
9 which the estimated cost of the energy saved by implementation of
10 the recommended measures exceeds the cost of implementing the
11 recommended measures.

12 Sec. 46.11.034. FEES AND PAYMENTS FOR ENERGY AUDIT. (a) The fee
13 for an energy audit may not be set by the state.

14 (b) The department shall reimburse a person who performs an
15 abbreviated energy audit of a residence in the state. The reimburse-
16 ment for the energy audit may not exceed the lesser of the cost of the
17 audit or \$50 adjusted by a regional cost-of-living and inflation index
18 determined by the department.

19 (c) For purposes of this section, a regional cost-of-living index
20 is determined by calculating the cost of living in each region of the
21 state by using the annually adjusted cost of living in Anchorage as a
22 base of 1.00.

23 * Sec. 25. AS 46.11.900(1)(B)(ii) is amended to read:

24 (ii) a method of architectural design and construc-
25 tion which provides for the collection, storage and use of
26 direct radiation from the sun or which provides for the re-
27 retention of heat by the use of an amount or quality of insula-
28 tion which exceeds the amount or quality of insulation re-
29 quired by building performance standards adopted by the

1 Alaska Energy Center under AS 46.12; and

2 * Sec. 26. AS 46.11.900(3) is amended to read:

3 (3) "energy audit" means a determination and written summary
4 prepared under AS 46.11.030 or sec. 215(b)(1)(A) of the National Energy
5 Conservation Policy Act (42 U.S.C. 8216(b)(1)(A)) of

6 [(A) THE ENERGY CONSUMPTION CHARACTERISTICS OF A BUILD-
7 ING, INCLUDING THE SIZE, TYPE, AND RATE OF ENERGY CONSUMPTION OF
8 MAJOR ENERGY CONSUMING SYSTEMS OF THE BUILDING AND THE CLIMATE
9 CHARACTERIZING THE REGION WHERE THE BUILDING IS LOCATED; AND

10 (B)] the energy [CONSERVATION AND COST] savings likely
11 to result from appropriate energy-conserving maintenance and
12 operating procedures and modifications, including the purchase and
13 installation of energy-related fixtures; [FOR PURPOSES OF THIS
14 SUBPARAGRAPH WHEN A FOSSIL FUEL IS THE ENERGY SOURCE, THE ENERGY
15 COST SAVINGS SHALL BE DETERMINED WITH REFERENCE TO THE PROJECTED
16 PRICE OF THAT FOSSIL FUEL OVER A 10-YEAR PERIOD;]

17 * Sec. 27. AS 46.12.010 is amended to read:

18 Sec. 46.12.010. ALASKA ENERGY CENTER ESTABLISHED. There is
19 established the Alaska Energy Center. The center is a public corpora-
20 tion of the state. It is an instrumentality of the state in the Depart-
21 ment of Commerce and Economic Development [ADMINISTRATION], but has a
22 legal existence independent of and separate from the state. Exercise
23 by the center of the powers conferred by this chapter is an essential
24 governmental function of the state.

25 * Sec. 28. AS 46.12.120 is amended by adding a new paragraph to read:

26 (6) adopt building energy performance standards for
27 (A) public facilities of the state; and
28 (B) residences, commercial and industrial buildings,
29 and other privately owned buildings in the state for which alterna-

1 tive energy system and energy conservation improvement loans may
2 be made under AS 46.13 or for which an energy conservation credit
3 is sought under AS 43.20.037.

4 * Sec. 29. AS 46 is amended by adding a new chapter to read:

5 CHAPTER 13. ENERGY CONSERVATION AND DEVELOPMENT.

6 ARTICLE 1. ENERGY CONSERVATION REFUNDS AND GRANTS.

7 Sec. 46.13.010. FUND ESTABLISHED. There is established in the
8 Department of Commerce and Economic Development the residential energy
9 conservation grant fund to carry out the purposes of AS 46.13.010 -
10 46.13.099. Refunds and grants made under AS 46.13.010 - 46.13.099 may
11 be used to purchase, construct, and install an energy conservation
12 improvement in residential buildings. The fund may be used for no
13 other purpose.

14 Sec. 46.13.020. REFUNDS AND GRANTS. (a) The department may
15 make refunds or grants for the purchase, construction, and installation
16 of an energy conservation improvement in a residential building if the
17 energy conservation improvement is recommended in an abbreviated energy
18 audit under AS 46.11.032.

19 (b) A refund or grant made under this section may not exceed an
20 amount determined by the department by application of each of the
21 factors set out in (c) of this section to the base rate applicable to
22 the dwelling or residential building. The base rate is

23 (1) \$300 for a single-family dwelling; or

24 (2) \$200 for each unit in a multi-unit residential building.

25 (c) In making a refund or grant under this section, the depart-
26 ment shall determine the amount of a refund or grant payable under (a)
27 of this section by adjusting the base rate set out in (b) of this
28 section by

29 (1) a regional cost-of-living index determined by the depart-

1 ment;

2 (2) a degree day factor.

3 Sec. 46.13.099. DEFINITIONS. In AS 46.13.010 - 46.13.099,

4 (1) "degree day" means a unit that represents one degree of
5 declination from 65 degrees Fahrenheit in the mean outdoor temperature
6 of a day;

7 (2) "degree day factor" means the factor determined by
8 dividing the average number of degree days for the community in which a
9 dwelling or residential building is located by the average number of
10 degree days for the state;

11 (3) "energy audit" means a determination and written summary
12 prepared under AS 46.11.030 - 46.11.032 or sec. 215(b)(1)(A) of the
13 National Energy Conservation Policy Act (42 U.S.C. 8216(b)(1)(A)) of
14 the energy savings likely to result from appropriate energy-conserving
15 maintenance and operating procedures and modifications, including the
16 purchase and installation of energy-related fixtures;

17 (4) "energy conservation improvement" means

18 (A) structural insulation;

19 (B) storm and thermal windows and doors;

20 (C) a furnace replacement burner designed to achieve a
21 reduction in the amount of fuel consumed as a result of increased
22 combustion efficiency;

23 (D) a device for modifying flue openings designed to
24 increase the efficiency of operation of the heating system;

25 (E) an electrical or mechanical furnace ignition system
26 that replaces a gas pilot light;

27 (F) an automatic energy-saving setback thermostat;

28 (G) a meter that displays the cost of energy usage;

29 (H) caulking and weatherstripping of doors and windows;

1 (I) insulating shades and shutters;
2 (J) air and water recuperators;
3 (K) electrical outlet insulating gaskets;
4 (L) water heater insulating jacket;
5 (M) shower flow reducer;
6 (N) any other energy-saving device approved by the
7 commissioner of commerce and economic development under AS 44.33.-
8 041(6);

9 (5) "regional cost-of-living index" is an index determined
10 by calculating the cost of living in each region of the state by using
11 the cost of living in Anchorage as a base of 1.00;

12 (6) "residential building" means a building that is used as
13 a home, dwelling, or sleeping place and includes a newly constructed
14 building and a building proposed for construction as well as an existing
15 structure.

16 ARTICLE 2. ENERGY CONSERVATION ASSISTANCE.

17 Sec. 46.13.100. ENERGY CONSERVATION ASSISTANCE. The department
18 may make a grant to an individual, municipality, or nonprofit corpora-
19 tion to install an energy conservation improvement in a building or
20 dwelling

21 (1) in which an individual who receives low income resides;
22 or

23 (2) in a community
24 (A) that has a population of less than 600;
25 (B) that does not have year-round surface transporta-
26 tion; and

27 (C) that lacks the goods and services necessary for
28 installation of energy conservation improvements.

29 Sec. 46.13.110. LIMITATION ON GRANT. A grant under AS 46.13.100

1 may not exceed \$3,000.

2 Sec. 46.13.120. STANDARDS. The department shall by regulation
3 establish

4 (1) income standards for individuals who are eligible for
5 assistance under AS 46.13.100 - 46.13.140 based on poverty guidelines
6 provided by the federal Office of Management and Budget adjusted to
7 Alaska and regional conditions by United States Department of Labor
8 statistics and a cost-of-living index;

9 (2) eligibility requirements for contractors of the grantee
10 who install energy conservation improvements;

11 (3) the energy conservation improvements that may be made
12 under AS 46.13.100 - 46.13.140;

13 (4) the amount of assistance that may be provided to an
14 individual under AS 46.13.100 - 46.13.140 considering

15 (A) the estimated life of the housing unit;

16 (B) prior energy conservation improvements made to the
17 housing unit;

18 (C) the cost effectiveness of any proposed improvements
19 that are made to conserve energy;

20 (D) costs of materials and transportation of materials;
21 and

22 (E) the availability of other financial resources for
23 energy conservation in the building or dwelling.

24 Sec. 46.13.130. LIMITATION ON ASSISTANCE. If an energy conserva-
25 tion improvement in a building or dwelling is financed by a refund or
26 grant made under AS 46.13.010 - 46.13.099, a low-income individual who
27 later resides in the building or dwelling may receive assistance under
28 AS 46.13.100 - 46.13.140 for other energy conservation improvements.
29 However,

1 (1) only one grant may be made under AS 46.13.100 - 46.13.140
2 for each building or dwelling; and

3 (2) when a grant is given for a building or dwelling under
4 AS 46.13.100 - 46.13.140, the owner of the building or dwelling may not
5 obtain a refund or grant under AS 46.13.010 - 45.13.099.

6 Sec. 46.13.140. AUDIT. A grant may not be made under AS 46.13.-
7 100 - 46.13.140 unless an abbreviated energy audit is completed and the
8 audit recommends an energy conservation improvement.

9 ARTICLE 10. GENERAL PROVISIONS.

10 Sec. 46.13.900. DEFINITION. In this chapter, "department" means
11 the Department of Commerce and Economic Development.

12 * Sec. 30. The following laws are repealed: AS 44.33.030, 44.33.040,
13 44.33.050, 44.33.060; AS 44.47.130(7), 44.47.145; AS 44.83.177, 44.83.179,
14 44.83.224; AS 46.11.030(d) and (e); and secs. 51 and 54, ch. 83, SLA 1980.

15 * Sec. 31. AS 44.83.162 and 44.83.164 are repealed.

16 * Sec. 32. APPLICABILITY OF ACT TO DIRECTORS. (a) The terms of office
17 of all members of the Board of Directors of the Alaska Power Authority
18 serving on the effective date of this section terminate on the effective
19 date of this section.

20 (b) The governor shall appoint three directors of the Alaska Power
21 Authority at large. When making his appointments under this subsection, the
22 governor shall appoint persons to serve in accordance with AS 44.83.030(1)
23 and shall specify the length of the term of office of each member he
24 appoints. Of the members at large first appointed by the governor under
25 this subsection,

26 (1) one member shall serve a two-year term;

27 (2) one member shall serve a three-year term;

28 (3) one member shall serve a four-year term.

29 * Sec. 33. TRANSITIONAL PROVISIONS, POWER COST ASSISTANCE. (a) The

1 Alaska Power Authority shall make payments to eligible electric utilities in
2 accordance with AS 44.83.162 as that section read before its repeal and
3 reenactment by sec. 7 of this Act, until the earlier of

4 (1) January 1, 1982; or

5 (2) the date on which the Alaska Power Authority determines, with
6 respect to the electric utility, that

7 (A) the electric utility has had sufficient time to apply
8 for power cost assistance under AS 44.83.162 as that section is re-
9 enacted in sec. 7 of this Act, and the Alaska Public Utilities Commis-
10 sion has had sufficient time to review the application; or

11 (B) the Alaska Power Authority or the Alaska Public Utilities
12 Commission determines that the electric utility is not eligible for
13 power cost assistance under AS 44.83.162 as that section is reenacted
14 in sec. 7 of this Act.

15 * Sec. 34. LOAN INTEREST RATES. (a) Subject to (b) of this section,
16 beginning July 1, 1981, the rate of interest for each of the following loans
17 is three percent a year on the unpaid balance:

18 (1) the sum of \$450,000, part of the general fund appropriation
19 made to the water resources revolving loan fund by sec. 1, ch. 237, SLA
20 1976, and loaned from the water resources revolving loan fund to the City
21 and Borough of Sitka for the Green Lake power project;

22 (2) the sum of \$1,600,000, the general fund appropriation made to
23 the Department of Revenue by sec. 1(1), ch. 152, SLA 1977, as a loan to the
24 City and Borough of Sitka for the Green Lake hydroelectric project;

25 (3) the sum of \$7,000,000, the general fund appropriation made to
26 the Department of Revenue by sec. 2, ch. 111, SLA 1978, as a loan to the
27 City and Borough of Sitka for the Green Lake hydroelectric project;

28 (4) the sum of \$200,000, an allocation within an appropriation
29 made from the renewable resources development fund to the power project fund

1 of the Alaska Power Authority by sec. 2, ch. 54, SLA 1980, and loaned to the
2 Kodiak Electric Association for the Port Lions power project;

3 (5) the sum of \$420,000, part of the general fund appropriation
4 made to the water resources revolving loan fund by sec. 1, ch. 237, SLA
5 1976, and loaned to Ketchikan Public Utilities for the Swan Lake power
6 project;

7 (6) the sum of \$200,000, part of the general fund appropriation
8 made to the power project revolving loan fund by sec. 1(2), ch. 152, SLA
9 1977, and part of the general fund appropriation made to the power project
10 revolving fund by sec. 1, ch. 111, SLA 1978, and loaned to Ketchikan Public
11 Utilities for the Swan Lake power project;

12 (7) the sum of \$135,000, part of the general fund appropriation
13 made to the power project revolving loan fund by sec. 1(2), ch. 152, SLA
14 1977, and part of the general fund appropriation made to the power project
15 revolving fund by sec. 1, ch. 111, SLA 1978, and loaned to Ketchikan Public
16 Utilities for the Swan Lake power project;

17 (8) the sum of \$18,000,000, an allocation within an appropriation
18 made from the renewable resources development fund to the power project fund
19 of the Alaska Power Authority by sec. 2, ch. 54, SLA 1980, and loaned from
20 the power project fund to Ketchikan Public Utilities for the Swan Lake power
21 project;

22 (9) the sum of \$420,000, part of the general fund appropriation
23 made to the water resources revolving loan fund by sec. 1, ch. 237, SLA
24 1976, and loaned from the water resources revolving loan fund to the Kodiak
25 Electric Association for the Terror Lake power project;

26 (10) the sum of \$100,000, part of the general fund appropriation
27 made to the power project revolving loan fund by sec. 1(2), ch. 152, SLA
28 1977, and part of the general fund appropriation made to the power project
29 revolving fund by sec. 1, ch. 111, SLA 1978, and loaned to Kodiak Electric

1 Association for the Terror Lake power project;

2 (11) the sum of \$1,050,000, an allocation within an appropriation
3 made from the renewable resources development fund to the power project fund
4 of the Alaska Power Authority by sec. 2, ch. 54, SLA 1980, and loaned to
5 Kodiak Electric Association for the Terror Lake hydroelectric project;

6 (12) the sum of \$120,000, part of the general fund appropriation
7 made to the power project revolving loan fund by sec. 1(2), ch. 152, SLA
8 1977, and part of the general fund appropriation made to the power project
9 revolving fund by sec. 1, ch. 111, SLA 1978, and loaned to the Thomas Bay
10 Power Authority for the Tyee Lake project.

11 (b) If, by July 1, 1986, the legislature has not appropriated at least
12 \$5,000,000,000 to the power project fund, beginning on that date the rate of
13 interest on the loans set out in (a) of this section is six percent a year
14 on the unpaid balance.

15 * Sec. 35. Sections 1 - 30 and 32 - 34 of this Act take effect July 1,
16 1981.

17 * Sec. 36. Section 31 of this Act takes effect July 1, 1992.



ALASKA STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

Pouch Y, State Capitol
Juneau, Alaska 99811
(907) 465-3991

June 2, 1981

MEMORANDUM

TO: Members of the House Finance Committee

FROM: Alexander Hoke and Jack Kreinheder
Research Staff *AH* *JK*

RE: Analysis of SB 25 and SB 26 Hydro Legislation
Research Request No. 81-152

We have prepared two sets of computer printouts, which are enclosed, that summarize our analysis of the House Resources CS for SB 25 and the latest House Finance workdraft CS for SB 26. The first set of tables shows the expenditures and opportunity costs of these expenditures for power projects included in the SB 26 workdraft. In the second set, funding for construction of the Susitna project is added to demonstrate the effect of Susitna funding on other power projects and the total cost to the state for all projects.

The first printout of each set shows the total expenditures and opportunity costs for each power project over the period from FY 1982 to FY 2001, while the second printout presents a breakdown of these figures by each fiscal year in this period. The first column of each printout shows the planned expenditures for each project or fiscal year. It is important to note that these expenditures represent the full costs of each project, which for Bradley Lake and Solomon Gulch are higher than the amounts appropriated in SB 26.

Column 2 displays the net annualized cost, or opportunity cost, to the State of these expenditures, which we have calculated as the difference between the market rate of return available to the State (including payback of principal, as well as interest), and the actual return from the power projects. For example, the Bradley Lake project has a total cost in 1981 dollars of about \$200 million. The net annualized cost of this expenditure over the period from from FY 1982 to FY 2001 in the noSusitna case is about \$155.4 million. This figure is the difference between the amount which the State could receive each year from a loan or bond investment at an 11 percent market rate of interest, and the amount which the State would receive from the "equity return" on hydro projects specified in the House Resources CS for SB 25.

The Resources CS for SB 25 provides that this equity rate of return is 5 percent through 1986. If the legislature has not appropriated at least \$5 billion to the power development fund by FY 1986, in other

Members of the House Finance Committee
June 2, 1981
Page 3

In Figure 5, we have projected the assistance available under the Power Cost Assistance program between FY 1982 and FY 1992 at several levels of power costs. This chart assumes a 5 percent annual increase in power costs, which is equivalent to a 10 percent annual increase in the cost of fuel.

Although not included with this memorandum, we have also prepared a set of tables which show the expenditures and costs for each project for each fiscal year. We can provide these tables if this more detailed breakdown is necessary.

We hope this information is useful. If you have any questions or would like additional information, please let us know.

Enclosures

JK/bf

words if Susitna or another major project is not constructed, the equity return to the State would increase from 5 percent to 10 percent, thereby reducing the opportunity costs to the State (but also increasing power prices).

If Susitna or another major project is developed, the opposite effect would occur. The bill states that when 500 megawatts of generation capacity have been developed, the return to the State from the power projects will be reduced from 5 percent to a level which covers only operations and maintenance costs and other expenses. The opportunity costs to the State would therefore increase at this time. We have assumed that the 500 megawatt threshold would be reached in 1993 in the Susitna case.

Column three of the printouts converts the net annualized cost to the State into present value terms (as of 1981). The discount rate used for this conversion is 10.24 percent, which is the average inflation rate in Anchorage over the past five years, according to the Consumer Price Index.

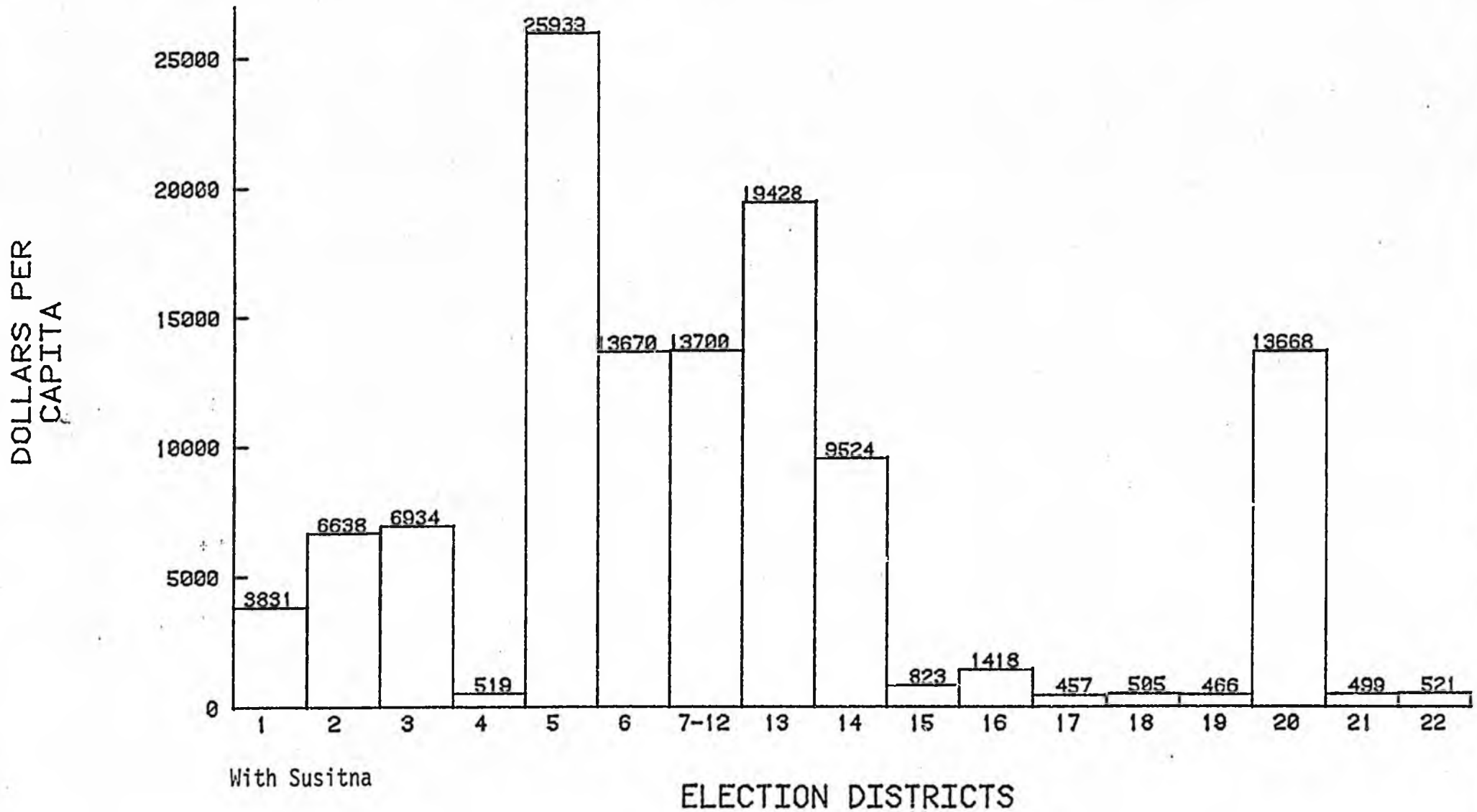
It is important to note that we have analyzed the opportunity costs of power project expenditures only through 2001. These opportunity costs would be substantially higher than those presented here if the analysis covered the full life of the power projects. Legislative Finance has done a long-term cost analysis which demonstrates this point.

The second set of three columns presents the information discussed above in terms of the expenditure and cost per power consumer to be served by each power project. In some cases where the actual number of consumers was not readily available, we used an estimate based on the average ratio of power customers to population for communities throughout the State. The third set of columns shows expenditures and costs on a per capita basis, based on the 1980 census population figures.

We have also enclosed five graphs which illustrate the information contained in the printouts. Figure 1 shows the per capita distribution of the SB 26 power project funding by election district in the no-Susitna case. Figure 2 shows the same distribution with Susitna construction funding included. In Figure 3, the expenditures, net annualized costs, and present value costs for the no-Susitna case are charted. This graph corresponds to the first three columns of the first computer printout. Figure 4 shows the same expenditures and costs with Susitna included, demonstrating the proportion of these costs which are attributable to the Susitna project.

PER CAPITA DISTRIBUTION OF SB 26 POWER FUNDING (H. FINANCE DRAFT)

FIGURE 2

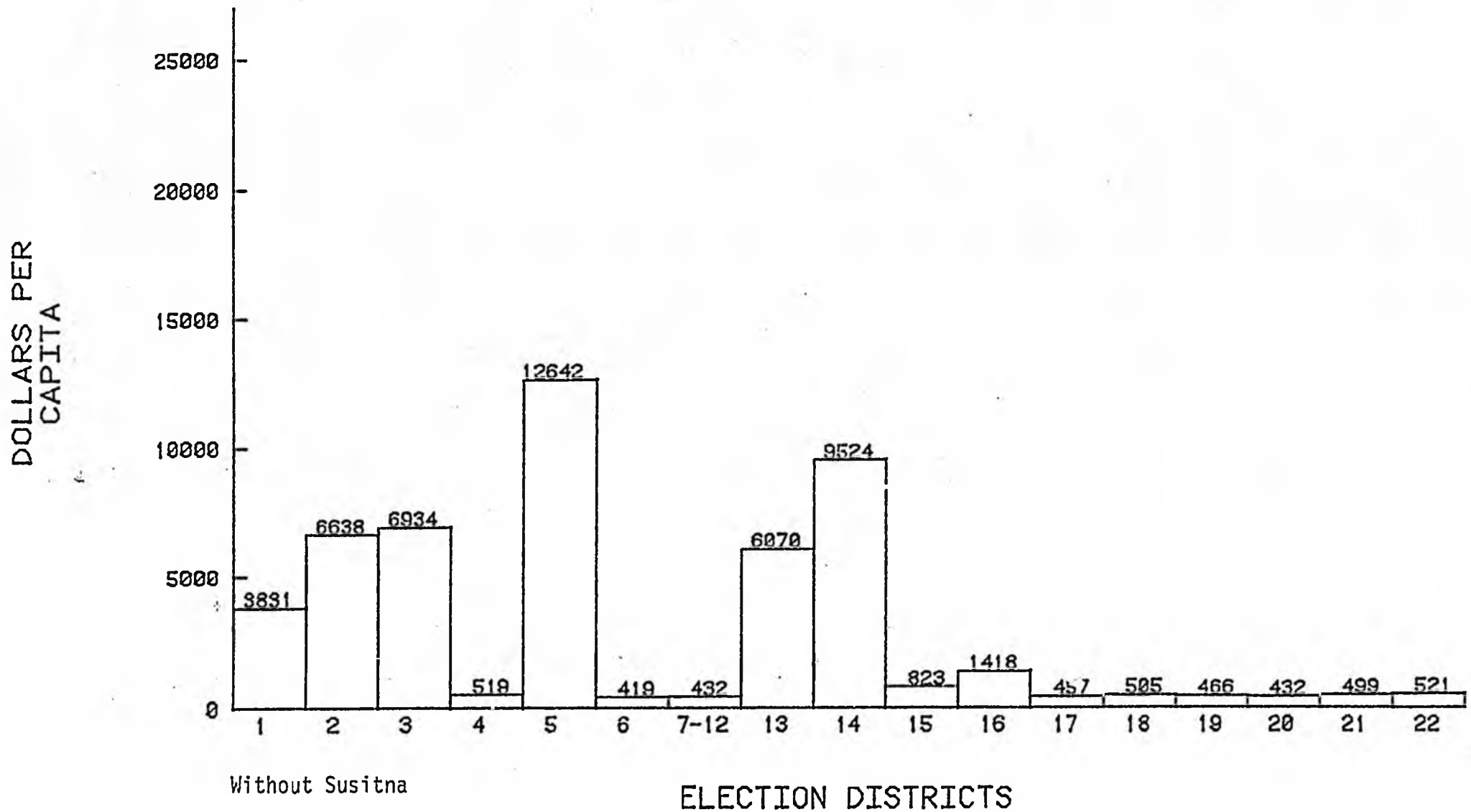


With Susitna

ELECTION DISTRICTS

PER CAPITA DISTRIBUTION OF SB 26 POWER FUNDING (H. FINANCE DRAFT)

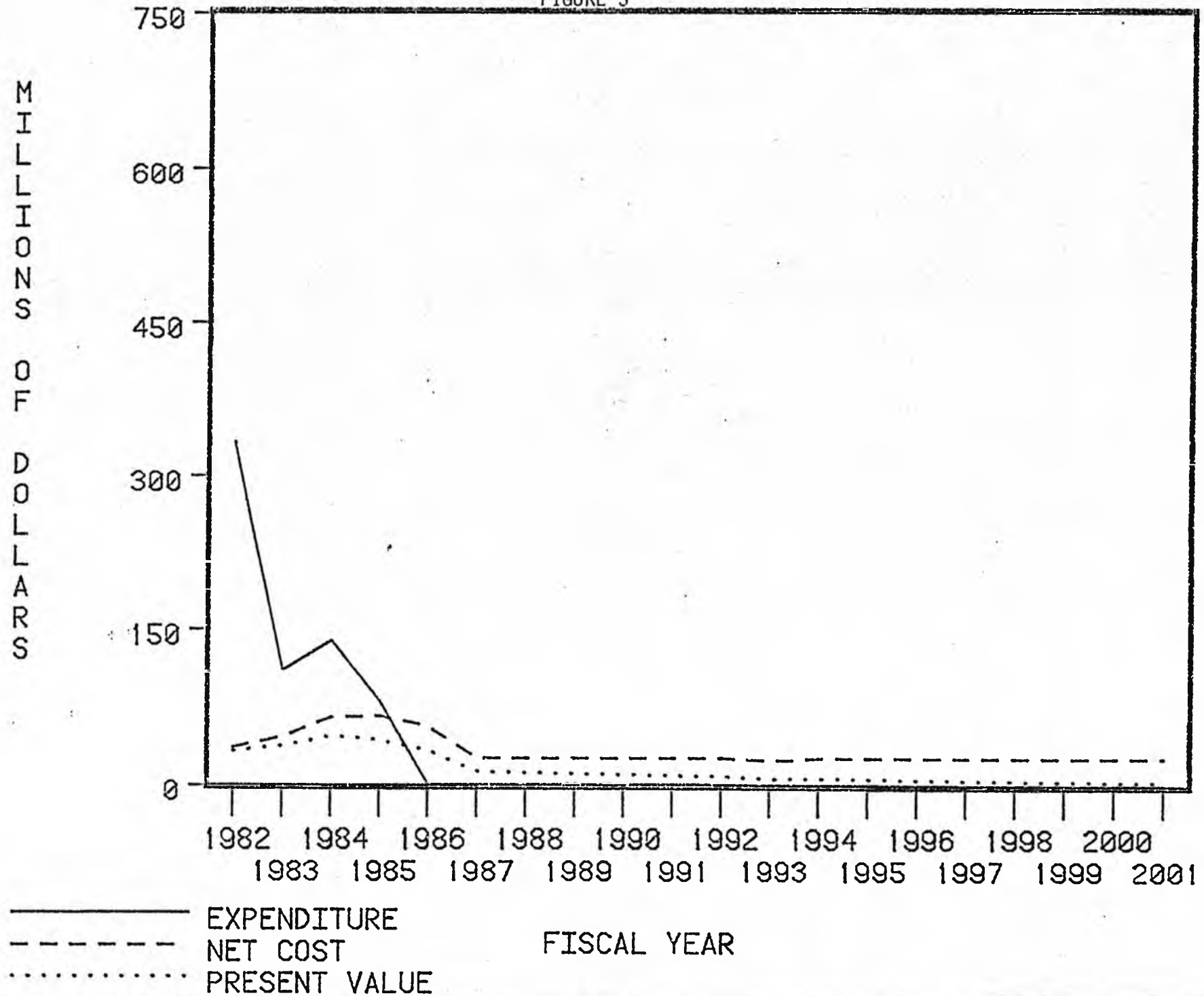
FIGURE 1



PREPARED BY:
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

HYDRO FINANCING ANALYSIS - SB 26 (H. RESOURCES VERSION)
ASSUMES NO FUNDING FOR SUSITNA PROJECT

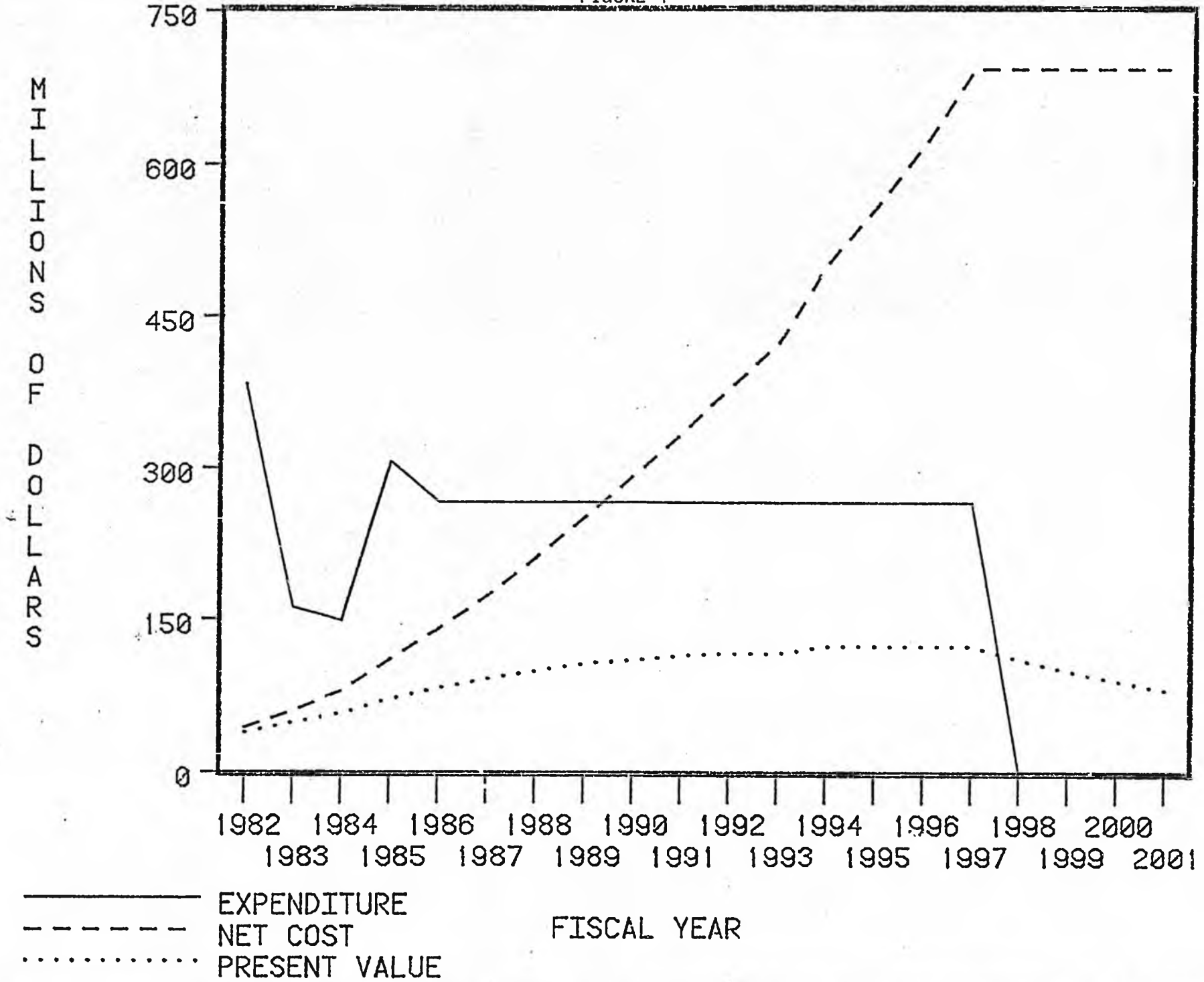
FIGURE 3



HYDRO FINANCING ANALYSIS - SB 26 (H. RESOURCES VERSION)

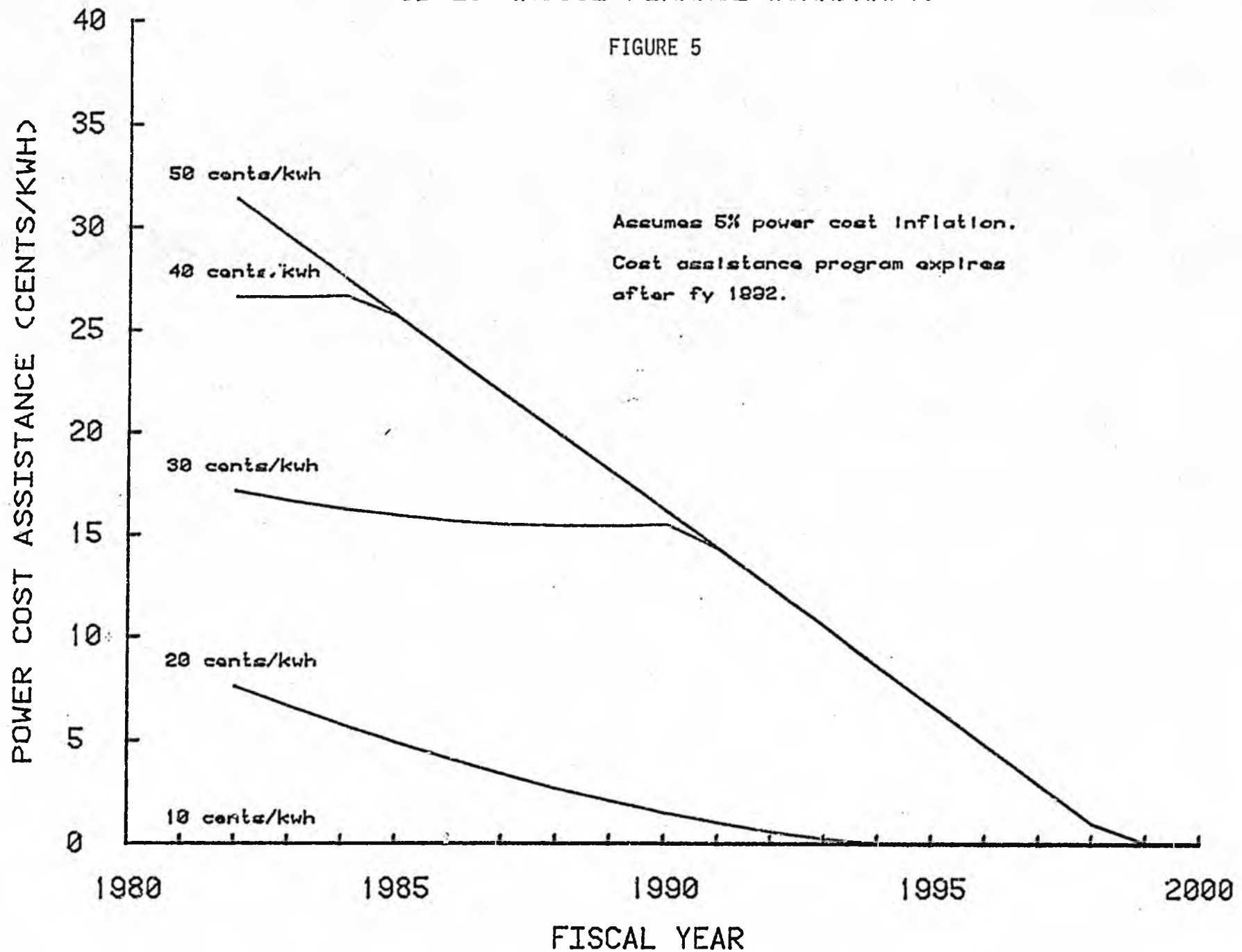
ASSUMES SUSITNA PROJECT FUNDING

FIGURE 4



ELECTRIC POWER COST ASSISTANCE LEGISLATION
SB 26 (HOUSE FINANCE WORKDRAFT)

FIGURE 5



HYDRO FINANCING ANALYSIS - SB 26 (HOUSE FINANCE DRAFT)

PARAMETERS USED IN ANALYSIS:

WITHOUT SUSITNA CONSTRUCTION

PREPARED BY
HOUSE RESEARCH AGENCY
JUNE 1, 1981

STATE RETURN ON HYDRO INVESTMENTS CONSIDERED AS CONVENTIONAL LOANS: 5 %

'EQUITY RETURN' STATE HYDRO INVESTMENTS ARE REPAYED:

AT RATE OF 5% OF INITIAL EXPENDITURE UNTIL JULY 1, 1986.

AT RATE OF 10% OF INITIAL EXPENDITURE THEREAFTER IF \$5 BILLION HAS NOT BEEN APPROPRIATED TO POWER FUND BY JULY 1, 1986

AT RATE SUFFICIENT TO OFFSET COSTS OF OPER., MAINT., AND EQUIP. REPLACEMENT AFTER TOTAL POWER PROJECT OUTPUT EXCEEDS 500 MEGAWATTS

ALTERNATIVE STATE MARKET RETURN ON INVESTMENTS: 11 %

INFLATION RATE 10.24 %

SUMMARY OF ALL POWER PROJECTS - SB 26 (HOUSE FINANCE DRAFT)

TOTAL COST TO STATE FOR PERIOD 1992 TO 2001

(THOUSANDS OF DOLLARS)

PROJECT	EXPENDITURE	ANNUALIZED STATE COST	PRES VAL ANNUALIZED STATE COST	EXPEND. PER CONS.	NET COST PER CONS.	PRES VAL NET COST PER CONS.	EXPEND. PER CAP	NET COST PER CAP	PRES VAL NET COST PER CAP
BRADLEY LAKE	200,000	155,399	63,043	21,431	16,652	7,292	7,977	6,198	2,714
PORT LIONS	1,400	1,136	596	19,718	16,001	8,402	6,511	5,284	2,774
SOLOMON GULCH	68,000	55,182	23,977	73,431	27,130	14,246	11,333	9,197	4,829
SWAN LAKE	53,000	44,985	22,972	14,021	11,901	6,077	4,670	3,964	2,024
TERROR LAKE	81,500	67,905	33,944	23,397	23,660	11,827	8,218	6,347	3,422
TYEE LAKE	40,000	33,399	16,736	19,569	16,340	8,188	6,522	5,445	2,728
ANCH-FBNKS INTERTIE	76,000	68,529	36,346	746	673	361	280	253	136
CRAIG-KLAOCK INTERTIE	2,000	1,823	1,005	7,117	6,487	3,577	2,372	2,162	1,192
TYEE-KAKE INTERTIE	5,800	5,111	2,716	32,222	28,395	15,093	10,603	9,343	4,966
KOBUK-SHUNGNAK LINE	200	152	76	2,325	1,770	886	778	592	296
BARROW-ATKASOOK LINE	7,062	5,377	2,692	10,088	7,682	3,846	3,017	2,298	1,150
GRFEN LAKE	60,618	54,959	21,311	24,247	21,983	8,524	7,802	7,074	2,743
RURAL WASTE HEAT	655	1,645	637	1,048	2,632	1,020	350	879	341
BLACK BEAR LAKE	2,000	5,023	1,947	5,000	12,557	4,869	1,666	4,185	1,623
CHESTER LAKE	1,000	2,511	973	3,030	7,610	2,951	1,011	2,539	984
CHAKACHAMNA LAKE	1,000	2,511	973	9	24	9	3	9	3
GRANT LAKE	1,000	2,511	973	1,628	4,030	1,586	542	1,363	528
BETHEL REG. STUDY	1,000	2,511	973	778	1,956	758	285	716	278
POWER CREEK	700	1,758	681	688	1,730	670	220	554	214
SNETTISHAM	4,500	4,101	2,261	548	500	275	230	210	116
SUSITNA STUDY	18,100	45,458	17,627	177	446	173	87	218	84
TAZIMNA LAKE	2,000	5,023	1,947	5,714	14,351	5,565	1,846	4,638	1,798
RURAL FEAS. STUDIES.	5,600	14,064	5,453	2,568	6,451	2,501	855	2,149	833
RURAL VIL. RECONNAISSANCE	560	1,406	545	194	487	189	64	162	63
HOONAH-JUNEAU INTERTIE	996	907	500	3,112	2,837	1,564	1,471	1,341	739
PELICAN	42	105	40	552	1,387	538	233	586	227
LAKE ELVA	4,500	11,301	4,387	6,818	17,123	6,640	2,250	5,650	2,191
NONDALTON TRANS. SYSTEM	961	2,413	935	17,472	43,882	17,016	5,652	14,197	5,505
AEL&P	7,000	6,575	2,845	952	894	386	400	376	162
UNALASKA GEOTHERMAL	5,000	12,557	4,869	11,627	29,203	11,324	3,843	9,652	3,742
VILLAGE ELECTRIFICATION	6,524	16,385	6,353	1,910	4,797	1,860	636	1,593	619
AVEC POWER COST ASSIST.	10,134	21,503	6,322	2,815	5,973	1,756	723	1,535	451
PORT LIONS COST ASSIST.	448	946	276	6,588	13,918	4,067	2,083	4,402	1,286
KOTZEBUE COST ASSISTANCE	271	662	244	459	1,123	414	132	324	119
TLINGIT-HAIDA COST ASSIST	1,741	3,802	1,174	2,408	5,258	1,624	824	1,801	556
UNALAKLEET COST ASSIST.	280	614	191	1,352	2,967	922	455	998	310
MCGRATH COST ASSISTANCE	275	599	184	2,391	5,210	1,603	774	1,687	519
NOME COST ASSISTANCE	148	368	140	195	486	185	65	162	61
TOTALS	672,015	661,232	299,386	4,945	4,866	2,203	1,823	1,794	812

HYDRO FINANCING ANALYSIS - SB 26 (HOUSE FINANCE DRAFT)

PARAMETERS USED IN ANALYSIS:

WITHOUT SUSITNA CONSTRUCTION

PREPARED BY
HOUSE RESEARCH AGENCY
JUNE 1, 1981

STATE RETURN ON HYDRO INVESTMENTS CONSIDERED AS CONVENTIONAL LOANS: 5 %

'EQUITY RETURN' STATE HYDRO INVESTMENTS ARE REPAID:

AT RATE OF 5% OF INITIAL EXPENDITURE UNTIL JULY 1, 1986

AT RATE OF 10% OF INITIAL EXPENDITURE THEREAFTER IF \$5 BILLION HAS NOT BEEN APPROPRIATED TO POWER FUND BY JULY 1, 1986

AT RATE SUFFICIENT TO OFFSET COSTS OF OPER., MAINT., AND EQUIP. REPLACEMENT AFTER TOTAL POWER PROJECT OUTPUT EXCEEDS 500 MEGAWATTS

ALTERNATIVE STATE MARKET RETURN ON INVESTMENTS: 11 %

INFLATION RATE 10.24 %

TOTAL NUMBER OF CONSUMERS SERVED BY HYDRO PROJECTS: 135875

TOTAL POPULATION SERVED BY HYDRO PROJECTS: 368442

**SUMMARY OF ALL POWER PROJECTS AND COST ASSISTANCE PROGRAM
SB 26 (HOUSE FINANCE DRAFT)**

	EXPENDITURE	NET ANNUALIZED COST TO STATE	PRESENT VALUE	EXPENDITURE PER CONSUMER	PRESENT VALUE	EXPENDITURE PER CAPITA	PRESENT VALUE	EXPENDITURE PER CAPITA	PRESENT VALUE
			NET ANNUALIZED COST TO STATE		NET COST PER CONS.		NET COST PER CONS.		NET COST PER CAPITA
FY 1982	332,878,000	36,574,121	32,828,931	2,449	269	241	903	99	89
FY 1983	111,490,000	46,746,850	37,663,271	820	344	277	302	126	102
FY 1984	138,366,000	64,777,610	46,846,101	1,022	476	344	376	175	127
FY 1985	81,285,000	66,155,754	42,943,654	598	486	316	220	179	116
FY 1986	1,243,000	56,324,202	32,817,785	9	414	241	3	152	89
FY 1987	1,214,000	25,670,127	13,425,333	8	188	98	3	69	36
FY 1988	1,192,000	25,840,855	12,130,725	8	190	89	3	70	32
FY 1989	1,138,000	26,009,451	10,959,580	8	191	80	3	70	29
FY 1990	1,022,000	26,166,867	9,896,857	7	192	72	2	71	26
FY 1991	901,000	26,312,037	8,932,703	6	193	65	2	71	24
FY 1992	786,000	26,445,501	8,058,664	5	194	59	2	71	21
FY 1993	0	26,645,501	6,194,069	0	166	45	0	61	16
FY 1994	0	26,445,501	6,492,751	0	194	47	0	71	17
FY 1995	0	26,445,501	5,827,893	0	194	42	0	71	15
FY 1996	0	26,445,501	5,231,117	0	194	38	0	71	14
FY 1997	0	26,445,501	4,695,450	0	194	34	0	71	12
FY 1998	0	26,445,501	4,214,636	0	194	31	0	71	11
FY 1999	0	26,445,501	3,783,057	0	194	27	0	71	10
FY 2000	0	26,445,501	3,395,672	0	194	24	0	71	9
FY 2001	0	26,445,501	3,047,955	0	194	22	0	71	8
TOTALS	672,015,000	661,232,887	299,386,216	4,945	4,866	2,203	1,823	1,794	812

HYDRO FINANCING ANALYSIS - SB 26 (HOUSE FINANCE DRAFT)

PARAMETERS USED IN ANALYSIS:

STATE RETURN ON HYDRO INVESTMENTS CONSIDERED AS CONVENTIONAL LOANS: 5 %

WITH SUSITNA CONSTRUCTION

PREPARED BY
HOUSE RESEARCH AGENCY
JUNE 1, 1981

'EQUITY RETURN' STATE HYDRO INVESTMENTS ARE REPAID:

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ALTERNATIVE STATE MARKET RETURN ON INVESTMENTS: 11 %

INFLATION RATE 10.24 %

SUMMARY OF ALL POWER PROJECTS - SB 26 (HOUSE FINANCE DRAFT) TOTAL COST TO STATE FOR PERIOD 1992 TO 2001

(THOUSANDS OF DOLLARS)

PROJECT	EXPENDITURE	PRES VAL		EXPEND. PER CONS.	NET COST PER CONS.	PRES VAL		EXPEND. PER CAP	NET COST PER CAP	PRES VAL NET COST PER CAP
		ANNUALIZED STATE COST	ANNUALIZED STATE COST			NET COST PER CONS.	NET COST PER CAP			
SUSITNA CONSTRUCTION	3,600,000	6,520,942	1,520,049	35,357	64,045	14,929	13,293	24,079	5,612	
BRADLEY LAKE	200,000	385,399	122,893	21,431	41,298	13,169	7,977	15,371	4,901	
PORT LIONS	1,400	2,746	980	19,718	38,677	13,809	6,511	12,772	4,560	
SOLOMON GULCH	68,000	133,382	47,624	33,431	65,576	23,414	11,333	22,230	7,937	
SWAN LAKE	53,000	105,935	37,506	14,021	28,025	9,922	4,670	9,336	3,305	
TERROR LAKE	81,500	161,630	56,293	28,397	56,317	19,614	8,218	16,298	5,676	
TYEE LAKE	40,000	79,399	27,705	19,569	38,345	13,554	6,522	12,946	4,517	
ANCH-FBNKS INTERTIE	76,000	155,929	57,687	746	1,531	566	230	575	213	
CRAIG-KLAWOCK INTERTIE	2,000	4,123	1,553	7,117	14,672	5,528	2,372	4,890	1,842	
TYEE-KAKE INTERTIE	5,800	11,781	4,307	32,222	65,450	23,929	10,603	21,537	7,874	
KOSUK-SHUNGNAK LINE	200	382	131	2,325	4,445	1,524	778	1,487	510	
BARROW-ATKASOOK LINE	7,062	13,499	4,629	10,088	19,284	6,612	3,017	5,763	1,978	
GREEN LAKE	60,618	54,959	21,311	24,247	21,983	8,524	7,802	7,074	2,743	
RURAL WASTE HEAT	655	1,645	637	1,048	2,632	1,020	350	879	341	
BLACK BEAR LAKE	2,000	5,023	1,947	5,000	12,557	4,869	1,666	4,185	1,623	
CHESTER LAKE	1,000	2,511	973	3,030	7,610	2,951	1,011	2,539	984	
CHAKACHAMNA LAKE	1,000	2,511	973	9	24	9	3	9	3	
GRANT LAKE	1,000	2,511	973	1,628	4,090	1,586	542	1,363	528	
BETHEL RFG. STUDY	1,000	2,511	973	778	1,956	758	285	716	278	
POWER CREEK	700	1,758	681	688	1,730	670	220	554	214	
SNETTISHAM	4,500	9,276	3,495	548	1,131	426	230	476	179	
SUSITNA STUDY	18,100	45,458	17,627	177	446	173	87	218	84	
TAZIMNA LAKE	2,000	5,023	1,947	5,714	14,351	5,565	1,846	4,638	1,798	
RURAL FEAS. STUDIES.	5,600	14,064	5,453	2,568	6,451	2,501	855	2,149	833	
RURAL VIL. RECONNAISSANCE	560	1,406	545	194	487	189	64	162	63	
HOUNAH-JUNEAU INTERTIE	996	2,053	773	3,112	6,416	2,417	1,471	3,032	1,142	
PELICAN	42	105	40	552	1,387	538	233	586	227	
LAKE ELVA	4,500	11,301	4,382	6,818	17,123	6,640	2,250	5,650	2,191	
NONDALTON TRANS. SYSTEM	961	2,413	935	17,472	43,882	17,016	5,652	14,197	5,505	
AELSP	7,000	6,575	2,845	952	394	386	400	376	162	
UNALASKA GEOTHERMAL	5,000	12,557	4,869	11,627	29,203	11,374	3,843	9,652	3,742	
VILLAGE ELECTRIFICATION	6,524	16,385	6,353	1,910	4,797	1,860	636	1,598	619	
AVEC POWER COST ASSIST.	10,134	21,503	6,322	2,815	5,973	1,756	723	1,535	451	
PORT LIONS COST ASSIST.	448	946	276	6,583	13,918	4,067	2,083	4,402	1,286	
KOTZEBUE COST ASSISTANCE	271	662	244	459	1,123	414	132	324	119	
TLINGIT-HAIDA COST ASSIST	1,741	3,802	1,174	2,408	5,258	1,624	824	1,801	556	
UNALAKLEET COST ASSIST.	280	614	191	1,352	2,967	922	455	998	310	
MCGRATH COST ASSISTANCE	275	599	184	2,391	5,210	1,603	774	1,687	519	
NOME COST ASSISTANCE	148	363	140	195	486	185	65	162	61	
TOTALS	4,272,015	7,803,702	1,967,640	31,440	57,432	14,481	11,594	21,180	5,340	

HYDRO FINANCING ANALYSIS - SB 26 (HOUSE FINANCE DRAFT)

PARAMETERS USED IN ANALYSIS:

STATE RETURN ON HYDRO INVESTMENTS CONSIDERED AS CONVENTIONAL LOANS: 5 %

WITH SUSITNA CONSTRUCTION

PREPARED BY
HOUSE RESEARCH AGENCY
JUNE 1, 1981

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ALTERNATIVE STATE MARKET RETURN ON INVESTMENTS: 11 %

INFLATION RATE 10.24 %

TOTAL NUMBER OF CONSUMERS SERVED BY HYDRO PROJECTS: 135875

TOTAL POPULATION SERVED BY HYDRO PROJECTS: 368442

SUMMARY OF ALL POWER PROJECTS AND COST ASSISTANCE PROGRAM SB 26 (HOUSE FINANCE DRAFT)

	EXPENDITURE	NET ANNUALIZED COST TO STATE	PRESENT VALUE NET ANNUALIZED COST TO STATE	EXPENDITURE PER CONSUMER	PRESENT VALUE		PRESENT VALUE		PRESENT VALUE	
					NET COST PER CONG.	NET COST PER CONG.	EXPENDITURE PER CAPITA	NET COST PER CAPITA	NET COST PER CAPITA	
FY 1982	332,378,000	42,852,903	33,464,766	2,317	315	283	1,039	116	104	
FY 1983	161,490,000	59,403,757	47,360,761	1,188	437	352	438	161	129	
FY 1984	183,866,000	83,926,660	60,694,379	1,389	617	446	512	227	164	
FY 1985	351,285,000	121,072,106	78,591,481	2,585	891	578	953	328	213	
FY 1986	266,243,000	147,152,491	85,739,676	1,959	1,082	631	722	399	232	
FY 1987	266,214,000	180,373,605	94,334,390	1,959	1,327	694	722	489	256	
FY 1988	266,192,000	218,499,806	102,572,505	1,959	1,608	754	722	593	278	
FY 1989	266,138,000	257,928,415	103,683,080	1,958	1,898	799	722	700	294	
FY 1990	266,022,000	298,903,062	113,051,403	1,957	2,199	832	722	811	306	
FY 1991	265,901,000	341,745,299	116,019,499	1,956	2,515	853	721	927	314	
FY 1992	265,786,000	386,876,141	117,891,700	1,956	2,847	887	721	1,050	319	
FY 1993	265,000,000	430,935,582	117,870,868	1,950	3,171	867	719	1,169	319	
FY 1994	265,000,000	513,253,561	126,011,140	1,950	3,777	927	719	1,393	342	
FY 1995	265,000,000	569,490,608	125,500,767	1,950	4,191	923	719	1,545	340	
FY 1996	265,000,000	632,130,397	125,040,106	1,950	4,652	920	719	1,715	339	
FY 1997	265,000,000	703,831,529	124,966,676	1,950	5,179	919	719	1,910	339	
FY 1998	0	703,831,529	112,170,088	0	5,179	825	0	1,910	304	
FY 1999	0	703,831,529	100,683,871	0	5,179	741	0	1,910	273	
FY 2000	0	703,831,529	90,373,843	0	5,179	665	0	1,910	245	
FY 2001	0	703,831,529	81,119,561	0	5,179	597	0	1,910	220	
TOTALS	4,272,015,000	7,303,702,045	1,967,640,570	31,440	57,432	14,481	11,594	21,180	5,340	

STATE OF ALASKA

OFFICE OF THE GOVERNOR

DIVISION OF POLICY DEVELOPMENT AND PLANNING

POUCH AD
JUNEAU, ALASKA 99811
PHONE: 465-3573

June 2, 1981

The Honorable Sam Cotten, Chairman
House Finance Committee
Alaska State House of Representatives
Pouch V
Juneau, Alaska 99811

Dear Representative Cotten:

You have asked for an explanation of how the proposed legislation before you today, HCS CSSS SB25 (Res), differs from the Governor's power project financing proposal contained in HB310 and HB461. You have also requested specific amendments he wishes to offer and any terms and conditions he expects this legislation to meet.

The version of SB25 before you differs substantially from the Governor's approach. HB310 contains three basic elements: grants of equity capital for a portion of a project's cost; revenue bond financing for the balance of costs; and State loans to both restructure debt service on revenue bonds, reducing front end costs to the consumer, and finance cost overruns which may be encountered during project construction.

The grants of equity capital would be allocated on a per capita formula basis, and would provide a level of funding necessary to ensure revenue bond financing of the balance of project costs. A per capita formula for these grants provides for equitable statewide distribution of subsidies for power projects. In anticipation of continued high revenue bond interest rates, the proposal also provides loans to be used by utilities to pay a portion of the debt service on revenue bonds during the early years of project operation and to ensure project completion. In later years, after load growth and inflation, these loans would be repaid by a broader base of utility customers.

In addition to financing large scale conventional power projects, HB461 would provide similar financial assistance to small scale alternative energy projects.

I wish to present to the Committee the Governor's letter to the House Resources Committee Co-Chairmen. This letter lays out his expectations and is attached. Most of the

amendments requested were adopted by the Resources Committee. The Governor hopes they will remain in any version of this legislation adopted by the House Finance Committee. At this time, he would request the Committee to consider and adopt the following amendments:

1. Page 4, line 2: after the word "return" add annually.

This amendment clarifies the intent of the existing language, which is that the authority must determine that a project is able to provide a five percent annual return on equity investment.

2. Page 6, line 24: after the words "less than the" add wholesale power and after the word "charged" add to the utility by the authority for.

This language, developed jointly by the APUC and the APA, clarifies the relationship between the two entities. The language ensures that the APA may set wholesale rates, and that the APUC retains jurisdiction over retail rates.

Regarding State energy organization and administration, the Governor has considered and approved a comprehensive reorganization of State agencies with responsibility in energy matters. This reorganization proposal has been transmitted to legislative leaders. I understand these proposals will be submitted to your committee in the form of amendments. The Governor supports these changes, and his staff is available to work on remaining details.

The Governor introduced HB359 (now Sections 8, 9, 15, 16 and 19 of the Resources version of SB25) in order to improve the equity and efficiency of the Power Cost Assistance Program currently in statute. His transmittal letter of March 18 and other materials submitted to the House Resources Committee go into detail regarding his concerns with the existing program and the intent of the proposed amendments.

The Governor has stated: " In conclusion, it should come as no surprise that I prefer my own proposal over other power project financing approaches, including this version of SB25. However, the legislative leadership has set forth this bill as the only legislation I may expect from this session which will accommodate my commitment for

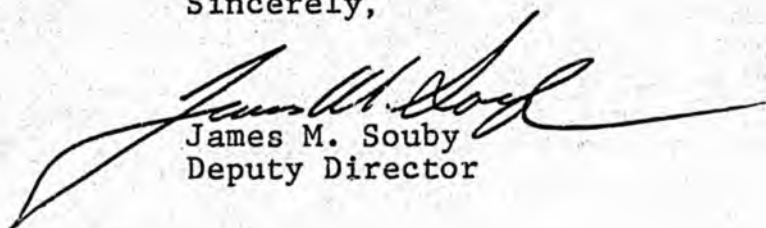
The Honorable Sam Cotten

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June 2, 1981

power project financing, and I have agreed to consider it under this circumstance. I remain committed to examining provisions of this legislation over the interim for possible amendment next session, should the bill be enacted."

Sincerely,



James M. Souby
Deputy Director

Attachment

cc: Governor Jay S. Hammond
Keith Specking, Legislative Assistant
to the Governor

JAY S. HAMMOND
GOVERNOR



STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

May 8, 1981

The Honorable Terry Gardiner
Co-Chairman
The Honorable Fred Zharoff
Co-Chairman
House Resources Committee
Alaska State House of Representatives
Pouch V
Juneau, Alaska 99811

Dear Co-Chairmen:

At your request, the following sets forth my understanding of terms and conditions relating to energy legislation.

As you know, I am committed to establishing a comprehensive energy financing program for the State during this Legislature. Toward that end, I introduced House Bills 310 and 461, as well as an appropriations bill, HB 462, earlier in the session. These measures were designed to promote efficient and effective solutions to our energy problems at the least cost to the consumer and the State.

In an effort to expedite legislative action and promote favorable consideration this year on other crucial legislation, I tentatively agreed to certain basic legislative proposals regarding energy financing on the presumption that the leadership of both Houses had signed off on them.

This should in no way cause any to presume I find such approach preferable to the Administration's proposal. Moreover, if agreement on the above basics has not been met, as I had been lead to believe, then, of course, there was in fact no such "agreement" to which I, in turn, might agree.

Should there in fact be such an agreement, there are several issues which must be addressed in the energy legislation this year. These are as follows:

- A. Ensure that the APA Board of Directors is comprised of a majority of members directly accountable to the Legislature and Governor. I would prefer a five member board, with three agency heads and two public members. As you know, the restructuring of the APA Board in such

The Honorable Terry Gardiner
The Honorable Fred Zharoff
May 8, 1981

Page Two

a manner would parallel similar action taken by the Legislature last year regarding the AIDA and AHDC Boards.

I understand the Committee is concerned about making certain that regional concerns are considered by the APA. I suggest that a citizens advisory committee be created to accommodate these concerns. Perhaps two citizens from each judicial district would be appropriate.

- B. Ensure that all funds appropriated to the APA are received only as expenditures require, and are otherwise under the control of and invested by the Commissioner of Revenue as is required of funds appropriated to other State entities.
- C. Ensure that income earned from the investment of money appropriated to the power development fund be appropriated annually by law.
- D. Ensure that the numerical factors used to determine the feasibility of a project not be set by statute. The numerical factors used to assess project feasibility must be sensitive to changes which reflect actual economic conditions.

Additionally, I believe it appropriate that ultimately all projects have keyed into their rate structure an equity return on true costs. Lacking some such "market test" to screen out the "lemons" it would behoove every community to strive for a project no matter the cost. However, with the understanding that this feature will be addressed over the interim, I am willing, again conditionally, to forgo addressing this issue at this time. Meanwhile, at the very least, however, a minimal 5% return on equity as proposed in the original "agreement" must be retained. I want to make clear that it is my intent -- and, as I understand it, also the intent of the leadership -- to carefully study this issue during the interim and develop options for legislative actions next session.

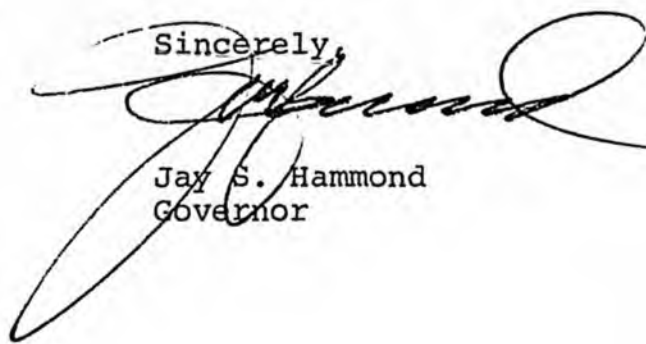
The Honorable Terry Gardiner
The Honorable Fred Zharoff
May 8, 1981

Page Three

Additionally, on the presumption that the basic hydroelectric proposal allegedly agreed upon by both houses prevails, in the interest of equity I indicated that within the parameters of appropriate funds available and dependent upon other legislative accommodations, I would therefore consider an expansion of power production assistance to cover usage above the 200 kwh proposed so long as this did not exceed 600 kwh so long as the cap was no greater than 40¢. To go beyond this without first experiencing actual costs would be most imprudent.

It should be made clear that while I am ready to work out a compromise on SB 25, I have not made any commitments on companion funding legislation, SB 26.

Sincerely,

A large, stylized handwritten signature in black ink, appearing to read "Jay S. Hammond". The signature is written over the typed name and title.

Jay S. Hammond
Governor

teletyped from Arlon Tussing 6/6. immediately
p. 1 did not copy and was not locatable.
The original is being mailed.

SB 25 and 26

page two of six

3. The lowest-cost long-term generating alternatives should be chosen regardless of the source and method of financing.

Alaska's existing procedures for power-project evaluation (in AS 44.56.180) are among the most businesslike and objective in the nation, yet leave the final decision on project funding to the legislature. There is no compelling reason to change them.

SB 25 (in both its Senate version and the House Resources Committee version) make project-selection and ratemaking procedures political from the very beginning, and SB 26 (in both versions) short-circuit the established evaluation and review procedures. Together, the two Bills imply that the State will choose and fund projects without regard to whether they are really the lowest-cost alternatives. [It isn't evaluation with facts.] The Bills also invite future legislatures to change the project-selection, financing, and ratemaking rules again and again and again.

4. Conventional financing and ratemaking arrangements exaggerate the costs of hydropower and obscure its benefits.

Conventional financing and ratemaking arrangements give a very heavy "front-end load" to the price of electricity generated by capital-intensive technologies -- notably hydro but also nuclear. Rates tend to be much too high in the early years and much too low later. The reasons that rates to consumers are distorted include:

- (1) straight-line amortization of debt principal (which means that interest payments are very high at the beginning, and decline over the life of the project);
- (2) the excess "debt-service coverage" required by lenders, which raises rates by 25 to 50 percent above actual principal and interest-payment needs;
- (3) high market interest rates that are largely payments in advance for future inflation (True interest is only 2-4 percent; the remainder of the market rate only compensates the bond-buyers for the fact that inflation erodes the value of their principal.); and
- (4) a penalty for under-utilization of the project's capacity in its early years. (The same annual debt-service payments are spread over a smaller number of kilowatt-hours.)

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As a result, an Alaska hydropower project whose average power cost over 25 years of service was only 7 cents per kilowatt-hour might require rates of 40 to 50 cents in its first year of service. These rates might decline to as low as 4 cents after 25 years. (This would be equal to only about 0.4 cents in the year-one dollars, if the long-term inflation rate were 10 percent.) [For a further explanation of the front-end load, its causes, and possible remedies, see my memorandum to Governor Hammond, "A New Approach to Electric Power Project Financing" (November 10, 1981).]

Under these circumstances the rates would probably begin at levels much higher than the thermally-generated status quo, and make the project very unattractive to consumers. Lenders would doubt whether the utility could actually levy and collect high enough bills to pay principal and interest, and thus the project might be unfinanceable.

If the project were completed anyway, unrealistically low rates in later years would encourage homeowners and industry to consume electricity as if those rates reflected the real cost of electricity, only to find that their bills suddenly had to increase by two, four, or even ten or more times, once the project's capacity was used up, because new projects would have to be built at now inflated prices, once more with a front-end-loaded debt-service schedule. (This is a pretty close description of what is happening now in the Pacific Northwest.)

5. Reasonable rates for hydropower do not require any State subsidy.

Wherever a large hydro project in Alaska is actually the lowest-cost source of power in the long run, "rate restructuring" can bring consumer electric rates down to reasonable levels, without any subsidy in the form of capital grants, low-interest loans, or power-cost assistance payments. Rate restructuring here means drastically reducing the front-end load in electricity prices by levelizing the project's debt-service (or return to equity) in inflation-adjusted dollars, over the term of its financing (e.g., 25 years).

In the example given in point 4 above, rates would ordinarily start at, say, 45 cents per kilowatt-hour and decline to 4 cents after 25 years, but restructuring would ideally allow them to start at 7 cents and escalate with inflation, so that the first-year and 25th-year price would be the same low constant-dollar average cost. In practice, restructuring would be incomplete, so that rates might start at about 10 cents and fall to 5 cents (in year-one dollars), as the project's generating capacity was fully used.

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Beginning in mid-1980, the Governor's office (and its consultants, of which I was one) and the Alaska Power Authority, explored several rate-structuring arrangements that would have helped local utilities finance their own hydro projects and reduced the initial rates for power from these projects to reasonable levels.

[One of these plans was set out in my November 10, 1980, memorandum cited above. Another memorandum to the Governor, "Lower Project Financing Alternatives" (January 23, 1981) compares some of the different approaches, and a third paper, "Putting Various Hydropower Cost Factors into Their Proper Perspective," (February 26, 1981) shows that differences in financial strategies and interest rates tend to have less influence on the actual cost of electricity than non-financial factors such as project selection; construction-cost overruns; completion, licensing and startup delays; engineering design quality; and contractor performance.]

The plan that the Governor finally proposed to the Legislature was a reasonable compromise among these plans but it had three big faults: (1) it was not finalized until after influential Legislators had firmly committed themselves to other approaches; (2) it was too complicated; and (3) the Governor has not supported his own plan firmly or consistently.

6. State equity grants and statewide "postage-stamp" rates tend to encourage (1) bad project selection and (2) wasteful electricity consumption.

If someone else is paying the bill, communities and the utilities that serve them will ignore real costs per kilowatt-hour, and seek the biggest conceivable projects for their construction payrolls, for the prestige of having a big project, and in the hope that "cheap" power (no matter how false that cheapness is) will attract industry.

A statewide postage-stamp rate would also eliminate the incentive of energy-intensive industry to locate where power costs were truly lowest. (Actually, there are only two industries that decide where to locate their plants on the basis of electricity prices — uranium refining and primary aluminum manufacturing.)

If someone else is paying the bill, utilities have no incentive to operate efficiently, and consumers have no incentive to conserve energy. They will use electrical resistance heat, for example, even where oil, gas, coal, or wood is cheaper and, indeed, even where oil, gas, or coal is used to generate the electricity at less than half the efficiency of burning these fuels directly.

7. There is a straightforward way (a) to finance the lowest-cost electrical generating project in each community or service area, (b) to assure reasonable electric rates beginning in each project's first year of service, (c) to preserve the right to project selection and energy-generation incentives, (d) to protect the State's investment from inflation, and (e) eventually to recover for the State (and by the original value of its construction-cost surcharge).

The way to reconcile these goals is amazingly simple, and it is easily understood under the existing law or a modified SR 25. The State would charge each utility that received a state construction grant, or which distributed electricity from an Alaska Power Authority project, an annual charge for the use of its capital equal to ---

3 percent of the value of the State's investment in any hydro project (an adjusted for changes in the value of money);

5 percent of the (adjusted) value of the State's investment in any coal-fired steam plant; and

6.5 percent of the (adjusted) value of the State's investment in any gas-turbine or diesel generator.

Under this arrangement, rates could begin very low, and they would always stay low because fixed costs would never rise more rapidly than general inflation. For hydro, the first year's charges could be as low as one-sixth of the rates that would be dictated by conventional financing and rate-making methods. (3 percent of the project's fixed cost as against 18.75 percent [3 percent depreciation plus 12 percent interest plus 3.75 percent excess coverage]).

An annual return of 3 percent on the inflation-adjusted value of the State's investment in hydro means that consumers will get the use of the money for 33-1/3 years without any real interest charge. At the same time, however, the State's investment would be totally protected from erosion because of inflation.

A 5-percent return on any state investment in coal-fired steam plants means that consumers will use the money free of real interest for 20 years, and that the State would get back the entire value of its investment, without reduction by inflation, over that period. Likewise, the 6.5-percent return on any state investment in gas and oil-fired facilities means the State's outlay will be repaid in 15.4 years. These different rates (1) reflect the longer economic life of hydro plants over steam turbines and of steam plants over oil and gas-fired generators, and (2) directly express the Legislature's preference for renewable energy.

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B. There are ways by which the State can lower electric costs to consumers even further -- ways that are (a) more equitable than capital grants or low-interest loans, and (b) do not distort project-selection decisions or create incentives for wasteful consumption.

The secret is for the State to pay for the full cost of generating the first (say) 300 kilowatt-hours per month for every residential electric customer in Alaska. This power-cost assistance would be completely separate from any program of state capital grants or construction loans, because everyone would get the same amount of power free, regardless of the technology used to generate the electricity, regardless whether or not the State had helped finance the generating plant, and regardless of the actual cost of its power.

State financial assistance would be directed to the technologies and projects with the lowest long-term generating cost for each community or service area. Consumers would pay rates based upon this (restructured) long-term cost for all consumption above the 300 kilowatt-hours per month. They would thus be encouraged to use electricity for heating where (and only where) it was truly the lowest-cost energy source, and industries heavily dependent on electricity would be encouraged to locate where (and only where) power costs were truly lowest.

NOTE: During the past year, I have served as a consultant to the Legislature, the Governor's office, and RURALCAP on electric power planning and financing issues. My statement here does not necessarily reflect the views of any of these agencies.

Also, I do not claim that any of the ideas presented here are original with me. Most of them have been around for many years under other names or in other applications. I want to state specifically that the Alaska Power Authority and its staff have been working imaginatively on the problem of rate restructuring for some time, and that nothing in my June 2 testimony was intended to diminish or discredit the Authority's efforts or the independent origin of its financing proposals.

PUTTING VARIOUS HYDROPOWER COST FACTORS
INTO THEIR PROPER PERSPECTIVE

Elaboration of a memorandum prepared for
The Office of the Governor, State of Alaska,
January 14, 1981

By Arlon R. Tussing
February 26, 1981

PUTTING VARIOUS HYDROPOWER COST FACTORS
INTO THEIR PROPER PERSPECTIVE

Most recent debate over an Alaska hydropower-financing regime has concerned --- .

- * the relative effect on electricity costs of financing with revenue bonds, general obligation bonds, and direct loans from the State treasury;
- * the impact of various financing schemes on project and statewide bond ratings, and the effect of those ratings on power costs; and
- * the total economic impact of different financing schemes on Alaskans when the consumer price of electricity and the treasury's potential earnings from other investments are both taken into account.

These are important questions, as the cost of electricity does depend powerfully on several financing variables. The table on page 3 compares the impact of several financial and non-financial factors on average electricity costs from an idealized Alaska hydroelectric project over the term of its financing, whether those costs are all paid by electricity consumers or paid in part by the state treasury. The upper part of the table shows that the impact of some of the financial variables --- specifically the choice between revenue and general obligation bonds, and revenue-bond ratings --- are relatively insignificant.

Comparing the financing variables on the upper part of the table to the planning, design, and management variables below shows that electric power costs tend to be less sensitive to financing methods in general than to the effects of over- or underbuilding, engineering errors, construction delays, and cost overruns --- all of them commonplace occurrences on major capital projects.

The risk and frequency of such cost-inflating events is not independent of the financing method, however. Large state capital grants, state general-obligation funding, state overrun or completion guarantees, or a statewide power-cost equalization policy could undermine the incentives of communities, utilities, or the Alaska Power Authority to forecast demand realistically, choose and design the right size and kind of projects, employ competent contractors, supervise them competently, and manage the projects efficiently.

The Washington Public Power Supply System [WPPSS or "Woops"] is a classic illustration of financial overassistance encouraging bad planning, mismanagement, engineering and construction incompetence, predatory behavior by construction unions, and worse. The result has been prolonged construction delays, tenfold or greater cost overruns, and a real possibility that the plants may never be licensed to generate power. The hypothetical instances of bad planning, delays, or overruns in the following table are, of course, far less serious than those that have afflicted WPPSS projects, so my contrast between financing and non-financing influences on electricity costs may be unrealistically conservative.

The table refers to the increase that each of the changes listed would cause in the project's average life-cycle electricity costs. These costs are measured by the total constant-dollar revenue required per kilowatt-hour of electricity sold, over 25 years of operation. The assumptions that were used throughout the table are shown in the technical notes that follow it; changing any of these assumptions would of course alter some of the numbers in the table, but we would expect the ranking of the factors to remain about the same.

PUTTING VARIOUS HYDROPOWER COST FACTORS
INTO THEIR PROPER PERSPECTIVE

The following table compares the sensitivity of hydropower costs to several financial, design, and construction variables.

<u>Variable</u>	<u>Increases average life-cycle electric cost by</u>
<u>Financial variables</u>	
1. Financing with A-rated revenue bonds rather than medium-grade G.O. bonds	0.4 percent
2. Financing with A-rated rather than AA-rated revenue bonds	2.4 percent
3. Loss of arbitrage	7.5 percent
4. Financing with medium rather than prime G.O. bonds	8.0 percent
5. 15-year instead of 30-year amortization	18.3 percent
6. Financing with AA (taxable) utility bonds rather than AA (tax-exempt) municipal bonds	44.1 percent
<u>Planning, design, and construction variables</u>	
7. Underbuilding based on a 3-percent expected load growth --- actual load growth 6 percent	21.0 percent
8. 25-percent cost overrun	25.0 percent
9. 3-year delay in start of construction	27.3 percent
10. 25-percent derating of plant	32.0 percent
11. 8 years instead of 5 years to complete	48.5 percent
12. 50-percent cost overrun	50.0 percent
13. Overbuilding based on 6-percent expected load growth --- actual load growth 3 percent	54.5 percent
14. 3-year delay in commissioning	65.1 percent
15. Overbuilding based on 6-percent expected load growth --- actual load growth zero	106.7 percent
16. Non-operability & abandonment	200.0 percent
17. Cases 11, 12, and 13 all apply	361.0 percent

NOTES

General: Average life-cycle electric cost is the total revenue required per kilowatt-hour sold, years 6 through 30 inclusive. Except where otherwise indicated, the construction period is 5 years with equal annual outlays; operating life and permanent financing are 25 years; project is hydro or other 100-percent fixed-cost technology; financing is 100 percent debt; interest rates are the same for construction and permanent financing. Interest cost is 10 percent unless otherwise indicated.

Any electricity supply shortfalls during years 6 to 15 that result from delays, derating, or underbuilding are made up by thermally-generated power. The unit cost of thermally-generated supplemental power is assumed to be twice the average life-cycle cost of power from the project in question (if it had been completed and operated according to design).

Interest rate figures are from Salomon Brothers Bond Market Roundup for the week ending January 9, 1981 [copy attached].

Financial Variables

1. A-rated 30-year electric revenue bonds at 10.25 percent vs. medium-grade 30-year G.O. bonds at 10.20 percent.
2. A-rated 30-year electric revenue bonds at 10.25 percent vs. AA-rated 30-year electric revenue bonds at 10.00 percent.
3. Medium-grade 30-year G.O. bonds at 10.20 percent vs. prime 30-year G.O. bonds at 9.40 percent.
4. 15-year prime G.O. bonds at 8.60 percent, amortized over 15 years, vs. 30-year prime G.O. bonds at 9.40 percent, amortized over 30 years.
5. Arbitrage here refers to the ability of the state to invest its surpluses in taxable securities at relatively high interest rates while its agencies or subdivisions continue to borrow at lower interest rates in tax-exempt bond markets. The IRS will disallow a federal tax exemption for state or municipal bonds that are clearly issued for arbitrage purposes (i.e., "to profit at the expense of the U.S. Treasury"). Row 5 compares the combined cost of power to consumers and the State treasury under two financing proposals presented to the Governor's office earlier in the year, one of which would, and one of which would not, permit the State to make offsetting investments in taxable securities markets. For details, see Tussing's January 23, 1981 memorandum to Governor Hammond, Appendix A.
6. AA-rated 30-year taxable utility bonds at 14.50 percent vs. AA-rated tax-exempt electric revenue bonds at 10.00 percent.

Planning, design, and construction variables

7. Plant is designed to reach optimum load factor after 10 years of operation at 3 percent annual load growth. At 6 percent annual growth the capacity constraint is reached in the third year of operation (year 6). The cost of supplementary thermal power generation through the tenth year of operation (year 15) is added to the total cost figure in determining life-cycle average cost.

8. Self-explanatory.

9. Construction outlays and operation are both delayed 3 years. Term of financing and life of project are unchanged. Additional cost is the difference between the cost of an added 3 years of thermal power generation and the unit cost of power from the project in question.

10. "Derating" is official recognition of the inability to attain design-capacity operation. The plant is designed to reach its optimum load factor after 10 years of operation, at 3 percent annual load growth. With 25-percent derating, the capacity constraint is reached in the first year of operation (year 6). Power shortfall for ten years is made up by thermal power generation.

11. Equal annual construction outlays are stretched out from 5 to 8 years but total is unchanged; amortization is reduced from 25 to 22 years. The cost of 3 years of thermal power generation is added to total costs in determining average costs.

12. Self-explanatory.

13. Plant is designed to reach optimum load factor after 10 years of operation, at 6 percent annual load growth. The higher unit cost reflects lower utilization rates caused by growth at only 3 percent.

14. Project is completed on schedule, but actual startup is delayed 3 years because of technical or licensing problems; amortization is reduced from 25 to 22 years. The cost of 3 years of thermal power generation is added.

15. Plant is designed to reach optimum load factor after 10 years of operation, at 6 percent annual load growth. Additional unit costs reflect lower utilization rates caused by lack of load growth.

16. Plant is completed but fails to operate or receive operating license. Demand must be met by thermal power generation.

17. Self-explanatory. $[1.485 \times 1.5 \times 1.545 = 4.61]$

6/2/81

MY NAME IS DAVID GOTTSTEIN, AND I WANT TO MAKE IT CLEAR THAT I REPRESENT MYSELF AND NOT ANY OTHER GROUP OR INDIVIDUAL ASSOCIATED WITH THE LEGISLATURE.

MR. CHARIMAN AND MEMBERS OF THE COMMITTEE, YOU HAVE HEARD ENOUGH PROPOSALS OVER THE LAST SEVERAL ^{Days} TO MAKE YOUR HEADS SPIN. YOU HAVE HEARD FROM SOME WHO TAKE RELATIVELY SIMPLE CONCEPTS AND MAKE THEM SOUND COMPLICATED IN ORDER TO JUSTIFY THEIR HIGH SALARIES. WHAT I HOPE TO DO IN THE NEXT SEVERAL MINUTES IS TO SUGGEST TO YOU A FRAMEWORK WITHIN WHICH POLITICAL DECISIONS CAN APPROPRIATELY BE MADE.

FIRST AND FOREMOST I BELIEVE IT IS NECESSARY TO SEPARATE THE ISSUES OF COSTS OF A POWER PRODUCTION PROJECT, AND THE RATES YOU CHARGE FOR THAT POWER, FOR THEY ONLY HOLD A CASUAL RELATIONSHIP. THE DETERMINATION OF WHEN AND IF A PARTICULAR PROJECT SHOULD BE BUILT SHOULD BE BASED UPON WHETHER OR NOT TOTAL TRUE COSTS FOR A PARTICULAR PROJECT ARE LOWER THAN ALL OTHER ALTERNATIVE POWER PRODUCTION PROJECTS ^{for a region} IF THERE EXISTS ANY BIAS TOWARDS HYDRO DEVELOPMENT IN THESE BILLS, IT ONLY COMES ABOUT AFTER FEASIBILITY ^{studies} SHOW THERE EXISTS ^{an} ECONOMIC BIAS. IT MUST BE NOTED THAT IN AREAS WHERE HYDRO IS CONSIDERED AS A VIABLE ALTERNATIVE, IT IS IMPORTANT, I BELIEVE, TO INCLUDE IN THE COST OF ALTERNATIVES, THE TOTAL COSTS OF PRODUCING EQUIVALENT AMOUNTS OF POWER FOR 100 TO 150 YEARS. SINCE DAMS HAVE AN ECONOMIC LIFE OF AT LEAST THAT TIME FRAME, YOU MUST COMPARE THAT WITH THE COSTS OF PRODUCING THE SAME AMOUNT OF POWER FOR 150 YEARS USING ALTERNATIVE SOURCES. THOSE WHO SUGGEST THAT HYDRO PROJECTS MUST BE PAID FOR IN 30 TO 40 YEARS ARE BEING VERY SHORT SIGHTED.

IT WOULD BE LIKE SAYING ONCE A HOUSE'S MORTGAGAGE IS PAID FOR AFTER 30 YEARS, THE HOUSE HAS NO VALUE. WE ALL KNOW THAT THE HOUSE STILL DERIVES AN ECONOMIC VALUE AND WILL BE USED FOR AT LEAST 30 OR 40 MORE YEARS. LONG RANGE THINKING IS THE WHOLE CONCEPT BEHIND DAMS, AND THAT IS EXACTLY THE KIND OF FINANCIAL ANALYSIS THAT SHOULD ACCOMPANY IT. SINCE THE COSTS OF OPERATING A GAS FUELED ELECTRICITY PLANT WILL RISE AT A FASTER RATE THAN THE COSTS OF OPERATING A DAM, IT IS NOT A QUESTION OF IF THE TOTAL HYDRO COSTS ARE LOWER THAN A GAS OPERATION, BUT WHEN IT BECOMES SO. AS LONG AS THAT POINT IN TIME IS LESS THAN THE ECONOMIC LIFE OF THE DAM, THEN THE DAM SHOULD BE BUILT. SINCE THE REAL COST ADVANTAGES OF HYDRO COMES IN ITS LATER YEARS, ANY ANALYSIS THAT INCLUDES A PAYOUT OF THIRTY TO FIFTY YEARS IS PAINFULLY SHORTSIGHTED.

THE QUESTION OF RATE STRUCTURING HOWEVER IS NOT RELATED TO COSTS, EXCEPT IN AN AREA I WILL OUTLINE IN A FEW MOMENTS. AFTER IT IS DETERMINED THROUGH COSTING ANALYSIS WHAT IS THE CHEAPEST WAY TO PRODUCE POWER, WE ARE, IT SEEMS TO ME, FACED WITH THE QUESTION OF HOW MUCH TO CHARGE. HERE WE MUST BE CONCERNED WITH A NUMBER OF THINGS. IF WE CHARGE MORE THAN THE TOTAL TRUE COST OF A PROJECT, WE DERIVE A PROFIT, AN APPROACH VERY FEW PEOPLE I SUSPECT ARE IN FAVOR OF AT THE OUTSET. IF ON THE OTHER HAND WE CHARGE SOMETHING LESS THAN TRUE COSTS, WE EXERCISE A DISTRIBUTION OF WEALTH. THE RATES THEMSELVES WILL DETERMINE, WHO WILL RECEIVE THE WEALTH, WHEN, AND HOW MUCH. THE LEGITIMATE AREA WHERE RATES ARE RELATED TO COSTS LIE IN THE CASES WHERE CHEAP RATES INVITE EXTRA DEMAND FOR POWER, REQUIRING EXPENDITURES IN ADDITIONAL, AND POSSIBLY MORE COSTLY POWER PRODUCTION CAPACITY.

BECAUSE OF THIS, AND THE FACT THAT THE AMOUNT OF INDIVIDUAL SUBSIDIE
WILL BE BASED UPON CONSUMPTION, A GRADUATED CONSUMER RATE SCHEDULE
THAT MARGINALLY CHARGES THE HEAVY CONSUMER CLOSER TO TRUE COSTS,
MIGHT BE DEEMED MORE APPROPRIATE. THIS HAS THE BENEFITS OF A MORE
EQUITABLE DISTRIBUTION OF WEALTH, DISCOURAGES WASTE AND REMOVES
most UNECONOMICAL INCENTIVES. THERE EXISTS ANOTHER QUESTION CONCERNING
EQUITABLE DISTRIBUTION OF WEALTH. WHAT IS FAIR? CERTAINLY IT
SOUNDS FAIR TO SUBSIDIZE PEOPLE STATEWIDE ON A PER CAPITA BASIS.
AND DOESN'T IT ALSO SEEM FAIR TO CHARGE ALL PEOPLE ACROSS THE STATE
THE SAME RATE. WITH THESE TWO SEEMINGLY FAIR PROPOSALS WE HAVE AN
INHERENT CONFLICT. I WOULD GUESS THAT THE ULTIMATE RATE WILL FALL
SOMEWHERE BETWEEN THE TWO. FOR IF WE CHARGE PEOPLE THE SAME RATE,
WE CREATE INCENTIVES FOR DEVELOPMENT AND CONSUMPTION IN TRULY
LESS ECONOMICAL AREAS. THIS APPROACH, AS A RESULT, WILL CREATE
A LARGER AND EVER INCREASING LEVEL OF SUBSIDY. ON THE OTHER HAND,
IF WE SUBSIDIZE ON A PER CAPITA BASIS, WE FALL SHAMEFULLY SHORT
OF RECOGNIZING LEGITIMATE NEEDS IN MANY REGIONS OF THE STATE.
FOR THIS REASON, A CHEAP STATEWIDE WHOLESALE RATE, WITH TRUE
DISTRIBUTION COSTS ADDED ON, STRIKES A BALANCE BETWEEN THE TWO.
THIS DOES NOT PRECLUDE ADDITIONAL SUBSIDIES THROUGH SUCH MECHANISMS
AS THE POWER COST ASSISTANCE PROGRAM IN CASES WHERE DISTRIBUTION
COSTS MAKE CONSUMER PRICES EXORBITANTLY HIGH.

IN A RELATED ISSUE, IT SEEMS TO ME MR. CHAIRMAN, FROM A PRACTICAL
POINT OF VIEW, SINCE ONE LEGISLATURE CANNOT BIND A FUTURE ONE,
THAT OVER THE LIFE OF THESE PROJECTS, HYDRO IN PARTICULAR, WITH
LIFETIMES OF ONE HUNDRED TO ONE HUNDRED AND FIFTY YEARS, IT IS
LIKELY THAT THE LEGISLATURE WILL FIND IT NECESSARY MANY TIMES TO
RECONSIDER THE RATES IT CHARGES ITS RESIDENTS. JUST AS IT HAS FOUND
IT NECESSARY IN THE PAST TO REVIEW OTHER TYPES OF FISCAL AUTHORITY.

THERE MAY COME A TIME, 20 OR 30 YEARS DOWN THE ROAD FOR INSTANCE, THAT THE VALUE OF THE ELECTRICITY IS SO HIGH THAT APPROPRIATE RATES COULD PROVIDE SUBSTANTIAL ENOUGH REVENUES TO THE STATE TO OFFSET DECLINING OIL REVENUES. IN THAT REGARD, CHEAP POWER COULD BECOME A MAJOR FACTOR IN A STABLE ECONOMY BEYOND OUR OIL AND GAS DAYS. WITH THAT IN MIND, I BELIEVE, ALL YOU CAN SAY IS THAT IN THE SAME WAY THAT THE PROPOSAL TO FUND 5 BILLION DOLLARS OVER THE NEXT SEVERAL YEARS IS A POLICY STATEMENT, SO ARE ANY RATES YOU CURRENTLY PROPOSE. SO IN MY OPINION, THE QUESTION OF BINDING FUTURE LEGISLATURES DOES NOT APPLY. IF IT DID, ONE COULD ARGUE THAT ANY LONG RANGE PLAN WOULD HAVE TO APPROPRIATE ALL ITS PROJECTED BUDGET DURING A SINGLE LEGISLATURE, VOID OF ANY ADDITIONAL INFORMATION THE FUTURE WOULD HOLD.

ON ANOTHER NOTE, I COMMEND REPRESENTATIVE ADAMS AND OTHERS WHO SUGGEST THE BILL GUARANTEES NO ASSISTANCE FOR THE BUSH AFTER 1992, AND THAT PRIOR TO THAT TIME THEY MUST RELY ON TRANSFER PAYMENTS TO LOWER POWER COSTS. I CAN ONLY SUGGEST THAT THE SPEED WITH WHICH THE VIABLE ALTERNATIVE FORMS OF POWER PRODUCTION ARE IDENTIFIED AND CONSTRUCTED FOR THE REMOTE AREAS WILL BE LARGELY A FUNCTION OF THE HUMAN AND CAPITAL RESOURCES EXPENDED IN ANY REGION. FOR THAT REASON, ALL EFFORTS MUST BE MADE ON THE PART OF THE POWER AUTHORITY TO PUT FORTH A BALANCED DEVELOPMENT PROCESS THROUGHOUT ALL REGIONS OF THE STATE. IF AFTER CAREFUL AND LEGITIMATE REVIEW, IT IS DETERMINED THAT IN SOME AREAS OF THE STATE, THE COST OF POWER PRODUCTION CANNOT BE SIGNIFICANTLY REDUCED, THEN BETTER LONG TERM COST EQUILIZATION FORMULAS MUST BE CONSIDERED. IN THE MEAN TIME, THE POWER COST ASSISTANCE PROGRAM IS A GOOD SHORT RUN ALTERNATIVE TO USE UNTIL EITHER CHEAPER POWER PRODUCTION PROJECT CAN BE BUILT, OR BETTER LONG TERM COST EQUILIZATION FORMULAS CAN BE DEVELOPED.

IT MIGHT TOO BE NOTED THAT MANY REMOTE AREAS ARE ALREADY RECEIVING ASSISTANCE FROM THE PROGRAM, WHILE MANY MORE DENSELY POPULATED AREAS WON'T RECEIVE ANY RELIEF UNTIL THEIR POWER PROJECTS ARE COMPLETED MANY YEARS DOWN THE ROAD.

IF PEOPLE CONSIDER THESE BILLS AS ONLY A PARTIAL ANSWER TO OUR ENERGY PROBLEMS, THEY WILL BE CORRECT. UNTIL SOCIETY AS A WHOLE REPLACES THE FOSSIL FUEL DRIVEN INTERNAL COMBUSTION ENGINE, WE WILL CONTINUE TO RELY HEAVILY ON CARBON BASED FUELS. THESE BILLS TAKE A BIG STEP IN PROVIDING ALTERNATIVES FOR THINGS WE HAVE CONTROL OVER. THE QUESTION IN MY MIND IS NOT HOW MUCH ELECTRICITY CURRENTLY PLAYS A PART IN OUR ENERGY CONSUMPTION, BUT HOW MUCH IT CAN PLAY, GIVEN RATIONAL ECONOMIC CONSTRAINTS.

THAT BRINGS ME TO MY FINAL ARGUMENT OF THE DAY IN SUPPORT OF THE CONCEPTS BEHIND THESE BILLS. WE ALASKANS ARE FACED OVER THE NEXT DECADES WITH THE QUESTION OF DEVELOPMENT VERSUS CONSERVATION. AS A LIFELONG ALASKAN I AM GRAVELY CONCERNED THAT THE LAND WE ALL LOVE MAY BE DRAMATICALLY TRANSFORMED. WE MUST BE CAREFUL TO INSURE THAT ALL COSTS AND ALL BENEFITS TO DEVELOPMENT PROJECTS ARE PROPERLY IDENTIFIED AND WEIGHED BEFORE A DECISION IS REACHED. I AM NOT OF THE OPINION THAT WE CAN STOP DEVELOPMENT. IN A WORLD OF EVER INCREASING DEMANDS UPON A FINITE NUMBER OF RESOURCES, I AM AFRAID THAT OUR ONLY HOPE IS TO INSURE THAT WHAT DEVELOPMENT TAKES PLACE, RIGOROUSLY ADHERES TO OUR GUIDELINES. CHEAP POWER ON A STATEWIDE BASIS CAN BE AN IMPORTANT PART. IF WE CREATE A COMPARATIVE ECONOMIC ADVANTAGE THROUGH THE AVAILABILITY OF CHEAP POWER RELATIVE TO OTHER PARTS OF THE WORLD, WE WILL BE DEALING FROM A POSITION OF STRENGTH. AS SUCH WE WILL BE ABLE TO DICTATE AS TO WHAT KINDS OF DEVELOPMENT TAKES PLACE THROUGH SUCH THINGS AS RATE STRUCTURES AND LAND MANAGEMENT POLICIES. THE RESULT COULD BE A LONG TERM STABLE ECONOMY BASED UPON RENEWABLE RESOURCES.

IF ON THE OTHER HAND WE WAIT OR DO NOTHING, WE STAND THE RISK OF BEING FORCED TO ACCEPT OTHERWISE UNACCEPTABLE FORMS OF DEVELOPMENT DUE TO HIGH UNEMPLOYMENT, HIGH INTERNATIONAL RESOURCE DEMANDS, AND AN UNSTABLE ECONOMY.

THE TIME TO ACT IS NOW. IF YOU WAIT UNTIL YOU PRODUCE THAT ELLUSIVE PERFECT BILL THAT ATTEMPTS TO ACCURATELY FORECAST THE SPECIFIC NEEDS OF FUTURE GENERATIONS OF ALASKANS, ONE WHICH WOULD TAKE YEARS TO FORMULATE AND STILL NOT PROVIDE ALL THE RIGHT ANSWERS, YOU WILL INCREASE COSTS PERHAPS BILLIONS OF DOLLARS IN ADDED CONSTRUCTION COSTS AND LOST OPPORTUNITIES. THE IMPORTANT POINT IS THAT WE GET UNDER WAY BUILDING A CHEAP POWER PRODUCTION INFRA-STRUCTURE, WHETHER IT INCLUDES HYDRO, BIO-MASS, WIND, TIDAL, OR ANY OTHER LEGITIMATE FORM. WE CAN WAIT UNTIL THE YEAR 2000 TO DETERMINE WHAT THE CIRCUMSTANCES DICTATE THEN AS THE MOST APPROPRIATE RAI STRUCTURE.

MR. CHAIRMAN, IT IS A TIME WHEN PEOPLE ALL ACROSS THE COUNTRY ARE WATCHING TO SEE HOW ALASKA SPENDS ITS MONEY, DECIDING WHETHER OR NOT TO ALLOW US TO KEEP IT. DURING THESE TIMES OF FISCAL CONSTRAINT, WHEN TENS OF THOUSANDS OF NEEDY AMERICANS WILL HAVE FOOD STAMPS TAKEN AWAY FROM THEM, I FIND IT DIFFICULT TO JUSTIFY EXPENDITURES ON HUGE SPORTS STADIUMS BEFORE SUCH THINGS AS POWER PRODUCTION PROJECTS, SCHOOLS, SEWERS, TRANSPORTATION SERVICES, HOSPITALS AND OTHER EMERGENCY SERVICES ARE ADEQUATELY FUNDED. IT SEEMS TO ME THAT THERE IS HARDLY ANYTHING ELSE THE LEGISLATURE CAN DO THAT WOULD HAVE AS GREAT A LONG TERM COST BENEFIT PAYOUT THEN THIS PROGRAM WOULD. ESPECIALLY WHEN YOU CONSIDER THE FACT THAT WHEN THE OIL RUNS OUT, ALL WE WILL BE LEFT WITH IS A BAREN WHOLE IN THE GROUND AND AN EMPTY PIPELINE. HYDRO AND OTHER POWER PRODUCTION PROJECTS WILL GUARANTEE A FUTURE FOR ALASKA. WHAT OTHER PROGRAMS CAN WE SAY THAT ABOUT.

THANK YOU FOR YOUR TIME, I AM PREPARED TO ANSWER ANY QUESTIONS YOU MAY HAVE.

A M E N D M E N T

by The Finance Committee

Offered in the HOUSE

TO: HCS CS SS SB 25 (Finance)

Page 32, following line 14:

Insert the following new section:

" * Sec. 35. The Alaska Power Authority may design, acquire easements for, and construct a high voltage electrical transmission system connecting Anchorage and Fairbanks. Notwithstanding other provisions of law, the transmission system authorized by this section shall be considered a use that is compatible with the purposes of the Denali State Park. Within the boundaries of the Denali State Park, the transmission system authorized by this section shall be routed in consultation with the division of parks."

Renumber following sections accordingly.

Page 32, line 15:

Delete "32-34" and insert "32-35"

STATE OF ALASKA
THE LEGISLATURE

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

LEGISLATIVE AFFAIRS AGENCY

M E M O R A N D U M

June 2, 1981

SUBJECT: Single subject rule

TO: Representative Brian Rogers

FROM: Billy G. Berrier *BGB*
Director
Division of Legal Services

You have asked whether in our opinion HB 589 relating to the disposal of state in kind royalty gas and oil could be combined with HCS CSSSSB 25 (Resources) relating to energy projects and programs of the Alaska Power Authority without violating the single subject rule.

Section 13, Article II of the Constitution of the State of Alaska provides in relevant part:

SECTION 13. Every bill shall be confined to one subject unless it is an appropriation bill or one codifying, revising, or rearranging existing laws.

The meaning of this provision has been before our Supreme Court several times. In each later case a quotation from Gellert v. State, 522 P.2d 1120 (Alaska 1974) has been cited with approval. That quotation reads:

"Ultimately the decision in cases of this kind must be made on a basis of practicality and reasonableness. In determining whether a bill is confined to one subject, we agree with the statement:

"All that is necessary is that the act should embrace some one general subject; and by this is meant, merely, that all matters treated of should fall under some one general idea, be so connected with or related to each other, either logically or in popular understanding, as to be parts of, or germane to, one general subject."

Representative Brian Rogers

Page 2

June 2, 1981

The latest case in this series, Short v. State, 600 P.2d 20 (Alaska 1979) stated:

Thus, it is apparent that the Gellert test requires no more than that the various provisions of single legislative enactment fairly relate to the same subject, or have a natural connection therewith.

Our courts have broadly construed the rule to allow legislation to incorporate related matters in the same bill.

Even granting these broad powers it is my opinion that it is a close question whether combining these bills would violate the single subject rule although it is somewhat more likely that a court would not find a violation.

There is a connection between the primary thrust of each bill, in one reduction to the user in the cost of electrical energy and in the other reduction to the user in cost of fossil fuels and the costs of fossil fuel in many instances relates directly to the cost of electrical energy generation.

However, HCS CSSSSB 25 (Resources) has a broad approach to electrical energy production and financing, creates an energy program, alters the composition and terms of the board of the Alaska Power Authority and creates two distinct funds. HB 589 on the other hand contains provisions for a conditional gift of oil to private firms.

It is difficult to say that all the provisions fairly relate to the same subject despite the relationship of the primary themes. There is therefore a possibility that the entire act would be found unconstitutional as violating the single subject rule.

BGB:ljb

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

HCS C555B 25(Res.)

I. REQUEST

Bill/Resolution No. HOUSE CS FOR CS FOR SSSB 25(Res.)
 Title Energy projects and programs of the Alaska Power Authority
 Requested by House Finance Committee Date 5/20/81

II. FISCAL DETAIL

Agency Affected Department of Revenue
 Program Category Affected Revenue Collection and Management
 BRU, Program, or Subprogram(s) Affected Treasury Management
 (Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

	FY 81	FY 82	FY 83	FY 84	FY 85	FY 86
100 PERSONAL SERVICES		27.5	30.3	33.3	36.6	40.3
200 TRAVEL						
300 CONTRACTUAL		30.0	33.0	36.3	39.9	43.9
400 COMMODITIES						
500 EQUIPMENT		3.0				
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL		60.5	63.3	69.6	76.5	84.2

FUNDING (Thousands of Dollars)

GENERAL FUND		60.5	63.3	69.6	76.5	84.2
FEDERAL FUNDS						
OTHER (Specify Fund Source)						

POSITIONS

FULL TIME		1	1	1	1	1
PART TIME						
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

Above to implement separately invested Power Development Fund by the Department of Revenue. Alaska Power Authority to draw funds when costs incurred. Because of size of fund and specific use relationship, separate fund necessary to assure proper control.

Above personal services for Accounting Technician I (Range 12) for necessary recording, review accounting, reporting for contractual services for safekeeping fees, computer accounting costs, etc. Equipment for new position and working file storage.

Above cost are about .003% of investment income obtained from average balance of fund assuming full draw down by June 30, 1982.

Anselm C. Staack

IV. DATE June 2, 1981 PREPARED BY Anselm C. Staack, Treasury Comptroller
 AGENCY Department of Revenue/Treasury Division
 Original: Legislative Finance PIONEER 465-2351
 cc: Budget and Management
Prime Sponsor (First Legislator Named)

1	POSITION TITLE Accounting Technician I				RANGE/STEP 12 A	BARG. UNIT. G	LOCATION Juneau	GOV	APPROV	DISAPP
2	TYPE OF POSITION PFT	STAFF MONTHS 12	RP No. HCS CSSSSB 25	PCN No.	PRIORITY	FORM 12	PAGE/LINE	LEG		
3	TYPE OF EXPENDITURE			AMOUNT		JUSTIFICATION:				
	1	2	3							
4	PERSONAL SERVICES:									
	SALARY	\$ 1.761 X 12	21,132							
5	BENEFITS	21,132 X .1533	3,239							
6	FICA	21,132 X .0613	1,295							
7	HEALTH INS.	12 X 150	1,800							
8	TOTAL PERSONAL SERVICES		01	27,466						
9	TRAVEL		02							
10	CONTRACTUAL		03							
11	COMMODITIES		04							
12	EQUIPMENT		05	3,000						
13	OTHER									
14	TOTAL COST			30,466						
	CODE	FUNDING SOURCE								
15		FED RCPTS. 1002								
16		GF MATCH. 1003								
17		GEN. FUND 1004		30,466						
18		I-A RCPTS. 1005								
19		PGM RCPTS 1028								
20		OTHER								
21	CONTINUATION									
22	ADDITION		XX	FOR B&M USE ONLY						
4A KEY NUMBER _____ COLUMN NO. _____										

To implement separately invested fund for the Power Development Fund. Contained in HCS CSSSSB 25(Res).

To do accounting, recording and reporting work necessary for fund. Assure transaction posted to proper fund, track income, review/proof safekeeping reports, aid in general ledger posting, preparation of monthly, quarter and annual reports.

AGENCY Department of Revenue PROGRAM Revenue Collection and Management

BRU Treasury Management

COMPONENT HCS CSSSSB 25(Res.)

13 REQUEST FOR NEW POSITION.

FY 82

BILL ANALYSIS
HCS CSSSSB 25 (Res) (5/20/81)

Power Project Development Fund

1. Establishes a Power Development Fund (PDF) in the Alaska Power Authority (APA) to acquire and construct power projects submitted to and approved by the legislature.

Can be used for reconnaissance, feasibility studies, cost of project, debt service/bond defeasance, the Power Cost Assistance Fund (PCAF) (see following section).

2. Department of Revenue to invest money in PDF in accordance with allowed general fund surplus. Department of Revenue to provide money in fund to APA only after cost of project incurred.
3. Income earned on PDF shall be deposited to general fund and may be appropriated by the legislature to the PDF.
4. Power project acquired or constructed is owned by the State and administered by the APA.
5. If by 7/1/86 \$5.0 billion has not been appropriated to the PDF, the APA shall on that date obtain a 10% rate of return on each project.

Wholesale power rate set to obtain a 5% rate of return on all projects when power output of all projects is between 0-500 megawatts. When consolidated power exceeds 500 megawatts rates to be set to recover maintenance/repairs, debt service, safety inspections and costs the PCAF.

6. Legislature reappropriates operating cost monies from revenue received. Any balance may be appropriated to PCAF.

Power Authority Membership

1. APA board directors changes to three at large (four previous) and four appointed heads of state agencies (three previous).

Authority Bonds

1. APA may issue revenue bonds if appropriations to PDF are insufficient to cover costs and the interest cost for bonding is less than other available alternatives.

BILL ANALYSIS, HCS CSSSSB 25, Cont'd

Power Cost Assistance Fund (PCAF)

1. PCAF established as separate fund to provide financial assistance to obtain certain desirable levels of power costs.
2. PCAF is a separate fund in APA, administered by APA. Source of PCAF is money appropriated to it. Assistance provided monthly.
3. APA to conduct proper review (extensive detail language provided in bill) to assure PCAF assistance both necessary and proper.

TELEGRAM

ALASCOM, INC.
PHONE: 586-6442
JUNEAU, AK 99802

1961 JUN 1 PM 3 12

02061 TDA ANIAK ALASKA 86 06-01 1154A ADT
PMS HOUSE FINANCE COMMITTEE

REP SAM COTTEN 0024

JUNEAU AK

WE ARE UNABLE TO ATTEND TELECONFERENCE IN BETHEL TO TESTIFY
ON SB26 TODAY. WE STRONGLY URGE YOU SUPPORT SB26 IN PARTICULAR
SECTION 19 THAT WILL PROVIDE FUNDING TO COMPLETE ELECTRIFICATION
IN THE FOUR VILLAGES OF CHUATHBALUK, CROOKED CREEK, SLEETMUTE,
AND STONEY RIVER. THE PEOPLE IN THESE VILLAGES HAVE BEEN WORKING
VERY HARD DURING THE LAST SEVERAL MONTHS TO ORGANIZE AN ELECTRIC
COOP. THE PEOPLE FEEL THIS WILL PROVIDE A MUCH NEEDED SERVICE
FOR THEIR COMMUNITY. AGAIN YO'JR SUPPORT IS REQUESTED FOR THIS
BILL. SINCERELY

PETE MELLICK, CHAIR PERSON

MIDDLE KUSKOKWIM ELECTRIFICATION COMMITTEE

A M E N D M E N T

Offered in the HOUSE

By Moss

TO: MCS CSSSSB 25(Resources)

Page 1, after line 9:

Insert the following new material:

* Section 1. AS 44.83 is amended by adding new sections to read:

ARTICLE 8. RURAL ELECTRIFICATION REVOLVING LOAN FUND.

Sec. 44.83.361. RURAL ELECTRIFICATION REVOLVING LOAN FUND ESTABLISHED. (a) The rural electrification revolving loan fund is established in the Alaska Power Authority. The fund consists of

(1) appropriations made to the fund; and

(2) principal and interest payments on loans made under this section.

(b) The authority may make loans from the rural electrification revolving loan fund to electric utilities certified by the Alaska Public Utilities Commission. Loans from the fund may be made only for the purpose of extending new electric service into the areas of the state which an electric utility may serve under a certificate of public convenience and necessity issued by the Alaska Public Utilities Commission. A loan may be provided to an electric utility if the utility invests the money necessary to provide one pole, one span of line, one transformer, and one service drop for each consumer for whom immediate service would be provided by the extension of electric service. The balance of the money required to provide the extension

of electric service may be loaned from the fund. However, a loan may not be granted from the fund unless the extension of electric service would provide immediate service to at least three consumers for whom service had not been provided.

(c) A loan from the rural electrification revolving loan fund shall bear an annual rate of interest of two percent.

(d) The electric utility to which the loan is made shall, in addition to its authorized rates, charge the consumers who are served by the extension of new electric service from improvements made with the loan proceeds an amount sufficient to pay the interest costs of the loan.

(e) A utility which receives a loan under this section shall pay to the authority annually an amount equal to the principal and interest on the portion of the loan which has not been invested by the utility to provide one pole, one span of line, one transformer, and one service drop for each consumer served by the line extension.

(f) The authority shall

(1) adopt regulations necessary to carry out the provisions of this section;

(2) administer the rural electrification revolving loan fund;

(3) submit to the legislature within the first 10 days of each regular legislative session a report of actions taken by the authority and an accounting of the fund.

Sec. 44.83.363. LOAN ADVISORY BOARD. (a) When an application for a rural electrification loan is submitted by a utility to the

authority under AS 44.83.361, the authority shall appoint a local advisory board from persons residing in the area which the utility is certified to serve. The board shall consider the loan application. The board may recommend that the loan be approved, with or without modification, or be disapproved based on

- (1) permanence of the premises to be served by the extension;
- (2) land use patterns;
- (3) access for the line which would be installed using loan proceeds;
- (4) availability of other utility service in the area; and
- (5) the economic feasibility of the extension of electric service using the proceeds of the loan.

(b) The authority may accept or reject the recommendation of the loan advisory board.

Renumber subsequent bill sections.

Page 1, line 11:

Delete "Article 8" and insert "Article 9"

Page 3, delete all material in lines 18 - 20 and insert in its place:

* Sec. 19. Sections 1 - 8, 11 - 15, and 18 of this Act take effect immediately in accordance with AS 01.10.070(c).

* Sec. 20. Sections 9, 10, and 16 of this Act take effect July 1, 1981.

* Sec. 21. Section 17 of this Act takes effect July 1, 1992.

AMENDMENT

OFFERED IN THE HOUSE:

BY: MOSS

TO: HCS for CS for SS for HOUSE BILL No. _____

SENATE BILL No. 25 (Resources)

PAGE: X 1

LINE: X 24

ADD (D) THE ENERGY PROGRAM FOR ALASKA SHALL PROVIDE LOWER COST FOSSIL FUEL AS FOLLOWS:

~~After "gas" insert:~~

~~which will be provided by section 38.05.336 as follows:~~

Sec. 38:05.336. DISPOSAL OF ROYALTY OIL AND GAS FOR PROCESSING IN THE STATE. (a) All or part of the royalty oil and gas taken in kind by the state under AS 38.05.182 shall be given by the department to a person who contracts with the state to process and distribute the royalty oil and gas in the state in accordance with the provisions of this section.

(b) A contract entered into for the disposal of oil or gas under this section shall provide

(1) that the recipient of the oil or gas pass on to consumers only the costs of processing and distributing the oil or gas plus a reasonable profit on the processing and distribution;

(2) that if the recipient of the oil or gas contracts with a retail distributor to deliver the oil or gas to consumers, the contract shall provide that the retail distributor will not increase the final price of the oil or gas to the consumer beyond an amount necessary to pay the costs of retail distribution plus a reasonable profit on the retail distribution;

2 (3) for penalties prescribed by regulation adopted by the
3 department if the recipient of the oil or gas or a retail distributor
4 sells the oil or gas to consumers in the state for more than the price
5 authorized by this section;

6 (4) that if oil or gas disposed of under this section is
7 delivered or consumed outside the state the person who received the oil
8 or gas from the state will pay the state an amount equal to the value,
9 before processing, of the oil or gas delivered or consumed outside the
10 state; in this paragraph "oil or gas consumed outside the state" does
11 not include small quantities of processed oil or gas sold by a retail
12 distributor in the state;

13 (5) that the contract may be terminated by the department if
14 the commissioner determines that the recipient is not using all or most
15 of the oil or gas supplied under this section to meet the demand in the
16 state for that oil or gas;

17 (6) that the recipient of the oil or gas will maintain
18 records on the processing, distribution, costs of processing and distri-
19 bution, and prices of oil or gas received under this section, in a form
20 prescribed by the commissioner, which shall be available for examination
21 by the commissioner or his designated representative at all times; and

22 (7) for other terms and conditions considered necessary by
23 the commissioner in accordance with regulations adopted by the depart-
24 ment.

25 (c) The department shall issue regulations providing for the
26 computation of allowable costs, reasonable profits, and for the imple-
27 mentation of this section.

Original sponsors: Kerttula, Dankworth,
Ziegler, et al

Offered: 3/5/81
Referred: Rules

1 IN THE SENATE

BY THE FINANCE COMMITTEE

2 CS FOR SPONSOR SUBSTITUTE FOR SENATE BILL NO. 25 (Finance) am
3 IN THE LEGISLATURE OF THE STATE OF ALASKA
4 TWELFTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act establishing a power project development fund
7 in the Alaska Power Authority and amending the Alaska
8 Power Authority Act; and providing for an effective
9 date."

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

11 * Section 1, AS 44.83.030(a) is amended to read:

12 (a) The authority shall consist of the following directors:

13 (1) four directors at large to be appointed by the governor
14 and confirmed by the legislature;

15 (2) the commissioner of commerce and economic development;

16 (3) the commissioner of natural resources;

17 (4) the commissioner of revenue;

18 (5) the commissioner of transportation and public facilities;

19 (6) the commissioner of community and regional affairs.

20 * Sec. 2. AS 44.83.040 is amended to read:

21 Sec. 44.83.040. OFFICERS AND QUORUM. The directors [DIRECTOR]
22 shall elect one of the directors at large as chairman and other officers
23 they determine desirable. The powers of the authority are vested in
24 the directors, and five [THREE] directors of the authority constitute a
25 quorum. Action may be taken and motions and resolutions adopted by the
26 authority at a meeting by the affirmative vote of at least five [THREE]
27 directors. The directors of the authority serve without compensation,
28 but they shall receive the same travel pay and per diem as provided by
29 law for board members.

1 * Sec. 3. AS 44.83.110(g) is amended to read:

2 (g) When the authority has created and established a capital
3 reserve fund, the commissioner of revenue may lend surplus money in the
4 general fund to the authority for deposit in a capital reserve fund in
5 an amount equal to the capital reserve fund requirement. The loans
6 shall be made on such terms and conditions as may be agreed upon by the
7 commissioner of revenue and the other members of the authority, includ-
8 ing without limitation terms and conditions providing that the loans
9 need not be repaid until the obligations of the authority secured and
10 to be secured by the capital reserve fund are no longer outstanding.

11 * Sec. 4. AS 44.83.100 is amended by adding a new subsection to read:

12 (e) The authority shall issue bonds the principal and interest of
13 which are paid only from the money derived from the project financed
14 with the proceeds of those bonds for a power project previously financed
15 from the power project development fund (AS 44.83.400). Bonds may be
16 issued under this subsection only if

17 (1) the appropriations to the power project development fund
18 for that power project, and interest earned on those appropriations,
19 are insufficient to cover the cost of the power project; and

20 (2) the rate of interest which the authority will pay on the
21 bonds is not more than alternative costs of securing money to pay for
22 the power project.

23 * Sec. 5. AS 44.83.181(b) is amended by adding a new paragraph to read:

24 (5) a recommendation as to whether the proposed project is
25 economically feasible; a power project is "economically feasible" if
26 the authority determines that the total costs of the power project are
27 cheaper for the estimated life of the project than other alternatives;
28 in making a determination of economic feasibility under this paragraph,
29 the authority shall evaluate the estimated life of the power project

1 and its alternatives applying the following standard factors:

2 (A) a general inflation factor for construction and
3 operating costs of seven percent annually;

4 (B) an interest rate of 10 percent for money borrowed
5 for the power project; and

6 (C) an escalation factor for measuring the comparative
7 cost of oil, gas or coal; the rate to be applied is 11 percent
8 annually, and the rate shall be applied to the current fuel cost
9 at the date of determination of economic feasibility.

10 * Sec. 6. AS 44.83 is amended by adding new sections to read:

11 ARTICLE 8. POWER PROJECT DEVELOPMENT FUND.

12 Sec. 44.83.400. FUND ESTABLISHED. (a) A power project develop-
13 ment fund is established in the Alaska Power Authority to carry out the
14 purposes of AS 44.83.400 - 44.83.480.

15 (b) The fund includes

16 (1) all money appropriated to it by the legislature; and

17 (2) interest earned by investment of money in the fund by
18 the Department of Revenue.

19 Sec. 44.83.410. USE OF FUND BALANCE. (a) The fund may be used
20 by the authority to provide money for

21 (1) reconnaissance and feasibility studies and power project
22 finance plans prepared under AS 44.83.177 - 44.83.181; and

23 (2) the cost of a power project, including but not limited
24 to costs of acquiring necessary licenses, preparing engineering designs,
25 obtaining land, and constructing the power project.

26 (b) Money in the fund may be used under (a) of this section only
27 for a power project which

28 (1) meets the operation and revenue requirements of AS 44.-
29 83.460; and

1 (2) operates or will operate

2 (A) on renewable energy resources; or

3 (B) on coal, peat or wood, if the authority determines

4 that

5 (i) the source of the fuel for the project is
6 abundant; and

7 (ii) renewable energy resources to operate the
8 power project are not available or are not economically
9 feasible; or

10 (C) on fossil fuel if none of the other resources or
11 fuels listed in this subsection are economically feasible.

12 Sec. 44.83.420. INVESTMENT OF FUND. The Department of Revenue
13 shall invest the balance of the fund which exceeds the amount the
14 authority determines is necessary to meet requirements of AS 44.83.410
15 during the current fiscal year. An investment by the Department of
16 Revenue under this subsection shall be made in accordance with AS 37.-
17 10.070 and 37.10.075.

18 Sec. 44.83.430. ALLOTMENT TO PROJECTS. (a) The authority shall
19 maintain records of power project allocations from the fund for each
20 power project

21 (1) approved in accordance with AS 44.83.185; and

22 (2) for which an allocation is made from an appropriation
23 made by the legislature without specifying a project.

24 (b) Income earned from investment of money appropriated to the
25 fund under AS 44.83.400(b) shall be allotted by the authority to power
26 projects for which appropriations have been made by law. The allotment
27 shall be based on the amount of investment income earned during each
28 state fiscal year in or after which the legislature has appropriated
29 money to the fund. An allotment of income under this subsection shall

1 be made to each power project for which a specific appropriation has
2 been made in proportion to the amount appropriated for that project as
3 a percentage of the total amount appropriated by the legislature to the
4 fund.

5 Sec. 44.83.440. REALLOCATION OF FUND BALANCE. (a) If a power
6 project designated by the legislature by law is not constructed, the
7 amount appropriated to it may be reappropriated to other power projects
8 by the legislature.

9 (b) The legislature may allocate money under (a) of this section
10 only for a power project which is economically feasible under AS 44.83.-
11 181(b) if the project will serve the market area that is to be served
12 by the power project designated by the legislature and not constructed.

13 Sec. 44.83.450. LAPSE OF EXCESS FUNDS. If appropriations for a
14 power project exceed the amount required for construction of the power
15 project, the excess lapses into the general fund.

16 Sec. 44.83.460. OPERATION AND REVENUE REQUIREMENTS. The authority
17 may not use money in the fund for a power project unless the authority
18 determines that, after construction, operation of the power project
19 will provide revenue sufficient to cover

20 (1) operation, maintenance, and equipment replacement costs
21 of the power project;

22 (2) debt service costs associated with the power project;
23 and

24 (3) the costs of safety inspections and investigations of
25 the power project by the authority.

26 Sec. 44.83.470. OPERATION OF POWER PROJECT BY QUALIFIED UTILITY.
27 If, after construction, a power project that is constructed with pro-
28 ceeds from the fund will be operated by a qualified utility, the author-
29 ity shall enter into an agreement with the qualified utility

1 (1) to assure that operation of the power project by the
2 qualified utility will provide sufficient revenue to meet the require-
3 ments of AS 44.83.460; and

4 (2) to assure that the power project is operated in a safe
5 manner.

6 Sec. 44.83.480. DEFINITIONS. In AS 44.83.400 - 44.83.480,

7 (1) "fund" means the power project development fund;

8 (2) "qualified utility" means any of the following which the
9 authority determines is capable of operating and maintaining a power
10 project of the kind and magnitude which has been constructed or is to
11 be constructed to provide power for a market area:

12 (A) a corporation organized under the Alaska Nonprofit
13 Corporation Act (AS 10.20);

14 (B) an electric cooperative organized under the Electric
15 and Telephone Cooperative Act (AS 10.25);

16 (C) a utility owned and operated by a municipality; and

17 (D) a regional electrical authority (AS 18.57);

18 * Sec. 7. AS 44.83.410(b), added by sec. 6 of this Act, is amended by
19 adding a new paragraph to read:

20 (3) upon completion, charges rates for power which it sells
21 which provide a rate of return to the authority of seven percent a year
22 of the amount allocated to the power project by the authority from the
23 fund .

24 * Sec. 8. AS 44.83.460, added by sec. 6 of this Act, is amended by
25 adding a new paragraph to read:

26 (4) payment to the authority of a rate of return of seven
27 percent a year of the amount allocated to the power project by the
28 authority from the fund.

29 * Sec. 9. AS 44.25.020 is amended by adding a new paragraph to read:

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(5) invest and manage the balance of the power project development fund in accordance with AS 44.83.420.

* Sec. 10. AS 44.83.030(b) is repealed.

* Sec. 11. Sections 1, 2, 3, and 10 of this Act take effect immediately in accordance with AS 01.10.070(c).

* Sec. 12. Sections 4, 5, 6 and 9 of this Act take effect July 1, 1981.

* Sec. 13. Sections 7 and 8 of this Act take effect July 1, 1986, if on that date the total amount appropriated by the legislature to the power project development fund (AS 44.83.400) is less than \$5,000,000,000.

Schedule and Witnesses

House Finance Committee

June 2, 1:30 p.m.

SB 25, 26, and 244

I. State funding of energy projects v. the existing financing mechanisms and alternatives

Sterling Gallagher, Nuveen and Associates
Arlon Tussing
Milt Barker, Legislative Finance
Utility Representatives

II. Energy projects as wealth-sharing

Jim Ayers, Rural CAP
Bob Brean, Alaska Regional Energy Association (AREA)
Jack Krienheider, House Research Agency
Jim Suby, Governor's Office

III. Energy project selection

Eric Yould, Alaska Power Authority
Gregg Erickson

other witnesses as time permits