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1 IN THE HOUSE

BY THE FINANCE COMMITTEE

2 CS FOR SPONSOR SUBSTITUTE FOR HOUSE BILL NO. 9 (Finance) (efd failed)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 TWELFTH LEGISLATURE - FIRST SESSION

8 A BILL

6 For an Act entitled: "An Act relating to energy."

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

8 * Section 1. AS 37.12.125(6) is amended to read:

9 (6) "renewable resource" means

10 (A) non-human living organisms;

11 (B) natural components of the environment, including
12 the air, land, and water; [AND]

13 (C) energy systems which are naturally recurring or
14 replenished; and

15 (D) energy conservation technologies and recyclable
16 wastes.

17 * Sec. 2. AS 43.20.037(d)(1)(B)(ii) is amended to read:

18 (ii) a method of architectural design and construc-
19 tion which provides for the collection, storage and use of
20 direct radiation from the sun or which provides for the re-
21 tention of heat by the use of an amount or quality of insula-
22 tion which exceeds the amount or quality of insulation re-
23 quired by building performance standards adopted by the
24 Alaska Energy Center under AS 46.12.120; and

25 * Sec. 3. AS 44.21.020 is amended by adding a new paragraph to read:

26 (13) adopt regulations to implement the energy conservation
27 procurement policy set out in AS 46.11.070.

28 * Sec. 4. AS 44.33.040(17)(B) is amended to read:

29 (B) make grants for recipients eligible for [TO MATCH]

1 grants from [MADE BY] the United States Department of Energy under
2 the appropriate technology small grants program for Alaska autho-
3 rized by Title I of the Department of Energy Appropriation Authori-
4 zation Act of 1977, P.L. 95-39 (42 U.S.C. 5907a) and 10 C.F.R. 470.

5 * Sec. 5. AS 44.47.140 is amended to read:

6 Sec. 44.47.140. LIMITATIONS. A program of the department under
7 AS 44.47.130 in a rural area may not exceed \$40,000 in [A] cost a year,
8 except that a grant of not more than \$100,000 [\$60,000] may be made
9 under AS 44.47.145 for a bulk fuel storage facility.

10 * Sec. 6. AS 44.47.145(b) is amended to read:

11 (b) Grants made under this section for the acquisition and in-
12 stallation of a bulk fuel storage facility may not exceed \$100,000
13 [\$60,000] per community.

14 * Sec. 7. AS 44.83.070 is amended to read:

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

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

22 (2) facilities which recover and use waste energy [CONSERVA-
23 TION FACILITIES].

24 * Sec. 8. AS 44.83.177(a) is amended to read:

25 (a) To identify power project alternatives and energy consumption
26 patterns and needs for a community or region, the authority shall,
27 after consultation with other state agencies and after review of in-
28 formation on alternative sources of energy [POWER], complete a recon-
29 naissance study for each proposed new power project.

1 * Sec. 9. AS 44.83.177(b) is repealed and reenacted to read:

2 (b) A reconnaissance study shall

3 (1) identify the present and anticipated electrical and
4 thermal energy requirements of a community or region;

5 (2) survey all electrical and thermal energy sources avail-
6 able to the community or region and evaluate the relative economic
7 merits of alternative sources of power and heat, including energy
8 conservation;

9 (3) assess the effect of development of alternative sources
10 of power and heat on the environment so as to assure that there is no
11 adverse effect to the environment which would make the project inadvis-
12 able; and

13 (4) include public comment from residents of the community
14 and adjacent area.

15 * Sec. 10. AS 44.83.177(c)(2) is amended to read:

16 (2) standard criteria and measures for comparative analysis
17 of alternative energy [POWER] sources.

18 * Sec. 11. AS 44.83.230(4) is amended to read:

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

1 * Sec. 12. AS 44.83.230(7) is amended to read:

2 (7) "reconnaissance study" means a study conducted for the
3 purpose of assessing the present and future electrical and thermal
4 energy [POWER] needs of an area under AS 44.83.177;

5 * Sec. 13. AS 46.11.030(a)(1) is amended to read:

6 (1) establish criteria for the performance of energy audits
7 of commercial and industrial buildings, cultural facilities, and
8 public buildings located in the state;

9 * Sec. 14. AS 46.11.030(c) is amended to read:

10 (c) The department may contract

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

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

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

17 * Sec. 15. AS 46.11 is amended by adding new sections to read:

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

21 (1) abbreviated audits that

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

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

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

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

1 (2) detailed audits that

2 (A) analyze building characteristics;

3 (B) evaluate the applicability of structural retrofit,
4 upgrading, and the replacement of energy systems with alternative
5 energy systems;

6 (C) recommend appropriate alternative energy systems
7 for the residence; and

8 (D) provide to the resident an estimate of the costs to
9 implement the recommended measures, and an estimate of the time in
10 which the estimated cost of the energy saved by implementation of
11 the recommended measures exceeds the cost of implementing the
12 recommended measures.

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

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

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

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

25 Sec. 46.11.070. ENERGY CONSERVATION PROCUREMENT POLICY REGULA-
26 TIONS. (a) By July 1, 1982, the commissioner of administration shall
27 adopt regulations to implement a procurement policy applicable to state
28 agencies. The regulations adopted shall be reasonably necessary to
29 promote energy conservation in the acquisition and use of equipment,

1 materials, and supplies, and shall include, but are not limited to,

2 (1) procedures to determine life cycle costs of equipment,
3 based on acquisition costs, the cost of operating the equipment during
4 its anticipated useful life, maintenance costs of equipment during its
5 anticipated useful life, and the anticipated resale or salvage value of
6 the equipment; and

7 (2) minimum standards of energy efficiency of equipment,
8 based on applicable federal energy efficiency standards and average
9 fleet fuel economy for automobiles.

10 (b) The regulations adopted by the commissioner of administration
11 shall include bid procedures applicable to the acquisition of equip-
12 ment, materials, and supplies by state agencies by which the state
13 agency may evaluate compliance of a bid with the provisions of (a) of
14 this section before making a bid award.

15 (c) The commissioner of administration may not adopt regulations
16 under this section until the director of the Alaska Energy Center
17 (AS 46.12) and the director of the division of energy and power develop-
18 ment in the Department of Commerce and Economic Development are allowed
19 to review and comment on the regulations.

20 (d) The commissioner of administration may assist state agencies
21 in complying with regulations adopted under this section.

22 (e) By the 10th day of each regular session of the legislature,
23 the commissioner of administration shall submit a report to the legis-
24 lature on the regulations adopted under this section, and on compliance
25 with the regulations by state agencies. The report shall contain

26 (1) the actual energy costs and the energy conserved as a
27 result of compliance by state agencies with the regulations adopted
28 under this section; and

29 (2) the estimated energy costs and estimated energy which

1 may be conserved as a result of compliance by state agencies with the
2 regulations adopted under this section.

3 * Sec. 17. AS 37.25.030 is amended by adding a new subsection to read:

4 (b) The commissioner of administration shall

5 (1) require bids submitted under this section to contain
6 information about the life cycle costs and energy efficiency standards
7 of equipment, if the bid involves energy-consuming equipment;

8 (2) condition acceptance of a bid submitted under this
9 section on compliance by the bidder with bid regulations adopted under
10 AS 46.11.070.

11 * Sec. 18. AS 46.11.900(1)(B)(ii) is amended to read:

12 (ii) a method of architectural design and construc-
13 tion which provides for the collection, storage and use of
14 direct radiation from the sun or which provides for the re-
15 retention of heat by the use of an amount or quality of insula-
16 tion which exceeds the amount or quality of insulation re-
17 quired by building performance standards adopted by the
18 Alaska Energy Center under AS 46.12; and

19 * Sec. 19. AS 46.11.900(3) is amended to read:

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

23 [(A) THE ENERGY CONSUMPTION CHARACTERISTICS OF A BUILD-
24 ING, INCLUDING THE SIZE, TYPE, AND RATE OF ENERGY CONSUMPTION OF
25 MAJOR ENERGY CONSUMING SYSTEMS OF THE BUILDING AND THE CLIMATE
26 CHARACTERIZING THE REGION WHERE THE BUILDING IS LOCATED; AND

27 (B)] the energy [CONSERVATION AND COST] savings likely
28 to result from appropriate energy-conserving maintenance and
29 operating procedures and modifications, including the purchase and

1 installation of energy-related fixtures; [FOR PURPOSES OF THIS
2 SUBPARAGRAPH WHEN A FOSSIL FUEL IS THE ENERGY SOURCE, THE ENERGY
3 COST SAVINGS SHALL BE DETERMINED WITH REFERENCE TO THE PROJECTED
4 PRICE OF THAT FOSSIL FUEL OVER A 10-YEAR PERIOD,]

5 * Sec. 20. AS 46.11.900 is amended by adding a new paragraph to read:

6 (10) "cultural facility" means a structure or complex the
7 principal purpose of which is to serve the visual and performing arts,
8 including but not limited to a theatre, concert hall or gallery, or to
9 serve as the repository of the historical or contemporary heritage of
10 the community and its people, and which also may be used for compatible
11 activities, including but not limited to, activities relating to educa-
12 tion, community meetings, tourism, and visitor information.

13 * Sec. 21. AS 46.12.120 is amended by adding a new paragraph to read:

14 (6) adopt building energy performance standards for
15 (A) public facilities of the state; and
16 (B) residences, commercial and industrial buildings,
17 and other privately owned buildings in the state for which alterna-
18 tive energy system and energy conservation improvement loans may
19 be made under AS 46.13 or for which an energy conservation credit
20 is sought under AS 43.20.037.

21 * Sec. 22. AS 46 is amended by adding a new chapter to read:

22 CHAPTER 13. ENERGY CONSERVATION AND DEVELOPMENT.

23 ARTICLE 1. ALTERNATIVE TECHNOLOGY AND
24 ENERGY CONSERVATION LOANS.

25 Sec. 46.13.010. LOAN FUND ESTABLISHED. There is established in
26 the Department of Commerce and Economic Development the alternative
27 technology and energy conservation loan fund to carry out the purposes
28 of AS 46.13.010 - 46.13.099. A loan made under AS 46.13.010 - 46.13.099
29 may be used

1 (1) to develop energy production and conservation systems
2 using energy sources other than fossil or nuclear fuel, including but
3 not limited to, windmills, water, and solar energy devices;

4 (2) to develop and implement methods of energy production,
5 waste disposal, recycling, food production, transportation, building
6 design, and industrial enterprise which may be more efficient, less
7 costly, and less energy intensive than those methods presently used and
8 which are appropriate to the Alaska environment;

9 (3) to purchase, construct, or install an energy conserva-
10 tion improvement or an alternative energy system which is likely to
11 result in energy conservation or energy cost savings

12 (A) in a residential or commercial building;

13 (B) in a building owned by a corporation organized
14 under AS 10.20; or

15 (C) as part of an agricultural or industrial process.

16 Sec. 46.13.020. POWERS AND DUTIES OF THE DEPARTMENT. The depart-
17 ment may make loans

18 (1) for the purchase, construction, installation, and pro-
19 duction of

20 (A) alternative energy systems;

21 (B) energy conservation improvements; and

22 (2) for the development, implementation, and production of
23 more efficient, less costly, less energy intensive, and more appropri-
24 ate technologies.

25 Sec. 46.13.030. AUDITS. A loan may not be made under AS 46.-
26 13.010 - 46.13.099 for an alternative energy system or energy conserva-
27 tion improvement unless a detailed energy audit of the building has
28 been completed as provided in AS 46.11.032.

29 Sec. 46.13.040. LOAN TERMS. (a) A loan for the purchase, con-

1 construction, or installation of an alternative energy system or an energy
2 conservation improvement under AS 46.13.010 - 46.13.099 may be made
3 only for an alternative energy system or energy conservation improve-
4 ment which has been recommended in a detailed energy audit as a measure
5 which is likely to result in energy conservation or energy cost savings.

6 (b) A loan for the development of an alternative energy system or
7 for an energy conservation improvement

8 (1) may include the cost of the detailed audit of the build-
9 ing; and

10 (2) may not exceed the lesser of

11 (A) the cost of the alternative energy system or the
12 energy conservation improvement and the amount included under (1)
13 of this subsection; or

14 (B) \$100,000.

15 (c) The duration for repayment of a loan may not exceed 75 percent
16 of the estimated useful life of the alternative energy system or energy
17 conservation improvement, as determined by the department.

18 (d) All payments of principal and interest on a loan made under
19 AS 46.13.010 - 46.13.099 shall be paid by the department to the Depart-
20 ment of Revenue for deposit into the general fund.

21 (e) The rate of interest on a loan made under AS 46.13.010 -
22 46.13.099

23 (1) is five percent, if the loan is made before January 1,
24 1984;

25 (2) equals the percentage of the average weekly yield of
26 municipal bonds for the 12 months preceding the loan, as determined by
27 the commissioner of commerce and economic development from municipal
28 bond yield rates reported in the 30-year revenue index of the Weekly
29 Bond Buyer, for a loan made after December 31, 1983.

1 (f) The department may require security for a loan under this
2 section. If the amount of a loan is less than \$10,000, the department
3 may not require security in the form of a deed of trust. When a loan
4 is made under this section, the department may require the loan appli-
5 cant to present copies of invoices or billings for expenses which the
6 proceeds of the loan will be used to pay.

7 Sec. 46.13.050. LIMITATIONS ON LOANS. A loan for an alternative
8 energy system or energy conservation improvement which uses wood as its
9 principal fuel may not be used by the borrower for structural changes
10 in a building. Not more than one-third of the amount loaned for an
11 alternative energy system or energy conservation improvement which uses
12 wood as its principal fuel may be used for costs of installation of the
13 system or improvement.

14 Sec. 46.13.060. LOAN ADVANCES. The department shall establish
15 procedures for the payment of an advance of a portion of the proceeds
16 of a loan by an applicant before the purchase and construction or
17 installation of an energy conservation improvement or an alternative
18 energy system.

19 Sec. 46.13.070. REGULATIONS. The department shall adopt regula-
20 tions necessary to carry out the provisions of AS 46.13.010 - 46.13.099.

21 Sec. 46.13.099. DEFINITIONS. In AS 46.13.010 - 46.13.099,
22 "alternative energy system"

23 (1) means a source of thermal, mechanical, or electrical
24 energy which is not dependent on oil or gas or a nuclear fuel for the
25 supply of energy for space heating and cooling, refrigeration and cold
26 storage, electrical power, mechanical power, or the heating of water;

27 (2) includes

28 (A) an alternative energy property as defined by
29 sec. 48(1)(3)(A) of the Internal Revenue Code (26 U.S.C. sec. 48-

1 (1)(3)(A));

2 (B) a method of architectural design and construction
3 which

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

6 (ii) provides for the retention of heat by the use
7 of an amount or quality of insulation which exceeds the
8 amount or quality of insulation required by building perfor-
9 mance standards adopted by the Alaska Energy Center; and

10 (C) any other device approved by the commissioner of
11 commerce and economic development under AS 44.33.040(12).

12 ARTICLE 2. ENERGY CONSERVATION REFUNDS AND GRANTS.

13 Sec. 46.13.100. FUND ESTABLISHED. There is established in the
14 Department of Commerce and Economic Development the residential energy
15 conservation grant fund to carry out the purposes of AS 46.13.100 -
16 46.13.199. Refunds and grants made under AS 46.13.100 - 46.13.199 may
17 be used to purchase, construct, and install an energy conservation
18 improvement in residential buildings. The fund may be used for no
19 other purpose.

20 Sec. 46.13.110. REFUNDS AND GRANTS. (a) The department may
21 make refunds or grants for the purchase, construction, and installation
22 of an energy conservation improvement in a residential building if the
23 energy conservation improvement is recommended in an abbreviated energy
24 audit under AS 46.11.032.

25 (b) A refund or grant made under this section may not exceed an
26 amount determined by the department by application of each of the
27 factors set out in (e) of this section to the base rate applicable to
28 the dwelling or residential building. The base rate is

29 (1) \$300 for a single-family dwelling; or

1 (2) \$200 for each unit in a multi-unit residential building.

2 (c) In making a refund or grant under this section, the depart-
3 ment shall determine the amount of a refund or grant payable under (a)
4 of this section by adjusting the base rate set out in (b) of this
5 section by

6 (1) a regional cost-of-living index determined by the depart-
7 ment;

8 (2) a degree day factor.

9 Sec. 46.13.199. DEFINITIONS. In AS 46.13.100 - 46.13.199,

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

13 (2) "degree day factor" means the factor determined by
14 dividing the average number of degree days for the community in which a
15 dwelling or residential building is located by the average number of
16 degree days for the state;

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

23 (4) "energy conservation improvement" means

24 (A) structural insulation;

25 (B) storm and thermal windows and doors;

26 (C) a furnace replacement burner designed to achieve a
27 reduction in the amount of fuel consumed as a result of increased
28 combustion efficiency;

29 (D) a device for modifying flue openings designed to

1 increase the efficiency of operation of the heating system;

2 (E) an electrical or mechanical furnace ignition system
3 which replaces a gas pilot light;

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

5 (G) a meter which displays the cost of energy usage;

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

7 (I) insulating shades and shutters;

8 (J) air and water recuperators;

9 (K) electrical outlet insulating gaskets;

10 (L) water heater insulating jacket;

11 (M) shower flow reducer;

12 (N) any other energy-saving device approved by the
13 commissioner of commerce and economic development under AS 44.33.-
14 040(12);

15 (5) "regional cost-of-living index" is an index determined
16 by calculating the costs of living in the regions of the state by using
17 the cost of living in Anchorage as a base of 1.00;

18 (6) "residential building" means a building which is used as
19 a home, dwelling or sleeping place and includes a newly constructed
20 building and a building proposed for construction as well as an existing
21 structure.

22 **ARTICLE 3. ENERGY CONSERVATION ASSISTANCE.**

23 **Sec. 46.13.200. ENERGY CONSERVATION ASSISTANCE.** The department
24 may make a grant to an individual, municipality, or nonprofit corpora-
25 tion to install an energy conservation improvement in a building or
26 dwelling

27 (1) in which an individual who receives low income resides;
28 or

29 (2) in a community

- 1 (A) which has a population of less than 600;
- 2 (B) which does not have year-round surface transporta-
- 3 tion; and
- 4 (C) which lacks the goods and services necessary for
- 5 installation of anergy conservation improvements.

6 Sec. 46.13.210. LIMITATION ON GRANT. A grant under AS 46.13.200
7 may not exceed \$3,000.

8 Sec. 46.13.220. STANDARDS. The department shall by regulation
9 establish

10 (1) income standards for individuals who are eligible for
11 assistance under AS 46.13.200 - 46.13.240 based on poverty guidelines
12 provided by the federal Office of Management and Budget adjusted to
13 Alaska and regional conditions by United States Department of Labor
14 statistics and a cost-of-living index;

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

17 (3) the energy conservation improvements which may be made
18 under AS 46.13.200 - 46.13.240;

19 (4) the amount of assistance that may be provided to an
20 individual under AS 46.13.200 - 46.13.240 considering

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

22 (B) prior energy conservation improvements made to the
23 housing unit;

24 (C) the cost effectiveness of any proposed improvements
25 which are made to conserve energy;

26 (D) costs of materials and transportation of materials;
27 and

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

1 Sec. 46.13.230. LIMITATION ON ASSISTANCE. If an energy conserva-
2 tion improvement in a building or dwelling is financed by a refund or
3 grant made under AS 46.13.100 - 46.13.199, a low-income individual who
4 later resides in the building or dwelling may receive assistance under
5 AS 46.13.200 - 46.13.240 for other energy conservation improvements.
6 However,

7 (1) only one grant may be made under AS 46.13.200 - 46.13.240
8 for each building or dwelling; and

9 (2) when a grant is given for a building or dwelling under
10 AS 46.13.200 - 46.13.240, the owner of the building or dwelling may not
11 obtain a refund or grant under AS 46.13.100 - 46.13.199.

12 Sec. 46.13.240. AUDIT. A grant may not be made under AS 46.13.-
13 200 - 46.13.240 unless an abbreviated energy audit is completed.

14 ARTICLE 10. GENERAL PROVISIONS.

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

17 * Sec. 23. The following laws are repealed: AS 45.88; AS 45.89; and
18 AS 46.11.030(d) and (e).