

CS FOR HOUSE BILL NO. 121 (CRA)  
IN THE LEGISLATURE OF THE STATE OF ALASKA  
SEVENTEENTH LEGISLATURE - FIRST SESSION

BY THE HOUSE COMMUNITY AND REGIONAL AFFAIRS COMMITTEE

Offered: 3/22/91

Referred: Labor & Commerce, Finance

Sponsor(s): REPRESENTATIVES BROWN, Ellis, Finkelstein, Navarre, Gruenberg, Koponen, Ulmer

A BILL

FOR AN ACT ENTITLED

1 "An Act requiring certain electric utilities to prepare integrated resource plans; prohibiting  
2 state agencies and corporations from participating in certain projects unless they are  
3 consistent with the approved integrated resource plan; and requiring a report concerning  
4 disruption of the state's energy supply."

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

6 \* Section 1. FINDINGS. The legislature finds that

7 (1) recent events in the Middle East have once again focused worldwide attention on the  
8 vulnerability of energy supplies and the need to pursue energy policies that emphasize energy efficiency  
9 and conservation;

10 (2) the state has invested hundreds of millions of dollars in electrical energy generation  
11 and distribution facilities and the public has a compelling interest in the efficient and cost-effective  
12 utilization of these energy supply and distribution facilities; and

13 (3) the Alaska Energy Authority has documented substantial opportunities to make cost-  
14 effective energy efficiency and conservation investments in the state.

1 \* **Sec. 2. SHORT TITLE.** This Act shall be known as the "Energy Efficiency and Security Act."

2 \* **Sec. 3.** AS 42.05 is amended by adding new sections to read:

3           **Sec. 42.05.292. INTEGRATED RESOURCE PLANS.** (a) An electric utility that uses  
4 or is served by a power generating or distribution facility owned by the state or constructed using  
5 state financial assistance with annual sales that exceed 300,000,000 kilowatt hours shall, on or  
6 before January 15, 1993, and every four years thereafter, file an integrated resource plan with the  
7 commission. The plan must show how the utility will meet forecasted power requirements. A  
8 forecast required by this subsection must be for the next 20 years. In the plan, the utility shall

9                   (1) list and describe current facilities and energy supply resources of the utility;

10                   (2) include a forecasted retirement schedule that lists the facilities that the utility  
11 expects to remove from service, discusses the assumptions used to develop the retirement  
12 schedule, and includes the forecasted use of specific facilities, the remaining useful life of the  
13 facilities, and forecasted maintenance work;

14                   (3) describe the utility's interconnection relationships with other utilities and small  
15 power producers, and the utility's agreements for operation of joint use facilities, power  
16 exchanges, power pooling, reserve sharing, commodity displacement, and other operating  
17 arrangements;

18                   (4) document energy end-use in the utility service area and identify with  
19 reasonable accuracy the final physical use of electricity in the residential, commercial, and  
20 industrial sectors, including use within each sector for space heating and cooling, lighting, water  
21 heating, refrigeration, and appliances;

22                   (5) forecast system power demand including annual, seasonal, and peak day load  
23 hourly duration curves and best estimates of anticipated peak demand of the major user  
24 classifications including residential, commercial, and industrial sectors;

25                   (6) analyze the utility's existing ability to meet increased system requirements,  
26 including

27                           (A) opportunities for generation, transmission, or other system efficiency  
28 improvements;

29                           (B) potential electric power pooling;

30                           (C) possible interconnection with qualifying cogenerators or small power  
31 producers;

- 1 (D) anticipated demand reductions in power requirements as a result of  
2 market-induced or programmatic conservation efforts; and  
3 (E) current utility load management efforts;
- 4 (7) summarize the utility's load research programs, end-use analysis, and load  
5 management investigations, including
- 6 (A) the status of current and anticipated load research, data collection, and  
7 analysis;
- 8 (B) the status of current and anticipated end-use research, data collection,  
9 and analysis;
- 10 (C) an assessment of changes anticipated in end-use requirements from  
11 appliance and mechanical system efficiency improvements for each consumer sector;
- 12 (D) an evaluation of the effects on utility costs from end-use efficiency  
13 changes;
- 14 (E) a description of methods including innovative rate designs available  
15 to modify, coordinate, or control end uses to manage system loads; and
- 16 (F) cost estimates for implementation of load management programs;
- 17 (8) provide long-term forecasts, based on end-use and econometric methodologies  
18 as appropriate, including
- 19 (A) base, low, and high forecasts of the power requirements for the utility  
20 service area;
- 21 (B) a discussion of the assumptions used in developing the forecasts  
22 including reserve margin requirements, population growth or decline, employment growth  
23 or decline, economic development, changes in service area, and other factors that influ-  
24 ence the demand for electrical energy; and
- 25 (C) a sensitivity analysis that tests the importance of specific assumptions;
- 26 (9) identify and evaluate alternative system development options to meet  
27 forecasted power requirements; the options must address availability, reliability, flexibility, and  
28 cost-effectiveness;
- 29 (10) identify the system development option with the lowest present value cost  
30 over the forecast period;
- 31 (11) recommend a specific system development option and an implementation "An

1 Act plan for the option; the option must identify projected facility retirement, development of  
2 additional generating and transmission systems, load management efforts, conservation, and  
3 energy end-use efficiency improvements;

4 (12) if the system development option recommended by the utility under (11) of  
5 this subsection is different from the system development option with the lowest present value cost  
6 identified under (10) of this subsection, provide an analysis and justification for the recommended  
7 system development option; and

8 (13) include other information considered necessary by the commission to ensure  
9 adequate evaluation of all supply-side and demand-side alternatives.

10 (b) After consulting with the Alaska Energy Authority, the commission may establish by  
11 regulation a consistent plan development and reporting methodology for the integrated resource  
12 plans required under (a) of this section including the coordinated preparation and filing of  
13 individual plans by closely integrated utilities served by common facilities.

14 (c) In this section, "present value cost" means the total of future costs of a system  
15 development option, including environmental costs, discounted to the present.

16 Sec. 42.05.293. REVIEW AND APPROVAL OF INTEGRATED RESOURCE PLANS.

17 (a) The commission shall establish by regulation a procedure for the review and approval of a  
18 plan submitted under AS 42.05.292 that includes a provision for public hearings before the  
19 commission in the principal localities served by the utility submitting the plan.

20 (b) After consulting with the Alaska Energy Authority, the commission shall approve a  
21 utility's integrated resource plan, including the recommended system development option, if the  
22 commission finds that the plan

23 (1) ensures system reliability;

24 (2) would provide consumers with the lowest reasonable cost of power over the  
25 forecast period; cost savings identified through life-cycle cost analysis may be considered even  
26 though the cost savings will be realized after the forecast period;

27 (3) adequately addresses conserving electrical energy through cost-effective, end-  
28 use efficiency improvements using readily available or reliably anticipated methods or  
29 technology;

30 (4) documents a reasonable expectation of future load and resource requirements;

31 (5) uses, as appropriate, life-cycle costing and cost-effectiveness analysis and

1 explains the criteria and assumptions on which the analysis is based;

2 (6) evaluates resource alternatives that would be appropriate for the service area  
3 in light of technology currently available and reliably anticipated to exist during the forecast  
4 period; and

5 (7) describes the utility's data collection activities, additional data requirements,  
6 and efforts to develop that additional data.

7 (c) If the commission finds that a utility's integrated resource plan and recommended  
8 system development option does not meet the criteria set out in (b) of this section, the  
9 commission may reject the plan or approve a modified plan and system development option that  
10 meets the criteria. Commission approval of a plan and system development option authorizes  
11 the utility to implement the plan as approved.

12 (d) The commission shall set rates for utility services and revenue requirements at a level  
13 sufficient for a utility to recover all reasonable expenses and capital expenditures incurred by the  
14 utility in preparing the plan and implementing the approved plan.

15 Sec. 42.05.294. COMPLIANCE WITH INTEGRATED RESOURCE PLAN. An electric  
16 utility that is subject to the requirements of AS 42.05.292 and 42.05.293 may not participate in  
17 the use of an electrical generation or transmission system project authorized by the legislature  
18 after January 15, 1993, whose construction or acquisition was financed in whole or in part by  
19 state appropriations unless the project is consistent with the utility's approved integrated resource  
20 plan under AS 42.05.292 and 42.05.293.

21 \* Sec. 4. AS 44.83 is amended by adding a new section to read:

22 Sec. 44.83.085. GRANTS FOR INTEGRATED RESOURCE PLANS. The authority may  
23 make a grant to an electric utility to assist in paying the cost of preparing an integrated resource  
24 plan under AS 42.05.292.

25 \* Sec. 5. After consulting with the Alaska Energy Authority and the Department of Military and  
26 Veterans' Affairs, the Department of Community and Regional Affairs shall prepare a report examining  
27 the implications of a major disruption of the energy supply to consumers in the state, including a  
28 discussion of the implications of a substantial increase in the price of energy. The department shall  
29 submit the report to the Alaska State Legislature on or before January 15, 1992.