

MAINE STATE LEGISLATURE

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FIRST REGULAR SESSION

ONE HUNDRED AND TENTH LEGISLATURE

Legislative Document

No. 1228

H. P. 1018

House of Representatives, March 10, 1981

Referred to the Committee on Public Utilities. Sent up for concurrence and ordered printed.

EDWIN H. PERT, Clerk

Presented by Representative Kany of Waterville.

Cosponsors: Representative Thompson of South Portland, Representative Baker of Portland and Representative J. Mitchell of Freeport.

STATE OF MAINE

IN THE YEAR OF OUR LORD NINETEEN HUNDRED AND EIGHTY-ONE

AN ACT to Promote Increased Efficiencies in Thermal Electric Generating Facilities.

Be it enacted by the People of the State of Maine, as follows:

35 MRSA § 13-A, as last amended by PL 1979, c. 265, §§ 3 to 5, is further amended by adding at the end a new paragraph to read:

The commission shall issue a certificate of public convenience and necessity for a thermal electric generating facility only if the commission finds that there is no practicable alternative, or combination of alternatives, which would have a greater thermal design efficiency and provide sufficient reliable electric power to the area served. For the purpose of this paragraph "thermal design efficiency" means the ratio of the useful energy output to the fuel energy input, calculated from the design, for steady state operation, expressed as a percent; and "useful energy output" means the sum of the electrical energy generated and delivered to the busbar plus the heat energy delivered in useful form to pipes or other transmission systems for use in space heating, industrial processes or other end uses as specified by rule, by the commission.

STATEMENT OF FACT

Typical thermal efficiencies of central station electric generation facilities are 33-38%. Thus, nearly 2/3 of the fuel energy is discharged as waste heat.

Cogeneration facilities can capture some of that waste heat and use it for industrial processes or for space heating efficiencies possibly as high as 74%. The result is to generate electricity with about 1/2 as much fuel per kilowatt as in a conventional plant.

The purpose of this bill is to encourage cogeneration to the maximum extent feasible in new electric generating facilities, and, in the absence of cogeneration, to encourage improved thermal design in conventional facilities.