"With all the evidence seemingly pointed the other way, why is the American energy effort so heavily concentrated on such a costly, controversial, hazardous, and inefficient technology such as nuclear fission?"

--U.S. House of Rep., Com. on Government Operations
Report, "Nuclear Power Costs", April 26, 1978

## JOES AND ENTEREDY

# WITHOUT SEASFICIA

#### REAL NEEDS FOR POWER

"Utilities have grossly overestimated their future need for energy and for new power plants." (p. 35)

with..unneeded, expensive nuclear plants being built onthe strength of no longer valid planning. It is invalid because of lowering demand forecasts combined with the emergency of energy conservation." (p. 36)

"(Connecticut) PUCA Commissioner Harrigan said, 'We can't afford to bankrupt a whole generation of tax-payers by a construction program..that is not required and may never be required." (p. 35)

The Seabrook plant was based on Public Service Co. of N.H.'s predictions of a 10.0% annual demand increase. Since the 1973 energy crisis, demand has not grown significantly. The 1977 increase was only 1.1% (by PSCo figures).

Manchester attorney Robert Backus, in a letter to N.H. Public Utilities Commission Chairman Alexander Kalinski, said, "And the (Public Service) Company has further admitted that it will be seeking annual compound rate increases of 5.15%..for financing the plant.., based on an assumption that demand would grow at 7.89% a year. Mr. Harrison, Financial Vice-President for the Company, admitted that if this annual growth rate is not achieved, larger rate increases would be necessary." In the spring of 1978, PSCo requested and received a 29% rate increase, and now predicts additional annual increases of 6-10% until the Seabrook plant is completed.

### CONSERVATION and ALTERNATIVES

"More than half the current energy produced in the United States is wasted. For the next 25 years the U.S. could meet all its new energy needs simply by improving efficiency." (p. 64)

"..the U.S. could reduce its energy consumption by 40% or more, without adverse effects on industrial output or individual lifestyles, and with the positive effects of increasing employment and reducing inflation and pollution." (p. 65)

"Prosperous and highly industrialized countries such as Sweden and West Germany consume about 40 to 50% less energy per capita than we do... there is a significant potential for energy savings." (p. 65)

"The U.S., by turning to alternative energy sources, could reduce or totally eliminate its reliance on nuclear power as a chief energy source, with all its attendant hazards and costs. Alternatives are safe, dependable, and non-polluting." (p. 51)

"Though no single solar technology can meet the world's total energy demand, a combination can." (p. 63)

"A quarter century ago, years before the first commercial nuclear reactor was built, experts were asking that an aggressive effort be made to develop solar energy. Now, 67 nuclear reactors later, new reports continue to emerge saying that if an aggressive effort were made, solar could produce most of this country's heating and hot water needs, and even its electrical needs, at competitive prices in the near future." (p. 51)

"Solar power-including wind, waste wood, biomass, ocean thermal-is one of the most attractive energy alternatives to nuclear power. If the Federal Government spent only a small portion of what it has already spent on nuclear power development for the commercialization of solar power, solar generated electricity would be economically competitive within five years, in the view of many experts." (p. 75)

ALL QUOTATIONS TAKEN FROM THE U.S. HOUSE OF REFRESENTATIVES, COMMITTEE ON COVERNMENT OPERATIONS REPORT, "NUCLEAR POWER COSTS", APRIL 26, 1978

### JOBS and ENERGY

"A new energy policy could be the key, not only to a resolution of the energy crisis, but to unemployment and inflation problems. .. Because an energy policy premised on nonrenewable resources and complex technologies, such as nuclear reactors, is capital-intensive, it has not produced many jobs. .. However, an alternative energy policy with greater emphasis on solar and conservation, would have a significant positive impact on employment, and on the economy." (p. 71)

"During a study done for the Suffolk County, N.Y., Department of Environmental Control analyzing energy usage on Long Island from 1975 to 1995, Fred Dubin found that a program of solar energy and energy conservation would produce four times as many jobs as would building two nuclear plants.

Dubin found that the proposed twin, 1150 megawatt nuclear units at Jamesport, Long Island, estimated to cost \$2 billion (exactly the same size as the proposed Seabrook plint, with a lower projected cost than Seabrook), would produce 16,000

man-years of employment for construction and operation.

In contrast, if the same \$2 billion were spent on solar energy and conservation, including lighting, heating, ventilation and cooling adjustments, and the retro-fitting of insulation in existing buildings, plus installation of solar heating and cooling, heat pumps and total energy systems in new construction, 64,000 man-years of direct employment on Long Island alone would result, and three times as much energy could be saved as could be generated through the two nuclear plants." (p. 71)

"A 1977 report by the staff of the New York Legislative Commission on Energy Systems reviewed the economic and employment potential of wood and wind energy options, compared to coal or nuclear. Burning waste wood for energy could provide four to six times the employment compared to coal or nuclear alternatives, at equivalent capital but lower energy costs, the report found, and wind could provide one and one half times the employment at lower capital and equivalent energy costs." (p. 72)

"Before formulating an energy policy, more consideration should be given to the labor-intensiveness of the energy source that will be given priority... One purpose of energy is to support the economic system which provides jobs. Thus the impact on employment ought to be a primary test of the effectiveness of any energy policy. ... These studies point to the advantages of solar and conservation. These alternate resources should now be stressed much more than they ever have been." (p. 73)



# A CHEAP POWER?

"Contrary to widespread belief, nuclear power is no longer a cheap energy source." (p. 1)

"Construction costs for a nuclear plant are increasing more rapidly than the general rate of inflation; nuclear plants are experiencing serious cost overruns -as much as 267% for one plant and more than 100% for others; the cost of uranium has risen from \$7 per pound in 1973 to more than \$40 per pound today for new sales; known uranium reserves are being depleted; various 'hidden costs' and 'extra costs', such as Federal subsidies for nuclear power research and development, and limited liability and insurance are not incorporated in electric rates... 'Construction Work in Progress' (CWIP) allows utilities to charge customers now for current construction costs of powerplants. Customers pay more, and over a longer period of time..." (p. 2-3)

"Another hidden subsidy to the nuclear industry has been government. enrichment of uranium... Richard Morgan of the Environmental Action Foundation said: 'Business Week' (magazine) has noted that a \$30 billion investment in uranium enrichment might be needed in the next 15 years. The same amount of money could insulate every home in the United States.'" (p. 37)

"In view of escalating capital costs, it would be foolhardy to invest such enormous quantities of capital in one industry that is still so beset with problems at the expense of other industries and technologies." (p. 32)

"Then there are the potentially enormous costs associated with the 'back end' of the fuel cycle. The costs of virtually indefinite radioactive waste storage and decommissioning of the nuclear plant remain essentially unknown..." (p. 3)

"The true cost of nuclear power is not reflected in the price the consumer pays for electricity. ... These costs, therefore, remain a potential burden for future generations." (p. 25 & 4)



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