

DOCKET NO. 11

AN APPLICATION SUBMITTED BY NORTHEAST  
UTILITIES SERVICE COMPANY, AS AGENT FOR THE  
HARTFORD ELECTRIC LIGHT COMPANY FOR A  
CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY  
AND PUBLIC NEED WITH RESPECT TO THE  
CONSTRUCTION OF AN OVERHEAD 345 KV ELECTRIC  
TRANSMISSION LINE AND THE CONSTRUCTION AND  
RECONSTRUCTION OF AN OVERHEAD 115KV  
ELECTRIC TRANSMISSION LINE ALONG A ROUTE  
BETWEEN THE MANCHESTER SUBSTATION, IN  
MANCHESTER AND THE NORTH BLOOMFIELD SUBSTATION,  
IN BLOOMFIELD

POWER FACILITY  
EVALUATION COUNCIL

JANUARY 23, 1978

CONCURRING OPINION

I am troubled by the Council's conclusion that the Applicant has proven the need for the proposed transmission line. The source of my unease lies in the assumptions used by the Applicant to underpin its determination of need, doubts that I will express below. Notwithstanding these doubts, I concur, rather than dissent, because I am influenced by the unanimity of expert opinion supporting the line, and because I do not feel confident on the record that there is no need for the line.

The argument for need is founded in the Applicant's forecast figures on load growth. The forecast figures used in this docket were developed in connection with the Applicant's 1977 Ten Year Forecast.

While I believe that the 1977 forecast was the best available source of information at the time of the hearing, that is not to say that the forecast was without weaknesses. At the public hearings in the Spring of 1977 at which the forecast was reviewed, the following criticisms were expressed: 1) conservation measures such as load management and peak load pricing were inadequately considered, 2) the assumed penetration rate of electric space heating was significantly higher than indicated by the historical trend, 3) the assumed penetration rate of electric water heating did not give adequate attention to recent state and federal incentives for solar water heating, and 4) the industrial forecast was based on national rather than state production indices. At the public hearing on Docket No. 11, further concern was expressed that the forecast did not give adequate attention to the possibility of meeting energy demands with alternative energy sources. Also, it was not made clear to what extent load growth on the NU system would necessarily entail load growth in the area to be served by the proposed line.

At the time of the July hearing the January 1, 1977 forecast was the most recent one available. On or about January 1, 1978 the Applicant filed its 1978 ten year forecast. While this forecast was filed in time for the Council legally to take judicial notice of it, there was not sufficient time for it to be adequately analyzed or its effect on this application to be properly assessed. However, the trend in recent forecasts has been a decrease in the projected rate of growth over the forecast period. If this trend is confirmed by the 1978 forecast, the need for new facilities could be deferred. If this trend is reversed, the need would seem more urgent. It is unfortunate that the most recent information on this fundamental factor is not available to the Council.

In addition to these concerns with the 1977 forecast figures, I continue to be troubled by the use of planning for double contingency outages. This concern was clearly expressed in our opinion on Docket 9 in which we stated:

"There was substantial agreement that the probability of such outages in the subject area are remote. Further, the cost of providing the proposed high level of reliability is significant..... No evidence was adduced whether such guidelines should be followed at all costs, or no matter how low the probability of a double contingency outage."

These concerns are only magnified by the record in this docket. In Docket 9 the Applicant documented past double contingency outages and was able to furnish the Council with probability figures based thereon. In this docket the Applicant admitted there had been no such outages and did not attempt to furnish the Council with probability figures based on this area or comparable areas.

I am also concerned with the Applicant's failure to perform a cost-benefit analysis. Without such an analysis it is difficult to judge whether or not the proposed line conforms to the statute's criterion of lowest reasonable cost. It is clear from the record that the Applicant's proposal would burden ratepayers with approximately \$3 million per year in additional costs. What is not clear is whether the benefits to be derived from the line are worth this \$3 million annual cost. It is not enough to know that the proposed line will protect the system from contingencies without knowing the probabilities of these contingencies actually occurring or the possible social costs if they do occur. And this brings me to my final comment.

Even more fundamental than my concern with the factual basis for a findings of need here is my belief that the underlying approach to utility expansion planning is misguided. Once a utility projects a need, two principles come into play. First, the projected need must be met 100%, i.e., no one must ever be without all the power they want. Second, this need must be provided with an extremely high level of reliability, i.e., a double fail/safe backup system. To the utility, the only question is "how", not "if". The result of such planning is extremely costly, both in dollars to the customer, and in damage to the environment. Nowhere have the people of Connecticut been given a chance to opt for less power or less reliability in return for less cost to themselves and their natural surroundings. Perhaps this is a concern that should be addressed to the legislature, but it is one that disturbs me each time I am asked to authorize new facilities. I have a growing suspicion that "the game is not worth the candle (power)".

CERTIFICATION

The undersigned member of the Power Facility Evaluation Council who has signed this Concurring Opinion hereby certifies that he has heard this case or read the record thereof.

Dated at Hartford, Connecticut, this 23rd day of January, 1978.

STATE OF CONNECTICUT        )  
                                  :       ss.               Hartford, January 23, 1978  
COUNTY OF HARTFORD        )

I hereby certify that the foregoing is true and correct copy of the concurring opinion issued by the Power Facility Evaluation Council, State of Connecticut.

ATTEST:

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C. Thomas Foley, Executive Director  
Power Facility Evaluation Council