DOCKET No. 13

| | | |
|---|---|---|
| APPLICATION BY NORTHEAST UTILITIES SERVICE COMPANY FOR THE CONNECTICUT LIGHT AND POWER COMPANY FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED RESPECTING A PROPOSED TELECOMMUNICATION TOWER TO BE CONSTRUCTED IN BETHEL, CONNECTICUT. | : | POWER FACILITY<br>EVALUATION COUNCIL<br>May 4, 1978 |

# O P I N I O N

## I. GENERAL

This application is for a certificate of environmental compatibility and public need for the construction of a microwave telecommunication tower in the southeasterly part of Bethel, Connecticut. The tower and associated microwave facilities will constitute a part of an expanded microwave communications system serving the Northeast Utilities system, and it will also be one of more than 75 microwave relay stations, constituting a communications system shared by eight utility companies with interconnected electric systems serving the six New England states.

Public hearings were held at Bethel High School, Bethel, on February 1, February 6, February 23, March 6, March 7, March 10, March 29, and April 6, 1978. Members of the Council made ground inspections of the proposed site and the alternate sites for the proposed telecommunication tower. Council members and parties made a ground inspection of the proposed site and alternate site to view a Kytoon flown from each site. In addition to advertised notice, notice was mailed, in accordance with law.

The applicant presented testimony exhibits to support his claim that the telecommunication tower is needed, that the construction of the tower as proposed would not adversely affect the environment, and that the proposed site easterly of Aunt Patty's Lane is environmentally preferable to the alternate site on Dittmar Road.

The case in opposition to the proposed telecommunication tower presented testimony and exhibits as to the adverse environmental impact.

II. NEED

The Council is of the opinion that public need has not been demonstrated for construction of a microwave tower in the Town of Bethel. There is a lack of specific data on which the Council could make a determination of need at this time.

The applicant described the ideal microwave system as performing three initial functions: telemetering of operating information from generation and substation facilities to operating centers, operating complex relaying equipment to protect circuits and other facilities in the event of faults, and providing direct supervisory control of the electric system from operating centers. These functions were deemed especially important at times of natural disasters or major faults on the Northeast Utilities System or any of the interconnected electric systems. Additional functions the applicant attributed to a microwave system include voice communications among system-operating centers; customer service; high speed data gathering and information transfer for operations, purchasing and stores, accounting engineering, and management; and computer operations from remote terminals on the system.

In particular, the applicant said the proposed Bethel microwave facility would relay information between existing Norwalk and New Milford microwave stations and complete a loop to parallel the Norwalk-Devon-Prospect-CONVEX path used since 1959. The applicant testified that this redundancy is warrented by the size of the southwestern Connecticut load, the presence of the Norwalk Harbor Station, and the transmission interconnection between Norwalk and Long Island.

The company currently has several communications systems, including the present microwave system which has become more reliable with the replacement of obsolete equipment, rented telephone facilities which are direct private lines that remain open and can be used continuously, VHF wave radio systems, and Northeast Utilities' extensive power line carrier installations.

An applicant witness testified that communications failure to Norwalk could result in risk of loss or damage to company equipment or a loss of ability to operate Norwalk Harbor generating plant at maximum efficiency, or detract from the ability of NEPEX to buy and sell power from nearby states and Canada.

The need for a reliable communications system is clear and was not contested by anyone. What is not so clear is why the present system is inadequate. While the record is replete with assertions by the applicant that this is so, these allegations were always phrased in conclusory language without supporting records or data. Even when pressed on cross-examination, witnesses for the applicant fell back on generalities and personal opinions, and they were unable to come up with data supporting their conclusions. Rather, they asserted that such hard evidence did not exist, i.e., that no such records were kept. If that is so, the failure to keep records or otherwise document communications failures leaves the transcript void of meaningful evidence upon which to accept or reject the bare assertions of need, and even raises some doubt that such break downs ever occured or were significant enough to record. Moreover, no witness for the applicant could remember from his personal recollection when, or if ever, there had been a serious consequence of a communications failure. One witness testified that a communications failure could result in risk of loss or damage to company equipment, permit loss of ability to operate Norwalk Harbor generating plant a maximum efficiency, and prevent communication with NEPEX thus detracting from the applicant's ability to buy and sell power from nearby states; however the witness was unable, though repeatedly asked, to provide a single example of such an occurance between Norwalk and Devon.

The applicant's principal witness on need testified that the existing private open telephone line was inadequate on the average of about 15% of the time. When pressed, however, he could only assert that this was his personal estimate as he had no back-up figures. Based on this witness's duties with the applicant, it is not at all clear that he was familiar enough with the operational aspects of the system to give an informed opinion. Such an off-the-cuff opinion is hardly sufficient to justify a finding that the current telephone hook-up is inadequate. As a matter of fact, the figure of 15% strains credibility when analyzed. It means that the line is unreliable for over three hours every day, a figure that a company witness transformed into seven hours a day in the spring and fall and makes the need for supporting data even more essential when another company witness testified that there was a communications failure from all causes every two or three days.

The Council also found the record inadequate as to the unreliability of the existing communications lines between Norwalk Harbor and CONVEX. The transcript contains numerous assertions that the Norwalk to Devon path, being over water, was vulnerable to special atmospheric and water reflection problems that made the line particularly vulnerable, and it was this vulnerability, together with the growing electric load in this area of the state, that was the foundation for their application. Despite the importance of this information, to this application, the applicant was unable to furnish the Council figures and other data quantifying the frequency, duration, and actual effects of the alleged outages. Other information supplied by the applicant was inconsistent in that one witness said that new equipment had been installed in the fall of 1977 which had diminished troubles with telemetering from Norwalk, Devon, and Bridgeport, and that weather conditions with fading had not yet been experienced.

The applicant's witnesses even presented conflicting testimony as to the greater reliability of a microwave system. The next best alternative to constructing the proposed tower was described as equipping each existing terminal with a second transmitter and a second receiver. This back-up system that was estimated to be 99.9% reliable, a figure which meets the highest level of reliability projected for the proposed facility.

The applicant asserted that a microwave system would be significantly more economical than the present telephone system. Large round figures were put forth, but these figures were never supported with more detailed data and analysis. In particular, no adequate records were presented on which costs and benefits of the proposed facility could be calculated. For example, costs of the data losses have not been calculated; operator's logs of problems with communications are destroyed and no maintenance records are kept; there are no available records of the memoranda of discussions, letters, or studies of the problems with the microwave system; there is no estimate of the dollars of cost incurred by uneconomic generation during communications failure.

Even if the Council was satisfied that the record supported a conclusion that a need existed for an overall microwave system to replace the existing communications system, there remains the question whether this particular microwave tower is needed, or whether there are other alternatives that would obviate the need for the tower. One such alternative that deserves

greater exploration and explication is the cooperative use of towers among several users, particularly public service companies, so as to reduce the total number of towers needed in any one area. In any future application the Council would expect this issue to be fully discussed and documented.

## III. CONCLUSION

The Council has concluded, based on its consideration of the entire record, that for the reasons stated above, no need has been established for construction of a microwave tower in the Town of Bethel.

The Council further concludes that the denial of this application will not prevent consumers from receiving adequate and reliable electricity at the lowest reasonable cost.

The Council has not concluded that there is no need for a statewide microwave communication system, or that there are no communication problems between Norwalk Harbor and CONVEX. It may be that a microwave communication system is more reliable and more economical than current systems, but the record presented by the applicant is bereft of hard data backed-up by reliable records and documentation to corroborate those propositions. The Council is legally charged with determining the public need for this tower, but what the applicant wants or believes is not necessarily what the public needs. That need is established, not by generalities and "guesstimates," but by facts and concrete data, and such evidence is simply not to be found in this record.