

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of)
)
WISCONSIN ELECTRIC POWER COMPANY,)
ET AL.)
)
(Haven Nuclear Plant, Units 1 and 2))

Docket Nos. 50-502
50-503

ORDER

- A. The petition of Northern Thunder fails to state an adequate "interest," within the meaning of 10 CFR §2.714, in this proceeding. The petition is denied.
- B. The State of Wisconsin Public Service Commission has previously been admitted as a participant pursuant to 10 CFR §2.715(c).
- C. The Board hereby approves the stipulation, filed November 21, 1978, among the organization Safe Haven, Ltd., the Applicants, and the Commission's Regulatory Staff. In accordance with that stipulation, Safe Haven, Ltd., is hereby admitted to this proceeding as an intervening party.
- D. The October 9, 1978 motion by Safe Haven to dismiss the construction permit application is hereby dismissed. Supervening events, namely, pursuit of the application for authority to construct but one of the originally planned two nuclear units, have removed

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the grounds for the motion.

E. The following Safe Haven contentions, their admissibility stipulated by all the parties, are admitted as issues in controversy:

1. Applicants have failed to adequately consider the following energy sources now available, or available by 1987, as alternatives to the nuclear option:
 - a. photovoltaic cells;
 - b. solar generating stations;
 - c. wind generation;
 - d. wood as a fuel for space heating and for large generating stations;
 - e. municipal solid waste as a generating fuel;
 - f. cogeneration; and
 - g. combination of above.

2. Applicants have failed to adequately detail their assumptions and predictions relative to the need for more operating capacity in that not enough consideration has been given to the flattening of the birth rate in Wisconsin or the possibility of the development of negative population growth in this state. Such a trend could dramatically lower demand during the lifetime of the Haven nuclear plant.

3. Applicants have failed to provide a discussion of the degradation of the aesthetics of the lakeshore area brought on by the construction of the Haven nuclear plant. The Lake Michigan shore between Manitowoc and Sheboygan is a beautiful and prime example of Great Lakes aesthetics. The construction of the proposed Haven nuclear plant would severely degrade the scenic and natural beauty of the area.
4. Applicants' discussion of transmission line corridors and their environmental, aesthetic, and economic impact is inadequate in the following respects:
 - a. All transmission line corridors are not delineated and their total impact cannot be judged until they are.
 - b. An economic value for the produce and grain potential of the land affected by the construction of transmission lines is not provided.
5. Applicants fail to discuss the following merits of putting all transmission lines underground:
 - a. The aesthetic and environmental values of underground transmission lines.
 - b. The greater reliability of underground transmission lines and the fact that they are protected from inclement weather.

6. The proposed natural draft cooling towers will have a significant impact on the environment of the area in the following respects:
 - a. They will cause icing of roads, fogging, and an increase in the heat and humidity in the area of the plant, as well as an increase in the amount of snowfall.
 - b. The cooling towers, easily the largest structures on the lakeshore in Sheboygan County, will be aesthetically unpleasing and destroy an otherwise natural skyline.
 - c. Fogging from the cooling towers may adversely affect navigation on Lake Michigan.
 - d. Noise pollution from the tower (44-62 dBA) will degrade both the aesthetic quality of the area as well as the wildlife habitat.
 - e. Data relating to the configuration and characteristics of the visible plumes on the cooling towers may be deceptive in light of the fact that onsite meteorological data were obtained from a tower located as much as 4200 feet NNW of the #2 cooling tower.
 - f. The Haven ER states, and we concur, that the cooling towers represent a hazard to birds, especially migratory species, killing as many as several thousand birds at a time. (Haven ER, §5.7.4.2) Whereas such kills can cause a significant impact on migratory bird populations

and the towers are a disruptive element in the flyways of such birds, and whereas cooling towers would be mandatory on the Haven nuclear plant, we contend that this reason alone should cause the Applicant to seek another generating option.

7. The removal of 3-4.5 million cubic yards of soil from the site will have the following adverse environmental effects:
 - a. The temporary removal of vegetation from 282 acres will cause considerable erosion and a large amount of solid materials to be transported into the lake waters and increase the turbidity of the lake water.
 - b. The natural nutrients found in the soil may cause potential degradation of the water quality.
 - c. Removal of vegetation will disrupt the natural wildlife habitat.
8. Applicants state the need for a ten-mile temporary power transmission line to the site but offer no route for this transmission line nor do they provide an environmental impact discussion for the creation of such a temporary route.
9. Applicants have failed to discuss the corrosive effects on the spent fuel and its cladding within the spent fuel pool for the term of the operating license.

10. Applicants have failed to discuss the methods of handling spent fuel assemblies in the event of corrosion the loss of physical integrity of its cladding.
 11. Applicants have failed to fully assess the cumulative thermal burden of having five nuclear reactors operating within a fifty mile radius along Lake Michigan.
- F. Applicants' discussion of the means of reducing the perceived electrical demand is inadequate and incomplete in that:
- (a) Applicants fail to detail the effect an inversion of the current rate structure would have on predicted demand. Industrial and commercial areas, a major portion of the Applicants commercial sales, are particularly sensitive to the pricing of electricity. Inverted rates have the potential for dramatically affecting demand.
 - (b) The effects of mandatory load management programs (e.g., use of load control water heaters) are not adequately discussed by Applicants, nor is there adequate description of the effects of allowing load management as an option with financial incentives beyond the actual savings in rate charges.

This could be a valid option for those already using electricity to heat water and provide them with an incentive to participate in the program.

- G. The following disputed (Attachment C of the stipulation) contentions are hereby admitted as issues in controversy:
1. Applicants have failed to adequately detail their assumptions and predictions relative to the need for more generating capacity in the following respects:
 - a. Much of the perceived need is based on the assumption that natural gas supplies will be unavailable, but Applicants fail to adequately consider the substitution of synthetic gasses, hydrogen, or geopressurized natural gas in meeting the needs currently met by natural gas. Especially in space heating and industrial processes, synthetic gasses may have a serious effect on the demand as predicted by Applicants.
 - b. Applicants fail to account adequately for the growing "southward trend" of the population. While this trend is in existence among individuals, it is also quite strong in industry. Southern states offer milder

climates, abundant and cheap work forces, and other advantages attracting industry. Much of Applicants' perceived demand is due to the requirements of industrial processes; yet Applicants fail to provide analysis of those industries planning to move into the state, out of the state, or expand within and outside of the state; nor is there analysis of those companies which may simply close down instate operations within the lifetime of the proposed Haven nuclear plant.

(Unstipulated contention number 2.a, b.)

2. The shoreline placement of certain structures of the Haven plant are placed so as to be subject to damage due to the erosion of the shoreline. Some plant structures are placed as close as 50 feet to the edge of the shoreline bluff with the erosion expected to be as high as 60 feet within the forty year lifetime of the plant. (Unstipulated contention number 13)
3. Applicants have not adequately discussed the roles a combined program of load management, peak pricing, time of day rates, summer pricing policies, mandatory energy efficiency legislation, and economic incentives would have in reducing the demand perceived by the Applicants in whole or in part.

(Unstipulated contention number 16)

4. Applicants have failed to establish a baseline for radioactivity in milk in and around the Haven site. The most important agricultural product in the area around the Haven site, milk, should receive the most careful consideration in radiation monitoring. (Unstipulated contention number 22)

H. The following disputed contentions (Attachment B and C) are rejected for the reasons stated:

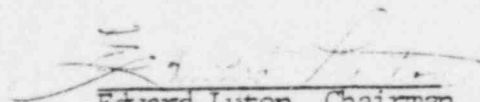
1. (Unstipulated no. 1(a)-(c)) The contention raises only remote and speculative, rather than reasonably available, alternatives to the nuclear option.
2. (Unstipulated nos. 7(a)(b) and 8) These contentions state mere speculation and raise no issue properly determinable through litigation.
3. (Unstipulated nos. 3, 4, 5, 10(a)(b), 11, 12(a)-(c), 14, 15, 17, 18, 19, 20 and 21) These contentions seek to impose upon the Applicants obligations which they do not have in connection with this construction permit application.
4. (Unstipulated no. 9) The contention constitutes an impermissible attack on the Commission's regulations at 10 CFR §50.46 and Appendix K.

5. (Instipulated no. 23) The contention is moot.
6. (Attachment B, no. 2) The contention is purely conclusory, lacking both basis and specificity.

Discovery shall proceed on all admitted contentions in accordance with the Commission's Rules of Practice.

SO ORDERED.

THE ATOMIC SAFETY AND
LICENSING BOARD


Edward Luton, Chairman

Dated at Bethesda, Maryland
this 9th day of March 1979.