

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

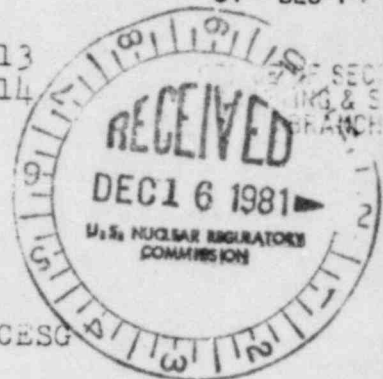
DOCKET
USNRC

CR

'81 DEC 14

In the Matter of)
)
DUKE POWER COMPANY, et al.,)
)
(Catawba Nuclear Station,)
Units 1 and 2))

Docket Nos. 50-413
50-414



CESG'S CONTENTIONS

In accord with the Board's Order of Nov. 5, 1981 CESG herewith amends its petition of July 27, 1981 and contends:

1. The Board should dismiss Applicant's Application for an Operating License. The Catawba plant is not needed now. Both Applicant's and Staff's need forecasts made at the CP stage have proved grossly defective as to level of need and rate of growth. CESG's forecast, in contrast, has proved accurate. The earliest possible date of justifiable operation of Catawba is a decade hence, unless, as appears likely, growth in need decreases further. A realistic, favorable, cost/benefit consideration is rescinding the CP and mothballing the plant until and unless the cost/benefit consideration for continuing construction becomes favorable.

2. The license should not issue until and unless the hydrogen release consequences from that range and variety of LOCA's which the Applicant is required by the NRC to consider have been dealt with so as to make impossible damage to public health and safety. The igniter system cannot perform this function.

3. The license should not issue because the risk evaluation made by the Staff is inadequate. The totality of risks,

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including those demonstrated at TMI-2, in relation to the possible consequences for this specific site, have not been considered. The/risks, plus those associated with decommissioning, the transport, and both interim and long term storage of radioactive substances resulting from generation, must be taken into consideration in striking a cost/benefit balance vis-a-vis alternatives. These risks are significant and greater by far than those assumed at the CP stage. It is not within the capability of Applicant nor NRC to prove the absence of substantial risks to public health and safety over the period of time which radioactive materials formed by generation remain hazardous.

4. Motions by Applicant or Staff to dismiss CESH as an Intervenor should be denied. There are sufficient differences in the McGuire and Catawba stations, and sufficient changes in both the cost/benefit and safety and health matters for collateral estoppel or res judicata to be inapplicable.

5. The license should not issue because the cost/benefit statement has become grossly defective. Slow construction, due primarily to Applicant's erroneously high forecast of growth in electrical demand, will result in Catawba power being more expensive than a number of alternatives, including conservation and renewable energy sources. This has been demonstrated by Applicant's 10% increase in rate with declaring McGuire, a plant similarly affected by slow construction, commercial.

6. The license should not issue because it will, contrary to the intent of cost/benefit considerations, further burden

the consumer, not only with construction costs and the interest on construction borrowing, but with an entirely undeserved earning on an unneeded facility. The CP stage cost/benefit statement is grossly defective.

7. The Board should require the Staff to provide the Environmental Impact Statement at least 90 days before the prehearing conference. This is essential to permit CESC and other petitioners to take into consideration Staff's views in regard to environmental and health and safety matters. The existence of an EIS will aid the Board in its consideration of the matters which should be at issue.

8. If a license issues, it should require that emergency planning for the EPZ include the city of Rock Hill. Because the plant is a low pressure, ice condenser containment type, and because the consequences of severe accidents are estimated to extend to at least 25 miles, a radius of 30 miles should be the basis for emergency planning. This would include the city of Charlotte.

9. The EIS should explicitly consider the consequences for the specific site of the entire spectrum of serious release accidents, including PWR-1 to PWR-9 as formulated in the Reactor Safety Study. This consideration should include the recognition that local officials and resources are not qualified to assure protection of the public health and safety in the event of a serious accident.

10. If a license issues, an adequate crisis relocation plan should be a condition for issuance. The nature of particulate releases in serious accidents, such as PWR-1, is such that

relocation of the affected population is required. Present plans are deficient in that no consideration is given crisis relocation.

11. The operating license should not issue because part of the construction was not covered in the CP and the CP was amended without due process. The fuel pool was greatly expanded by an amendment. The Intervenor, CESC, was not, at the time, apprised of this change. Enlargement of the fuel pool significantly increases the source term for fuel pool accidents, including boiling dry followed by fuel melt.

12. A license should not issue because, since the CP stage, in response to the mandates of North Carolina legislation, the Applicant has embarked on a variety of programs designed to decrease load growth such as load management, special rates for conservers, and a program to assist homeowners in reducing thermal loss. The cost/benefit statement of the CP stage was struck absent these considerations.

13. The license should not issue because irregularities in the welding practices on safety related systems endanger the public health and safety.

14. The prehearing conference should not be held until at least 90 days after the Safety Evaluation Report has issued. CESC has concerns, reflected in some following contentions, which should be addressed by the SER.

15. The license should not issue because / ^{Catawba} was designed and is being constructed without appropriate consideration of electromagnetic pulse. EMP will knock out most of the power grids on which Applicant could rely for backup power, knock out

most if not all electronic and electric communications systems on which Applicant routinely relies, knock out all control systems relying on solid state components, knock out all computers including the off site computer used for monitoring the ECCS thereby making possible a variety of reactor accidents not foreseen including the boiloff of water in the fuel pool.

16. The license should not issue because the design of the control room preceded knowledge of the essential role of human factors considerations in design, a factor in the TMI-2 accident and in other operating problems having in common avoidable operator error.

17. The license should not issue because no consideration has been given to the effects of Corbicula, known to infest the Catawba River and Lake Wylie, on the performance of the cooling tower system.

18. The license should not issue because reactor degradation in the form of a much more rapid increase in reference temperature than had been anticipated has occurred at a number of PWR's including Applicant's Oconee unit 1. Until and unless the NRC and the industry can avoid reactor embrittlement, Catawba should not be permitted to operate.

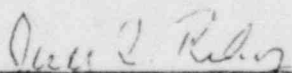
19. The license should not issue until and unless the loosening of reactor neutron shield bolting and the loss of such bolts is understood and prevented. Dropping of the neutron shield from its support, RESAR Fig. 4.2-7, would result in blockage of the coolant system flow path and, despite the ECCS, lead to a major LOCA.

20. The license should be withheld as no provision has been made for the release of substantial amounts of radioactivity to Lake Wylie, the source of potable water for many down stream communities. Such a loss can occur in an accident such as happened at Oconee, in which the quantity of radioactive water resulting from washing down a contaminated area exceeded the holding capacity, or from any one of a variety of as yet unencountered operational errors.

21. The license should not issue because Applicant's Environmental Report is deficient in that it does not consider the health effects of tritium, considers only airborne volatiles as a source of dosage, ignoring water pathways, and does not consider the consequences of the release of radioactive particulates.

22. The license should not issue because the dilution of ownership was not considered at the CP stage and presents a series of problems in connection with responsibility and liability. A 75% interest in Catawba has already been sold. It is Applicant's intention to dispose of the remainder. As the terms of purchase are unfavorable to the buyers unless Applicant's unrealistic forecast of sales eventuates, the owners of the plant will be unable to meet the burdens of ownership, including a proper assumption of liability.

Respectfully submitted,



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December 9, 1981

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD SNRC

'81 DEC 14 P4:29

In the Matter of)
DUKE POWER COMPANY, et al.,)
(Catawba Nuclear Station,)
Units 1 and 2))

Docket Nos. DOCKET
DUKE SERVICE
50-4114

AFFIRMATION OF SERVICE

I hereby affirm that copies of "CESG'S CONTENTIONS" in the above captioned proceeding have been served on the following in the U.S. mail, first class, this 9th day of December, 1981:

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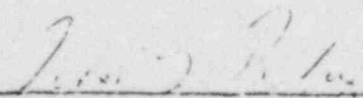
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