

BEFORE THE  
UNITED STATES OF AMERICA  
ATOMIC ENERGY COMMISSION

1-21-72

In the Matter of

CONSOLIDATED EDISON COMPANY  
OF NEW YORK (INDIAN POINT  
UNIT NO. 2)

Docket No. 50-247

RESPONSE OF CITIZENS COMMITTEE FOR  
PROTECTION OF THE ENVIRONMENT WITH  
RESPECT TO QUESTIONS CERTIFIED TO THE  
APPEALS BOARD

CERTIFIED QUESTION 1

The briefs of Applicant and the Staff fail to address the two fundamental issues which are relevant to this question:

- 1) Were the Interim Criteria adequately supported by fully disclosed facts and reasons when promulgated?
- 2) Were adequate facts and reasons presented to support the application of these criteria to non-operating plants without prior notice or public participation?

As to the first issue the Applicant and the Staff have virtually nothing to say except to point to the meagre statement on June 29, 1971 and assert that it is adequate. The submission by Staff Counsel of the voluminous Staff testimony prepared in

support of the criteria is the most persuasive evidence of the inadequacy of the original statement. Significantly, the original statement did not even discuss rod swelling and bursting and the only test referred to (semi-scale) related to blowdown phenomena and not rod swelling and bursting. Nor was any list of relevant references relied upon provided in the June 29 statement.

Two recently published general rules by the Federal Trade Commission demonstrate the thorough statement of reasons and references required by the APA. One related to octane ratings in which the FTC devoted 12 pages of the Federal Register to the relevant arguments on both sides of the issue and to the basis for the final determination. 36 F. R. 23871-883 (December 16, 1971). The FTC followed a similarly thorough procedure with respect to "care labelling" of textile wearing apparel. 36 F. R. 23883-893 (December 16, 1971). In both cases the bulk of the FTC data came from public comments. However, as noted in the December 28, 1971 Staff testimony supporting the criteria and the list of referenced documents, the task force had substantial material to which it referred without public comments. The Commission was obligated by law to discuss that data and to justify the conclusions it reached.

With reference to the second issue, the Staff and Applicant are laboring under the misapprehension that the provisions of Section 553(b) and (d) are complied with by a mere recitation of the exception regardless of its accuracy. Obviously, this is absurd. Despite the Commission's statement that an emergency exists, none existed with reference to plants such as Indian Point No. 2 which

were not in operation. As to those plants, the public health and safety would be best protected by taking time to fully develop a final rule with public notice and participation prior to any licensing action. Nowhere in the June 29 statement is there any factual allegation or statement of reasons which can apply to plants not then licensed to operate and excuse the failure to provide public notice and participation.<sup>1/</sup>

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<sup>1/</sup> Staff counsel suggests that no parties were prejudiced by the criteria's immediate effectiveness because no license were issued until October and public comments had been received. But those comments persuaded the Commission that a further analysis of the criteria was required in which the public participation could be more direct and more meaningful. See 37 F. R. (January 8, 1972) in which the full scope of the procedural protections associated with the hearing is detailed. Thus, the October license was issued in the face of the Commission's recognition that more study and analysis is required. The public is clearly prejudiced and the health and safety of the public severely compromised if licensing proceeds prior to a full review of ECCS in the national hearing and without permitting a full review of the issue (unfettered by the ECCS criteria) in individual licensing proceedings.

CERTIFIED QUESTION 2

The burden of the position taken by the Applicant is that the Westinhouse evaluation model which has been approved by the AEC does not take account of rod swelling and bursting and thus, those matters are irrelevant. The Staff casts substantial light on this subject by pointing to the December 28th staff testimony on ECCS but, of course, that subsequent explanation in the context of a full rule making cannot correct the error inherent in the original criteria. What is contained in the staff testimony is what they hope will be adopted by the Commission and not what was in fact adopted by it in June. The June 29th statement does not mention rod swelling and bursting nor does the Westinghouse evaluation model. In the absence of any explanation or rationale for the omission of this admittedly important area of concern, it must be concluded that the subject was to be independently explored in individual licensing proceedings. <sup>2/</sup>

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2/ While we feel that December 28th Staff Testimony is irrelevant to the issues presented here, we are somewhat surprised that the staff refers to it in support of its position in light of the following statement contained in that December 28th testimony:

On the basis of the above, we have concluded that Criterion 3, requiring a core geometry amenable to core cooling, does require consideration of flow blockage resulting from clad swelling, but since the net experimental effect has been a decrease in clad temperature rise, no specific requirement for additional conservatism has been specified in the evaluation models.  
[Emphasis added]

Two alternative courses of action follow from this. First, as we urge in our main brief the rod swelling and bursting and flow blockage phenomena are to be taken into account to see if applicant meets the criteria--particularly criteria 1 and 3. Alternatively, the data is to be considered without regard to those criteria and is to be evaluated by the ASLB to see if there is a reasonable assurance of protection for the public health and safety. This determination would be made regardless of compliance with the criteria and without regard to the numerical value on temperatures contained therein. Under either alternative (we feel the former is more logical) the data on rod swelling and bursting and flow blockage is relevant to this proceeding and must be considered in the ASLB decision.

IMPACT OF NATIONAL HEARINGS

Applicant argues that this Board should issue an order relating to the status of the national ECCS hearing and its impact on the present case. There is not now pending before this Board any certified question direct to that issue. There is pending before the ASLB consideration of using the direct and cross-examination testimony of certain staff witnesses at the hearing to substitute for cross-examination of those same witnesses before the ASLB. The ASLB has made no decision on this issue nor does the issue involve a request to "await developments in the rule-making proceeding" as applicant

frames the question (applicant's brief, p. 14)) in the rule making proceeding. Even if the Board were considering "awaiting developments," the propriety of that decision cannot be reviewed here absent a final decision by the ASLB and certification of the question to this Appeals Board. See Vermont Yankee (50-271) Appeals Board Memorandum and Order dated January 6, 1972; 10 CFR Part 2, Section 2.730(f).

We agree with the Applicant to the extent it contends that what transpires at the national rule making cannot effect the questions now pending here. The Staff seems to feel that the as yet unquestioned and unrebutted testimony of the Staff on the Interim Criteria can be relevant to the pending certified questions. We disagree. The Staff testimony cannot justify, after the fact, the June 29 Interim Criteria. If that testimony is relevant, then so will be the cross-examination of the Staff witnesses, the direct case of the other participants and the resolution of the matter by the Commission. This would make resolution of the pending issues dependent upon the outcome of the rule-making, a position which neither Applicant nor ourselves nor the ASLB has suggested.

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The factual allegations contained in our original brief (pp. 14-27) should be modified by the following additions:

Paragraph 9 should be renumbered 9A.

A new Paragraph 9B as follows should be added:

There will be substantial embrittlement of the fuel rod cladding at the core midplane during a LOCA at Indian Point #2. The cladding

will be thinned because of swelling and oxidation on both sides at the rupture locations. The degree of oxidation and of embrittlement, as a function of the time temperature history computed by Westinghouse for Indian Point #2, will be such that the Zero Ductility Temperature (ZDT) at the damaged midplane locations will be significantly above room temperature, viz, between 600°F and 900°F. The methods of computing ZDT for a computed LOCA temperature transient developed by ORNL when applied to the data provided by the Westinghouse codes on the temperature and time at temperature following a double-ended inlet break clearly establish the ZDT for the damaged fuel rods at between 600°F and 900°F. The ORNL methods for calculating cladding embrittlement for full-wall-thickness tubing is presented in ORNL-4758.

A new Paragraph 15 should be added:

The potential of radial flow and coolant bypass problems to cancel the margin of safety thought to exist in ECCS has not been resolved by suitable tests. ANC, the Staff's consultants on ECCS, have presented their judgment on the seriousness of the hot-spot flow starvation that would result from radial flow and coolant bypass and have proposed an experiment aimed at assessing these problems in IN-1387.

Sincerely,

Anthony Z. Roisman  
Counsel for Citizens' Committee  
for Protection of the  
Environment

January 21, 1972