

October 12, 1982

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

DOCKETED  
USNRC

Before the Atomic Safety and Licensing Board

'82 OCT 14 A11:

In the Matter of )

CLEVELAND ELECTRIC ILLUMINATING )  
COMPANY, Et Al. )

(Perry Nuclear Power Plant, )  
Units 1 and 2) )

Docket Nos. 50-440

50-441

(Operating License)

OFFICE OF SECRETARY  
DOCKETING & SERVICE  
BRANCH

OCRE REPLY TO STAFF AND APPLICANTS'  
RESPONSES TO OCRE'S MOTION FOR LEAVE  
TO FILE ITS CONTENTIONS 21 THROUGH 26

Pursuant to the Licensing Board's August 4, 1981 Procedural Order and October 6, 1982 Memorandum and Order (Concerning Procedures for Late-Filed Contentions), intervenor Ohio Citizens for Responsible Energy ("OCRE") hereby files its reply to Staff and Applicants' responses to OCRE's Motion for Leave to File Its Contentions 21 Through 26. <sup>1/</sup> Both Staff and Applicants oppose the admission of all six contentions. The Staff claims that the good cause requirement of 10 CFR 2.714 has not been met. Applicants, while usually citing this argument as well, primarily claim that the contentions lack basis and specificity. OCRE will demonstrate below that Staff and Applicants' objections to each contention are without merit and that the contentions therefore should be admitted.

However, OCRE will first make some prefatory comments applying to all of the contentions addressed herein.

1/ OCRE's motion was dated August 18, 1982. Both Staff and Applicants requested extensions of time to respond. Applicants' answer was filed on September 16, 1982 and Staff's answer on September 21, 1982.

1. The burden of proof in this proceeding is upon the Applicants. 10 CFR 2.732. For the purpose of admitting contentions, OCRE interprets this to mean that Applicants must make a positive showing that the contentions have no factual basis whatsoever and/or do not apply to the facility in question. Applicants are not entitled to any benefit of doubt.
2. The admission of these contentions should not delay this proceeding. Although a target date has been set for a hearing concerning some of the issues in this proceeding, three issues will probably not be ready for consideration in an evidentiary hearing for some time. The litigation of these additional contentions thus would not delay the issuance of an operating license. OCRE also maintains that Applicants' request for the extension of the completion dates for the Perry reactors to 1985 for Unit 1 and 1991 for Unit 2 indicates that the facility will not be ready for operation for some time. The facility must be complete before it can operate. 10 CFR 50.57(a)(1).
3. The Appeal Board, in deciding a motion to reopen the record (for which there exists a much higher burden than that for the admission of late-filed contentions), held that the resolution of safety concerns is of far greater importance than the issuance of an operating license to suit an applicant's schedule. The Appeal Board stated:

We cannot accept the applicant's unstated premise that the desirability of completing the hearing process outweighs the need to resolve potentially serious safety matters . . . In short, delay in the issuance of an operating license attributable to an intervenor's ability to present to a licensing board legitimate contentions based on serious safety problems uncovered

by the staff would establish not that the licensing system is being frustrated, but that it is working properly. Any delay in such a situation would be fairly attributable not to the intervenors but to the non-readiness of the facility for operation. Delay in the issuance of the license is entirely appropriate -- indeed, mandated -- in that circumstance. Vermont Yankee Nuclear Power Corporation (Vermont Yankee Nuclear Power Station), ALAB-124, 6 AEC 358, 365 (1973).

Thus, even if the admission of these contentions does delay this proceeding, this delay pales in light of the potentially disastrous consequences of operating an unsafe facility.

4. The fact that an intervenor bases a motion on safety concerns identified by the Staff should not prejudice the intervenor's motion. The Appeal Board in Vermont Yankee, supra, disagreed with the Staff's assertion "that the validity of a motion to reopen turned on whether it presented new matters of which the agency was not previously aware" and stated that "the fact that the staff may have previously known of the matter being raised has no direct bearing on the validity of an intervenor's motion to reopen." ALAB-124, 6 AEC 358, 367. In applying that decision to this situation, it can be construed that any arguments that the Staff's efforts toward the resolution of a safety issue it identified is sufficient reason to deny an intervenor's motion to submit a contention based on the Staff's assessment are without basis.
5. Contentions 21 through 26 are based, at least in part, on some finding, deficiency, or information in the Staff's Safety Evaluation Report (SER), NUREG-0887. Although the SER is dated "May 1982", OCRE did not receive it until mid-

June; indeed, its notice of availability was not published in the Federal Register until June 18, 1982 (47 FR 26480). On July 6, 1982 OCRE filed a "Notice of Intent to File New Contentions Based on the SER," which explained this discrepancy and stated OCRE's intent to file said contentions by August 18, 1982. (OCRE did not feel that 60 days was an excessive or unreasonable time period; 60 days is a typical comment period given for many Commission proposals.) All parties were thus aware what OCRE's plans were. If any parties had objections to this schedule, they should have made them known. Not being aware of any objections, OCRE proceeded to file its contentions as planned. The Staff, in its answer to OCRE's motion, repeatedly asserts that "five months" have elapsed from the issuance of the SER to OCRE's August 18 filing, and that the motion thereby lacks good cause. OCRE can only surmise that the Staff must use a strange calendar.

OCRE will now proceed to address the specific criticisms of Staff and Applicants of each of the contentions seriatim.

#### Contention 21 Turbine Missiles

The Staff concedes that this contention is stated with specificity and basis but considers it untimely. Applicants also consider it untimely, and, in addition, claim that it lacks basis.

Applicants claim that the contention is untimely since the turbine missile issue was discussed at the construction permit

stage. However, Applicants ignore the fact that the Staff in the SER-CP resolved the issue but now, in the SER-OL, consider it to be an outstanding issue. Unfortunately, neither Staff nor Applicants bothered to explain why this "resolved" issue suddenly became "unresolved" at the OL stage. <sup>2/</sup> The fact that the Staff now considers this to be a problem does in fact constitute good cause for late filing.

It should be apparent that the Staff's review is not an adequate substitute for the full litigation of this issue, since it seems to be a deficiency in the Staff's CP stage review that now makes this a concern. Regulatory Guide 1.115 states that the preferred method of protection against low-trajectory turbine missiles is to design the facility such that safety systems are not within the target zone. That the Staff allowed the construction of Perry to proceed without requiring the plant design to be corrected is a virtual indictment of the adequacy of the Staff's review.

Applicants also claim that the 1976 Gilbert Report cannot serve as a basis for Contention 21 since it concludes that the probability of damage from turbine missiles is too low to constitute a problem. Applicants neglect, however, to mention that the Staff at the CP stage did not find some of the methodology used in the Gilbert Report to be acceptable and independently

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<sup>2/</sup> It should be noted that Staff and Applicants have an affirmative duty to keep the Licensing Board informed of any developments relevant to this proceeding. Duke Power Company (Wm. B. McGuire Nuclear Station, Units 1 and 2) ALAB-143, 6 AEC 623 (1973).



calculated the probability for strike of safety-related targets to be  $1.4 \times 10^{-2}$  per year and the overall probability to be  $5.5 \times 10^{-7}$  per year. This should be compared to the guidelines of Regulatory Guide 1.115, Revision 1, i.e., that the probability for strike of safety-related targets be less than  $1 \times 10^{-3}$  per year and the overall probability less than  $1 \times 10^{-7}$  per year. It is clear that the Perry design does not provide acceptable protection from turbine missiles.

Since this contention does have basis and is timely (since the SER-OL was OCRE's first notice of this concern), the contention should be admitted.

Contention 22 New Mark III Containment Concerns

Both Staff and Applicants claim that Contention 22 lacks basis and specificity. OCRE would disagree. The containment issues identified by Mr. Humphrey are very specific and have been explained or discussed further in various meetings involving Mr. Humphrey, the NRC, and Mississippi Power and Light, Grand Gulf's applicant. The fact that Applicants are clearly aware of what OCRE is alleging demonstrates specificity.

The contention has basis as well. These containment concerns were identified by a General Electric engineer who considered them serious enough to warrant his resignation from GE (where they were no longer being given attention) so that he could resolve these problems at Mark III plants before they became operational.

Although the 66 concerns are based on GE's STRIDE project,

they should not be considered generic issues, as Mark III plants are not all identical. For example, Grand Gulf's containment is steel-lined reinforced concrete (Grand Gulf SER, NUREG-0831, Section 6.2.1), while Perry's containment is free-standing steel (Perry SER, NUREG-0887, Section 6.2.1). Thus it is not possible for OCRE at this time to ascertain, on the basis of analyses specific to Grand Gulf, which of the containment concerns do not apply to Perry. It is possible that some concerns not applicable to Grand Gulf may apply to Perry. Unfortunately, Staff and Applicants again have not bothered to inform the Board and parties exactly which concerns pertain to Perry. OCRE believes that until Applicants or Staff demonstrate that each specific concern does not apply to Perry, that concern must be considered applicable and unresolved.

Applicants cite Supplement 1 to the Perry SER in support of their argument that these containment concerns are not serious. (The Staff has identified two of these items as deserving "priority attention." SSER 1, p. 6-1.) However, they neglect the fact that the Staff also stated that, for all of the items, "substantial confirmatory analyses and tests will have to be performed . . . before an operating license for Perry Unit 1 is issued." Ibid. (OCRE cannot comment on the portions of the transcript of the meeting of the ACRS Fluid Dynamics Subcommittee meeting cited by Applicants, since OCRE would prefer to review the entire transcript before drawing any conclusions.)

OCRE maintains that Applicants have not demonstrated that these concerns are not applicable to PNPP and, thus, the con-

tention should be admitted.<sup>3/</sup>

Contention 23 Seismic Evaluation of BWR Core Thermal-Hydraulics

The Staff concedes that Contention 23 has basis and specificity but complains that it is untimely. Applicants consider the contention to be both untimely and lacking in basis.

OCRE believes that Applicants are seriously in error in requiring an expert to provide additional references, citations, and analyses to support his statements, especially at the preliminary stage of deciding the admission of contentions. See Houston Power and Light Company (Allens Creek Nuclear Generating Station) ALAB-590, 11 NRC 542 (1980). Dr. Webb is an expert in nuclear engineering. The Licensing Board should not permit ipse dixit assertions made by Applicants' counsel to provide adequate refutation of the opinions of an expert. Their lack of understanding of this issue is quite apparent by Applicants' discussion, at p. 21 of their answer, of the possibility of uncovering the core. OCRE did not contend that sloshing of the coolant from a seismic event could directly uncover the core.

Although Applicants may not believe it, OCRE in fact was not aware of Dr. Webb's book until early this year. OCRE will concede that Contention 23 may not meet the good cause

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<sup>3/</sup> OCRE would note that items 5.4, 5.7, 6.1, 6.2, 6.3, 6.4, 6.5, and 21 are related to hydrogen control, the subject of Issue 8 in this proceeding. OCRE is willing to dissociate these items from Contention 22 if OCRE has assurance that they can be litigated as part of Issue 8.



requirements of 10 CFR 2.714. However, that regulation requires a balancing of the 5 factors listed therein; OCRE believes that these factors, considered as a whole, show that this contention should be admitted.

#### Contention 24 In-Core Thermocouples

The Staff considers Contention 24 to have met the specificity and basis requirements of 10 CFR 2.714 but claims that it is untimely. Applicants attack both the timeliness and basis of the contention.

OCRE maintains that the Perry SER constitutes good cause for this contention. While it is true that OCRE has had knowledge of the in-core thermocouple issue for some time, OCRE truly believed, on the basis of the Grand Gulf SER, that the Staff would require in-core thermocouples at Perry. The Perry SER was OCRE's first notice that the Staff's view had changed. (OCRE does not consider Applicants' views on the use of thermocouples to be relevant since Applicants do not (or at least are not supposed to) regulate themselves.) OCRE was not aware of the fact that the Staff changed its requirements for Grand Gulf in the June 1982 Supplement 2 to Grand Gulf's SER. Since this document was issued contemporaneously with Perry's SER, it should not affect OCRE's claim of good cause. OCRE was not aware of the Staff's position in the Clinton, WNP-2, and LaSalle SERs. (Compare the Licensing Board's Memorandum and Order of July 12, 1982: "it would be unfair to charge (OCRE) with current knowledge of all NRC publications." LBP-82-53, slip op. at 5) OCRE would note that Dr. Webb's book is cited only as a supplementary basis

and thus should not influence any considerations of timeliness.

Applicants' main complaints as to the lack of basis for Contention 24 center on the unvarnished assertions present in the GE report, cited by OCRE. That these assertions may lack credibility<sup>4/</sup> is shown by an AEOD case study on BWR vessel level instrumentation (see Attachment). Although OCRE has not yet reviewed this document, the brief summary given indicates that BWR vessel level measuring systems may not be as impressive as GE claims.<sup>5/</sup> OCRE therefore concludes that the contention should be admitted.

Contention 25 Steam Erosion

The Staff admits that this contention is stated with the required specificity and basis but considers it untimely. Even Applicants, who have an interest in the expeditious conduct of this proceeding, concede that Contention 25 is timely. Applicants do, however, charge that it lacks basis.

Applicants claim that since they must submit an inservice inspection program meeting ASME code requirements, the contention should be barred because OCRE did not allege any deficiency in the ASME requirements. However, the facilities identified in the IE Information Notices also presumably has inspection programs meeting the ASME code requirements. These inservice inspection

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<sup>4/</sup> OCRE would also allege that Applicants' entire argument lacks credibility, since it is obvious that Applicants' counsel did not research the issue enough to learn what a "time constant" is.

<sup>5/</sup> This constitutes new material recently obtained by OCRE and

programs did not adequately prevent, assess, or mitigate the steam erosion problems.

Applicants also state that, for the Information Notice 82-23 case dealing with MSIV leakage attributed to steam erosion, the Perry MSIV leakage control system will control any such leakage, thus making the MSIV case of no concern. FSAR Section 6.7.1.3 states that the MSIV leakage control system is rated for 100 scfh per MSIV per steam line. Information Notice 82-23, however, indicates that MSIV leakage rates, in those cases linked to steam erosion, have exceeded 3000 scfh. Applicants' arguments against this contention not being dispositive, Contention 25 should be admitted.

Contention 26 Control Room Fire Suppression

The Staff concedes that this contention meets the specificity and basis requirements of 10 CFR 2.714, but claims that it is untimely, again using the "five months delay" argument. Staff, however, does correctly characterize this contention's basis on the SER, i.e., that the SER was OCRE's first notice of the Staff's recent preference for Halon over CO<sub>2</sub>.

Applicants curiously ignore the fact that the Staff favors Halon for use in the control room; instead, Applicants interpret Contention 26 as an attack on their proposed fire suppression

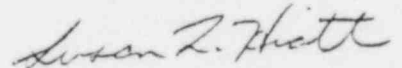
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5/ continued.

and thus not cited in OCRE's original motion. OCRE does not subscribe to the "Weekly Information Reports," but obtains copies from another person who does. Since OCRE has no control over the receipt of these reports, it cannot be held accountable for the timely knowledge of the information contained therein.

system utilizing CO<sub>2</sub>, which it is not. Contention 26 has merely identified deficiencies in the Staff's approach; OCRE contends that the Staff should thoroughly evaluate all the advantages and disadvantages of both systems (similar to a cost/benefit analysis) before advocating either system merely on the basis of precedent. (Perry is the only BWR to propose a CO<sub>2</sub> system in the control room instead of Halon.) OCRE thus maintains that Contention 26 is timely, has basis, and should be admitted.

Respectfully submitted,



Susan L. Hiatt  
OCRE Representative  
8275 Munson Rd.  
Mentor, OH 44060  
(216) 255-3158

OFFICE FOR ANALYSIS AND EVALUATION  
OF OPERATIONAL DATAITEM OF INTERESTWEEK ENDING JANUARY 22, 1982Case Study on BWR Vessel Level Instrumentation

Following completion of the peer review, AEOD has completed a case study on vessel level instrumentation in boiling water reactors (BWRs). The study was initiated following events at Brunswick 1 on January 20, 1981 and Browns Ferry 2 on March 13, 1981.

The study included the review of a number of operating reactor events involving BWR vessel level instrumentation. The review has shown several cases where interaction between plant control systems and protection systems are evident. Our evaluation of these cases has raised the safety concern of a single random failure in the vessel level instrumentation system causing a control system action that could (1) result in a station condition requiring protective action and, at the same time, (2) prevent proper action of some of the protection system channels designed to protect against such a condition, leaving the remaining protection system channels to provide the protective function. A further single active failure in the remaining channels could then prevent the required protective actions.

The study addresses the interaction between feedwater control, reactor protection, containment isolation and emergency core cooling systems and includes findings and recommendations regarding these systems and the safety concern.

Although the postulated control system or protection system interaction was not considered an immediate concern, AEOD believes that the safety concern and associated problems needs to be addressed. Thus, the report was forwarded to NRR for appropriate action.

FROM "Weekly Information Report" for the Commissioners from  
T. A. Rehm, Office of EDO.

ENCLOSURE K

CERTIFICATE OF SERVICE

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This is to certify that copies of the foregoing TO STAFF AND APPLICANTS' RESPONSES TO OCRE'S MOTION FOR LEAVE TO FILE ITS CONTENTIONS 21 THROUGH 26 were served by deposit in the U.S. Mail, first class, postage prepaid, this October, 1982 to those on the service list below.

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DOCKETING & SERVICE  
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Susan L. Hiatt  
Susan L. Hiatt

SERVICE LIST

Peter B. Bloch, Chairman  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Comm'n  
Washington, D.C. 20555

Dr. Jerry R. Kline  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Comm'n  
Washington, D.C. 20555

Frederick J. Shon  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Comm'n  
Washington, D.C. 20555

Docketing and Service Section  
Office of the Secretary  
U.S. Nuclear Regulatory Comm'n  
Washington, D.C. 20555

James M. Cutchin IV, Esq.  
Office of the Executive  
Legal Director  
U.S. Nuclear Regulatory Comm'n  
Washington, D.C. 20555

Jay Silberg, Esq.  
1800 M Street, N.W.  
Washington, D.C. 20036

Atomic Safety and Licensing Appeal Board Panel  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Daniel D. Wilt, Esq.  
P.O. Box 08159  
Cleveland, OH 44108

Ronald G. Wiley  
CEI-PNPP  
P.O. Box 97  
Perry, OH 44081