

January 14, 1983

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of  
CLEVELAND ELECTRIC ILLUMINATING  
COMPANY, ET AL.  
(Perry Nuclear Power Plant,  
Units 1 and 2)

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Docket No. 50-440 OL  
50-441 OL

NRC STAFF MOTION FOR SUMMARY  
DISPOSITION OF ISSUE #9

I. INTRODUCTION

The NRC Staff moves the Licensing Board, pursuant to 10 CFR 2.749 of the Commission's Rules of Practice, for summary disposition in its favor of Issue #9 which states:

Applicant has not demonstrated that the exposure of polymers to radiation during the prolonged operating history of Perry would not cause unsafe conditions to occur.

As grounds for its motion, the Staff asserts that the attached affidavit of James E. Kennedy and other papers filed in this proceeding demonstrate that there is no genuine issue of material fact to be heard with respect to Issue #9 and that the Staff is entitled to a decision in its favor as a matter of law.

II. DISCUSSION

A. The Standards for Summary Disposition

The Commission's Rules of Practice provide that summary disposition of any matter involved in an operating license proceeding shall be granted

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Certified By D. J. [Signature]

if the moving papers, together with the other papers filed in the proceeding, show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law. 10 CFR 2.749(d). The use of summary disposition has been encouraged by the Commission and the Appeal Board to avoid unnecessary hearings on contentions for which an intervenor has failed to establish the existence of a genuine issue of material fact. E.g., Statement of Policy on Conduct of Licensing Proceedings, CLI-81-8, 13 NRC 452, 457 (1981) and Houston Lighting and Power Company (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 550-551 (1980). A material fact is one that may affect the outcome of the litigation. Mutual Fund Investors Inc. v. Putnam Management Co., 553 F.2d 620, 624 (9th Cir. 1977).

When a motion for summary disposition is made and supported by affidavit, a party opposing the motion may not rest upon the mere allegations or denials of his answer but must set forth specific facts such as would be admissible in evidence that show the existence of a genuine issue of material fact. 10 CFR 2.749(b).<sup>1/</sup> All material facts set forth in the statement of material facts required to be served by the moving party will be deemed to be admitted unless controverted by the statement of material facts required to be served by the opposing party. 10 CFR 2.749(a). Any answers supporting or opposing a motion for summary disposition must be served within twenty (20) days after

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<sup>1/</sup> See also Licensing Board's Memorandum and Order (Concerning Scheduling) dated September 16, 1982 at 4 where it is stated that "facts [offered to show the existence of a genuine issue of material fact] must be evidentiary (emphasis in original) -- in a form that is admissible at trial."

service of the motion. Id. If no answer properly showing the existence of a genuine issue of material fact is filed, the decision sought by the moving party, if properly supported, shall be rendered. 10 CFR 2.749(b).

B. The Polymer Degradation Contention (Issue #9)

As submitted, OCRE's contention 19 with its basis read:

OCRE has learned of recent experiments conducted by Sandia National Laboratories which indicate that polymers degrade more rapidly when exposed to lower levels of radiation for long periods of time than when exposed to high levels for shorter periods. Since the latter conditions are used for age testing materials used in nuclear power plants, it is possible that the useful life of such materials in a radiation environment has been greatly overestimated. Science News, March 27, 1982 at 215 . . . .

OCRE has not found in the FSAR a comprehensive listing of all polymers used at PNPP which will be exposed to radiation and the methods used for age testing same, so this Intervenor cannot now determine the degree to which this concern is applicable to the Perry facility. However, such matters are clearly appropriate subjects for discovery.

OCRE is concerned that the radiation-induced embrittlement of polymers, especially those used as electrical insulation, may compromise plant safety. OCRE therefore contends that all polymer materials used in a radiation environment at PNPP should be tested under realistic conditions and inspected for degradation at increased intervals throughout the plant's lifetime.<sup>2/</sup>

As reworded by the Licensing Board and admitted to the proceeding,

OCRE's Contention 19 became Issue #9, which, as noted above, reads:

Applicant has not demonstrated that the exposure of polymers to radiation during the prolonged operating history of Perry would not cause unsafe conditions to occur.

However, in admitting Issue #9 to the proceeding the Licensing Board stated that it was doing so prior to issuance of a final rule

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<sup>2/</sup> Ohio Citizens for Responsible Energy Motion for Leave to File Its Contentions 17, 18 and 19 dated April 22, 1982 at 5-6.

establishing a deadline for environmental qualification of safety-related electrical equipment, because "it appears highly likely that applicants will be required to show compliance with the electrical qualification rule prior to a license being issued." Memorandum and Order (Concerning Motions to Admit Late Contentions) dated July 12, 1982 at 6. In addition, the Board stated:

Because of the potential breadth of this contention, we will require OCRE (which shall act as lead intervenor on this contention) to give increased particularity to this contention, by providing greater specificity as to the basis for believing that particular wires or other locations are potentially dangerous, prior to the time for an evidentiary hearing. Id.

On motion of the Staff the Licensing Board established December 28, 1982 as the deadline for OCRE to provide the required "greater specificity as to the basis (emphasis added) for believing that particular wires or other locations are potentially dangerous."<sup>3/</sup> But OCRE totally failed to provide the ordered greater specificity as to its basis for believing that particular safety-related electrical components are potentially dangerous owing to polymer degradation caused by radiation-induced embrittlement in its filing of December 28th. Instead, OCRE merely identified "general systems and types of safety-related Class IE circuits and cable types" that in OCRE's view "may (emphasis added) become dangerous as a result of polymer degradation."<sup>4/</sup> It did not provide any greater specificity as to the

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<sup>3/</sup> Notes of Telephone Conference of December 9, 1982 (attached to the letter from Staff Counsel to the Licensing Board dated December 13, 1982), at 1.

<sup>4/</sup> OCRE Supplemental Response to Applicants' Second Set of Interrogatories and Request for Production of Documents to Intervenor Ohio Citizens for Responsible Energy dated December 28, 1982 (attached to the letter from OCRE's Representative to the Licensing Board dated December 28, 1982), at 2.

basis for its view at all. Thus OCRE is unexcusably in default for its failure to obey the Licensing Board's Order to provide by December 28th greater specificity as to the basis for its belief that particular safety-related electrical components are potentially dangerous. On this ground alone Issue #9 should be summarily dismissed because it remains, as admitted by the Board, too broad and unparticularized to be meaningfully and efficiently litigated.

Moreover, the Commission on January 6, 1983 approved a final rule (10 CFR 50.49) that establishes March 31, 1985 as the earliest deadline by which environmental qualification of safety-related electrical equipment at plants such as the Perry facility should be completed.<sup>5/</sup> But the rule also provides that the March 31, 1985 deadline may be extended by the Director of Nuclear Reactor Regulation to November 30, 1985 for specific pieces of equipment and that the Commission itself may grant extensions even beyond November 30, 1985. 10 CFR 50.49(g). Thus there no longer appears to be any basis for the Licensing Board to believe that it is "highly likely that applicants will be required to show compliance with the electrical qualification rule prior to a license being issued" as the Licensing Board believed when it admitted Issue #9 to the proceeding.

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<sup>5/</sup> See Memorandum for William J. Dircks from Samuel J. Chilk dated January 7, 1983. A copy of that memorandum and a copy of the marked-up version of the rule are attached to this motion. Although the deadlines for completion of environmental qualification may appear to apply only to plants for which operating licenses have already been issued, the supplementary information accompanying the rule (see p. 5 of the marked-up version that is attached to this motion) states:

The dates specified in this rule for completion of environmental qualification of electric equipment important to safety apply to all licensees and applicants and supersede any date previously imposed.

Because no fixed deadline for completion of the environmental qualification of safety-related electrical equipment at the Perry facility that is within the power of the Licensing Board to enforce presently exists, Issue #9 should be dismissed on that ground also.

In addition, OCRE in its Contention 19 (now Issue #9), supra, seeks to require that polymers to be used in a radiation environment at the Perry facility be age tested by exposure to low levels of radiation for long periods, rather than by exposure to high levels for shorter periods, to achieve the total radiation dose for which qualification is to be demonstrated. The new rule permits accelerated aging of equipment for the purpose of demonstrating its environmental qualification.

10 CFR 50.49(e)(5). Issue #9 as admitted by the Licensing Board is no broader than the basis provided by OCRE for its Contention 19.

Cleveland Electric Illuminating Company, (Perry Nuclear Power Plant, Units 1 and 2), ALAB-675, 15 NRC 1105, 1115 (1982). Thus Issue #9, because its sole basis is a Science News article expressing concern about the appropriateness of accelerated compared to slower and thus more realistic age testing of polymers, now constitutes a challenge to the Commission's regulations and should be summarily dismissed on that ground as well. 10 CFR 2.758(a).

The Staff submits that the attached affidavit and statement of material facts as to which there is no genuine issue to be heard, together with the other papers filed in this proceeding, demonstrate that there is no genuine issue of material fact to be heard with respect to Issue #9 and that the Staff is entitled to a decision in its favor as a matter of law.

III. CONCLUSION

The Staff's motion for summary disposition of Issue #9 should be granted.

Respectfully submitted,



James M. Cutchin IV  
Counsel for NRC Staff

Dated at Bethesda, Maryland  
this 14th day of January, 1983



STATEMENT OF MATERIAL FACTS AS TO WHICH  
THERE IS NO GENUINE ISSUE TO BE HEARD

1. The Applicants are not required by the Commission's regulations to complete environmental qualification of safety-related electrical equipment for the Perry facility until March 31, 1985 at the earliest. 10 CFR 50.49(n).
2. The March 31, 1985 deadline for completion of environmental qualification of specific pieces of safety-related electrical equipment may for good cause be extended by the Director of Nuclear Reactor Regulation until November 30, 1985 and by the Commission itself indefinitely. 10 CFR 50.49(g).
3. Accelerated aging of safety-related electrical equipment for the purpose of demonstrating its environmental qualification is permitted by the Commission's regulations. 10 CFR 50.49(e).
4. The Applicants have committed to implement surveillance and maintenance procedures based on the guidance of Regulatory Guide 1.33 (Rev 2) to detect age-related degradation of safety-related electrical equipment and replace or refurbish significantly degraded equipment before it could cause a safety problem. Affidavit of James E. Kennedy (Affidavit) at ¶¶ 5, 6 & 7.
5. The Staff will verify that an appropriate surveillance and maintenance program for detecting and replacing or refurbishing significantly degraded equipment is implemented at the Perry facility. Affidavit at ¶ 8.
6. There is reasonable assurance that exposure of polymers to radiation during the operation of the Perry facility will not cause unsafe conditions to occur. Affidavit at ¶ 9.