



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MAR 18 1986

Docket Nos. 50-440/441
(10 CFR 2.206)

Ms. Susan L. Hiatt
8275 Munson Road
Mentor, Ohio 44060

Dear Ms. Hiatt:

This is in response to your 10 CFR 2.206 Petition dated February 3, 1986, on behalf of the Ohio Citizens for Responsible Energy, requesting that the NRC take certain action with regard to the Perry Nuclear Power Plant, Units 1 and 2, prior to issuing an operating license or permitting fuel loading of Unit 1. Specifically, you requested that, prior to licensing, the Perry plant be thoroughly inspected for damage which may have resulted from an earthquake which occurred on January 31, 1986; that post-earthquake functional testing of all plant systems be completed; that a comprehensive investigation of the earthquake and reevaluation of local seismicity be conducted; that the Atomic Safety and Licensing Appeal Board complete a hearing and issue a decision on a new contention submitted by OCRE in the Perry operating license proceeding concerning the adequacy of the seismic design of the facility; and that installation of any required seismic upgrading on the Perry plant be completed. For the reasons stated in the enclosed "Director's Decision under 10 CFR 2.206," your Petition has been denied with the exception of your requests for inspection of the Perry facility for damage resulting from the earthquake and an investigation of the earthquake and reevaluation of local seismicity. As discussed in the decision, the Staff has conducted an extensive investigation of the effects of the earthquake upon the Perry structure and equipment, and is reevaluating the geology and seismology of the Perry site. With regard to your other requests for action, I have determined that there is no adequate basis to grant such relief. Enclosed is a copy of Supplemental Safety Evaluation Report No. 9 on which the decision relies in part.

A copy of this decision will be filed with the Secretary of the Commission for its review in accordance with 10 CFR 2.206(c) of the Commission's regulations. As provided by this regulation, the decision will constitute the final action of the Commission 25 days after the date of issuance of the decision unless the Commission, on its own motion, institutes a review of the decision within that time.

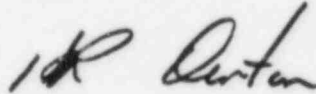
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Ms. Susan L. Hiatt

- 2 -

A copy of the notice, which is being filed with the Office of the Federal Register for publication, is also enclosed.

Sincerely,

A handwritten signature in black ink, appearing to read "H.R. Denton". The signature is written in a cursive style with a large initial "H".

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosures:
As stated

cc w/enclosure:
Cleveland Electric Illuminating Company
J. Silberg, Esq.
Shaw, Pittman, Potts & Trowbridge

Docket Nos. 50-440/441
(10 CFR 2.206)

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8275 Munson Road
Mentor, Ohio 44060

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Ms. Susan L. Hiatt

- 2 -

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Original Signed by

H. R. Denton

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosures:
As stated

cc w/enclosure:
Cleveland Electric Illuminating Company
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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

OFFICE OF NUCLEAR REACTOR REGULATION

Harold R. Denton, Director

In the Matter of)	
CLEVELAND ELECTRIC ILLUMINATING)	Docket Nos. 50-440, 50-441
CO., ET AL.)	
(Perry Nuclear Power Plant,)	(10 CFR 2.206)
Units 1 & 2))	

DIRECTOR'S DECISION UNDER 10 CFR 2.206

INTRODUCTION

By Petition dated February 3, 1986, Ms. Susan Hiatt, on behalf of Ohio Citizens for Responsible Energy (OCRE), requested that the Director of the Office of Nuclear Reactor Regulation not authorize fuel loading or issue an operating license for the Perry Nuclear Power Plant, Units 1 and 2, until certain actions have been completed. Specifically, OCRE requested that, prior to licensing, the plant be thoroughly inspected for damage which may have resulted from an earthquake which occurred on January 31, 1986; that post-earthquake functional testing of all plant systems be completed; that a comprehensive investigation of the earthquake and reevaluation of local seismicity be conducted by the NRC, the licensee, and other scientific entities; that the Atomic Safety and Licensing Appeal Board complete a hearing and issue a decision on a new contention submitted by OCRE in the Perry operating license proceeding concerning the adequacy of the seismic design of the facility; and that installation of any required seismic upgrading on the Perry

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plant be completed. As grounds for its request, OCRE asserts that the magnitude of the January 31 earthquake indicates that the FSAR analysis of site seismicity needs to be redone and that conclusions in the FSAR and the Staff's SER (NUREG-0887, May 1982) are erroneous.

By letter dated February 4, 1986, Donald L. Schlemmer, on behalf of the Western Reserve Alliance (WRA), requested that the Commission take a number of immediate actions with regard to the Perry plant, Units 1 and 2. Specifically, WRA requested that the Commission: (1) permanently suspend all construction and other activities at the Perry plant, except for removal of radioactive material; (2) require an independent design and construction verification program to assess the integrity and implementation of the Perry quality assurance (QA) programs; and (3) review and require an audit of an application by Centerior Energy Corporation (CEC) seeking the approval of the Securities and Exchange Commission (SEC) to acquire all outstanding shares of Cleveland Electric Illuminating Company (CEI) and Toledo Edison (TE) and of mergers by which this will be accomplished.

WRA asserts, as grounds for its request that construction be suspended, that the seismic design of the Perry plant is inadequate, particularly in light of the earthquake which occurred on January 31, 1986. As grounds for its request that an independent design and construction verification program be undertaken, WRA claims that CEI and its contractors have failed to implement an acceptable QA program that meets the requirements of 10 CFR Part 50, Appendix B. As grounds for its request that the application of CEC before the SEC should be audited, WRA asserts that the application will adversely impact the ability of CEI and TE to meet the requirements of 10 CFR Part

140. In accordance with the usual NRC practice, the WRA Petition was referred to the Staff for appropriate action in accordance with 10 CFR 2.206.

By letter dated February 19, 1986, the licensee responded to the WRA Petition and by letter dated February 25, 1986, the licensee responded to the OCRE Petition.

With the exception of OCRE's requests that appropriate evaluation of the earthquake and site seismicity be undertaken and that the facility be inspected for damage which may have resulted from the January 31 earthquake, I have determined that the Petitions should be denied for the reasons stated in this decision. As discussed below, the Staff has conducted an extensive investigation of the effects of the earthquake upon the Perry structure and equipment, and has reevaluated the geology and seismology of the Perry site. On the basis of its review to date, the Staff does not believe that an adequate basis exists to deny further licensing or order the other measures requested by the Petitioners. 1/

1/ Apart from the merits with respect to the seismic design issue, the Petition may be independently denied on procedural grounds. OCRE's Petition requests, among other things, that the Staff decline to permit fuel load or operation of the facility, relief that concerns initial licensing of the facility and not enforcement action such as is usually contemplated under §2.206. See Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), DD-85-14, 22 NRC 635, 642 n.4 (1985); Detroit Edison Co. (Enrico Fermi Atomic Power Plant, Unit 2), DD-84-11, 19 NRC 1108, 1110 n.2 (1984). OCRE has also filed a motion before the Appeal Board to reopen the operating license proceeding to consider its new seismic design contention. In other circumstances, the Commission has ruled that §2.206 is not an appropriate avenue for relief where an issue is pending or has been considered before a Board in an ongoing adjudication. General Public Utilities Nuclear Corporation (Three Mile Island Units 1 and 2; Oyster Creek Nuclear Generating

DISCUSSION

Impact of January 31 Earthquake on the Plant

The OCRE Petition requests several actions with regard to the Perry facility. Chief among these is that, prior to licensing for fuel load and operation of Unit 1, the Perry plant be thoroughly inspected for damage resulting from the January 31 earthquake, that any necessary corrective action be taken, that installation of any required seismic upgrading be completed, and that the earthquake be investigated and local seismicity be reevaluated. These requests have been essentially satisfied.

Both the NRC Staff, which was notified of the earthquake immediately following its occurrence, and the licensee have undertaken extensive investigations of the consequences and potential implications of the January 31 earthquake. The Staff is also reevaluating the geology and seismology of the Perry site, including a review of the seismic design bases for the Perry plant. The Staff has documented its investigations and conclusions in a Sup-

(FOOTNOTE CONTINUED FROM PREVIOUS PAGE)

Station), CLI-85-4, 21 NRC 561, 563-64 (1985); Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-81-6, 13 NRC 443, 444 (1981). Therefore, since a forum is available where the same issue may be raised, a §2.206 Petition is not an appropriate avenue for relief.

plemental Safety Evaluation Report (NUREG-0887, Supp. No. 9) issued March 5, 1986 (hereafter SSER No. 9).

Immediately following the earthquake on January 31, Perry plant operations personnel were dispatched into the plant to survey for damage. The initial reports indicated no damage. Subsequently, a utility team of approximately 65 engineers and technicians was organized to perform a detailed walkdown of all plant areas. These inspections found no damage to any systems, structures or components. The hairline cracks in concrete walls that were observed have been reviewed by the licensee and the Staff and were found to be typical of those expected in reinforced concrete structures which have not experienced seismic events. Numerous safety-related systems in operation or on standby readiness continued to operate without interruption during and after the earthquake.

The NRC Staff also conducted a review at the Perry facility on February 1-2, 1986 of preliminary seismic recordings, and performed a walk-through inspection of buildings and equipment. No significant damage was observed at the plant. See Inspection Reports 50-440/86005 and 50-440/86006. See also Trip Report dated February 25, 1986.

A Seismic Qualification Review Team (SQRT) subsequently conducted another site audit on February 6, 1986, primarily to investigate the effect of the earthquake on the plant's safety-related equipment. During the audit, the licensee and its architect engineer, Gilbert/Commonwealth Associates, Inc. (GAI), presented brief background information on the event and implications of their views of the recorded motions at various locations of the plant. See CEI Report submitted by letter dated February 12, 1986, and NRC Trip Report dated February 25, 1986. Preliminary observations were that the re-

corded response spectra had exceeded the Perry Operating Basis Earthquake (OBE) and Safe Shutdown Earthquake (SSE) in the high frequency range (above 15 Hertz (Hz)). On the basis of its qualitative evaluation of the safety impact of the event on plant equipment, GAI stated that, in view of the short duration (strong motion portion is less than 1 second), and the high frequency characteristics of the recorded motion, the impact of the exceedance on plant equipment and structures would be minimal from an engineering viewpoint. In addition to the technical discussions with GAI and the licensee, the SQRT performed a walkdown and observed some representative equipment that was a part of the detailed review of the SQRT audit of August, 1984. The equipment inspected included the H13-680 Unit Control Console, Division 1 battery and rack, motor control center, and Reactor Core Isolation Cooling (RCIC) turbine and its related pipings and accessories. No damage that could be attributed to the January 31, 1986, earthquake was observed on the equipment itself, the equipment supports, or the mounting configuration. Furthermore, no apparent structural damage was observed during the walkdown.

In addition, a special safety inspection was conducted by the NRC's Region III Staff on February 5-7, 1986. See Inspection Reports 50-440/86005 and 50-440/86006. This included a post-earthquake walkdown and visual inspection (involving a total of some 90 inspector hours) of an extensive list of safety-related systems and components. The scope of the walkdown and visual inspection included: (1) an assessment of the general condition of the systems and components selected for inspection to determine whether there was visible evidence of damage or significant movement as a result of seismic activity; (2) examination for bent or deformed pipe support structures or

components; (3) inspection for loose anchor bolts or cracked concrete associated with anchor bolts and embedded plates; (4) inspection for signs of significant movement such as damaged pipe insulation and scraped or cracked paint at support locations; (5) examination of pipe snubbers and spring cans for changes in initial settings; (6) examination of exterior and interior of electrical and control panels for cracks in frames, termination integrity, instrument damage, and glass breakage; (7) inspection of components for misalignment, foundation cracks, and fluid leakages; and (8) inspection of movement and cracks in battery racks, and batteries and leaking cell jars. No damage or significant movement that could be attributed to seismic activity was identified during the walkdown or the detailed visual inspections at the Perry facility.

In addition to the above walkdowns and visual inspection activities, the safety impact of the earthquake on future Perry plant operation has also been evaluated from an engineering viewpoint by the licensee and the Staff. The licensee analyzed both the significance of high frequency acceleration on the structural design and the impact of the earthquake on the seismically qualified safety-related equipment. The Staff's own analysis and review of the licensee's analysis is described in SSER No. 9 at Sections 3.7.2 and 3.10. With regard to the impact of the earthquake on the structural design of the Perry facility, the licensee found that the dynamic stresses due to the recorded earthquake were substantially lower than the corresponding design stresses and not of any safety significance. The Staff, in concurring with this assessment, determined that the earthquake represented a negligible effect on the future safe operation of the Perry plant, and reaffirmed its original findings as set forth in its Safety Evaluation Report, NUREG 0887, issued in May 1982

(hereafter SER) that the structural seismic design of the facility is acceptable. With regard to the impact of the earthquake on plant equipment, the licensee reassessed the seismic capability of a sample of equipment types. Components were selected by the licensee to compare qualification spectra with corresponding estimated response spectra derived from measured earthquake responses for various types of equipment in different buildings at different elevations. The estimated spectra and testing response spectra at proper elevations were compared to indicate ample margin to accommodate the recorded January 31 earthquake. The Staff reviewed the information provided by the licensee in this regard and agrees with the results. See SSER No. 9 at Section 3.10.

On the basis of the results of detailed walkdowns conducted by the NRR staff and its consultants, Region III and utility personnel, no significant equipment or structural damage has been found that could be attributed to the Ohio earthquake of January 31, 1986. On a reassessment of the seismic capability of a sampling of equipment types and structure, the Staff does not view the earthquake as having an impact on the plant equipment and structures. In other words, though the design-basis earthquake may have been exceeded at some high, narrow frequency region of the response spectra, the adequacy of the original overall plant seismic design has not been affected. Therefore, the Staff has concluded that the previous conclusions regarding the adequacy of the applicant's plant seismic design and seismic qualification program remain valid. See SSER No. 9 at Section 3.10. From the inspection and analysis performed to date, the Staff has determined that no seismic upgrading of the facility is required and no corrective actions or repairs are needed.

OCRE also requested that post earthquake functional testing of all plant systems be completed, including containment integrated leak rate testing and hydrostatic testing of the reactor coolant pressure boundary. These tests are required as part of preoperational testing for licensing under 10 CFR Part 50, Appendix A, and were satisfactorily completed for the Perry facility prior to the January 31 earthquake. As indicated above, the Staff has concluded from the results of inspections and analyses by the licensee and Staff that the earthquake which occurred near the Perry plant did not have a significant effect on plant systems and structures. The effect of the earthquake did not impose any loads that were outside of the original equipment and structural code allowables. Therefore, there is no need to repeat either the containment integrated leak rate test or hydrostatic test of the reactor coolant pressure boundary.

Site Seismicity

OCRE and WRA make several claims in support of their assertion that the seismic design of the Perry facility is inadequate and the conclusions in the FSAR and SER are erroneous. Both WRA and OCRE assert that the January 31 earthquake has demonstrated that, contrary to information in the FSAR, the plants have been constructed on a fault line, that the plant site is not in an area of low seismicity 2/, and that the plants are subject to seismic acceleration forces which were greater than they were designed to withstand.

2/ In this connection, WRA asserts that the epicenter of the earthquake was extremely close to the plants and that there may be future earthquakes with epicenters closer to the Perry facility.

As indicated earlier in this Decision, following the January 31, 1986, earthquake, the Staff began a reevaluation of the geology and seismology of the Perry site. See SSER No. 9 at Section 2.5. The Staff's preliminary conclusion is that there is no adequate basis to revise its previous conclusions regarding site seismicity and the appropriate seismic design parameters for the Perry plant. The earthquake which occurred on January 31, 1986, was a magnitude 5.0 event and occurred about 10 miles south of the Perry plant. Under 10 CFR Part 100, Appendix A, the design bases for earthquakes must be determined through evaluation of the geologic and seismic history of the site and surrounding region. The largest earthquakes occurring in the site region must be assessed. The Perry site lies in the Central Stable Region tectonic province. The largest earthquake that cannot be correlated with a geological structure in this province is a magnitude 5.3 event, and in the operating license review the Staff evaluated the site ground motion produced by a nearby magnitude 5.3 event. See SER at Section 2.5.2 Thus, the size and proximity of the January 31 earthquake are consistent with historical seismicity in the Central Stable Region. During the operating license review, the Perry SSE (a Regulatory Guide 1.60 spectrum anchored to 0.15g) was found acceptable since it exceeded the 84th percentile ground motion spectrum from a set of recordings from nearby magnitude 5.3 ± 0.5 events. As explained in Section 2.5.2 of the SER, the Perry SSE was compared to accelerograms recorded at epicentral distances of less than 16 miles from a magnitude 5.3 ± 0.5 event. The January 31 earthquake triggered the inplant seismic monitoring instruments. The earthquake motion recorded was of short duration (about one second) and contained predominantly high frequency elements. The SSE anchor is a high frequency anchor point for a

design response spectrum (a frequency-dependent description of earthquake motion useful to design engineers). For most frequencies of the January 31 earthquake recordings, the design spectrum of the SSE was conservative. At high frequencies (above 15 Hz) there were some inplant recordings that exceeded the OBE and SSE.

It is not unusual for an earthquake to have high amplitude, high frequency peak accelerations of limited duration. These high frequency peak accelerations are not used in scaling Regulatory Guide 1.60 design spectra because they are usually of short duration and have little energy and are not representative of spectral response at the lower, more significant frequencies. As at Perry, these high frequencies have not resulted in any significant damage. This conclusion has been arrived at based on the results of previous studies. See SSER No. 9 at Sections 2.5, 3.7.2 and 3.10.

The NRC discussed the issue of whether the Perry facility was constructed on a fault line in the SER and in its Supplement No. 3 to the Construction Permit-SER (issued in November 1975). As described in Section 2.5 of the SER, the Staff determined that no known capable faults exist in the plant area. No evidence has been found to indicate that the faults encountered in the intake and discharge (cooling water) tunnels are capable, or that the potential exists for future nontectonic movement of the faults. As described in Section 2.5 of the SER a series of minor folds and shallow faults were identified within the excavations for the plant's main structures as a result of geologic mapping and photographing during plant site excavations. These features were examined by the applicant, the NRC Staff, U.S. Geological Survey and U.S. Army Corps of Engineers geologists. The shallow faulting and associat-

ed limited surficial deformation, which was underlain by horizontal, undeformed bedrock, was determined to be of nontectonic glacial origin and consequently presented no hazard to the Perry facilities.

WRA also raises other concerns with regard to the January 31 earthquake and geologic and seismic issues. WRA asserts that CEI filled a fault line with cement and said that it was a glacial scar, that a fault line can move at any time, and that, because of the vibration and ground acceleration, the soil conditions at the Perry site subject the plant to greater degrees of seismic acceleration forces than would occur in other parts of the world.

With regard to WRA's assertion that CEI filled the fault line with cement, the fractured and otherwise structurally deformed bedrock encountered in the plant excavation was over-excavated and backfilled with lean concrete. See FSAR at 2.5-122-123, Fig. 2.5-43, 44. These were noncapable faults and the applicant's activities were normal construction activities.

With regard to WRA's assertion that fault lines can move at any time, as noted earlier, the Staff made a determination that no known capable faults exist in the plant area. 3/ Noncapable faults are not assumed to be capable of future movement, and WRA provides no basis for its assertion.

WRA asserts that soil conditions subject the Perry facility to a greater degree of seismic forces than would occur in other parts of the world. No basis is provided for this assertion. Most seismic category I structures are founded on shale rock. No site-dependent amplification is expected and

3/ Appendix A to 10 CFR Part 100 describes procedures to be followed in determining whether a fault is capable and whether the nuclear power plant is required to be designed to withstand the effects of surface faulting.

such conditions are not unique. The diesel generator and offgas buildings are founded on Class A fill, and the radwaste building is founded on lower till soil. These foundation soil conditions are typical of those found at other nuclear power plants.

Finally, WRA suggests that asserted delays in receiving information on the earthquake from seismic instrumentation and the licensee's reliance on vendors to read the instrumentation reflect poorly on the licensee's (and the NRC's) performance. It is assumed that this allegation pertains to the delays experienced in finalizing seismic instrumentation data, and the WRA is asserting that CEI is incapable, without assistance from its seismic instrumentation manufacturers, to read its own instruments. To the contrary, the seismic recording instrumentation (manufactured by Kinometrics, Inc. and Engdahl, Inc.) was promptly read by CEI following the January 31 earthquake. The manufacturers also read the instruments since they were at the plant calibrating their respective instruments in preparation for Perry licensing at the time the event occurred. The Kinometrics orthogonal accelerometers (which record motion time histories on a magnetic tape) would normally be read by the manufacturer since the raw data obtained by these accelerometers needs to be processed by computer for development of the information in the form in which it can be interpreted. The Engdahl response spectra recorders' data were read preliminarily at the plant site and, under customary practice, the final interpretation of the Engdahl instrument data was performed by the manufacturer. There was some delay experienced in interpreting the Engdahl instrument data. Some of those instruments provided indications later found not to have been attributed to the earthquake, but instead were indications

caused by shocks imparted by construction activities. 4/ The circumstances do not suggest inadequate or improper performance by the licensee.

As a result of the various reviews of the January 31 earthquake and its impact on the plant, the Staff did identify certain confirmatory activities to be undertaken by the licensee and to be reviewed by the Staff. These activities, as described in Section 1.2 of SSER No. 9, are an evaluation of fault plane solutions of the earthquake and its aftershocks and the search for a possible source structure; evaluation of a possible relationship between the earthquake and the injection of chemical wastes into wells; assessment of faults near the plant site; consideration of the impact of enriched high-frequency content; further generic evaluations of energy content and potential safety significance of high-frequency short-duration earthquakes; relocation of seismic instrumentation; modification of specific plant procedures, and additional assessment of seismic qualification of equipment. The Staff will report the results of its review of these actions in future SSERs. It is not anticipated that the results from the confirmatory studies will be of such a nature that repairs or corrective actions will be necessary. The Staff has reaffirmed the adequacy of the seismic design of the facility and has concluded that it is unlikely that the results of the confirmatory studies will show any information which would necessitate a significant change in the design of the facility.

4/ The seismic instrumentation at the Perry plant is extensively discussed in SSER No. 9 in Section 3.7.3.

Non-Seismic Issues

In addition to its request that action be taken with regard to the Perry facility due to inadequate seismic design, WRA also requests immediate action based on its allegations with regard to inadequate quality assurance over construction of the plant and CEC's application before the SEC seeking to acquire the shares of CEI and TE and seeking approval of the mergers by which this will be effectuated.

The adequacy of the Perry quality assurance program was litigated in the operating license proceeding and found to be satisfactory. See LBP-83-77, 18 NRC 1365, 1396 (1983), aff'd, ALAB-802, 21 NRC 490 (1985). As indicated in a recent §2.206 decision on the Perry plant, Region III conducted an assessment in late 1984 of the quality of design and construction and found adequate implementation of the QA program and acceptable plant construction. See Cleveland Electric Co. (Perry Nuclear Power Plant, Units 1 & 2), DD-85-14, 22 NRC 635, 638 (1985). Nonetheless, WRA challenges the integrity of the Perry quality assurance program and, in support of its assertion that CEI has failed to implement an acceptable design and construction program that meets the requirements of 10 CFR Part 50, Appendix B, WRA lists in its Petition 48 allegations apparently derived from information provided to it by the Government Accountability Project. These allegations are stated in the most general terms. Although the Petition refers to affidavits that support the allegations, no affidavits or supporting documents were submitted to the NRC with the Petition. The NRC requested affidavits and supporting documents but as of March 17, 1986, has not received this material.

10 CFR 2.206(e) requires that a petitioner "set forth the facts that constitute the basis for the request." See Public Service Co. of Indiana (Marble Hill Nuclear Generating Station, Units 1 and 2), CLI-80-10, 11 NRC 438, 443

(1980). Absent such a showing, no action need be taken on a request. See, e.g., Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), DD-85-11, 22 NRC 149, 154 (1985); Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), DD-82-13, 16 NRC 2115, 2121 (1982). The Director, upon receipt of a request to initiate an enforcement proceeding, is not required to accord presumptive validity to every assertion of fact by a Petitioner. Rather, his role is to make an inquiry appropriate to the facts asserted, and to obtain and assess the information he believes necessary to make that determination. See Northern Indiana Public Service Co. (Baillly Generating Station, Nuclear-1) CLI-78-7, 7 NRC 429, 432-33 (1978).

In this instance, from a review of the Petition and the information of which the Staff is currently aware bearing on the allegations, the Staff has determined that none of the allegations appear to have significant implication for the safety of the plant, nor is there a sufficient basis to refuse to authorize fuel load or licensing of the facility. A number of these allegations refer to issues which have previously been investigated by the Staff. 5/ The

5/ The following allegations (as numbered in WRA's Petition) are related to matters previously inspected:

- 14) welds in the containment building are cracked (Inspection Report 85072);
- 15) most nuclear plants use metal boots around penetrations but CEI uses plastic. If the plastic boot around the penetration fails, the system could belch and radiation could go out (Inspection Report 86002);
- 16) design of Dresser valves is inadequate (Inspection Report 85089);
- 17) Borg-Warner valves are inadequate (Inspection Reports 84006 and 85080);
- 20) CEI failed to successfully complete the Integrated Leak Rate Test (ILRT) (Inspection Reports 85061 and 86002);
- 22) welders have illegally taken tests without supervision (Inspection

(FOOTNOTE CONTINUED ON NEXT PAGE)

Staff has recently conducted inspections to investigate these concerns to the extent possible, based upon the limited information provided. The results of these inspections will be documented in a Region III inspection report. All outstanding issues, to the extent determinable and understood by the NRC Staff, have been resolved.

Thus, there is insufficient information in the Petition to warrant granting the immediate relief requested by WRA. Nonetheless, the Staff intends to pursue the allegations further and has been in contact with the Government Accountability Project (GAP) which WRA states provided it with the allegations, to obtain more specific information on the allegations that may exist. In discussions with the Staff, on March 5, 1985, Ms. Billie Garde, who on behalf of

(FOOTNOTE CONTINUED FROM PREVIOUS PAGE)

- Report 85023);
- 31) the sprinkler system came on accidentally or for unknown or undisclosed reasons, affecting portions of the containment vessel (Inspection Reports 85010, 85017, 85053, and 85056);
 - 33) paint quality is not uniform (Inspection Reports 85-64 and 85-84);
 - 36) voids exist in the bioshield wall (Inspection Report 84-02);
 - 40) defects exist in the polar crane support beam (Inspection Reports 82006 and 85078);
 - 41) quality control inspectors have been harassed and intimidated (Inspection Reports 83037 and 84007);
 - 42) harassment and intimidation of quality control inspectors affected diesel generator inspection (Inspection Reports 83037, 84005, 84007, 85045 and 85071) (The Office of Investigations (OI) is investigating this matter) ;
 - 43) verification work was not done in the main control room due to shortage of quality control inspectors (Inspection Reports 85032 and 85037);
 - 46) cracks exist in the stainless steel clad in the containment vessel (Inspection Reports 83032 and 85035);
 - 47) welds in the fuel pools are bad (Inspection Report 83002); and
 - 48) Unit 1 crane girder is bad (Inspection Reports 82006 and 85078).

GAP has been advising and assisting WRA with regard to these allegations, was requested to provide the Regional Staff with further details regarding the allegations. Ms. Garde agreed to provide written documentation in GAP's possession, and to assist the Staff in arranging interviews with persons who may have specific information regarding the allegations. When this information is received, a prompt review will be conducted by the NRC Staff in accordance with the Commission's normal practices for reviewing allegations, and the Staff will take enforcement action as appropriate on the basis of the results of its further investigations.

Apart from its allegations concerning quality assurance at the Perry plant, WRA contends that the affiliation of CEI and TE in a new holding company will result in the violation of 10 CFR Part 140 because of the financial danger it creates for the companies. WRA has provided no specific information to support this contention. 6/ On the contrary, the formation of holding companies is often expressly undertaken to improve the financial posture of the combined entities, which, in the case of CEI and TE, should prove beneficial to their respective nuclear and non-nuclear operation. 7/ CEI has kept

6/ WRA alludes in its Petition to "other issues" which it has raised in its filings before the SEC that, it asserts, tend to show how the CEC's application before the SEC "will aid in the continuing violation of other NRC rules and regulations." WRA did not provide these filings with its Petition or otherwise provide specific information concerning these charges.

7/ In an earlier Director's Decision denying a request by OCRE for relief based upon the licensee's alleged precarious financial condition, it was noted that the Staff was aware that CEI and TE are considering a merger, and that that fact did not alter the analysis set forth of the adequate financial qualifications of the licensee, as one stated purpose

the NRC fully informed as to the proposed CEI/TE affiliation. By letters dated August 14, 1985, November 13, 1985, January 8, 1986, January 31, 1986, and February 13, 1986, the licensee has forwarded to the NRC the relevant CEI/TE filings with the SEC. Furthermore, in a meeting on December 17, 1985, the NRC Staff raised questions about the CEI/TE holding company affiliation and the effect it would have on the management and operation of the Perry plant. The NRC was concerned that the organizational structure and plant operating staff previously approved by the NRC as documented by CEI in the FSAR would be changed as a result of the holding company formation. In a letter from R. M. Ginn (Chief Executive Officer for CEI) to H. R. Denton (NRC) dated December 20, 1985, CEI satisfactorily responded to the NRC's concerns. In this letter, the licensee explained that the planned affiliation would involve the formation of a holding company, Centerior Energy Corporation, which would own all common stock of CEI and TE and that a service company would be formed, but that the affiliation would not involve any significant changes with respect to the management of Perry. The licensee further stated that it would keep the NRC fully informed with regard to decisions on the service company's role, and would request appropriate amendments to the Perry operating license in the event such amendments were required to implement future management organization changes. Therefore, the NRC Staff sees no plant organizational-management

(FOOTNOTE CONTINUED FROM PREVIOUS PAGE)

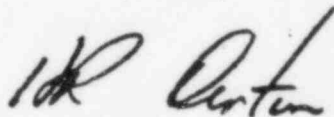
of the merger was to strengthen the combined financial position of CEI and TE. See Cleveland Electric Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), DD-85-14, 22 NRC 635, 641 n. 3 (1985).

impediment associated with the planned holding company formation which would prevent the licensing of the Perry plant.

Nor does the proposed affiliation indicate that there is or will be a violation of 10 CFR Part 140. These regulations require for an operating nuclear power reactor that the licensee maintain \$160 million in financial protection plus secondary financial protection in the form of private liability insurance available under an industry retrospective rating plan providing for deferred premiums. As indicated in its response to the WRA Petition, CEI has in force liability insurance policies (American Nuclear Insurers Policy No. NF 291 and Mutual Atomic Energy Liability Underwriters Policy No. MF 124) which provide for \$160 million in financial protection. An indemnity agreement with the NRC (No. B-98) was issued on March 7, 1985, and will be amended at the time the operating license is issued. CEI has also submitted to the NRC Certificates of Insurance for deferred premiums under Nuclear Energy Liability Insurance Association/Mutual Atomic Energy Liability Underwriters Master Policy No. 1. This insurance provides an aggregate of \$30 million per event in the event that utilities are unable to meet deferred premium obligations. CEI and the other co-owners of the Perry plant are also required to submit to NRC the certified financial statements pursuant to 10 CFR 140.21(e), as CEI and Toledo Edison have annually done with respect to the Davis-Besse plant. In sum, WRA raises no substantial issue with respect to the ability of the licensee to meet its obligations under Part 140 or the effect of the proposed CEI/TE affiliation on compliance with Part 140.

CONCLUSION

For the reasons discussed above, I have concluded that no adequate basis exists for suspending the existing construction permits, withholding the operating license for Unit 1, or ordering the other relief requested by the Petitioners. Thus, with the exception of OCRE's requests for inspection of the Perry facility for damage resulting from the January 31 earthquake, identification of any necessary corrective action or plant upgrading, and an investigation of the earthquake and reevaluation of local seismicity, OCRE's and WRA's Petitions have been denied. As provided in 10 CFR 2.206(c), a copy of this decision will be filed with the Secretary for the Commission's review.



Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland,
this 18th day of March 1986.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
[Docket Nos. 50-440, 50-441]

CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL.

(Perry Nuclear Power Plant, Units 1 and 2)

Issuance of Director's Decision Under 10 CFR 2.206 (DD-86-04)

Notice is hereby given that the Director of the Office of Nuclear Reactor Regulation has taken action with regard to two Petitions for action under 10 CFR 2.206 with respect to the Perry Nuclear Power Plant, Units 1 and 2.

By Petition dated February 3, 1986, the Ohio Citizens for Responsible Energy (OCRE) requested that the Commission take certain actions with regard to the Perry plant prior to issuing an operating license or permitting fuel loading of the facility. Specifically, the Petition requested that, prior to licensing of Unit 1, the plant be thoroughly inspected for damage resulting from an earthquake on January 31, 1986; that post-earthquake functional testing of all plant systems be completed; that a comprehensive investigation of the earthquake and reevaluation of local seismicity be conducted by the NRC, the licensee, and other scientific entities; that the Appeal Board complete a hearing and issue a decision on OCRE's seismic design contention, and that installation of any required seismic upgrading on the Perry plant be completed. OCRE asserted as grounds for its request that the magnitude of the January 31st earthquake indicates that the FSAR analysis of site area seismicity needs to be redone and that conclusions in the FSAR and the staff's SER are erroneous.

DUPE

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By Petition dated February 4, 1986, the Western Reserve Alliance (WRA) requested that the Commission take immediate action to suspend the construction of the Perry plants, Units 1 and 2, require an independent design and construction verification program to assess the integrity and implementation of the Perry quality assurance (QA) programs, and review and require an audit of an application of Centerior Energy Corporation (CEC) seeking the approval of the Securities and Exchange Commission (SEC) to acquire all outstanding shares of the Cleveland Electric Illuminating Company (CEI) and Toledo Edison and of mergers by which this will be effectuated.

The WRA asserted as grounds for its request that construction be suspended, that the seismic design of the Perry plant is inadequate, and as grounds for its request that an independent design and construction verification program be undertaken that CEI and its contractors have failed to implement an acceptable QA program that meets the requirements of 10 CFR Part 50, Appendix B. Included with the WRA Petition were 48 allegations of various construction problems. The Petition further asserted that the application of CEC before the SEC should be audited because it will adversely impact the ability of CEC, CEI and Toledo Edison to meet the requirements of 10 CFR Part 140.

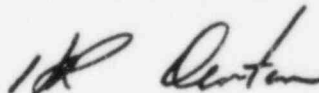
Upon consideration of the Petitions, the Director, Office of Nuclear Reactor Regulation, has determined to deny OCRE's and WRA's Petitions, with the exception of OCRE's requests for inspection of the Perry facility for damage resulting from the January 31 earthquake and an investigation of the earthquake and evaluation of local seismicity. The Staff has conducted an extensive investigation of the effects of the earthquake upon the Perry

structure and equipment, and is reevaluating the geology and seismology of the Perry site. The Director has determined that no adequate basis exists to require the other measures requested by the Petitioners.

The reasons for this decision are fully described in the "Director's Decision Under 10 CFR 2.206" (DD 86-04) which is available for public inspection in the Commission's Public Document Room located at 1717 H Street, N.W., Washington, D.C. 20555, and in the local public document room for Perry Nuclear Plant located at Perry Public Library, 3753 Main Street, Perry, Ohio 44081. Copies of the Petitions are also available for public inspection at those locations. A copy of the Director's Decision will be filed with the Secretary for the Commission's review in accordance with 10 CFR 2.206(c).

Dated at Bethesda, Maryland, this 18th day of March 1986.

FOR THE NUCLEAR REGULATORY COMMISSION



Harold R. Denton, Director
Office of Nuclear Reactor Regulation

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Director, Office of Nuclear Reactor Regulation

In the Matter of)
)
THE CLEVELAND ELECTRIC) Docket Nos. 50-440 OL
ILLUMINATING CO. ET AL.) 50-441 OL
)
(Perry Nuclear Power Plant,)
Units 1 and 2))

PETITION FOR ACTION UNDER 10 CFR 2.206

I. INTRODUCTION

At 11:47 AM on Friday, January 31, 1986 an earthquake with a magnitude of 5.0 on the Richter scale struck Northeast Ohio. The epicenter of the earthquake is estimated to be near Thompson, Ohio, less than 10 miles from the Perry Nuclear Power Plant.

While only preliminary information is available on the earthquake at this time, this information strongly indicates that, at a minimum, the FSAR analysis of site area seismicity needs to be redone. The January 31 earthquake clearly shows the conclusions in the FSAR and SER (NUREG-0887) to be erroneous. For example, it is concluded that no capable faults exist in the vicinity of the plant. FSAR Section 2.5.3.6; SER at p. 2-21. The plant site is also said to be an area of low seismicity. FSAR Section 2, Appendix D, p. D-94.

Even more disturbing are news accounts stating that accelerations from the earthquake were estimated to range from 0.19 g to 0.25 g. Perry is designed to withstand 0.15 g (safe shutdown earthquake). FSAR Section 2.5.2.6. This, along with the definition of the operating basis earthquake in 10 CFR 100

8602/00059

4pp.

Appendix A (an earthquake which could reasonably be expected to affect the plant site during the operating life of the plant), indicates that the SSE and OBE should be more severe than presently postulated, and the seismic capability of safety-related structures, systems, and components at Perry should be upgraded accordingly.

In light of this information, Ohio Citizens for Responsible Energy ("OCRE") has moved to reopen the hearing record in the Perry operating license proceeding, for the purposes of admitting and litigating the following new contention:

Applicants have not demonstrated that the seismic design of the Perry Nuclear Power Plant is adequate in light of observed local seismicity.

Because fuel loading of Perry Unit 1 is scheduled for sometime this month (perhaps as soon as mid-February), OCRE also finds it necessary to file this action pursuant to 10 CFR 2.206 in order to ensure that licensing does not proceed before this matter has been thoroughly investigated.

II. RELIEF REQUESTED

OCRE requests that fuel loading not be permitted, and that no operating license for any power level be issued, until the following actions have been accomplished:

1. The Perry Nuclear Power Plant has been thoroughly inspected for damage resulting from the January 31 earthquake. This should include the use of nondestructive evaluation techniques as well as visual inspection.

2. Post-earthquake functional testing of all plant systems is completed. These tests should include, but not be limited to, containment integrated leak rate testing and hydrostatic testing of the reactor coolant pressure boundary.

3. Full completion of any corrective actions or repairs found to be necessary as a result of the testing and inspection delineated above.

4. A comprehensive investigation of the January 31 earthquake and a reevaluation of local seismicity by the Cleveland Electric Illuminating Co., the NRC, the Advisory Committee on Reactor Safeguards, the U.S. Geologic Survey, and all other scientific entities studying the earthquake.

5. Completion of the hearing and issuance of a decision on OCRE's seismic design contention (noted above) in the reopened operating license proceeding, should the Appeal Board grant OCRE's motion.

6. Completed installation of any seismic upgrading of Perry that may be required either by the NRC Staff or by the Appeal Board in its decision on OCRE's seismic design contention.

III. CONCLUSION

The January 31 earthquake raises significant questions about the safety of the Perry Nuclear Power Plant. Completion of the above activities is a necessary prerequisite to the resolution of these questions. Because it is imperative that the safety of Perry be firmly resolved before the plant is permitted to

operate, the granting of this petition is manifestly in the public interest.

Respectfully submitted,

Susan L. Hiatt

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DATED: FEB. 3, 1986