



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of

CONSOLIDATED EDISON COMPANY
OF NEW YORK, INC. and
POWER AUTHORITY OF THE STATE
OF NEW YORK

(Indian Point Station,
Units 1, 2 and 3)

Docket Nos. 50-3
50-247
50-286

ANSWER OF CON EDISON IN OPPOSITION TO
THE CITIZENS COMMITTEE (CCPE) PETITION
FOR REVIEW OF ALAB-436 AND 561

October 9, 1979

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The Consolidated Edison Company of New York, Inc., submits this Answer, pursuant to 10 CFR § 2.786(b)(3), in opposition to the Petition for Review of the Citizens' Committee for Protection of the Environment (hereinafter "CCPE") dated September 24, 1979. The CCPE Petition seeks Commission review of only that portion of the Atomic Safety and Licensing Appeal Board's decision herein, ALAB-436 and 561, 6 NRC 547 (1977) and 10 NRC ____ (1979), which deleted a requirement for a microseismic monitoring network from the operating license for Indian Point Unit No. 3. The balance of the Appeal Board decision is unchallenged by CCPE.

The CCPE Petition does not satisfy the Commission's own settled standards for review, in that the Petition nowhere alleges that the Appeal Board decision is clearly erroneous. The CCPE position is essentially that it would have weighed controverted testimony differently than did the Appeal Board. Because the CCPE Petition does not purport to raise questions which are appropriate for Commission review under the NRC's Rules of Practice, the Petition should accordingly be denied.

The Appeal Board Proceedings and Decision

The inquiry which resulted in the instant Appeal Board decision was directed by the Commission's order in CLI-75-8, 2 NRC 173 (1975). The Appeal Board proceedings initially related to three issues arising under the Commission's seismic and geologic siting criteria, 10 CFR Part 100, Appendix A. In particular, the Appeal Board considered whether there was any basis for requiring a "Safe Shutdown Earthquake" tolerance for the Indian Point site greater than intensity VII, whether the ground acceleration value used for the design of the Indian Point units should be increased, and whether there were any "capable" geologic faults in the vicinity of the site.*

In the course of the proceedings on the siting criteria issues, the Appeal Board sua sponte raised the issue

*The specific site criteria questions addressed by the Appeal Board are set forth in its opinion, 6 NRC at 548-49.

of whether there was any statutory justification or safety rationale for a requirement in the Unit 3 license for the maintenance of an elaborate and expensive microseismic monitoring network throughout the Indian Point region. A license amendment issued by the staff on April 5, 1976 had required such a network for a two-year period.* The sole function of such a network would have been to identify and measure microseismic activity, i.e., minor movements of the earth's crust which occur virtually everywhere, and which, unlike the macroseismic (large earthquake) activity significant to reactor design, cannot even be detected without elaborate instrumentation.

On November 10, 1976 the Appeal Board issued a memorandum and order, ALAB-357, 4 NRC 542, which expanded the siting criteria issues before it to include certain enumerated questions relating to the microseismic monitoring network (see 4 NRC at 551). Thereafter, six days of hearings were held on network issues between March 15 and 23, 1977. Testimony was offered by the licensees, Con Edison and the Power Authority of the State of New York ("PASNY"), the NRC staff, and the New York State Energy Office.

*The condition was imposed by the staff without notice or an opportunity for a hearing. Cf. 10 CFR § 2.204. Undisputed testimony before the Appeal Board established that the cost of the two-year microseismic monitoring network would exceed \$1,000,000. 6 NRC at 608-09.

Under probing by the Appeal Board, the NRC staff witnesses acknowledged that a principal purpose for the proposed monitoring network was to provide "a pure research project," 6 NRC at 602. There was general agreement at the Board hearings that no relationship had ever been established between the microseismic activity that would be measured by the monitoring network, and large earthquakes. The NRC staff's written testimony acknowledged that:

"[w]hile many [microseismic] studies have been reported in the literature, a general relationship between micro-earthquake activity and the occurrence of larger earthquakes significant to engineering design has not yet been established." Staff Ex. 25, quoted in 6 NRC at 612.

An NRC staff witness, J. Carl Stepp, testified as to the absence of any predictive value of microseismic monitoring:

"There has been over the past ten years a lot of discussion about the possibility of using increases in seismicity, micro-earthquakes, as a basis for predicting the occurrence of larger earthquakes. So far as I am aware . . . , that has not been a terribly successful approach." Tr. at 5529, quoted in 4 NRC at 548.

This witness continued that:

"[W]e do not know what the significance of micro-earthquakes may be so far as being able to estimate what they mean -- to determine what they mean for the potential for defining where future larger earthquakes may occur in the eastern United States." Tr. at 5530-31, quoted in 6 NRC at 603.

Testimony before the Appeal Board was uncontroverted in establishing that no unusual seismic activity or hazards existed at Indian Point, and that the geologic characteristics

of the area were quite unremarkable.* NRC staff testimony established that seismicity around Indian Point "is not higher than the [seismic] activity to the east of the site or for that matter not more than the rest of New England in its entirety." 6 NRC at 615. The licensees and NRC staff were in complete agreement that the latest geologic fault activity on the east side of the Hudson River "appears to have occurred at least several million years ago." 6 NRC at 620.

The Appeal Board's decision, ALAB-436, 6 NRC 547 (1977), was announced on October 12, 1977.** The decision gave the Indian Point plant a clean seismic bill of health, and concluded that Indian Point fully satisfied all of the seismic and geologic standards set forth in 10 CFR Part 100, Appendix A. The instant CCPE Petition does not seek review of that portion of the Appeal Board decision which found full compliance with

*An NRC staff witness, Seth M. Coplan, testified that:

"[W]e are quite confident that, given the data that we have available to us, the [seismic] situation is not one that causes a hazard for the Indian Point site. . . ." Tr. at 5538, quoted in 6 NRC at 603.

** A dissent in part from the Appeal Board decision, dated August 3, 1979, and a supplemental opinion of the Appeal Board dated September 6, 1979, together with a modification of the partial dissent, have been designated as ALAB-561, 10 NRC ____.

the Commission's seismic and geologic siting criteria.*

On the subject of the microseismic monitoring network, the Appeal Board determined that "the enlarged monitoring network would not contribute to the assurance of health and safety of the public and is therefore unnecessary."** 6 NRC at 602.

The Board observed that:

"Throughout the hearing the staff insisted that the data collected by the expanded microseismic network neither would nor could be used to predict the advent of large earthquakes either in the short term or long term." 6 NRC at 610.

The Appeals Board also stated that while Indian Point Units 2 and 3 were designed to withstand an intensity VII earthquake at the site, 6 NRC at 606, "the witnesses noted that only two intensity IV and two intensity V earthquakes have occurred within the area of the proposed network in the past 278 years," Id. Noting the complete absence of any support in the hearing record for a relationship between microseismic activity and the assessment of "Safe Shutdown Earthquakes," the Appeal Board concluded that:

* No petition for review of the instant Appeal Board decision was filed by the NRC staff. Another petition for review of the Appeal Board's decision herein, filed by the New York State Energy Office, purports to "secondarily" seek review of the Safe Shutdown Earthquake/intensity VII and capable fault issues, however the principal thrust of the Energy Office petition relates to the microseismic monitoring network issue.

**Prior to the Appeal Board proceedings, the licensees and their customers had incurred expenditures of \$1.4 million in connection with studies to determine the suitability of the Indian Point site under regular Commission seismic and geologic criteria. Lic. Ex. 39 at 5.

"[g]iven these considerations we do not believe that a research project with such tenuous usefulness is one which should be required of an applicant or licensee under [10 CFR Part 100] Appendix A." 6 NRC at 619.

The non-technical member of the Appeal Board, Mr. Farrar, dissented from the Board determination with respect to the microseismic monitoring network, ALAB-561, 10 NRC _____ (1979). The principal benefit of the rejected microseismic monitoring network, according to Mr. Farrar, was "that of advancing our general knowledge of seismicity, particularly with respect to the relationship between micro-earthquakes and larger earthquakes. . . ." ALAB-561 at _____, 10 NRC at _____ (Slip op. at 57).

Mr. Farrar did not discuss any possible justification for the imposition of non-safety related expenses upon licensees under the Commission's seismic and geologic siting criteria, 10 CFR Part 100, Appendix A, or under the Atomic Energy Act of 1954, as amended, 42 U.S.C. § 2011, et seq. However, the Appeal Board's Supplemental Opinion dated September 6, 1979 addressed this matter in stating that:

"[A]bsent some indication (and we think there is none) that the enlarged [microseismic monitoring] network is necessary to provide reasonable assurance that operation of the Indian Point reactors will not endanger the public health and safety, it is difficult to understand why the licensees and their rate-payers should be required to bear the considerable cost of broad-gauged seismic research projects." ALAB-561 at _____, 10 NRC at _____ (Slip op. at 4).

THE CCPE PETITION DOES NOT CONTEND THAT THE
APPEAL BOARD DECISION WAS CLEARLY ERRONEOUS,
AND THUS FAILS TO ALLEGE A PROPER
BASIS FOR COMMISSION REVIEW

The Commission's criteria for the consideration of review petitions such as that submitted by the CCPE are set forth in its Rules of Practice, 10 CFR § 2.786(b)(4)(ii). This section provides that:

"A petition for review of matters of fact will not be granted unless it appears that the Atomic Safety and Licensing Appeal Board has resolved a factual issue necessary for decision in a clearly erroneous manner. . . ."

The CCPE Petition on its face fails to assert that the Appeal Board decision might be considered "clearly erroneous." CCPE instead contends only that the Appeal Board erred because it "did not give fair weight" to the testimony offered in support of the microseismic monitoring network, and that the Board "err[ed] in weighing the evidence," CCPE Petition at 3.

These claims of CCPE are plainly insufficient. It is well established that "a choice between two permissible views on the weight of the evidence is not 'clearly erroneous,'" U.S. v. Yellow Cab Co., 338 U.S. 338, 94 L.Ed. 150, 70 S.Ct.

*Other review criteria set forth in 10 CFR § 2.786(b)(4) are here inapposite. CCPE does not purport to raise questions of law or policy, see 10 CFR § 2.786(b)(4)(i). As discussed above, the Appeal Board unanimously found, and CCPE does not dispute, that Indian Point satisfies all Commission siting criteria set forth in 10 CFR Part 100, Appendix A.

177 (1949). The CCPE Petition contends that the Appeal Board did no more than resolve differing views in an adversarial situation where one competing point of view must be accorded more weight than the other. The Commission itself implemented the clearly erroneous standard to exclude mere weighing of competing factual material in Public Service Company of New Hampshire (Seabrook Units 1 and 2), 4 NRC 451, 467 (1976), where it stated that:

"As a general matter, this Commission does not sit to review factual determinations made by its subordinate panels."

CCPE does not deny that there was ample evidence to support the Board's findings that:

- (1) The Indian Point plant fully satisfies all of the seismic and geologic siting criteria required by Commission regulations, as set forth in 10 CFR Part 100, Appendix A; and
- (2) the proposed microseismic monitoring network was unnecessary to protect the public health and safety; and
- (3) there was no credible evidence showing any relationship between the microseismicity which would be measured by the monitoring network and the probability or predictability of large earthquakes.

Because the CCPE Petition complains only of the weighing of the testimony, but does not suggest that there is an insufficient evidentiary basis to support the Appeal Board decision, CCPE has not satisfied the Commission's "clearly erroneous" standard for seeking review. The CCPE Petition should accordingly be denied.

Respectfully submitted,

CONSOLIDATED EDISON COMPANY
OF NEW YORK, INC.

4 Irving Place - 1816
New York, New York 10003

October 9, 1979

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CERTIFICATE OF SERVICE

I hereby certify that on the 9th day of October 1979,
I served the following documents entitled "Answer of Con Edison
in Opposition to the Citizens Committee (CCPE) Petition for
Review of ALAB-436 and 561" and "Answer of Con Edison in Opposi-
tion to the New York State Energy Office Petition for Review
of ALAB-436 and 561", by mailing copies of each document first
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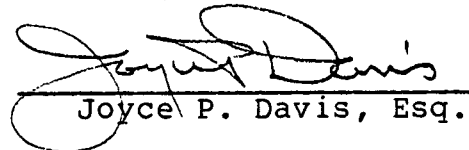
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