UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of	)	
	)	
COMMONWEALTH EDISON COMPANY	)	Docket Nos. STN 50-454 OL
	)	STN 50-455 OL
(Byron Nuclear Power Station, Units 1 and 2)	)	

* * *

BRIEF OF INTERVENORS

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March 12, 1984

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Introduction

This brief responds to the brief of Applicant, Commonwealth Edison Company ("Edison"), filed in support of its appeal from the January 13, 1984 Initial Decision of the Atomic Safety and Licensing Board, LBP-84-2, which denied Edison's application for an operating license for Byron Units 1 and 2. We show herein: (§1) the Board below applied the proper legal standard; the Board's findings with respect to (§II) Hatfield Electric Company as well as (§III) other Edison contractors were correct and well-founded in the record; and (§IV) the Board properly found "no confidence" in Edison's reinspection program. We also show (§V) that Edison's remaining arguments are without merit. Finally, we present (§VI) three additional grounds for license denial which must be considered in the event this Board were to reverse the ruling on quality assurance below or reopen the record to receive more evidence. These grounds are that the Board below erroneously denied Intervenors the right to litigate (A) financial qualifications and (B) need for power and alternative energy source issues; and that (C) the Board erred in its decision on the seismology contention.

I. THE BOARD APPLIED THE PROPER LEGAL STANDARD.

Contrary to the theme of Edison's brief, the Board below correctly applied the governing legal standard in denying an operating license for Byron. First, as required by NRC regulations, the Board found that there is no "reasonable

assurance" that Byron can operated safely. (I.D. §D-434.) Second, in language similar to that of Union Electric Company (Callaway Plant, Unit 1) ALAB-740, 18 NRC 343 (1983), the Board found such "widespread failures" in quality assurance at Byron that it could not be confident that "widespread hardware or construction problems ... would have been discovered." (I.D. at 7.)

In contrast, Edison's brief all but ignores the governing "reasonable assurance" test, and mechanically misapplies the Callaway language of "pervasive failure" and "resolution of ascertained construction errors" to each quality assurance problem individually. Edison does not concern itself with the entire pattern of quality assurance failures at Byron, as Callaway requires and as the Board below did.

In short, the Licensing Board, and not Edison, correctly applied the law to the facts of this case. After hearing months of testimony and reviewing voluminous documents, in good conscience, and following lengthy deliberation, that Board simply could not find with reasonable confidence that Byron can or will be operated safely. For the reasons set forth below, its unanimous decision to deny an operating license for Byron should be affirmed.

A. The "reasonable assurance" standard

Under the Atomic Energy Act, no operating license may issue without a finding that the operation of a nuclear power plant "will provide adequate protection to the health and safety of the public." Atomic Energy Act, §182, 42 U.S.C. §2232(a). The

Commission has interpreted that statutory standard as requiring a finding that

> "There is reasonable assurance (i) that the activities authorized by the operating license can be conducted without endangering the health and safety of the public..."

10 CFR §50.57(a)(3).

Therefore, the ultimate finding that each Licensing Board must make, as recently articulated by both the Appeal Board in Callaway and the Licensing Board below, is whether there is "reasonable assurance" that, as built, the facility can and will be operated without endangering the public health and safety. I.D. ¶D-434. Here, the Board below specifically found: "The Board does not have confidence that the quality of the work at Byron by Hatfield Electric Company is adequate to provide reasonable assurance that the Byron facility can be operated without undue risk to the public health and safety." I.D. ¶D-434.

This test places no burden on anyone to show that the plant is unsafe. Rather, burden of proof is on Edison to demonstrate with "reasonable assurance" that the plant can be operated safely. */ 10 C.F.R. §2.732.

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*/ Edison acknowledges that it has the burden of proof. (Brief, p. 1.) However, scattered throughout Edison's brief are various statements that subtly erode that acknowledgment. E.g., Edison complains that the record "fails to support" a conclusion of inadequacy with respect to Hunter (p. 26); that the findings regarding Hatfield's noncompliances "cannot... support withholding of the requisite safety finding" (p. 34); that there was no evidence that the sample selection process was inadequate (p. 58). It would appear that Edison sometimes forgets that it must prove that reasonable assurance exists; it cannot rely on absence of proof.

In the context of a quality assurance contention, under Callaway, there are two types of evidence that could preclude a finding of "reasonable assurance," 18 NRC at 346: first, a failure to cure ascertained construction errors; second - and relevant here - is evidence of a "breakdown in quality assurance procedures of sufficient dimensions to raise legitimate doubt as to the overall integrity of the facility and its safety-related structures and components. A demonstration of a pervasive failure to carry out the quality assurance program might well stand in the way of the requisite safety finding." Id. */

That is precisely what happened here. Using slightly different words, the Board below found such "widespread failures" (paralleling Callaway's "breakdown" or "pervasive failure") in quality assurance at Byron that it was "not confident" (Callaway said "legitimate doubt") that "widespread hardware or construction problems ... would have been discovered." (I.D. at 7.)

Not only did the Board thus correctly identify the governing legal standards, it applied them to a body of evidence (discussed in §§II through IV below) far more disturbing than the facts in Callaway. That case involved only "five discrete safety issues" (id. at 364) that had been adequately resolved (id. at 351, 356, 358, 362-63, 364) and three additional arguments at most only

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*/ "Breakdown" in this context is, of course, not the same as the Severity Level II "breakdown" identified in 10 CFR Part 2 Appendix C, for if they were identical, quality assurance problems of lesser severity, no matter how many and no matter the cause, would be largely irrelevant. (See Edison's brief, p. 12 n. 4.)

indirectly related to safety (id. at 364-70). Five discrete resolved safety issues and three non-safety issues simply did not add up to the kind of "widespread failures" present here and which support a conclusion of "no reasonable assurance." (Id. at 347, 364.)

Edison's brief both ignores the governing legal standard and misapplies the elaboration of that standard set forth in Callaway. Edison's discussion of the legal standard (brief at 11-17, 32-34) is remarkably devoid of so much as an acknowledgement that Edison must demonstrate "reasonable assurance" to obtain a license for Byron. With respect to Callaway, Edison's brief throughout (e.g., pp. 38, 39, 40, 45, 46, and 48) argues that each specific noncompliance at Byron does not, in Edison's view, amount to a "breakdown" or "pervasive failure." Edison thus misses the real issue: whether all the evidence collectively shows such a breakdown or pervasive failure - or in the words of the Board below "widespread failures" - that objective observers cannot find "reasonable assurance" that Byron can or will be operated safely.

B. The Board's Reasoning

Edison also mischaracterizes the reasoning of the Board below (brief at 13-18, 32-34). The Board did not "[lose] its perspective" in the face of negative evidence, nor engage in a "leap of judgment" from discrete deficiencies to doubts about Edison's entire program "absent some substantial basis for that judgment" (Edison Brief at 15). The Board was well aware that Edison "may be the coincidental beneficiary or victim of whether

a particular set of facts came to be litigated." (I.D. ¶D-433.) Nonetheless, the Board concluded, "As it turned out, despite the random nature of the litigation, enough information was considered for the Board to conclude that the insufficiencies in the quality assurance programs of the Byron contractors demonstrate an inadequate quality assurance program in Applicant's organization and that the resultant problems cannot all be delegated for resolution." Id.

In fact, the Board's reasoning in reaching this ultimate finding of no reasonable assurance was clear, straightforward and (though not using Callaway's identical words) consistent with Callaway:

1. The Board meticulously reviewed all the evidence before it, grouped by those contractors on whom the evidence had been focused. */ It then drew specific conclusions about Edison's quality assurance oversight of its contractors at Byron. (See generally I.D. beginning at ¶429.)

2. Focusing specifically on Hatfield's quality assurance record, the Board concluded that that record was so poor that it "does not have confidence that the quality of the work at Byron by Hatfield Electric Company is adequate to provide reasonable assurance that the Byron facility can be operated without undue risk to the public health and safety." (I.D. ¶D-434.)

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*/ Systems Control Corporation (p. 159 et seq.); Reliable Sheet Metal (p. 165 et seq.); Hunter Corporation (p. 168 et seq.); Blount Brothers Construction (p. 109 et seq.); and Hatfield Electric Company (p. 243 et seq.).

3. On the basis of other contractors' widespread quality assurance failures, as well as Hatfield's, the Board concluded that Edison's "quality assurance oversight of its contractors, without more, is not sufficient protection of the public safety" (I.D. ¶D-442.)

4. The Board realized that some reinspection program could provide the missing assurance. However, the reinspection program then underway at Byron could not provide that assurance; the Board had "no confidence in the program" itself. (I.D. p. 5; see also ¶D-435.) Not only could the NRC staff not vouch for the program (I.D. ¶D-416), but the Board independently questioned its efficacy and validity (I.D. ¶¶D-435-438).

The Board thus clearly stated that "reasonable assurance" was the test (I.D. ¶D-434), and it found that test had not been met by Edison.

In sum, the "widespread failures" in quality assurance (I.D. at p. 7) obvious from the record rendered the Board incapable of being confident that there are not also "widespread hardware or construction failures" (id.) at Byron. Given those findings, the Board below properly declined to issue an operating license for Byron.

Edison also argues that the Board's findings were contrary to the preponderance of the evidence. In the following sections, we show that the Board's findings are amply supported in the record, and that, based on the entire record, Edison has simply not met its burden of showing "reasonable assurance."

II. THE EVIDENCE RESPECTING HATFIELD ELECTRIC COMPELS A FINDING OF "NO REASONABLE ASSURANCE."

The Board's ultimate conclusion with respect to Hatfield was, "The Board does not have confidence that the quality of the work at Byron by Hatfield Electric Company is adequate to provide reasonable assurance that the Byron facility can be operated without undue risk to the public health and safety." (I.D. ¶D-434). */ The basis for this finding is Hatfield's "long and bad quality assurance history" which persuaded the Board that Edison "has not discharged its responsibility to assure that Hatfield's quality assurance program is effective." (Id.) That is, Hatfield's performance throughout the life of the Byron project -- under the direction and control of Edison -- was so poor as to preclude the Board from making the requisite statutory finding of "reasonable assurance." **/ As we show below, that conclusion has ample support in the record. Indeed, the evidence pertaining to Hatfield is so troubling that no other conclusion could fairly be reached.

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*/ Edison complains (brief at 13, 16) that the Board made this finding regarding Hatfield's work at the same time it expressly found no widespread hardware or construction problems. Of course, the Board could not have confidence in the work unless it had confidence in the quality assurance program. E.g., Callaway at 345.

**/ Edison (brief at 16) misstates the Board's reasoning process. While the Board in fact found deficiencies in the documents, had no confidence in Hatfield's work, found Hatfield to be "perpetually incapable of maintaining reliable records", and found Edison had not maintained an adequate QA program, it did not, however, "extrapolate" from one to the next. Rather, its reasoning process is clearly as stated supra.

The Board focused on a series of incidents beginning in 1978. It relied on evidence developed through several sources including historical QA noncompliances, the 82-05 CAT inspection, worker allegations, NRC inspections of the 82-05 reinspection program, and Edison's own audit of Hatfield. We review this evidence below, showing (A) that Hatfield's history was indeed "long and bad" (I.D. at p. 5), and that (B) we conclude, as the Board concluded Edison's oversight of Hatfield was inadequate. In the remainder of this section (C) we show why Edison's misapplication of Callaway leads it to miss the aspect of these incidents so crucial to the Board's decision.

A. The evidence

1. Hatfield's history

Hatfield's problems began early on. The very first Byron noncompliance noted by the Staff (Attachment A to Staff testimony ff tr. 3586 at p. 1) was due to Hatfield's failure to have an approved procedure for inspector certification and qualification pursuant to ANSI standard N45.2.6. (See I & E Report 78-07, Int. Exh. 3). In April, 1978, the Regional inspector had noted as an open item that Hatfield did not have an approved procedure for inspector qualifications (Attachment A, finding under report 78-02). In August, he noted that a procedure had been submitted to Edison, but had not yet been approved. Accordingly, the non-compliance was issued. (Int. Exh. 3 at pp. 19-20). */ Edison

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*/ A similar finding was made with respect to Reliable Sheet Metal. (Id. at p. 20).

had identified this deficiency (id.) but apparently taken no action. The Staff considered this a programmatic weakness. (Hayes, tr. 3647.) Resolution of the noncompliance was in part based on future Edison audits */ to assure Hatfield's future compliance. (Konklin tr. 3648; I.D. ¶D-307). **/

Report 79-18 (Int. Exh. 4) was based on Hatfield worker allegations. Two instances of failure to properly document nonconformances and one of failure to inspect to the approved specification were identified. Specifically, Hatfield was failing to properly document improper cable connections (id. at 14-15) and to properly document concrete expansion anchor changes (id. at p. 17). Hatfield also failed to inspect concrete expansion anchors (id. at p. 18), which was a programatic weakness (Hayes tr. 3650).

In Report 80-25 (Int. Exh. 5), "several very serious findings" of "significant deficiencies" (I.D. at ¶D-309) were made. Among those findings were:

**/ While Edison had an auditing program, it was ineffective. (Forney, tr. 7968.) Staff witness Forney testified that it is "difficult...to perform an audit of a contractor if you don't have a formal program established within your own corporation as to what has to be done by a contractor to certify an inspection...[T]he lack of that formal program established by Commonwealth...is what allowed the variation between contractors." (Tr. 7966.)

***/ According to the Staff compendium of inspection reports, (Attachment A to prefiled testimony) Hatfield was cited for noncompliance during at least three inspections between reports 78-07 and 78-19. Report 79-01 (lack of measures to insure effective implementation of design changes), report 79-14 (control of field change requests), 79-18 (failure to use controlled documents, and to inspect to approved specifications). See Staff Attachment A at pp. 6-12.)

1. Cable entrance frames for Category I equipment were designed without an approved QA program, and purchased and installed without QA approval. */

2. Failure to adequately translate design documents into drawings, instructions and procedures. These examples were noted: bundling safety and non-safety related cables at six locations; failure to properly separate redundant lines.

3. Failure to identify and correct deviations. Three examples were given: no measures to assure prompt identification and correction of deviations from cable routing specifications; no measures to assure that unacceptable welds were not present on installed cable tray stiffeners; and no measures to assure identification and correction of cable tray filling specifications.

4. Failure to develop or implement instructions, procedures, drawings, specifications or check lists for certain activities affecting quality. Five examples included the activities of partially pulled cables, cable pulling temperatures, sealing cable ends, conduit bend supports and identification of safety-related instrument sensing lines.

5. Inadequate inspection of cable tray prior to cable pulling, resulting in damage to cable. Damage had not been identified by Hatfield.

6. Failure to assure identification of nonconforming components. Five examples of equipment lacking "hold" tags were given.

7. Failure to control preservation of equipment. Five examples of poor housekeeping were included.

(See generally Int. Exh. 5, and Appendix A thereto at pp. 1-6. See also I.D. ¶309.) The Region considered the problem so serious that the matter could not not wait: an immediate action letter was issued, and "Hatfield's work was stopped when the NRC

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*/ The Regional Adminstrator stated, in the cover letter to the notice of violtion, that the Region "strongly considered" classifying this noncompliance as Severity Level III. (Int. Exh. 5).

participated in the Applicant's deliberative process and participated in arriving at the stop-work conclusion." I.D. at ¶D-311. (Emphasis supplied.)

In 1981, Hatfield's problems with impermissible cable bundling and procedures reappear in the Staff's compendium. (Staff Attachment A at pp. 30-31).

The CAT inspection report, 82-05 (Appl. Exh. 8), found noncompliances with all of the Byron contractors, and especially at Hatfield:

1. Failure to assure adequate QA independence. The five examples included two for Hatfield and one for Edison.

2. Failure to comply with ANSI N.45.2.6 - 1978. (This noncompliance, referred to by the Board and parties as "82-05-19", involved contractor qualification and certification of inspectors. Contractors were not consistently implementing the ANSI standards.) With respect to Hatfield, nine certification files were reviewed: six examples of noncompliance were noted. (Id. at p. 69.)

3. Failure to control nonconforming materials or equipment. Hatfield was cited for two examples, both of which resulted in negating the tracking system.

4. Failure to follow procedures. Hatfield did not tag past-due calibrated torque wrenches.

5. Failure to include ANSI criteria in audit findings. Hatfield was included.

(Appl. Exh. 8, Appendix A.)

The second item of noncompliance noted above resulted in two corrective action programs applicable to Byron contractors, including Hatfield: reinspection of inspections performed prior to contractors' eventual compliance with ANSI in September 1982, and recertification of on-site inspectors to the ANSI

requirements. */ However, Hatfield's troubles in each area only added to the Board's substantial doubt -- raised by Hatfield's noncompliance record -- that Byron can be operated safely.

2. Reinspection

After the reinspection program was begun, the Region performed several inspections to check on its implementation. **/ The first was in June, 1983 (see Attachment B to Staff testimony ff. tr. 7801; I & E Report 50-454/83-26, at p. 11). In the four months the program had been ongoing, Edison had not audited the program. The reinspections were more than half completed for nearly every contractor, and complete as to some. (Report 83-26, id. at p. 4.) "[I]n view of the importance and comprehensive nature of the reinspection program it would have been prudent for CECo to conduct an early audit to assure commitments to the NRC were being met." (Id. at p. 15.) In fact, the audit showed that commitments were not being met.

In response to 83-26, Edison, in July, audited contractors' implementation of the program. It discovered with respect to Hatfield: ***/

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*/ Other aspects of the reinspection program are discussed in Section IV, supra.

**/ Included in these inspections were allegations of Hatfield workers; those findings were also pertinent in the evidence before the Board. (See I.D. at ¶¶D-356-64.) See discussion, infra.

***/ Findings with respect to other contractors are discussed in Section IV, infra.

- Hatfield was not using discrepancy reports to document nonconforming conditions. (Int. Exh. 29 at A1.) Instead, a "Field Problem Sheet", which has no procedure, was being used. (Tr. 7751-52, Stanish). In other words, Hatfield was not following its own procedures. (Tr. 7703-04.)

- Hatfield was misinterpreting the definition of "inaccessible," resulting in fewer reinspections. (Id. at A2.)

- Hatfield was not properly determining the nature of the original inspection. (Id. at A5.)

- Bolt torque inspections were removed from the reinspection program because the original inspection had been done on a sampling basis, and the identity of the inspected bolts could not be determined. */ (Id. at A5; tr. 7791, Teutken)

On August 4, 1983, a meeting between Edison and the Staff was held. The Staff was concerned that, because of the state of Hatfield's records, "the reinspection program might not be conducted" and that Edison "is not maintaining a rigorous and dedicated control over the reinspection effort." I.D. ¶D-384. Even on the eve of the reopened hearings, then, Hatfield's incapacity to maintain documentation systems, and Edison's inadequate oversight, were evident. **/

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*/ As the Board's questioning pointed out, Edison shows more interest in validating the reinspection program than it does in validating the quality of work at the plant. (I.D. at ¶D-382; Teutken tr. at 7790-93).

**/ The evidence concerning Hatfield also includes that revolving around John Hughes' testimony. While not heavily relied on by the Board, that testimony gives added support to the Board's conclusions about Hatfield.

The Board ruled that evidence concerning the use of supplied answers to inspector tests was inconclusive. (See I.D. ¶D-351.) Mr. Hughes' testimony was unequivocal that he was tested, failed, was supplied with a corrected test, and retested within 45 minutes with the corrected answers before

(footnote continues next page)

3. Recertification

Details of the "recertification" aspect of the 82-05 corrective action were elicited through cross examination and, again, the evidence with respect to Hatfield was damaging.

First, site contractors were required to bring their procedures into compliance with the ANSI inspector certification and qualification standards. Then, each contractor was required to recertify inspectors still on site. The extent of Hatfield's prior deficiencies is illustrated by the fact that Hatfield made at least six changes to its program */, and the fact that "at least" half of Hatfield's on-site inspectors needed retesting and "about half" needed more training (I.D. ¶¶D-392, 436).

Edison, in turn, committed to perform a review of all certification packages to insure that the contractors were properly implementing the ANSI standards. (I.D. ¶D-390.) The review began in October, 1982, but was stopped because the contractors (including Hatfield) were still not properly

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(footnote continued from previous page)
him. That version of events was supported by Mr. Souders testimony. (See Intervenors' Partial Proposed Findings 7-8.) The only rebuttal witness was Mr. Koca, who testified that, although Mr. Hughes' version of the facts was contrary to Hatfield policy, he simply had no recollection of the event (id. at findings 36-41). Thus, the only evidence on this issue was that of Mr. Hughes' and Mr. Souders, and the Board erred in not substantiating the allegation. In addition, the test in question (Int. Exh. 27) was not made available by the Staff until well after Mr. Hughes' testimony before the Board had been completed.

*/ See, e.g., I.D. ¶D-388; Intervenors Partial Proposed Finding 43; Koca tr. 7469-70, 7481, 7504.) It is not clear whether the changes were prompted by the recertification program, Mr. Hughes' testimony, or a combination.

documenting inspector certifications (Stanish, tr. 7640) and were inconsistently implementing the new standards (tr. 7562). (I.D. ¶D-391.) These facts parallel the initial 82-05-19 finding, demonstrating that Edison's oversight of its contractors, including Hatfield, had not improved at all since the Staff's extensive findings some four months earlier.

In its contractor certification review, Edison found that Hatfield had erroneously certified two inspectors, failing to verify educational requirements. (Tr. 7725-27. See also Int. Exh. 29 at A6). But Edison missed at least three more Hatfield employees who had been erroneously certified -- a whistleblower, Hatfield's Quality Assurance Manager and a Level II welding inspector.

The Whistleblower

Documents from Mr. Hughes' certification package were submitted as Exhibits B-O to Mr. Koca's prefiled testimony (ff. tr. 7418). Mr. Hughes was certified in October 1982, after Hatfield was supposedly in compliance with ANSI. However, he was tested at a rate of about ten, not the required 40, questions per procedure. (Tr. 7948-7580; Koca Exhibits H-M; see Intervenors Partial Proposed Finding 145.) Hatfield had not verified Mr. Hughes' prior experience (tr. 7441-44) and the years of experience noted in the file bore no relation to the documents listing prior experience. (See Partial Proposed Finding 24.) */

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*/ In fact, Intervenors' cross-examination established that Hatfield does not verify the accuracy of the documents in an inspector's file. (Koca, tr. 7451-54, 7460.) Edison relies on those documents but does not verify them either. (Stanish, tr. 7633-36, 7642.) See I.D. ¶D-402 and n. 72. In short, both simply take the documents at face value.

The Quality Assurance Manager

A worker alleged that Hatfield's Quality Assurance Manager was not qualified. Region III reviewed his certification package, and the package demonstrated that he did not possess the requisite experience, even given credit for time in that position at Hatfield. (Tr. 7877-88.) He had been certified in the basis of an unverified letter in his file, and neither Edison nor Hatfield had checked his background. (I.D. ¶¶D-357-58; tr. 7917-71.)

The Level II Welding Inspector

On October 14, 1982, Hatfield improperly certified a Level II welding inspector who had no prior experience. (I.D. at ¶D-361; tr. 78861, 7915-17.) This was not found by Edison's certification package review. (Tr. 7915-17.) Thus, program revisions failed to insure that Hatfield was not continuing to certify inspectors improperly. (Tr. 7917).

4. Worker allegations

Worker allegations (in addition to Mr. Hughes' and the two discussed above), also contributed to the Board's view of Hatfield. (See generally I.D. ¶¶D-357-64.) A worker alleged that discrepancy reports had been destroyed; the Region III inspection was inconclusive but Hatfield was directed to use a tamperproof recording system. In addition, the Board found a violation of two of the criteria of Part 50, Appendix B. (I.D. ¶D-362.) */

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*/ See also, additional worker allegations discussed in I.D. ¶¶D-363-64.

Thus, the evidence showed serious, repeated and pervasive malperformance by Hatfield, and a continuing inability on the part of Edison to take effective corrective action.

B. The Board's conclusions

The Board's concern with the safety significance of Hatfield's troubles is succinctly stated:

> As we have noted throughout this decision, a system of maintaining documentation of nonconforming conditions is essential to the reliable tracking and trending of nonconforming conditions. The need for reliable reports on deficiencies and nonconforming conditions pervades the QA criteria of Appendix B.

I.D. ¶D-314. See also, I.D. ¶¶D-3-9. The Board's meticulous consideration of Hatfield's "long and bad" history led it to the well supported conclusion that Hatfield is "perpetually incapable of maintaining reliable records of nonconforming and deviating conditions." (I.D. ¶D-438). */

The Board found not only Hatfield's performance, but also Edison's oversight of Hatfield (and the other contractors), was too poor to justify a finding of "reasonable assurance."

"Commonwealth Edison has freely availed itself of its perogative to delegate, but failed in its responsibility to assure that its contractors carried out their delegated quality

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*/ Hatfield was also perpetually incapable of properly certifying inspectors. See discussion, supra.

assurance tasks." */ I.D. p. 4. (See 10 CFR Part 50, Criterion I.) The "long and bad" Hatfield history "persuade[d] the Board that the Applicant has not discharged its responsibility to assure that Hatfield's quality assurance program is effective." I.D. at ¶D-434. More broadly, the pattern with respect to all Edison contractors about which it heard evidence persuaded the Board that "...Applicant's quality assurance oversight of its contractors, without more, is not sufficient protection of the public safety." (I.D. ¶D-442.)

In no sense, then, is the Hatfield evidence "consistent with findings which would authorize the issuance of an operating license for Byron" (Edison brief at p. 34). Given the extent and nature of the evidence discussed above, the Board was clearly justified in concluding, as it did, that Edison had failed to carry its burden of demonstrating the requisite "reasonable assurance" that Byron can be operated safely.

C. Edison's view

Edison's view of Hatfield's noncompliance history ignores the pattern of problems so crucial to the Board's decision. Its

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*/ On June 8, 1983, Region III issued a preliminary report on the Systematic Assessment of Licensee Performance (SALP). That report -- an overview of Byron's construction -- succinctly pinpoints where Edison has gone wrong:

> These observations and findings indicated that the licensee at times did not address corrective actions beyond the specific in the noncompliances, his corrective measures were not effective in all cases, in at least two instances failed to promptly address potentially reportable items, and exhibited a lack of thorough understanding of quality requirements.

(Tr. 7865, quoting SALP at pp. 16-17.) (Emphasis supplied.)

largely irrelevant arguments stem from a mechanistic application of the Callaway language to the safety significance of each specific noncompliance. It notes their resolution, with the apparent view that if an item is "resolved," Callaway allows it to be discounted from the overall analysis of a contractor's performance */ and of Edison's accountability. At no time does it deal with the obvious pattern on which the Board's ruling was plainly based. **/ Finally, it ignores the Board's explicit findings of Edison's ineffective oversight.

Callaway calls for the Board to look at the totality of the evidence (§IA above). In that totality, the "pervasive failure" of Hatfield stands clear and unrebutted.

III. THE EVIDENCE AGAINST OTHER BYRON CONTRACTORS SUPPORTS THE FINDING OF "NO REASONABLE ASSURANCE."

Hatfield was not the only Byron contractor with quality assurance failures. Evidence respecting four other contractors provided the Board with additional support for its conclusion of no reasonable assurance. In this section, we show that -- contrary to Edison's assertion (brief at pp. 20-21) -- the pervasive QA failures at Byron went well beyond Hatfield.

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*/ Of course, Edison's "resolutions" are not always effective, as illustrated by a recurrence of the very first Hatfield noncompliance (78-07) four years later (82-05) and again in July, 1983 (Int. Exh. 29 at A6).

**/ Edison was criticized by the most recent SALP report for precisely the same myopic view. (See tr. 7865, SALP quote, supra.)

A. Systems Control Corporation

The undisputed facts concerning Systems Control Corporation (SCC) "add[] additional support to the [Board's] conclusion that Applicant's quality assurance oversight of its contractors, without more, is not sufficient protection of the public health and safety." (I.D. ¶D-442.)

Edison's chief complaint with the Board's conclusions about SCC (brief at 23-26) is that, while Region III witnesses testified that Edison "acted responsibly" (I.D. ¶D-106), the Board made findings adverse to Edison. Of course, the Board is not bound by the Staff's testimony, for that would result in delegating the Board's fact-finding role to the Staff. The facts, moreover, do not show Edison to have behaved responsibly at all.

A review of Int. Exh. 8 (pp. 23-27) reveals the following chronology of Edison's knowledge respecting SCC's performance:

January 18, 1977 - Edison informs SCC of concern about galvanized coating and weld quality on SCC equipment.

May 19-20, 1977 - Edison audits SCC and finds: no use of inspection checklists, no training, no approved coating and testing procedures, no welder qualification or records of qualification, no review of suppliers' programs and failure to perform an initial audit. A §50.55(e) report is issued.

May 23, 1977 - Edison issues stop-work order.

June 10, 1977 - Edison lifts stop-work order.

March 3, 1978 - The first main control boards made by SCC are inspected and found nonconforming.

September 28, 1978 - Edison audits SCC and finds it had reviewed and accepted the QA programs for only 15 of its 62 suppliers; that all electrical eqiupment had expired calibration dates; and that SCC's internal audits had found no deficiencies.

May 9, 1979 - Edison audits SCC, finding to instances of failing to follow own procedures; QA personnel records not current.

June 4, 1979 - Edison audit shows no objective evidence of SCC's internal audit.

August 21, 1979 - An Edison surveillance notes problems with welding, sharp edges, and paint on cable pans.

December 1979 to February 1980 - Edison waives final inspection of 20 safety-related panels.

February 15, 1980 - Structural steel frames on panels fail to meet criteria.

February 25-26, 1980 - Edison audits SCC. SCC had indicated acceptable condition of unacceptable panels; no evidence of QA managers' qualification, certification or training; inadequate weld inspection records.

March 13, 1980 - Edison issues nonconformance report due to peeling paint on panels.

In December 1980, Region III issued Report 80-04, citing Edison for failure to take timely corrective action.

The Region discovered, in addition to the chronology, falsified audit reports and an unqualified QA/QC manager. (I.D. at ¶D-100-01.) Edison "can take no credit for discovering the latest of SCC's deficiencies .... The findings ... were the result of allegations by a former employee." (I.D. ¶108.) Not all of the 80-04 noncompliances had been resolved by the date of the hearing. */

Incredibly, "Applicant has not produced any explanation of how the situation deteriorated as it did." (I.D. ¶D-108.) On

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*/ Edison would have this Board infer from ambiguous testimony by Mr. Williams and Mr. Hayes (brief at p. 23, n. 8) that the open items do not have anything to do with SCC's ineffective program. The record contains nothing to support that position.

the basis of the evidence, the Board correctly concluded that SCC's "quality assurance program broke down, was unreliable and fraudulent, and that the Applicant defaulted in its responsibility to be assured of the adequacy of System Control's quality assurance program as required by Criterion I of Appendix B to Part 50." (I.D. ¶D-109; see also ¶D-442). That conclusion -- not one even approaching adequate oversight -- is required by the facts. */

B. Reliable Sheet Metal

The Board found Reliable's quality asurance program "inadequate" (I.D. ¶D-433), a conclusion fully supported in the record.

In September 1982, Edison issued a stop-work order, based on findings of "inadequate and incomplete inspections, inadequate procedures, lack of documented evidence that some material purchased by Reliable met procurement requirements, and a number of open audit deficiencies." (I.D. ¶D-111.) Corrective action included a backfit inspection program and accelerated Edison audits. (I.D. ¶D-113.) Edison offered no explanation why it allowed the Reliable situation to become "so serious as to require a stop-work order, reinspection and 100% over-inspection." (I.D. ¶D-115.) Because Edison presented no contrary evidence, the Board's conclusion -- that "Reliable's inadequate quality

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*/ Edison's citation (brief at p. 26) to Callaway, slip op. at 27-28, is puzzling. In Callaway, a defect in a pipe was noticed by a worker and proper dispositioning procedures were followed, facts wholly unlike those of the SCC situation.

assurance program is a reflection on Applicant's program" (I.D. ¶D-443) -- is perfectly justified.

C. Hunter Corporation

The single Hunter QA failure of greatest concern to the Board was the evidence regarding "tabling": a system where documents without supports, and supports without documentation, were simply ignored with the expectation that they would be caught at some later point. */ That "tabling" occurred was not denied by Edison. **/ (I.D. ¶D-142.) In fact, it offered no rebuttal evidence on this issue, although it had every opportunity to do so. ***/

The Board also made three findings with respect to Hunter which, although not individually significant, collectively "suggest a sloppiness in Hunter's QA program." I.D. ¶D-169. Those matters were:

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*/ The record is not clear whether "field problem sheets" were initiated for some of the missing supports, or some of the missing documentation. (I.D. ¶D-138.) In any event, it was clear that no "formal document method" existed to assure resolution. (I.D. ¶D-144.)

**/ It is the fact that tabling took place, not who did it and when, that was important to the Board. (See I.D. ¶¶D [illegible]40.)

***/ Edison's three arguments about the tabling issue are an apparent attempt to minimize its significance, and are unpersuasive. First, Mr. Smith's confusion about the issue (brief at 27-29) has nothing to do with the undenied fact that tabling occurred. Second, that Region III did not issue a completed inspection report on tabling (brief at 29) is unrelated to the Board's ability to make findings. No complaint on this score is raised by the Staff. (See Staff Proposed Findings 560-564 (August 8, 1983). Third, Mr. Smith's initial audit drafts were destroyed (see I.D. at ¶D-163) so the fact that subsequent drafts do not mention tabling (brief at 29-30) is entirely unhelpful.

- Inadequate and insufficiently documented location inspection procedure for pipe hangers. I.D. ¶D-132.

- Inspections had been documented but not performed. I.D. ¶D-136.

- Failure to perform a timely inspection of bolts prior to grouting. I.D. ¶D-168.

Edison's chief complaint with the Board's conclusions on Hunter is that the Board allegedly made improper connections between Mr. Smith's tabling testimony, Mr. Yin's findings (in Reports 80-05 and 81-09) and Edison's July 1983 audit of Hunter. While it is not clear just how Edison believes the Board "connected" the three issues, they have a similarity that fully supports the Board's conclusion that Hunter does not "take appropriate steps to issue documentation on nonconforming conditions." (I.D. ¶D-169.)

Mr. Yin's finding, as Edison has described it, was that Hunter made a "programmatic decision not to do quality construction inspections against certain criteria until a later stage in the construction process." (Brief at 30, n. 11.) More specifically, in March 1980, July 1981, December 1981, and January 1982, Hunter was found not to be performing timely inspections required by its own procedures. I.D. ¶D-164. The situation was not resolved until September of 1982. Id. Thus, as it did when "tabling" an item, Mr. Yin found that Hunter was simply putting off timely inspection for, and documentation of, nonconforming conditions.

A 1983 Edison audit of Hunter's implementation of the 82-05 reinspection program (Int. Exh. 29) revealed a similar problem.

I.D. ¶D-145. Hunter was failing to issue appropriate reports on nonconforming conditions, using field problem sheets rather than the required discrepancy reports. (Id.; Int. Exh. 29 at A1.) */

In sum, the Board did not make incorrect "connections" between a series of unconnected facts. It discerned a pattern in Hunter's continual attempts to deal with nonconforming conditions outside the normal course of procedures -- a practice evident as recently as the reopened hearings. While the failure to appropriately document nonconformances took different forms, the problem itself is the same in each instance. This, together with the general sloppiness of Hunter's QA program, certainly shows that an effective verification of Hunter's QA program is needed. (I.D. ¶¶D-170, 444) **/, and the Board so properly concluded.

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*/ Edison complains (p. 31 at n. 12) that is is unfair to use Int. Exh. 29 to show Hunter's problems because the reopened proceedings, where the exhibit was admitted, concerned only Hatfield and the 82-05 program. Edison cannot claim, however, that the Hunter aspect of the exhibit was not raised in the reopened proceeding, for Mr. Stanish testified about that very audit finding as to Hunter (tr. 7702-7704). That the Board asked no questions is irrelevant.

**/ As Edison points out (brief at p. 32), it may not be literally accurate to say that discrepancy reports are "needed to test the reliability of the reinspection." But because the reinspection program includes resolution of identified nonconformances, and Hunter was not adequately documenting those nonconformances, the Board's concern certainly is justified. Further, Hunter's system kept the nonconformances from showing up in the trend analysis. (Cf. tr. 7752; I.D. ¶D-380.) Moreover, Edison does not contest the fact that the improper documentation practices continued to be found at Hunter in the reopened proceeding.

D. Blount Brothers.

Even though the Board ultimately ruled in Edison's favor with respect to this contractor (I.D. ¶¶D-445-46), the evidence of slipshod QA practices at Blount, too, adds support to the Board's ultimate findings. Evidence of Blount's failures can be categorized as follows:

Blount had inadequate separation of QA and production functions. Production responsibilities for bolting-in were assigned to two QA inspectors (Intervenors' witness Mr. Stomfay-Stitz, and his supervisor, Mr. Barnhart). (I.D. ¶¶D-254-55.) Blount's production department controlled QA wages, an "inappropriate interference with the independence of the QA function" (I.D. ¶D-235.) Those wages were so "paltry" as to be a "manifestation of the low regard for the QA function by Blount." (I.D. at D-280.) */

Blount also failed to follow its own procedures. Goods arriving without proper documentation were not segregated (I.D. ¶D-227), and inspection of tendon storage barns was not

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*/ Edison claims that the Board erred in admitting statements concerning the production department's control of wages and overtime for QA personnel. (Brief at p. 22, n. 7). The Board ruled that although the statements did not fit precisely within the hearsay rule's specific exceptions, they had "equivalent circumstantial guarantees of trustworthiness" to be admissible under Rule 803(24), Fed.R.Evid. The Board's reasoning is set forth at tr. 2980-82. Edison complains that, because the Board questioned the witness' demeanor in ruling on other aspects of the witness' testimony, it should have excluded this evidence. The Board itself conducted voir dire of Mr. Stomfay-Stitz on the admissibility issue (tr. 2935-36) and its failure to reverse its oral ruling in the written decision speaks for itself. Moreover, the Board invited Edison to rebut that statement (tr. 2981), but Edison declined.

performed as frequently as procedures required. (I.D. ¶D-242). */ In addition, Mr. Barnhart "trained" Mr. Stomfay-Stitz in bolting-in but was not certified in that area. (I.D. ¶¶D-284-87. See also I.D. ¶D-301-02.)

Finally, there were instances of attempts to intimidate Mr. Stomfay-Stitz. He was directed not to document wet and muddy conditions in the tendon in storage barns, (I.D. ¶¶D-243-48), and he was ordered to complete and sign reports for materials he had not inspected (I.D. ¶¶D-233-39).

The Board properly concluded that Blount (at least during Mr. Stomfay-Stitz' tenure) "had a weak quality assurance organization lacking independence." (I.D. ¶D-202.) It declined, however, to find Blount's QA program "inadequate." **/ Nevertheless, the Board's specific findings support its ultimate conclusions regarding the pervasive QA failures at Byron and Edison's ineffective oversight.

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*/ Edison's argument about whether the inspections were in fact sufficient misses the point. The procedures called for daily inspections, and those procedures were simply ignored. Edison's reliance (brief at p. 21 n. 7) on Mr. Mihovilovich's testimony is misplaced, for he admitted he had based his testimony on documents generated by Mr. Stomfay-Stitz, knowing that Mr. Stomfay-Stitz swore the documents did not reflect actual conditions (tr. 2761-62). See also I.D. ¶D-247-48.

**/ It gave the following reasons: Region III found no inherent QA problems at Blount; there were few Region III noncompliances leveled against Blount; Blount was rated above average in the SALP report, and it is subject to the 82-05 reinspection program (I.D. at ¶D-304.) In Intervenors' view, this conclusion is in error, in light of the problems discussed above, and Edison's default in its evidentiary presentation as to certain of Intervenors' evidence (I.D. ¶D-303).

* * *

The Board's findings with respect to Systems Control, Reliable, Hunter and Blount are well-founded in the record, and they are correct. */ These findings and those concerning Hatfield amply support -- indeed mandate -- the Board's conclusion that the "reasonable assurance" standard has not been satisfied here. Callaway.

IV. THE REINSPECTION PROGRAM IS NOT ADEQUATE TO PROVIDE REASONABLE ASSURANCE.

As the Board noted, there was underway at Byron during the hearings an "extensive, comprehensive, and apparently unusual reinspection program" (I.D. ¶D-416), stemming from noncompliance with the ANSI standard for inspector qualification and certification found during the CAT review (Report 82-05, Appl. Exh. 8). That program was a focal point of the reopened hearing held August 9 to August 12, 1983.**/

The matter was first mentioned in a 3-line summary in the Staff's compendium of Byron noncompliance history (Attachment A to Staff testimony ff tr. 3586), with no hint as to its

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*/ At least two other Byron contractors, Johnson Controls and Powers-Azco-Pope, were mentioned by the Board. The CAT inspection, 82-05, found them to be "worse than most" (I.D. ¶D-372, n. 68) in the area of inspector qualifications and training.

**/ Intervenors do not agree with the Board's limiting of the scope of the reopened proceeding to Hatfield, particularly given the flaws in other contractors' QA programs.

significance or magnitude. In response to Intervenors' Motion to Allow Testimony of John Hughes, Edison and the Staff relied on the reinspection program in urging the Board not to reopen the QA record. They argued that the reinspection would find and resolve all certification, welding and other deficiencies encompassed within Mr. Hughes' testimony. (Edison's Response to Motion to Allow Testimony of John Hughes, May 9, 1982 at pp. 5-6 and accompanying Teutken affidavit at ¶3; NRC Staff Response to Joint Intervenors' Motion to Reopen the Record, May 9, 1983 at pp. 4-5, and accompanying Affidavit at ¶¶6, 10.)

In deciding whether to reopen, the Board searched the record and ascertained that it was incomplete in two respects: the 82-05-19 reinspection program was of a more important nature than the Board had been led to believe (See I.D. ¶¶D-325, 411-14), and there had been additional worker allegations that had not been explored during the March and April hearings (I.D., p. 3).

It therefore ruled that:

> "Consideration of some of Mr. Hughes' allegations and other information of record has demonstrated to the Board that the record should be reopened for additional evidence." Memorandum and Order Reopening Evidentiary Record, June 21, 1983, at p. 1 (emphasis added).

The August hearings -- focusing on Hatfield and on the reinspection program -- were Edison's second chance to persuade the Board that the finding of "reasonable assurance" was justified. It was with respect to these reopened proceedings that Edison "made a weak showing bordering on default." (I.D. at p. 5.)

Evidence was received about the noncompliance underlying the

reinspection program. The dispute involved not merely a question of interpretation of the ANSI standard, but whether Edison had in fact honored its commitment to apply that standard. (I.D. ¶D-369.) The Region believed that unqualified inspectors had been working at Byron (I.D. ¶D-370.) The Staff is also relying on the results of the program to dispose of many of the outstanding Hatfield worker allegations. (I.D. ¶D-364.)

The implementation of the reinspection program has been far from smooth. Edison did not audit the program as soon as prudence would dictate. (I.D. ¶D-379.) When it finally did, it found defects in contractors' implementation of the reinspection program identical to those noted earlier with respect to Hatfield's and Hunter's implementation of their quality assurance programs. (I.D. at ¶D-380, see also discussion supra.) In addition, inconsistent contractor interpretations invariably resulting in fewer, rather than more, reinspections were disclosed. (I.D. at ¶¶D-381-82; see also Stanish, tr. 7719.) Finally, assessment of actual work quality seemed to take a back seat to finishing the program. (I.D. ¶D-382; Cole-Stanish, tr. 7723-25; Cole-Teutken, tr. 7790-91.)

Moreover, a number of flaws in the design of the program were revealed in the reopened hearing. For example:

- Reinspection will not cover each of the attributes that inspectors inspected. */ (I.D. ¶D-436.)

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*/ Incomplete coverage is obvious because the program excludes inaccessible and non-recreatable attributes. In addition, because the samples are selected from all inspectors and not all attributes, "there is no assurance that each attribute
(footnote continues on next page)

- There is no evidence that the results of the program are transferrable to inaccessible and non-recreatable inspections. (I.D. ¶D-437.)

- While at least half of Hatfield's workers required retesting and retraining, those workers are not necessarily included in the program. (I.D. ¶D-436; tr. 7649.)

- As admitted by Edison's Quality Assurance Supervisor, it is possible that unqualified inspectors will not have their work reinspected. (Stanish, tr. 7648-49.)

- Absolutely no evidence of the adequacy of the sample size was presented. (I.D. ¶D-436.)

- The reinspection program has resulted in loss or destruction of original inspection reports. I.D. ¶D-344; Region III testimony at 14-15, ff tr. 7801. */

The Staff's testimony on the program revealed that it harbored doubts as well. In his August 1 prefiled testimony, Mr. Forney **/ stated:

> At the time the program was proposed, Region III understood the reinspection program would be completed in early July 1983 and results would be available at the time for NRC review and evaluation to determine the adequacy of the reinspection program.

(footnote continues from previous page)
inspected by Hatfield will be covered in the reinspection program. There is no basis to assume that the random selection just happened to cover every attribute..." (I.D. ¶D-383.) Thus, Edison's citation to Stanish, tr. 7719 is unhelpful, for Mr. Stanish was asked whether the program "cover[s] all safety-related items" (id.), not whether all types of attributes will be picked up in the sample. (I.D. ¶D-384.)

*/ Some of these deficiencies are likely to be due to the fundamental design of the reinspection program itself. For a program aimed at producing more reliable results, see Texas Utilities Generating Co. (Comanche Peak Steam Electric Station, Units 1 and 2) LBP-83-81, ___ NRC ___, (Dec. 28, 1983), slip op. at 73-74.

**/ Mr. Forney was the Region's Senior Resident Inspector at Byron. He conducted the inspection that resulted in the 82-05 ANSI non-compliance and subsequent reinspection program.

> As of this date Region III has not made a final determination that the reinspection program will prove successful towards alleviating the problems addressed in the findings of Inspection Report No. 82-05. The Staff will reserve this determination until its receipt and evaluation of the reinspection results from the Applicant. The Staff estimates that its review will require up to three months to complete and will report the results of this review in subsequent inspection report(s).

(p. 7, ff tr. 7801). See also tr. 7809 (Hayes) ("...the NRC will thoroughly evaluate the results, as well as the Applicant's evaulation, before a final decision is made"); tr. 7981 (Forney) ("We accepted the basic premise of the reinspection program, but notified [Edison]...that we were at issue currently with the 90 (sic) for subjective attributes"); Staff Findings H-317, 318 (Sept. 20, 1983); Staff Reply Findings RH-6, 7 (Oct. 17, 1983); and Hayes, ff. tr. 7801, at pp. 22-23.

Therefore, it is clear that the Staff has not, contrary to Edison's assertion (brief at p. 54), accepted the program as adequate. Specific areas of non-agreement include which attributes are properly classified as subjective and which is objective, and the acceptability of the passing rates of 90% (subjective) and 95% (objective). The Staff may require more inspections and verifications after it has reviewed Edison's results. (E.g., Hayes, pp. 21-22 ff tr. 7801; tr. 7979-80; Forney, tr. 7981.) Indeed, even the adequacy of the sample size has not been determined by the Staff. (I.D. ¶D-436.) Finally, the Staff will not authorize the issuance of an operating license for Byron until the results are evaluated and any necessary inspections done. (I.D. ¶D-416.)

In sum, since the Staff had not even determined whether the program will demonstrate inspector qualifications, nor determined what will be acceptable, nor whether additional inspections will be required, it could not assure the Board of the adequacy of the program. (I.D. ¶D-4[illegible].) That, coupled with the Board's own additional concerns about the program, is clearly sufficient support for the Board's conclusion of "no confidence." (I.D. ¶¶D-435-438.) Cf. Callaway at 436.

V. EDISON'S REMAINING ARGUMENTS ARE WITHOUT MERIT.

A. Delegation to the Staff

Edison confuses the Board's reasons for finding "no confidence" in the reinspection program with the reasons why the matter cannot be delegated to the Staff. (Brief, pp. 62-63.) Edison's apparent theory is that the Board erred in not finding the program adequate to convince it that the requisite reasonable assurance exists, and therefore the Board also erred in holding the matter non-delegable; i.e., because the program is adequate, it is delegable. (Id.) However, the Board did not err in finding the program inadequate to convince it of "reasonable assurance." (See §IV, supra.) Therefore, Edison's major premise is wrong. Further, as we show below, the Board did not err in refusing to delegate the program to the Staff, for to do so here would be to delegate an ultimate finding.

The rule against delegation is succinctly stated in Consolidated Edison Co. of New York (Indian Point Station, Unit 2), CLI-74-23, 7 AEC 947, 951-52 (1974), and quoted by the Board,

I.D. at ¶D-420.

> As a general proposition, issues should be dealt with in the hearings and not left over for later (and possibly more informal) resolution...[T]he mechanism of post-hearing resolution must not be employed to obviate the basic findings prerequisite to an operating license -- including a reasonable assurance that the facility can be operated without endangering the health and safety of the public. 10 CFR 50.57. In short, the "post-hearing" approach should be employed sparingly and only in clear cases. In doubtful cases, the matter should be resolved in an adversary framework prior to issuance of licenses, reopening hearings if necessary. (Emphasis supplied by the Board.)

Both the Atomic Energy Act and the Administrative Procedure Act require that all parties -- not just Edison and the Staff -- "have the right to an opportunity to participate in the resolution of properly contested issues." Wisconsin Electric Power Co. (Point Beach Nuclear Plant Unit 2) CLI-73-4, 6 AEC 6, 7 (1973). (See I.D. ¶D-423.)

Delegating resolution of an issue to the Staff effectively removes the issue from the adjudictory process. Allowing the Staff, rather than the Board (with input on the merits from the parties) to make ultimate conclusions on contested issues is clearly contrary to Commission law. Metropolitan Edison Company (Three Mile Island, Unit 1) ALAB-729, 17 NRC 814, 887-88 (1983). See also Sacramento Municipal Utility District (Rancho Seco Nuclear Station) ALAB-746, ___ NRC ___ (1983), slip op. at n. 7. Moreover, it deprives Intervenors of their constitutional, statutory and regulatory rights to a fair hearing. */

*/ E.g., Ohio Bell Telephone Co. v. Public Utilities Com'n, 301 U.S. 292, 300, 304-5 (1937) (constitutional due process); 5 U.S.C. §556(d) (Administrative Procedure Act rights to present evidence, to cross-examine and to rebut); 10 CFR §§2.740 and 2.743 (NRC regulations establishing rights to discovery, to present evidence and rebuttal evidence, and to cross-examine).

The reasons for non-delegation are particularly strong in this case. The reinspection program was the subject of extensive litigation before the Board, even though the program had not been completed. Intervenors' cross-examination resulted in the Board's ultimate agreement that the program in fact was not adequate to resolve the issues. Edison proposes to rely on the results of the program to bolster its claim to a license. (See generally Applicant's Motion in the Alternative to Reopen the Record filed with the Appeal Board on February 12, 1964.) To remove this hotly contested, adversarily litigated issue from the hearing process now would be inherently unfair to Intervenors. In addition, the Board below -- which heard all the evidence -- considered adequate resolution on the record of the reinspection program issues to be essential to any ultimate finding of "reasonable assurance." (E.g., I.D. ¶¶D-426-27.) Finally, the program is being relied on to resolve far more than the specific noncompliance noted in Report 82-05. It extends as well to the resolution of a large number of outstanding worker allegations, some of which were litigated before the Board. */

Most importantly, even if the reinspection program achieves all of its objectives, it will not resolve all quality assurance concerns at Byron. The program is simply not designed to resolve all the issues on which the Board found against Edison. It will not prove that Edison had adequate oversight of its contractors

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*/ See discussion, supra.

and suppliers */, nor will it demonstrate the absence of hardware or construction errors. **/ Edison does not even appear to claim that it will. See Applicant's Motion in the Alternative to Reopen the Record at p. 2. Therefore, the completion of the program cannot, in any event, bar Intervenors from an opportunity to contest whether, on the totality of the record, Edison has demonstrated reasonable assurance that Byron can be operated safely. ***/

Accordingly, Edison's position that the Board below should be reversed and the entire matter of the reinspection program can be delegated to the Staff is unavailing: it contravenes Commission law, is grossly unfair to Intervenors, and would not, even once the program is completed, compel in the issuance of a license.

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*/ See §III, supra. It of course will not insure that all of Hunter's undocumented nonconforming conditions have been ascertained and corrected. And it will also not explain Edison's ineffective oversight of Systems Control Corporation, Reliable Sheet Metal, Blount Brothers, Hunter and Hatfield.

**/ I.D. at p. 7.

***/ The issue is not, as Edison suggests, whether "the Staff can be entrusted to ensure that Applicant carries out that program in accordance with its commitments." (Brief at 63). This case is very different from Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1) LBP-83-57, 18 NRC 445, 600 (1983) and Commonwealth Edison Co. (Zion Station, Units 1 and 2) LBP-80-7, 11 NRC 245, 277-1, 78, aff'd, ALAB-616, 12 NRC 419 (1980), cited by Edison (brief at id.) In Shoreham, the Licensing Board noted that the Staff would consider any deviation from the FSAR on final walk-down to be a deviation from an FSAR commitment. In Zion, the Board declined to make a detailed corrosion surveillance program, committed to by Edison and found acceptable by the Board and Staff, a technical specification. Here, Edison argues that a program it relies on to counter evidence of its past QA practices should be completely removed from the hearing process.

B. The in camera, ex parte hearings.

Edison argues that the in camera ex parte hearings held with Inspection and Enforcement and Office of Investigation personnel "fatally infect[ed]" the Board's ability to rule fairly on the record evidence *, but can point to no persuasive evidence of that influence in the Board's decision. **/ On the contrary, the Board expressly denied it had used the ex parte information in reaching its conclusion. (I.D. ¶D-440, n. 75.)

Edison cites two isolated statements in the decision as suggestive of influence. The first, the Board's mention (I.D. ¶D-440) of the outstanding worker allegations against Hatfield, has no bearng on the issue: it was the mere existence of out standing allegations, not their content, which was "simply added concern" to the Board's prior determination that the evidence on Hatfield "standing alone" mandated a finding of no reasonable assurance. (Id.)

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*/ See Brief at p. 75. See also Edison's Alternative Motion To Reopen the Record at pp. 6-7, requesting a new licensing board be convened to hear any reopened proceeding.

**/ Although nonprejudicial to Edison, Intervenors believe the Board below erred in receiving the in camera ex parte documents and testimony. An appropriate protective order could have been entered to obviate the ex parte element. Also, the Staff did not make the showing required by 10 CFR §2.744 to allow receipt of documents in camera. See NRC Staff Motion for Reconsideration, August 5, 1983. Moreover, neither that regulation nor the August 5 on Statement of Policy on Investigations and Adjudicatory Proceedings (attached to Staff Motion) contemplate oral testimony in camera and ex parte. See generally tr. 7256-61. Finally, the "sanitized" transcript shows that the Board went outside the scope of contemplated evidence. E.g., tr. 7378-80, tr. 7396-99 and tr. 7611.63-11.67.

The second is pure speculation: Edison implies that, because the Board mentions the nature of Edison's evidentiary presentation on the issue of fraudulent certification practices (I.D. at ¶¶D-403-04) */, it must know -- and must have relied on -- more than is in the record. To bolster that speculation, Edison points to three isolated comments by the Board Chairman Smith in the "sanitized" ex parte transcript as "show[ing] the impact of the secret information as it was being received." (Brief at p. 73.)

Edison simply has no substantiation for its accusations. The Board explicitly stated (I.D. ¶D-440 at n. 75) that it reviewed the complete transcript only for limited and proper purposes: the August 17 Order (LBP-83-51) determining whether to hear an evidentiary presentation, and prior to the August 26 release of the partial transcript. The Board did "not use that information in this decison." **/ Edison points to nothing that casts doubt on that unequivocal statement.

C. The propriety of license denial.

At numerous points throughout its brief Edison complains that the Board made findings based on certain record evidence without warning it would do so, or without previously expressing

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*/ These findings are discussed in §D, infra.

**/ Indeed, the Appeal Board recognizes its own ability to disregard that evidence in deciding Edison's appeal. Memorandum and Order, February 8, 1984, at p. 4.

an interest in that evidence. */

Under Edison's theory, no Board could ever make a final determination without prior notice to the parties to enable them to present additional evidence. There is no such requirement either in law or in common sense.

In an effort to find law which does not exist, Edison (brief, §V) cites 10 C.F.R., Part 2, Appendix A, §V(g)(1). That section suggests that if the Board, at the close of hearing, has "uncertainties" and needs a "clearer understanding of the evidence which has already been presented" it should "invite further argument." §V(g)(1).

The cited guideline means that a Board should not rule until it is satisfied that it understands the evidence and can rule in an informed manner. It does not mean that the Board should tell an applicant that, based on all the evidence, it is ready to deny a license unless the applicant can make a stronger showing.

Edison's complaint is even more presumptuous given that the Board already gave Edison a "second chance". In ruling on whether John Hughes' allegations were sufficient to require reopening of the record, it reviewed the record and Edison and the Staff's filings and found the record incomplete. **/

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*/ E.g., pp. 2, 18-19, 31 at n. 12, 35, 57-58, 71, 76 at n. 36. See also Alternative Motion to Reopen the Record at p. 3.

**/ I.D. ¶D-325. Those filings relied heavily on the reinspection program to resolve issues of inspector certification as well as outstanding allegations against Hatfield. See Edison Response at 5-6 and affidavit at ¶3; Staff Response at 4-5 and affidavit at ¶¶6, 10. "The Board focused more sharply on other evidence related to Hatfield that had been presented during the QA phase of the hearing. In our view, the record was incomplete." I.D. ¶D-325.

But in response to the reopened hearing, Edison's evidentiary presentation "bordered on default." (I.D. ¶D-404.) Edison cannot now claim to be entitled to yet a third chance to make its case. */

Finally, the Board committed no error in denying the license while the reinspection program was ongoing. (See Edison brief, pp. 76-78.) Edison never asked the Board to defer its decision until the program was complete; it is a bit late for Edison to argue now that that would have been the proper course.

The Board expressed sufficient doubts about the adequacy of the resinspection program, in which it had "no confidence" **/, that it was entirely reasonable in rejecting the alternative of deferring its decision until the resolution of the program. (See I.D. at 410.)

D. The Board's findings on the issue of fraud.

In §V of its brief, Edison argues that the Board's findings concerning fraudulent inspector training and testing by Hatfield "are based on a interpretation of its own orders reopening the record" (brief, p. 64). Again, Edison's real complaint appears to be its disagreement with a Board conclusion: that Edison's response to the order asking for evidence on the issue was

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*/ Indeed, until the filing of its February 12 brief, Edison has consistently taken the position that there is nothing about the reinspection program that would warrant reopening the record. E.g., Applicant's Response to Intervenors' Motion to Reopen the Record and For Order Imposing Commitments (January 6, 1984) at pp. 2-5.

**/ I.D. at p. 5; see also id. at ¶¶D-435-38.

"weak and borders on default." (I.d. ¶D-404.) */

The basis for that ruling is clear. The Board's reopening order of June 21 specifically states:

> Hatfield Electric may have followed a practice of certifying that QA inspectors received training which was not actually provided to the inspectors...[A] Hatfield employee may have defeated QA certification testing by providing test answers to QA inspector candidates. (emphasis supplied).

(Memorandum and Order Reopening Evidentiary Record, June 21, 1983, at 2.)

The subsequent Order clarifying the scope of the proceeding stated:

> 5. The Board is particularly interested in any fraudulent training, qualification, or certification practices. (emphasis supplied.)

(See, also I.D. ¶399; tr. 7657.)

Edison chose to present evidence only on the much narrower issue of whether Mr. Hughes had been subject to such practices. When its counsel stated that Edison would not submit testimony beyond that allegation (Miller, tr. 7655), the Board reiterated its interest in the broader issue "as a matter of policy" (Judge Smith, tr. 7657). Still Edison offered nothing more than that it "neither found nor looked for indications of certification

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*/ That conclusion was not limited to the fraud issue, but extends to Edison's entire Hatfield presentation, I.D. p. 5. See, e.g., ¶¶D-343, 396-404, 382, 383, 398, 435-38. Similar findings were made on issues litigated during the main portion of the QA hearings. E.g., I.D. ¶D-109 (the SCC situation); I.D. ¶D-143 (Hunter's tabling practice); I.D. ¶D-300 (Blount's tendon storage conditions); I.D. ¶D-278 (Blount production's control of QA wages and overtime).

fraud." (I.D. ¶D-403.) */ It is Edison, not the Board below, which seeks to mischaracterize the reopening order.

* * *

In sum, Edison has failed to identify any error below that would justify reversal. Indeed, denial of the operating license was mandated, for Edison failed to meet its burden of proving "reasonable assurance."

VI. THE BOARD ERRED IN ITS RULINGS ON THREE OTHER CONTENTIONS.

In this section, pursuant to this Board's Memorandum and Order of January 31, we respectfully suggest that the Board erred on three issues which would require affirming the result below -- denial of an operating license -- even if this Board did not concur in the conclusion of the Board below on quality assurance. **/ The Board erred in excluding Intervenors' contentions on (1) financial qualifications, and (2) need for power and alternative energy sources, resulting in denial of Intervenors'

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*/ Thus, it is the content of Edison's evidentiary presentation, not the fact that it conducted no investigations itself (brief, p. 70) that troubled the Board. E.g., I.D. ¶¶D-396-404. Indeed, even when it knows that allegations of fraud have been made, it does nothing. I.D. ¶D-404.

**/ In addition, the rule prohibiting litigation of the results of the emergency planning exercise has been challenged in Union of Concerned Scientists v. NRC, Case No. 82-2053 (D.C. Cir.). Should the rule be held invalid, Intervenors will seek to litigate that issue before the Licensing Board.

right to offer evidence on those contentions. */ The Board also erred in (3) its ruling on the seismology contention.

A. Financial Qualifications

On July 7, 1982, Rockford Legue of Women Voters **/, and on July 30, 1982, DAARE/SAFE ***/, filed petitions under 10 CFR §2.758(b) for waiver of or exception to the NRC regulations ****/ prohibiting litigation of financial qualifications in operating license proceedings. DAARE/SAFE's petition, in which the League joined, included a substantial amount of additional evidence that supported the League's

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*/ The procedural history of each issue is presented pursuant to Public Service Co. of Oklahoma (Black Fox Station, Units 1 and 2), ALAB-388, 5 NRC 640 (1977).

**/ Petition of Rockford League of Women Voters For Waiver of or Exception to Financial Qualifications Regulations, and Exhibits A-M.

***/ DAARE/SAFE, in its July 30 Petition For Waiver of or Exception to Financial Qualificatins Regulations, incorporated the League's Petition and submitted additional evidence, Exhibits N-W. It simultaneously filed a new contention on financial qualifications. DAARE/SAFE's original Financial Qualifications Contention was dismissed on April 15, 1982 pursuant to the Board's Order Dismissing Contention 1(i) on the basis of the new regulations which were effective March 21, 1982.

****/ 10 CFR §2.104(c)(4); 10 CFR Part 2, Appendix A, §VIII(b)(4); 10 CFR §§50.33(f)(1), (f)(1)(ii), (f)(2), and (f)(3); 50.40(b) and 50.57(a)(4) and Part 50, Appendix M, ¶4(b).

petition and requested that the Board consider both petitions jointly. */ It also reserved the right to challenge the validity of the financial qualifications regulation. (Petition of DAARE/SAFE, p. 2 note.)

The League's original petition was denied in an August 2, 1982 Memorandum and Order. DAARE/SAFE's peteition was denied on August 26, 1982.

Under 10 CFR §2.758(b) the applicability of a regulation may be waived or excepted to on the ground that

> special circumstances with respect to the subject matter of the particular proceeding are such that the application of the rule...would not serve the purposes for which the rule was adopted.

In order to support a waiver, only a prima facie showing need be made that the purpose of the rule would not be served by applying it to a particular case. 10 CFR §2.758(c). Such a prima facie showing then triggers certification to the Commission which makes the ultimate determination. Id., §2.758(d).

The regulations sought to be waived here eliminated financial qualifications issues from operating license proceedings, because the Commission believed that utilities are generally financially qualified and that experience has not shown a clear relationship between their financial qualifications and their ability to build and operate a nuclear power plant safely. In

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*/ Motion for Joint Consideration, July 30, 1982. The League joined in that motion. Further Statement by Rockford League of Women Voters Regarding Petitions for Waiver or Exceptions, August 2, 1982. Because of the motion, and because DAARE/SAFE's Petition incorporated the League's, we discuss the matters raised in both Petitions.

its Notice of Proposed Rulemaking 46 Fed. Reg. 41786 (August 18, 1981), the Commission noted that there are "matters important to safety which may be affected by financial considerations." See also Final Rule, 47 Fed. Reg. 13750 (March 31, 1982.)

However, the extensive evidence submitted by Intervenors discussed Edison's "special circumstances" -- that the safe construction of Byron was being adversely affected by Edison's financial condition.

The basis for each of the Board's rulings */ was that a nexus between Edison's financial situation and the public safety had not been shown. (August 5 order at p. 8; August 26 order at p. 6.) We respectfully suggest that it was.

The regulations generally precluding litigation of financial qualifications were premised on the belief that a utility, if financially strapped, would postpone or cancel its plants. 46 Fed. Reg. at 41788. In Edison's case, however, the League's evidence showed prima facie that this simply was not true, and that Edison's likely response to its financial difficulties would be to attempt to complete construction at the expense of quality. (See League Petition at p. 10.) Evidence of three key facts was presented:

1. "Psychological and institutional constraints" prevent Edison from cancelling plants.

2. Pressures on one of the contractors at Edison's LaSalle plant to cut costs at the expense of safety, due to Edison's need to obtain an operating license -- and subsequent rate-base treatment -- for LaSalle Unit 1.

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*/ Order of August 2 (Denying the League's Petition); Order of August 26 (Denying DAARE/SAFE's Petition.)

3. Serious and costly unresolved safety issues further endangered Edison's financial prospects by their potential to significantly inflate the cost of Byron.

(See id. at pp. 10-12.) Further, the Board was expressly put on notice that further evidence was being developed and would be available within 30 to 60 days, and the League requested that the Board defer its determination until that time. (Id. at p. 12 note.) It did not.

DAARE/SAFE's July 30, 1982 submission made an even stronger showing, raising two additional facts:

4. Instead of cancelling or postponing units then under construction, Edison had actually speeded up construction of LaSalle at the expense of its QA/QC program (DAARE/SAFE petition at p. 6, Exh. U-W.). Substantial evidence of contractor QA failures at Byron was submitted (see Exhibits Q-T) including at Systems Control Corporation and Hatfield Electric Company.

5. The NRC had represented to the United States Court of Appeals for the Seventh Circuit that the financial qualifications of Edison would be litigated in the operating license proceeding. */

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*/ DAARE/SAFE's Reply to Responses of Commonwealth Edison and NRC Staff to Rockford League of Women Voters Petitions for Waiver or Exception, filed July 30, 1982, at pp. 2-4. The NRC's representation was relied on in Rockford League of Women Voters v. NRC, 679 F.2d 1218 (7th Cir. 1982), an appeal from the denial of the League's 10 CFR §2.206 petition concerning Byron's safety problems and Edison's financial inability to solve them. The League's petition had alleged, in part, that "Edison did not have enough money to solve the safety problems ..." 679 F.2d at 1219. The Director of Nuclear Reactor Regulation denied the petition because "all of the issues raised by the League were being or would be considered in the pending proceeding on Commonwealth Edison's application for an operating license, and he rejected the League's suggestion that consideration of these issues would be prejudiced by ... the alleged inability to spend more money on safety." Id. (Emphasis added.) The Court relied on this representation in ruling that the NRC is "in the midst of one proceeding dealing with the Byron plant, the licensing proceeding, in which the safety issues that trouble the League will be considered ... We cannot say that the Commission must launch another proceeding on the same issues at the same time ..." Id. at 1222.

In ruling on DAARE/SAFE's petition, the Board relied heavily on its decision of "no nexus" concerning the League's petition. (August 26 Order at p. 3). It dealt only summarily with the extensive safety evidence submitted by DAARE/SAFE, dismissing it in a single paragraph. (Id. at 5-6). In doing so, it erroneously held that no prima facie case had been made. The Board also held that the Court had not been misled because a footnote in the NRC's brief had disclosed the existence of the then-pending financial qualifications rulemaking. */ Of course, the pendency of the rulemaking (nowhere mentioned in the Court's opinion) did not mean it would become final, nor that the rule would be applied to this case in the face of the express representation that Edison's financial plight would in fact be litigated.

The Board further ruled, without either legal analysis or authority, that even if the Court had relied on the representation, this was not a "special circumstance" since it was unrelated to the reasons for adoption of the rule. (August 26 Order at p. 5.)

In retrospect, the financial qualifications allegations appear even more "special" today than in 1982. Even though Intervenors were not permitted to litigate this contention, Edison's Corporate Manager of Quality Assurance admitted on the stand that Edison's emphasis is on production and not on quality

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*/ (See NRC Staff Response to DAARE/SAFE Petition for Waiver of or Exception to Financial Qualifications Regulations and Related DAARE/SAFE Filings, August 18, 1982, at p. 5 n. 9.)

assurance. (Shewski, tr. 2402.) This evidence is precisely one of the reasons for the "widespread failures" in quality assurance at Byron, and it reflects Edison's short-sighted concern for the expense of any delay, even a slight one.

We suggest, therefore, that the appropriate course for the Board below would have been to grant the petition to allow the Commission to decide this issue of law. §2.758(c).

Moreover, the financial qualifications rule has now been held to be invalid on the ground that the rule is not supported by its accompanying statement of basis and purpose, as required by the Administrative Procedure Act, 5. U.S.C. §553(c). New England Coalition on Nuclear Pollution, et. al. v. NRC, Case No. 82-1581 (D.C. Cir., Feb. 7, 1984), slip op. at 3. The Court's reasoning in that case echoes Intervenors' argument in this one, and has particular relevance here. The Court observed that "[t]he mere fact that some public utilities, when financially unstable, chose to abandon or defer proposed nuclear facilities instead of completing them inadequately, does not lead to the conclusion that all financially unstable public utilities, as opposed to other firms in that situation, will generally do so; nor do we see any a priori reason to believe that would be the case." (Id. at 8).

While this reasoning would support a waiver in this case, the Court's conclusion -- invalidating the rule -- indicates that there is now nothing to be waived. Here, the Atomic Energy Act, §189, 2 U.S.C. §2239, mandates a hearing on all properly raised qualifications for an operating license. See §182, 42 U.S.C.

§2232(a). In the event this Board were to reverse the license denial below on other grounds, or to permit reopened proceedings, the appropriate remedy would be to permit Intervenors to present evidence on their contention that Edison lacks the financial qualifications necessary to provide "reasonable assurance" that Byron can be operated safely.

B. Need for Power and Alternative Energy Sources.

The procedural history of the need for power and alternative energy source petitions for waiver filed by Intervenors, and their disposition, are similar to that of the financial qualifications petitions. The League filed its Petition */ on July 6, 1982. On July 30, 1983, DAARE/SAFE filed its Petition and Contention. **/ On August 3, DAARE/SAFE filed motions to compel supplementation of the Byron FES and SER. ***/ On the same day,

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*/ Petition of Rockford League of Women Voters for Waiver of or Exception to Need for Power and Alternative Energy Source Regulations 10 CFR §§51.23(e) and 51.53(c), and Exhibits A-C thereto.

**/ Petition of DAARE/SAFE for Waiver of or Exception to Need for Power and Alternative Energy Source Regulation 10 CFR §§51.23(e) and 51.53(c); DAARE/SAFE Need for Power and Alternative Energy Source Contention. The Contention also raised the sufficiency of the Byron Final Environmental Statement -- Operating License (FES-OL).

***/ Motion of DAARE/SAFE to Compel Supplement to or Revision of Safety Evaluation Report; Motion of DAARE/SAFE to Compel Supplement to or Revision of Final Environmental Statement.

DAARE/SAFE filed a Motion for Joint Consideration of the Petitions for Waiver, joined in by the League. */ Both petitions and DAARE/SAFE's motions were denied. **/ As with the financial qualifications petition, the League stated (Petition at p. 3 note, 6, 10) that significant new studies would be available available within 30 to 60 days and that it would promptly supplement the petition at that time. Again, the Board did not wait. Intervenors respectfully suggest that it was error to deny the Petitions and Motions, and further that the regulations are unlawful because they contravene the National Environmental Policy Act (NEPA), 42 U.S.C. §§4321 et seq. ***/

The regulations from which waiver is sought preclude consideration of need for power and alternative energy source issues at the operating license stage. They were premised on the Commission's assumption that operation of nuclear plants is economically and environmentally superior to operation of fossil plants. The purpose of the new rules was to avoid consideration of issues unlikely to tip the NEPA balance. Final Rule, 47 Fed. Reg. 12940 (March 26, 1983). Accordingly, the Commission determined that the NEPA cost-benefit balance would be performed only "if there are available alternatives which would result in lesser adverse

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*/ Motion for Joint Consideration (July 30, 1982); Further Statement by Rockford League of Women Voters Regarding Petition for Waiver or Exception (August 2, 1982).

**/ Memorandum and Order (August 5) (denying League Petition); Memorandum and Order (August 26) (denying DAARE/SAFE Petition and Motions).

***/ This issue was raised in the League's Petition at p. 3 and in DAARE/SAFE's Petition at p. 2 note.

environmental effects." Proposed Rule, 46 Fed. Reg. 39440, 39441 (August 3, 1981.) The Commission contemplated that if an environmentally superior alternative were identified, that would be the "special circumstance" needed to grant a petition under §2.758. Accordingly, a cost-benefit balance would then be performed under NEPA. Id. */

The League's Petition went well beyond the showing suggested in the rulemaking notices. The League suggested first that there was no need for Byron. The FES identifies only two occasions during which Byron might be "needed": to keep Edison's reserve capacity at the company's target level during projected peak demand periods in 1985 and 1990 (Byron FES-OL at p. 2-09.) The League also presented supplemental new evidence that even that projection was overstated. (League Petition, July 6, 1982, Exhibit A.)

The League also presented the alternative of non-operation (Petition at p. 5), a viable alternative in light of the lack of need. Not only would all environmental costs of operation be obviated, economic superiority existed also because ratepayers would be relieved of the construction completion costs as well as the operating and maintenance costs of an unneeded plant. (Petition at p. 6.) The environmentally superior alternatives of conservation and cogeneration were also presented. (Id., p. 6

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*/ In effect, the new rules shifted the burden from the agency to the public to identify the items to be put into the NEPA equation. This feature alone renders the regulations unlawful.

and Exhibits B and C.) */ The League further showed (pp. 6-8) that the purpose of the rule -- elimination of a non-productive consideration -- would not be served here because the NEPA balance would in fact tip. (Id. at 7-8).

DAARE/SAFE's petition adopted the League's showing, and further demonstrated that the FES was invalid in its consideration of alternatives to Byron. There was no consideration of purchasing power to replace the excess reserve margin that would be lost in 1985 and in 1990 through non-operation of Byron. Small scattered purchases from already-existing plants, operating anyway, would be environmentally and economically superior to Byron. (DAARE/SAFE Petition pp. 4-5.) The FES was also flawed because it did not consider operation of only one of the two Byron units. (I.d. p. 5.) Finally, under existing law, the FES must be supplemented because of changed circumstances and new information under case law and the Council on Environmental Quality regulations. **/

The Board denied the League's petition, ruling that the prima facie case had not been made. (Order of August 5 at p. 8). It further ruled that non-operation was environmentally and economically inferior to operation of Byron.

The Board's ruling of economic inferiority was unfounded.

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*/ While the exhibits were not Byron and Edison specific, the Board was informed that such specific studies would be available within a few weeks. (Petition, p. 6). However, it ruled without waiting.

**/ 40 C.F.R. §1502.9(c). See also authorities cited, Petition at pp. 6-7.

It assumed that operation of Byron would be less expensive than continued operation of fossil plants, with no demonstration that Byron will in fact attain its claimed capacity factor, and without considering the high capital costs to complete Byron or the expenses of eventual spent fuel disposal and decommissioning. At the same time, it credited Byron with enhancing Edison's "diverse mix of generating recources," while in fact Byron will make Edison an even more heavily nuclear base-loaded utility. (Id. at 9-10.)

Its consideration of the availability of conservation and co-generation had even less substance. While acknowledging that Byron-specific evidence would soon be available (id. pp. 4, 11), it nonetheless found no evidence that cogeneration and conservation were even potentially available (id. p. 10). Further, even if they were available, there needed to be "independent means to require continuing availability." (Id.)

In short, the Board's analysis and discounting of the evidence went well beyond its appropriate role: to determine the existence of a prima facie case.

DAARE/SAFE's petition was summarily denied on the grounds that it "presented no new matter significantly different from that of the League." (August 26 Order at p. 7). */ The Board did not discuss the issues raised by DAARE/SAFE at all.

In sum, the Board did not confine itself to its proper role of merely determining whether the evidence presented by Inter-

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*/ The Board also summarily denied the motions to supplement the FES and SER. (Id.)

venors amounted to a prima facie showing. Furthermore, the Board barred Intervenors from presenting further evidence then under development -- no matter how compelling it might be (Order of August 5 at p. 11). For these reasons, and because the regulations are inconsistent with NEPA */, Intervenors would be entitled to reversal of the August 2 and 26 Orders, and to certification of the Petitions to the Commission, in the event this Board were to reverse the ruling below, or to authorize reopened hearings. **/

C. Seismology.

The Board's conclusion on the League's seismology contention ***/ was that "Applicant has demonstrated compliance with 10 CFR

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*/ There is nothing in that statute or in case law that allows an agency to effectively abrogate its NEPA duties by assuming away all alternatives to the proposed action through an advance determination that no alternative can compete with nuclear power and that its benefits invariably outweigh its costs. Moreover, the regulations have shifted the burden from the agency to members of the public, such as Intervenors, to supply information for the NEPA analysis, and that informtion will only be included if it, and its sponsors, survive the procedural course and evidentiary showing mandated by the agency. That is not what NEPA contemplates. In addition, the FES is insufficient under NEPA, for it does not adequately consider the need for Byron, its costs and benefits, and the available alternatives. 42 U.S.C. §4332(C).

**/ Upon certification, or upon the suggestion of this Board, Intervenors are prepared to supplement the Petitions with current data showing their case to be even more compelling now than in 1982.

***/ The contention is set forth at I.D. ¶F-1.

50.57 and 10 CFR 100 Appendix A as regards the seismic design of the Byron Plant." I.D. ¶F-64. */ Intervenors respectfully submit that the Board erred in its rulings on two fact issues that led to that conclusion and that, if those issues had been properly decided, the Board would have found neither the "reasonable assurance" required by §50.57, nor Edison's compliance with Part 100 Appendix A. Accordingly, the license would have been denied.

Edison presented the testimony of Dr. Alan K. Yonk (geologist, Sargent and Lundy) and Dr. Anand K. Singh (structural engineer, Sargent and Lundy). The Staff presented Dr. Ina B. Alterman (geologist) and Dr. Robert L. Rothman (seismologist). The League presented the testimony of Dr. Henry H. Woodard (geologist).

The Board's first error was its determination that the Plum River Fault (found only after the Byron construction permit had been granted) is not capable. (I.D. ¶¶F-15-24.) That determination was based on inaccurate indirect, methods **/, while an accurate and direct method (excavation and direct observation of the fault itself) is available. (See the League's Proposed Findings 14-16.) In sum, the investigation required to be performed under 10 CFR Part 100 Appendix A §IV was inadequate, and

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*/ This contention was litigated only by the League and not by DAARE/SAFE. Accordingly, the matter is argued here only on the League's behalf.

**/ Those methods, core drilling and seismic refraction were admitted by the Staff to be inaccurate. See the League's Proposed Findings 17-19.

Edison therefore did not carry its burden of showing that the fault is not capable.

The second error is the Board's conclusion that Edison had shown good cause for exemptions from the requirement of 10 CFR Part 100 Appendix A §V(a)(2). That section requires that the maximum vibratory ground acceleration for the Operating Basis Earthquake (OBE) shall be "at least one half that of the Safe Shutdown Earthquake" (SSE). Since the SSE value for Byron is .20g, the OBE value should be at least .10g. The Board erroneously concluded that the OBE value of .09g was sufficient.

Edison's basis for its exemption was a study done for the Sequoia Nuclear Plant. See I.D. at ¶F-52. That study is not Byron-specific, and there is no Byron-specific study. The Sequoia study is not transferable to Byron (see the League's Proposed Findings 36-39) and the best instrumentally measured data shows the study to be inadequate as to Byron. (Id.) Accordingly, Edison is not in compliance with Appendix A and good cause was not shown for an exemption. Therefore, had the Board made proper findings and conclusions on the League's seismology contention, the license would have been denied for this additional reason.

Conclusion

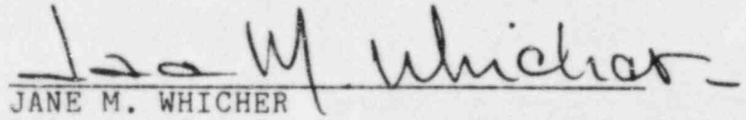
The Licensing Board properly denied the Byron operating license. The Board applied the correct legal standard and correctly concluded that Edison failed to prove that there is reasonable assurance that the Byron plant, as built, can be operated safely.

Indeed, no other conclusion can be supported by the record, and Edison has raised no other issue that would cast doubt on the result reached here. Accordingly, the Initial Decision below must be affirmed.

Further, the Board below erred in denying Petitions for waiver of regulations concerning financial qualifications and need for power and alternative energy sources. The appropriate remedy is to allow litigation of those issues in the event that hearings are reopened or any issue is remanded. The Board also erred in its conclusion on the seismology contention and a proper conclusion would have resulted in a license denial. Accordingly, irrespective of the outcome of Edison's appeal, no license may issue.

Dated: March 12, 1984

Respectfully submitted,



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