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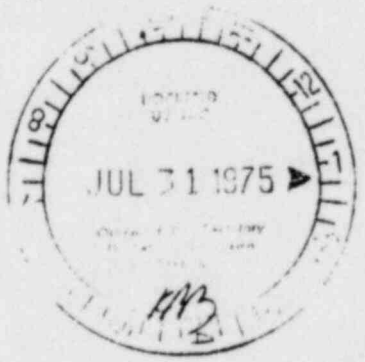

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING APPEAL BOARD

Richard S. Salzman, Chairman
Dr. Lawrence R. Quarles, Member
Michael C. Farrar, Member

In the Matter of	)	Construction Permit
	)	Nos. 81 and 82
CONSUMERS POWER COMPANY	)	(Show Cause)
	)	
(Midland Plant, Units 1 and 2)	)	

DECISION

July 30, 1975

(ALAB-283)

In December 1973, the AEC Director of Regulation ordered Consumers Power Company (the licensee) to "show cause" before him why construction of its nuclear power generating facility at Midland, Michigan, should not be suspended for failure to comply with the Commission's "quality assurance" regulations, 10 C.F.R. Part 50, App. B.[1/] The Commission referred the Director's order to

1/ The "show cause" order was authorized by section 2.202 of the Commission's regulations, 10 C.F.R. § 2.202. See Consumers Power Company (Midland Plant, Units 1 and 2), CLI-73-38, 6 AEC 1082 (1973).

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the Licensing Board for an evidentiary hearing, instructing the Board to determine (1) whether the licensee was implementing its quality assurance program in accordance with the governing regulations and (2) whether there was reasonable assurance that it would continue to do so throughout the remainder of the construction process.[2/]

Hearings were held as directed on the order to show cause. In due course the Licensing Board rendered an initial decision which answered both questions posed by the Commission affirmatively.[3/] The Board subsequently denied a petition, based on "newly discovered evidence," to reopen the record and reconsider its decision.[4/] These actions of the Licensing Board are now before us for review.

I.

1. Background.

When used with reference to the construction of a nuclear power plant, "quality assurance" in Commission

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2/ See Consumers Power Company (Midland Plant, Units 1 and 2), CLI-74-3, 7 AEC 7 (1974).

3/ LBP-74-71, RAI-74-9, 584 (September 25, 1974).

4/ LBP-75-6, NRCI-75/3, 227 (March 5, 1975).

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> comprises all those planned and systematic actions necessary to provide adequate confidence that a structure, system, or component will perform satisfactorily in service. Quality assurance includes quality control, which comprises those quality assurance actions related to the physical characteristics of a material, structure, component, or system which provide a means to control the quality of the material, structure, component, or system to predetermined requirements. 5/

Quality assurance (including quality control) is an important element of the Commission's defense-in-depth approach to nuclear safety. Accordingly, every utility seeking a license to construct a nuclear plant must develop a quality assurance program tailored to the proposed plant, which program must be detailed in the licensee's Preliminary Safety Analysis Report (PSAR) to the Commission. The adequacy of that program is then tested against the quality assurance regulations both in theory and as put into practice during construction.

As our own decisions attest, the construction history of the Midland plant is surfeited with quality assurance difficulties. 6/ The full record of events culminating in

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5/ 10 C.F.R. Part 50, App. B., Introduction.

6/ See Consumers Power Company (Midland Plant, Units 1 and 2), ALAB-106, 6 AEC 182 (1973); ALAB-132, 6 AEC 431 (1973); ALAB-147, 6 AEC 636 (1973); and ALAB-152, 6 AEC 816 (1973).

the "show cause" proceeding below is chronicled in the Licensing Board's initial decision.[7] For our purposes it is sufficient to note that the Appeal Board which reviewed the Licensing Board's approval of the Midland construction permits[8] found the licensee's quality assurance program at that site seriously deficient in several respects.[9] The Appeal Board accordingly directed certain corrective actions be taken as a condition of allowing the Midland construction permits to stand and imposed certain reporting requirements with respect thereto on both the licensee and the staff.[10] After a series of further decisions on various other aspects of the Midland quality assurance program, the Appeal Board affirmed the decision authorizing the Midland construction permits.[11] In so doing, that Board credited representations made to it that the

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7/ See RAI-74-9, 584, supra.

8/ LBP-72-34, 5 AEC 214 (1972). That decision was not rendered by the same Licensing Board which handed down the "show cause" decision now before us.

9/ ALAB-106, supra, 6 AEC 182.

10/ Id. at 186.

11/ See ALAB-147, supra; ALAB-152, supra; and ALAB-160, 6 AEC 1002 n.1 (1973).

licensee's quality assurance program would thereafter be satisfactorily organized and properly maintained.[12/]

The Appeal Board's final decision in Midland was rendered on October 5, 1973.[13/] On November 13, 1973, after the Board's formal jurisdiction over the case had ended,[14/] AEC staff inspectors reported still more instances of noncompliance with the quality assurance regulations at the Midland site, this time principally involving "cadwelding" operations.[15/] Upon learning of that report, the members of the Midland Appeal Board on November 26, 1973, sent a memorandum to the Director of Regulation commenting unfavorably on this latest development, expressing dismay that it should have occurred, and urging corrective action.[16/]

12/ See ALAB-162, 6 AEC 1139 (1973).

13/ ALAB-152, supra, 6 AEC 816.

14/ See ALAB-162, supra, n.12.

15/ Cadwelding is a process by which metal bars used in reinforced concrete construction are fused together. Dotson, p. 30, following Tr. 597.

16/ The memorandum was not sent under the Board's adjudicatory authority, which had terminated. A copy of the memorandum was also sent to the lead Commissioner for regulation. Having delivered their missive, those individuals disqualified themselves from any additional participation in the case and have not been further involved in this matter.

Prompted by the inspection reports and the Appeal Board memorandum, on December 3, 1973 the Director ordered the licensee to suspend cadwelding operations and to show cause before him why all construction activities at the Midland site should not be stopped until its compliance with the quality assurance regulations could be established. On December 17th, after a further inspection, the Director modified his show cause order to allow the resumption of cadwelding activities. 38 F.R. 35345 (December 27, 1973).

The "show cause" order (to which a copy of the Appeal Board memorandum was attached) also gave the licensee or "any interested person" twenty days within which to request a Commission hearing on the matter. 38 F.R. 33515 (December 5, 1973). Thereafter, at the request of the Saginaw Intervenors (parties to the original Midland construction permit hearings),[17/] the Commission referred the show cause order for an eviden-

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17/ Comprised of Saginaw Valley Nuclear Study Group, Citizens Committee for Environmental Protection of Michigan, Sierra Club, United Automobile and Aerospace Workers of America, West Michigan Environmental Action Council, and University of Michigan Environmental Law Society.

tiary hearing before a Licensing Board newly constituted for that purpose. 7 AEC 7 (January 21, 1974).[18] Construction of the Midland facility was permitted to proceed in the interim.

2. The proceedings below.

(a) The parties. In addition to the licensee and the regulatory staff, Bechtel Professional Corporation and Bechtel Power Corporation (the licensee's architect-engineers for the Midland project) and the Saginaw Intervenors were made parties to the show cause proceeding.[19] The Saginaw group advised the Licensing Board that they would not participate unless the Commission granted their petition for an award of attorney's fees and expenses. The Commission, however, denied that petition for want of a sufficient showing of need.[20] Thereafter Saginaw remained away from the hearing and tendered neither witnesses nor evidence, attempted no cross-examination, and filed no proposed findings of fact or conclusions of law. The Board below nevertheless declined to dismiss

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18/ The Commission decision also denied the Saginaw Intervenors' petition to revoke the construction permits and the licensee's motion to dismiss the order to show cause.

19/ The Dow Chemical Corporation, a party to the original construction permit hearing, was named a party also, but elected not to participate. Tr. 31.

20/ The Commission noted that two of the Saginaw Intervenors, the U.A.W. and the Sierra Club, had substantial assets. See CLI-74-26, RAI-74-7, 1 (July 10, 1974).

them as formal parties in the show cause proceeding.[21/]

(b) The burden of proof. The Licensing Board had ruled initially that the burden of proving compliance with the Commission's quality assurance regulations and establishing reasonable assurance of continued future compliance -- the issues referred to the Board by the Commission -- lay on the licensee. Tr. 48-49, 68. Later in the proceeding, however, on the licensee's motion, supported by Bechtel and the regulatory staff,[22/] the Board reversed its ruling and held the burden of proof to be on the proponents of the show cause order. The Board indicated that the staff, as the initiator of the show cause order, and the Saginaw Intervenors, who had requested a hearing on that order, were the proponents. LBP-74-54, RAI-74-7, 112 (July 12, 1974). The regulatory staff, however, had apprised the Licensing Board on March 28, 1974, that it no longer favored the show cause order. Tr. 32-33, 48-49, 163-64. Bechtel, the licensee's architect-engineer was, of course, not its proponent. This left the Saginaw Intervenors. But they had previously informed the Board that they would not participate without

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21/ See RAI-74-9 at 592 and Tr. 162.

22/ The Saginaw Intervenors filed no response to this motion.

an award of funds from the Commission. Tr. 152-53. As we mentioned, however, that award had been denied two days before the Board reversed itself on the burden of proof question.[23/] Consequently, the show cause order did not enjoy the support of any party active in the proceeding.

(c) The hearing. Not withstanding that at the beginning of the trial no party was supporting the show cause order, the Licensing Board denied motions to dismiss the hearing for failure to carry the burden of proof.[24/] Instead, it cautioned the parties that it was "fully prepared to assess the evidence submitted in this proceeding and reach [its] own judgment of whether or not the Consumers Power Company permits should be modified, reversed, or in any way affected by the record tnat we develop here." Tr. 155. Accordingly, during the course of the three day hearing which followed, the three parties other than Saginaw proceeded to produce witnesses and documentary evidence responsive to the questions propounded by the Commission.

(d) The Licensing Board's initial decision. Based on its evaluation or the evidence adduced before it,

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23/ See note 20, supra.

24/ See RAI-74-9 at 592.

the Licensing Board found the licensee to be currently "implementing its quality assurance program in compliance with Commission regulations" and that "[t]here is [now] reasonable assurance that such implementation will continue throughout the construction process," even though "there have been questions [about the licensee's] compliance and * * * attitude regarding QA in the past." RAI-74-9 at 609-10. For these reasons the Board concluded that there was no cause to suspend, modify or revoke the Midland construction permits; it therefore ordered the proceeding closed. Ibid.

(e) Saginaw's motion to reconsider. The initial decision was rendered on September 25, 1974; on September 30th the Saginaw Intervenors petitioned the Board below to reopen the record and reconsider that decision. The petition rested entirely on a suit brought by the licensee against Bechtel claiming $300,000,000 in damages on allegations that Bechtel had negligently performed and otherwise breached its contract to construct another nuclear power facility (Palisades) for the licensee. Saginaw asserted, in substance, that these allegations negated the evidence of Bechtel's ability

to perform quality assurance functions satisfactorily at the Midland facility and also undercut the Board's finding of reasonable assurance that those functions will be properly implemented throughout the remainder of the construction period.

The Licensing Board denied the motion on the merits on the ground that, even if true, the matters in the licensee's complaint against Bechtel would not affect the decision in the case at bar. The Board stressed that the litigation involved an entirely different plant, did not encompass the quality assurance matters at issue in this case, and, whatever their past difficulties, the record "convincingly established" that the present relationship between the licensee and Bechtel, together with the Commission's inspection program, could reasonably be relied upon to provide a satisfactory quality assurance program in the future at Midland. LBP-75-6, NRCI-75/3, 227 (1975).

II.

This matter initially came before us on exceptions filed by the Saginaw Intervenors.[25/] Because of their failure to comply with the Commission's Rules of Practice governing proceedings before us, however, they were dismissed as parties to this case.[26/] Nonetheless, we have followed our customary practice in uncontested cases and reviewed the entire record sua sponte. We conclude therefrom, first, that the Licensing Board erred in relieving the licensee of the burden of proof in this show cause proceeding; second, that the error was rendered harmless by the manner in which the Board conducted the evidentiary proceeding; and, third, that the initial decision and the denial of the motion to reconsider were warranted on this record. Accordingly, we affirm.

1. The Board below, accepting the arguments of the licensee and Bechtel, held that section 7 of the Administrative Procedure Act (5 U.S.C. § 556(d)) placed the burden

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25/ We had extended the time to file exceptions to the initial decision until after the Licensing Board disposed of the motion for reconsideration. ALAB-235, RAI-74-10, 645 (1974).

26/ The reasons for our action are explained in the opinion which accompanied the dismissal order. ALAB-270, NRCI-75/5, 473 (1975).

of proof on the proponents of the show cause order, in this case the Saginaw Intervenors and the regulatory staff. We do not agree.

To be sure, the APA -- including section 7 -- applies to Commission adjudicatory proceedings.[27/] The rule laid down by section 7, however, contains an important qualification: "Except as otherwise provided by statute, the proponent of a rule or order has the burden of proof." (Emphasis added). As the parties and the Board below appear to have overlooked, a Commission proceeding such as the one at bar, convened to determine whether a utility is constructing a nuclear power facility in compliance with the Commission's safety regulations, falls within that exception. This follows from the nature of the two-step licensing process Congress established in the Atomic Energy Act. Under section 185 of that Act,[28/] "issuance of a construction permit does not make automatic the later issuance of a license to operate" the nuclear power plant. Power Reactor Co. v. Electricians, 367 U.S. 396, 411 (1961). Rather, when the plant is constructed, the utility must return and "ask the

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27/ See 42 U.S.C. §§ 2231 and 2236.

28/ 42 U.S.C. § 2235.

Commission to grant * * * a license to operate the facility." Id. at 405. For that purpose, the utility must come forward with sufficient information to establish (among other things) "that the facility authorized [by the construction permit] has been constructed * * * in conformity with the * * * regulations of the Commission, * * *." 42 U.S.C. § 2235.

It is settled that a utility seeking permission to build a nuclear power plant carries the ultimate burden of proving compliance with all applicable Commission regulations at both ends of the licensing spectrum -- the initial construction permit phase and the concluding operating license phase. Maine Yankee Atomic Power Company (Maine Yankee Atomic Power Station), ALAB-161, 6 AEC 1003, 1018 (1973). See also Power Reactor Co. v. Electricians, supra, 367 U.S. at 405; Cities of Statesville, et al. v. AEC, 441 F.2d 962, 983 (D.C. Cir. 1969). In these circumstances we can not perceive why the legislature would have wanted that burden shifted elsewhere if a question of compliance arises in the intervening construction phase. As the Seventh Circuit cogently observed in analogous circumstances: "we see no reason why the location of the burden of proof should depend on the timing of the [agency's] first awareness of a

compliance problem,* * *." Stearns Elec. Paste Co. v. E.P.A., 461 F.2d 293, 305 n.38 (1972).[29/]

The result we reach does not conflict with the hearing examiner's decision in New York Shipbuilding Corporation, 1 AEC 707 (1961),[30/] relied upon by the Board below. The examiner held in that show cause proceeding that the Administrative Procedure Act placed the burden of proof upon the staff. Id. at 708. But, unlike the case at bar, New York Shipbuilding was a proceeding to revoke an AEC by-product material license. Consequently, it did not involve the statutory provisions applicable to construction cases that govern our decision here. See 42 U.S.C. § 2235.

The other cases cited in the Board's opinion are no more persuasive. They are decisions under different statutes administered by other agencies which, moreover, turn on

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29/ Stearns involved a deregistration proceeding under the Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. § 135. The court went on to hold that "whether the Administrator discovers the hazard at the time of registration or later, Congress intended that the registrant have the burden of proving compliance with the provisions of the statute." 461 F.2d at 305 n. 39. Accord, Environmental Defense Fund, Inc. v. Ruchelshaus, 439 F.2d 584, 593 (D.C. Cir. 1971).

30/ Reversed in part on other grounds by the Commission, 1 AEC 842 (1961).

economic rather than public health and safety considerations. They are therefore not material to the Atomic Energy Act issue before us. Under that Act, where the Commission orders a party licensed to construct a nuclear facility to "show cause" why its license should not be suspended (or otherwise modified or revoked) for not complying with the Commission's safety regulations, the burden of proving compliance rests on the licensee. Thus this case falls within the exception in section 7 of the APA.

2. Which party bears the evidentiary burden becomes a significant question, of course, only where the evidence on an issue is evenly balanced or if the trier is in doubt about the facts. Absent that balance or doubt, the question is immaterial.[31/] In this case, the Licensing Board did not turn its decision on the allocation of that evidentiary burden but expressly denied the licensee's motion to dismiss for failure to meet the burden of proof.[32/] Instead, the Board called upon the licensee, the licensee's architect-engineers and the staff to explain the circumstances surrounding the quality assurance problems at the Midland

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31/ See Liberty Mutual Insurance Co. v. Sweeney, 216 F.2d 209, 211 (3rd Cir. 1954); McCormick, Evidence, § 307 (1954 ed.).

32/ See RAI-74-9 at 592.

plant. The parties did so by supplying knowledgeable witnesses who testified at length not only on examination by counsel but in response to interrogation by the Board itself. The effect of adopting this procedure was to reduce the Board's ruling on burden of proof to dictum, thereby rendering harmless its erroneous holding on the question.[33/] We therefore turn to an examination of the record on which the Board's decision actually rests.[34/]

3. There were no parties at the hearing actively supporting the order to show cause. Saginaw had dropped out (see p. 7, supra) and the staff had come around to the position that the licensee had the Midland quality assurance

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33/ We have, nevertheless, elected to discuss the burden of proof question at some length. It is an important one and we do not wish other parties to be misled by the published opinion below (RAI-74-7, 112), which we hereby disapprove.

34/ We think the Board exercised sound judgment in refusing to decide this important case on a legal technicality. As that Board perceptively observed, "substantial public interest questions existed regarding Consumers' compliance with Commission quality assurance requirements and Consumers' implementation of its quality assurance program," and, in light of that interest, "a determination is warranted on the record * * * [on those issues]." RAI-74-9 at 592.

problems under control again and a hearing was therefore unnecessary.[35/] Given the circumstances of this case, we pass the question whether the Director of Regulation should have thus changed his position 180 degrees after the Commission had referred his show cause order to a hearing

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35/ "MR. MURRAY [staff counsel]: Yes, Mr. Chairman, and this is a very important point and although I am sitting on petitioner's side of the table here, we are really not Petitioners in this proceeding. The posture of the matter is this: The Director of Regulation issued an order to show cause, received an answer to that order to show cause [and] was in the process of pondering that answer when the Commission granted a request of the Intervenor for a hearing.

"We are still in the process of pondering that answer. At this stage, however, if you want a preliminary view, we are sort of satisfied with it. And that is how we will present our evidence." Tr. 32-33 (March 28, 1974).

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"MR. MURRAY: I should, perhaps, add for the record, Mr. Chairman, that the date that -- the schedule that the Staff is proposing is not, repeat, not out of any concern that construction is continuing. As I indicated at the outset, we are satisfied that the QA and QC problems there are now under control." Tr. 65.

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"MR. MURRAY: Mr. Chairman, I wonder if I might tender one small but to the Staff very important emendation in your opening remarks?

"CHAIRMAN GLASER: All right.

"MR. MURRAY: You said that the Staff decided that an order should never have been issued. I think, rather, what we decided was that the response to the show-cause order was adequate and did indeed show cause why they should not be shut down." Tr. 163 (July 16, 1974).

and we proceed directly to a consideration of the record.[36/]

The evidentiary hearing consumed three trial days. Testimony was taken from 20 witnesses, filling nearly 600 transcript pages, and some 276 exhibits were received into evidence. The licensee presented four witnesses: its senior vice president in charge of the planning, construction, operation, and maintenance of its electric generating and transmission facilities; its vice president responsible for all design, construction, and quality assurance activities at the licensee's nuclear plants; its official responsible for quality assurance implementation and compliance at the Midland plant; and (at the specific request of the Board) its administrator in charge of licensing for all its operating nuclear plants. The five witnesses called by the staff included three AEC inspectors from the regional office with responsibility over the Midland plant; the Director of that office (at the Board's request); and the

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36/ The regulatory staff had publicly announced at the Licensing Board's March 28, 1974 hearing that it did not expect to support the Director's show cause order notwithstanding that the Commission had referred it for a formal hearing. See note 18, supra. We may reasonably assume that the Commission was aware of this reversal of position; certainly its attention was specifically drawn to it by Saginaw's May 11, 1974 motion for fees and expenses. In the circumstances, we take the Commission's silence as acquiescence.

Director's technical assistant. Bechtel presented a total of eleven witnesses with a variety of quality assurance and quality control responsibilities at the Midland plant and at other nuclear facilities designed or constructed by that firm.

The testimony covered a broad range of quality assurance matters with the Licensing Board taking an active part in the inquiry. The Board probed, among other things, into the circumstances surrounding the deficiencies specifically mentioned in the "show cause" order, the results of subsequent staff inspections of each deficiency, the effectiveness of the staff's inspection program, the steps taken by the licensee and Bechtel to correct the defects in the Midland quality assurance program, the licensee's present quality assurance organization, procedures, and activities, the attitude of the licensee's senior management toward quality assurance matters and compliance with Commission regulations, the licensee's past quality assurance performance, and the measures it was taking and which would be taken to insure future compliance with the Commission's regulations.

Despite the handicap under which the Licensing Board labored, i.e., the absence of any party before it interested

in bringing out information adverse to the position of the staff, licensee and Bechtel, it is apparent from a reading of the record that the Board made a determined effort to insure that the issues were thoroughly explored. If that exploration did not go as deep in some areas as it might have, that fault is not of the Board's making.

On the basis of the record thus developed, the Board found that the licensee is now implementing its quality assurance program in accordance with the Commission's regulations and that it can reasonably be expected to continue to do so. The Board's carefully detailed decision contains findings which support its conclusions on those issues and each finding is in turn backed by appropriate references to relevant portions of the record. RAI-74-9 at 592-609.

We have reviewed the evidence carefully. On the basis of that examination, for the reasons stated in the initial decision we agree that the Board's findings and conclusions are warranted and the issues referred to it are correctly resolved in light of the record. We need only note our concurrence in the Licensing Board's carefully drawn opinion.

4. In its March 5 order, NRCI-75/3, 227, the Board denied Saginaw's petition to reopen the record and reconsider its initial decision on the basis of a recent lawsuit

filed by the licensee against Bechtel. The suit alleged negligence and breach of contract on Bechtel's part in serving as the licensee's architect-engineers at the Palisades nuclear plant. Among other things, the complaint charged Bechtel with negligent performance of quality assurance and quality control functions at that facility. Saginaw argued that these matters were relevant to the issue of Bechtel's ability to perform its quality assurance responsibilities at Midland and warranted reopening this proceeding.

The Licensing Board determined that Saginaw's "new evidence," even if true, would not affect the decision in this proceeding.[37/] That ruling was founded upon the Board's belief that (1) the issues raised in the Palisades lawsuit were different from those raised in this show cause proceeding, and (2) it was clear from the record here that the Consumers-Bechtel relationship and the staff's inspection program gave reasonable assurance that the quality assurance program at Midland would be implemented in conformity with the Commission's regulations.[38/]

37/ NRCI-75/3 at 231.

38/ Ibid.

We have held that performance of quality assurance activities at one facility is relevant in determining the likelihood of future satisfactory performance at another. Duquesne Light Company (Beaver Valley Power Station, Unit 2), ALAB-240, RAI-74-11, 829, 833-34, 838-40 (1974). In this case the Board below had already considered the quality assurance performance at Palisades in the course of determining whether there was a likelihood of continued implementation of a satisfactory program at Midland.[39/] A stronger answer to Saginaw's petition was the second reason proffered by the Board. For even assuming that all the allegations against Bechtel were true, they relate to past activities under different circumstances. We agree with the Board below that they are not sufficient to overcome the direct evidence in the record of this proceeding. That evidence shows that, as a result of changes made in the intervening years, the licensee and Bechtel have now adopted an adequate quality assurance program and organization at the Midland plant, which, backed by the staff's inspection program, gives reasonable assurance of future compliance with the Commission's regulations. We therefore hold that the Board below did not abuse its discretion in declining to reopen the case on Saginaw's petition.

39/ See RAI-74-9 at 608, par. 80.

III.

Some observations are in order before closing our books on this matter. The result we reach is constrained by the record before us. However, the perspective of hindsight harshly but accurately reveals the overall history of quality assurance actions at Midland to have been one of marginal effectiveness at best -- not only on the part of the licensee and Bechtel but, in our judgment, by the staff as well. Given the importance of the quality assurance program in the furtherance of nuclear safety, this long and unsatisfactory history suggests that a fresh, hard look at the philosophy and practices underlying the Commission's program in this area is in order. We recommend that such a review be undertaken by individuals divorced from direct responsibility for that program.

The decisions of the Licensing Board are affirmed.

It is so ORDERED.

FOR THE ATOMIC SAFETY AND LICENSING
APPEAL BOARD

Romayne M. Skrutski

Romayne M. Skrutski
Secretary to the
Appeal Board