

3/15/82

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	Docket Nos. 50-329-OM
CONSUMERS POWER COMPANY)	50-330-OM
)	50-329-OL
(Midland Plant, Units 1 and 2))	50-330-OL

CONSUMERS POWER COMPANY'S SUPPLEMENTAL
PROPOSED FINDINGS OF FACT
AND CONCLUSIONS OF LAW

ISHAM, LINCOLN & BEALE
One First National Plaza
Suite 4200
Chicago, Illinois 60603
(312) 558-7500

INDEX

IV.	SUPPLEMENTAL FINDINGS OF FACT	194-230
	A. National SALP Report	194
	B. MPQAD Modification	204
	C. Audit F-77-32	212
	D. Quality Control Inspector Qualifications	222
V.	Supplemental Conclusions of Law	230

IV. SUPPLEMENTAL FINDINGS OF FACT

A. National SALP Report

300. The NRC's "Systematic Assessment of Licensee Performance" (SALP) program provides an overall appraisal of a licensee's performance during specified periods.^{762/} We have already considered extensive evidence concerning the NRC Region III SALP appraisal, released in November 1980, evaluating Consumers Power's performance from July 1, 1979 to June 30, 1980.^{763/} Region III concluded that the Midland quality assurance program was adequate.^{764/}

301. Almost a year after the publication of the Region III SALP report, NRC national headquarters published its SALP appraisal ("National SALP").^{765/} The National SALP, using the SALP appraisals of the NRC Regional offices, attempts to provide "ratings" for construction permit holders "from a national perspective."^{766/} It ranks licensees as "above average", "average" and "below average" based on comparisons to other facilities.^{767/} The ranking "below average" does not mean that a facility is unsafe or that its construction should be stopped. Rather, the ranking of "below average" indicates that the "facility's performance

^{762/} See infra, pp. 77, 168-171.

^{763/} Keppler, Tr. 2036-37; Consumers Power Exhibit No. 6.

^{764/} Id.

^{765/} Staff Exhibit No. 7.

^{766/} Id., Forward at p. i.

^{767/} Id.

was judged to be less desirable than most other facilities."^{768/}
Midland received a "below average" rating.^{769/}

302. National SALP enumerates several events as the basis for its Midland rating. First, it cites Midland's "large numbers of items of noncompliance" when compared to other construction sites; it also cites instances of unqualified Quality Control inspectors and instances of inadequate control of contractor activities.^{770/} Second, it notes that soils quality assurance problems were identified during the evaluation period, that Consumers Power was slow in responding to them, and that the NRC issued an "Order" to assure proper soils corrective action.^{771/} Third, it asserts there were major deficiencies involved in the installation of heating, ventilation and air conditioning components ("ZACK") at Midland which resulted in an NRC stop work order and a civil fine.^{772/} Finally, the National SALP states that Consumers Power's technical responses to NRR were "occasionally" inadequate but improved during the evaluation period.^{773/} We found the portion of the National SALP report "ranking" construction projects on a national scale

^{768/} Id.

^{769/} Id., Appendix B at pp. B-2 and B-3.

^{770/} Id.

^{771/} Id.

^{772/} Id.

^{773/} Id.

irrelevant.^{774/} However, at the time of its release, we were concerned with whether information in the National SALP report, such as the events noted above, conflicted with evidence we had previously considered.^{775/} To that end, we admitted the National SALP report, and heard testimony concerning it from Richard H. Wessman,^{776/} and Darl Hood^{777/} of the NRC Staff and James W. Cook from Consumers Power.^{778/}

303. Richard H. Wessman was the senior NRC Staff member assisting in the development of the National SALP report.^{779/} Although he has an education and work background in the nuclear area, he has very little experience with the evaluation of reactors under construction.^{780/} According to Mr. Wessman, the first stage of the SALP process was the regional review.^{781/} During the second stage, regional reviews were placed into a "national perspective" by four senior NRC managers and issued as the National SALP report.^{782/} Mr. Wessman assembled the data for the national assessment,

^{774/} Tr. 5429-30; 6158-59.

^{775/} Tr. 5426-27, 5429-30, 6158-59.

^{776/} Staff Exhibit No. 6; Wessman, Tr. 6145-6249, 6288-6414.

^{777/} Hood, Tr. 6145-6429.

^{778/} Cook, Tr. 6454-6473.

^{779/} Wessman, Tr. 6145.

^{780/} Wessman, Tr. 6146, 6188.

^{781/} Wessman, Tr. 6146-48.

^{782/} Id.

participated in the deliberations preceding it, and actually authored the final National SALP report for the signature of the managers.^{783/} The basis for the managers' and Mr. Wessman's opinion of Midland's performance as contained in the final report is reflected in a Midland "working paper" prepared by Mr. Wessman,^{784/} written comment- submitted by Darl Hood and a computer printout listing all noncompliances at Midland for a two year period.^{785/}

304. Mr. Wessman admitted that the National SALP suffers from several shortcomings. Although acknowledging the importance of a national overview, he conceded that the regional assessment was more useful.^{786/} Regional assessments are more timely and are made "by people who are more associated with licensee activities."^{787/} Mr. Wessman agreed that the SALP process was not "systematic" in that there was a lack of uniformity in assessment criteria.^{788/} A national comparison was difficult when the NRC regions did not use the same rating systems, terminology, evaluation areas, or review period.^{789/}

^{783/} Wessman, Tr. 6225, 6229-30.

^{784/} Wessman, Tr. 6170-71; Staff Exhibit No. 9.

^{785/} Staff Exhibits Nos. 10, 11a, and 11b.

^{786/} Wessman, Tr. 6213.

^{787/} Id.

^{788/} Wessman, Tr. 6218.

^{789/} Wessman, Tr. 6165, 6218-20, 6376-78.

305. The Nuclear Regulatory Commission itself expressed criticisms of the National SALP similar to those admitted by Mr. Wessman.^{790/} In the "Commission Guidance for Future Conduct of the Licensee Assessment Process," which is attached as the preface to the National SALP report, the Commission asserted that future SALP assessments must be made only at a regional level.^{791/} The national group should be limited to "evaluating policy, criteria and methodology," for these assessments.^{792/} It rejected the use of assessment criteria dependent on relative performance levels, such as that used in the National SALP report.^{793/} It urged that those participating in an assessment have a "recognized expertise" in the areas they evaluate.^{794/} Finally, the Commission discounted the National SALP report's relative rankings as unrepresentative of current conditions, citing the unusually long time span between the actual appraisal periods and its issuance.^{795/}

306. These general problems with the National SALP are reflected specifically in its Midland assessment. For example, because different regions used different evalua-

^{790/} Staff Exhibit No. 7, Commission Guidance for Future Conduct of the Licensee Assessment Process.

^{791/} Id., at p. 1.

^{792/} Id.

^{793/} Id.

^{794/} Id.

^{795/} Id., at p. 3.

tion periods, the precise time period during which the National SALP report compared Midland to other facilities was unclear.^{796/} Both the Region III SALP report^{797/} and the National SALP report^{798/} list July 1, 1979 to June 30, 1980 as the "appraisal period." However, Mr. Wessman testified that because of regional differences, the National SALP sought to examine all licensee activities from January 1, 1979 to December 31, 1980 in making its assessments.^{799/} Indeed, the National SALP report acknowledges that the periods utilized to evaluate individual facilities varied as much as from 12 to 18 months.^{800/} At another point Mr. Wessman stated that the National SALP considered events occurring at a plant up to May, 1981, although he claimed the National SALP report concentrated on the July 1979/June 1980 appraisal period.^{801/}

307. In making its relative ratings among plants, the National SALP report compared the number of noncompliances per the amount of NRC inspection hours at Midland with that of other plants.^{802/} The National SALP concluded

^{796/} Wessman, Tr. 6165.

^{797/} Consumers Power Exhibit No. 6; Staff Exhibit No. 8.

^{798/} Staff Exhibit No. 7, Appendix B at p. B-1.

^{799/} Wessman, Tr. 6165, 6231-32.

^{800/} Staff Exhibit No. 7, at p. 1.

^{801/} Wessman, Tr. 6231-32, 6242.

^{802/} Wessman, Tr. 6360; Staff Exhibit No. 9 at p. 1; Staff Exhibit No. 7, Appendix B at p. B-3.

that Midland received a large number of noncompliances "when compared with other power reactor facilities under construction."^{803/} However, the basis for this conclusion is uncertain. First, it conflicts with the Region III appraisal, made by Director Keppler, that the number of noncompliances per NRC inspection hour at Midland is comparable to other sites.^{804/} Second, the method used by the National SALP staff in computing the number of noncompliances per NRC inspection hours is questionable. Mr. Wessman was unclear as to whether, in totalling the number of noncompliances, a noncompliance had to have actually occurred during the appraisal period, or merely be reported during that period.^{805/} Mr. Wessman also testified that there was an error rate of as much as 20% in compiling the amount of NRC inspection hours per plant.^{806/} He noted that in making this kind of evaluation for plants under construction, the stage of construction seriously affects the quality and quantity of NRC inspections.^{807/} The "average" of noncompliances per inspection hour used in the national appraisal failed to take this into account.^{808/}

^{803/} Staff Exhibit No. 7, Appendix B at p. B-3; see also Staff Exhibit No. 9 at p. 1.

^{804/} Keppler, Tr. 2025.

^{805/} Wessman, Tr. 6239-40.

^{806/} Wessman, Tr. 6361.

^{807/} Wessman, Tr. 6362; Staff Exhibit No. 9 at p. 1.

^{808/} Staff Exhibit No. 9.

Third, the National SALP report inaccurately counted the number of noncompliances which occurred at Midland.^{809/}

308. The National SALP contains other inaccuracies and conflicts with other evidence presented in these proceedings. Although the National SALP report cites "instances" of unqualified Quality Control inspectors, Mr. Wessman could not identify the particular events to which this referred.^{810/} According to the NRC's list of noncompliances for the July 1979/ June 1980 period the NRC identified only a single noncompliance of unqualified Quality Control inspectors.^{811/} In his direct testimony Mr. Wessman admitted that the National SALP report incorrectly states that the Midland soils problems occurred during the appraisal period.^{812/} Mr. Wessman stated that this was merely a drafting oversight and not a basis for the National SALP conclusions.^{813/} Mr. Wessman also admitted that the National SALP report errs in asserting that the Zack deficiencies resulted in an NRC imposed stop work order.^{814/} The NRC issued an "Immediate Action Letter" confirming the stop work order Consumers Power had imposed.^{815/} In relation to the Zack matter civil fine, Mr.

^{809/} Wessman, Tr. 6307-09; Consumers Power Exhibit No. 17.

^{810/} Wessman, Tr. 6329-33.

^{811/} Staff Exhibit No. 11a and 11b.

^{812/} Wessman, Tr. 6162-63.

^{813/} Wessman, Tr. 6163-64.

^{814/} Wessman, Tr. 6295.

^{815/} Wessman, Tr. 6163-64, 6295.

Wessman acknowledged that when the National SALP report was written, the national group believed that Consumers Power had failed to pay or protest the fine within the prescribed time.^{816/} The NRC considers the failure to pay or protest a fine within the allotted time a serious matter.^{817/} In fact, Consumers Power had paid the fine within the proper period.^{818/} Finally, Mr. Wessman testified that Region III agreed with the National SALP ranking of Midland as below average.^{819/} Mr. James Cook testified that at the November 1980 meeting held between Region III and Consumers Power when Region III released its SALP appraisal, Director Keppler characterized the Midland performance as average.^{820/} Later, when Region III actually published its written SALP report, the word adequate was used.^{821/} When Mr. Cook telephoned Mr. Keppler to inquire about the meaning of the terms, he was told that "average" and "adequate" were equivalent terms.^{822/}

Board Findings

309. We have reviewed the National SALP report and the testimony concerning it. No new evidence concerning

^{816/} Wessman, Tr. 6296-97.

^{817/} Wessman, Tr. 6310.

^{818/} Wessman, Tr. 6298; Consumers Power Exhibits Nos. 17 and 18.

^{819/} Wessman, Tr. 6336-38.

^{820/} Cook, Tr. 6455-57.

^{821/} Consumers Power Exhibit No. 6.

^{822/} Cook, Tr. 6455-57.

quality assurance at Midland is contained in the report. We find that the evidence already presented at this hearing more completely and more accurately accounts the events occurring at Midland during the SALP period. As we noted earlier, nationwide rankings have no relevance to this proceeding. We now find the National SALP report's "specific" factual bases similarly unhelpful. The Commission itself discounts the national assessment process, among other things, because of its lack of uniformity and expertise. For example, significant inaccuracies exist in the National SALP description of almost all of the events considered in making the Midland assessment. The method of computing noncompliances for comparison to other construction sites was not uniform. Similarly, the method of computing NRC inspection time, an important factor in the comparison, had up to a 20% error rate. The National SALP report misdescribes the deficiencies that did occur at Midland. For instance, although the report cites "instances" of unqualified Quality Control inspectors, the record discloses only one such noncompliance. Indeed, the National SALP report's conclusion that Midland received more noncompliances in comparison with other plants conflicts with the conclusion of Region III, upon which the National report claims to be based. The National SALP report incorrectly asserts that the soils deficiencies occurred during the SALP evaluation period. Its perception of the Zack matter was flawed. The report states that the NRC issued a stop work order in the Zack

situation; it did not. The national report miscounts the number of Zack deficiencies involved. Finally, in taking their national perspective, the National SALP group inaccurately believed at the time of its evaluation, that Consumers Power failed to pay a fine. Based upon these factors, we can give no weight to the National SALP report in making our determination as to whether reasonable assurance exists that Midland can be built and operated safely.

B. MPQAD Modification

310. In December, 1981 Consumers Power modified the management structure of the Midland Project Quality Assurance Department (MPQAD).^{823/} We have already considered extensive evidence concerning the MPQAD in relation to whether there is reasonable assurance that the plant can be built and operated safely. We reopened the quality assurance portion of the hearings to hear evidence about the modification. The purpose of the recent MPQAD modification was twofold. First, the size and scope of the project required the increased presence of senior quality assurance management at the Midland site.^{824/} Second, the modification provided better control of the responsibilities previously vested in the Site Quality Assurance Superintendent position, by dividing and reassigning them to two separate positions.^{825/}

^{823/} Consumers Power Exhibit No. 19.

^{824/} Cook, Tr. 6643, 6647, 6452, 6449.

^{825/} Marguglio, Tr. 6949-50.

311. Under the modification, the role, relationship and involvement of James W. Cook, the senior Consumers Power corporate Midland officer, to the MPQAD remains unchanged.^{826/} However, the newly instituted position of MPQAD director has been assumed by Benjamin W. Marguglio.^{827/} In this position, Mr. Marguglio has overall full-time responsibility for the MPQAD.^{828/} He reports directly to Mr. Cook;^{829/} the MPQAD Manager, Site Quality Assurance Superintendent, and the Assistant Manager for MPQAD -- Administration and Special Projects report to him.^{830/} He spends, at minimum, 60% of his time, that is at least 3 days per week, at the site.^{831/} He has his primary office and a residence in Midland.^{832/} As director, Mr. Marguglio has sufficient authority to implement the quality assurance program,^{833/} but has no project cost or scheduling duties.^{834/} In accept-

^{826/} Cook, Tr. 6481, 6446-47, 6440; Marguglio, Tr. 6925; cf. Consumers Power Proposed Findings at p. 45, paragraphs 62 to 68.

^{827/} Cook, Tr. 6448, 6450-51.

^{828/} Consumers Power Exhibit No. 21 at ¶5.1.1; Marguglio, Tr. 6923.

^{829/} Consumers Power Exhibit No. 21, Enclosure 4; Marguglio, Tr. 6524-25.

^{830/} Consumers Power Exhibit No. 21, Organization Charts at Enclosure 3 Attachment A and Enclosure 4; Cook, Tr. 6483.

^{831/} Cook, Tr. 6449; Gallagher, Tr. 6781-82; Marguglio, Tr. 6923-24, 7005.

^{832/} Marguglio, Tr. 6447, 6928-29.

^{833/} Gallagher, Tr. 6759.

^{834/} Id.

ing the directorship, Mr. Marguglio delegated his environmental and non-Midland related quality assurance activities to subordinates.^{835/}

312. Although he no longer heads the organization, Walter Bird remains MPQAD Manager, the position he held in the MPQAD prior to the modification.^{836/} He spends 60% of his time per week at Consumers Power's Jackson, Michigan facility and the rest at the Midland site.^{837/} Mr. Bird, though subordinate to Mr. Marguglio within the MPQAD structure, has direct line supervision of the HVAC Quality Assurance and Quality Assurance Services Sections.^{838/} In addition, because of his background, Mr. Bird has assumed primary responsibility for the development and implementation of the quality assurance program as it relates to the remedial soils work.^{839/}

313. The duties assigned to the previous Site Quality Assurance Superintendent were divided between two positions.^{840/} Donald Turnbull, who had been the Site Quality Assurance Superintendent, became the Assistant Manager for the MPQAD -- Administration and Special Projects.^{841/} In this role he retains all the administrative

^{835/} Cook, Tr. 6451.

^{836/} Consumers Power Exhibit No. 21, Enclosure 4.

^{837/} Cook, Tr. 6448-49; Marguglio, Tr. 6923-24.

^{838/} Cook, Tr. 6447-48, 6483-84; Marguglio, Tr. 7008;
Consumers Power Exhibit No. 21 at Enclosure 3, ¶5.1.2.

^{839/} Id.

^{840/} Marguglio, Tr. 6949-50.

^{841/} Consumers Power Exhibit No. 21, Enclosure 4.

duties of the previous Site Quality Assurance Superintendent position.^{842/} He supervises the MPQAD's Administrative Section, among other things, maintaining the quality assurance tracking, management information, and trending programs.^{843/} He manages the contracts for contract MPQAD personnel,^{844/} and provides management assistance for special quality assurance projects.^{845/} Mr. Turnbull also has responsibility for administering MPQAD's participation in the Crosby "Quality Improvement Program" now in effect for the project.^{846/}

314. The on-line responsibilities and title of Site Quality Assurance Superintendent have been assumed by Marvin Curland.^{847/} Mr. Curland has a degree in Mechanical Engineering and thirty (30) years of quality assurance experience in industry and the nuclear Navy.^{848/} Much of his time has been spent in management positions and as a quality assurance consultant.^{849/} Recently, he acted as a quality assurance consultant for Consumers Power at the Midland project.^{850/} The on-site, on-line quality assurance

^{842/} Marguglio, Tr. 6982, 6949-51.

^{843/} Marguglio, Tr. 6452, Consumers Power Exhibit No. 21 at Enclosure 3, ¶5.1.4, and Enclosure 4.

^{844/} Id.

^{845/} Cook, Tr. 6452, 6667-68.

^{846/} Consumers Power Exhibit No. 21 at Enclosure 3, ¶5.1.4.4.

^{847/} Marguglio, Tr. 6926.

^{848/} Marguglio, Tr. 6927.

^{849/} Id.

^{850/} Marguglio, Tr. 6928.

sections for Fluids - Mechanical, Civil, Electrical, and Instrumentation Controls report directly to Mr. Curland.^{851/}

315. Initially, in December, 1981, when Consumers Power implemented the MPQAD modification, the title "Site Quality Assurance Superintendent" had not been retained.^{852/} The Site Quality Assurance Superintendent duties relating to the immediate supervision of the line quality assurance sections at the site were to be the responsibility of Mr. Marguglio in his role as MPQAD Director.^{853/} This was meant to facilitate communication from line personnel to management by involving Mr. Marguglio in the day-to-day, detailed activities of the sections.^{854/} The NRC Staff expressed dissatisfaction with this arrangement.^{855/} In his December 1981 testimony evaluating the MPQAD modification, Eugene Gallagher of the NRC Staff found unacceptable the absence of a "full-time Site Quality Assurance Superintendent."^{856/} He characterized the assumption of the Site Quality Assurance Superintendent's line responsibilities by Mr. Marguglio as unworkable and a "fragmentation" of management.^{857/} He also

^{851/} Consumers Power Exhibit No. 21 at Enclosure 4; Marguglio, Tr. 6945.

^{852/} Marguglio, Tr. 6982; Cook, Tr. 6444.

^{853/} Cook, Tr. 6448; Marguglio, Tr. 6982.

^{854/} Marguglio, Tr. 6981.

^{855/} Gallagher, Tr. 6801-02; Marguglio, Tr. 6925-26.

^{856/} Gallagher, Tr. 6696-97.

^{857/} Id.

criticized Consumers Power's implementation of the modification without first informing the NRC.^{858/} Later, Mr. Gallagher admitted that Consumers Power had informally notified NRC Staff of the modification before it became effective.^{859/} Further, he qualified his statement on the unacceptability of the modification. Mr. Gallagher agreed that NRC regulations do not prescribe any one type of quality assurance organizational structure.^{860/} On the contrary, the regulations encourage flexibility in organizations.^{861/} His pronouncement of "unacceptability" was his opinion alone; his opinion did not reflect the final position of the NRC Staff.^{862/} Indeed, he has had no direct responsibility for or contact with the Midland project, except for these proceedings, for the past several months.^{863/} Finally, Mr. Gallagher admitted that the specific presence of a quality assurance superintendent or quality assurance management 100% of the time at a site for 5 days each week is not required at any other nuclear plant.^{864/}

^{858/} Id.

^{859/} Gallagher, Tr. 6737-38, 6747; Keppler, Tr. 7086-87.

^{860/} Gallagher, Tr. 6762.

^{861/} Id.

^{862/} Gallagher, Tr. 6778; Keppler, Tr. 7089.

^{863/} Gallagher, Tr. 6757-58; 6750-51.

^{864/} Gallagher, Tr. 6770-71.

316. In January 1981, Consumers Power and the NRC Staff met to discuss the MPQAD modification.^{865/} In response to the NRC Staff's concerns, Consumers Power agreed to reinstate the position of Site Quality Assurance Superintendent and hired Mr. Curland for it.^{866/} Consumers Power believes that the modification as originally proposed was adequate for its purpose.^{867/} However, it agrees that Mr. Curland's assumption of the Site Quality Assurance Superintendent position improves the organizational structure from that in effect prior to December, 1981.^{868/} While reinstating the formal position of Site Quality Assurance Superintendent may lengthen communication lines between management and line personnel,^{869/} the overall modification, with the addition of Mr. Curland, provides more management site presence.^{870/}

317. Mr. James Keppler, Director of the NRC's Region III office, also testified about the MPQAD modification.^{871/} He noted that Mr. Gallagher's testimony concerning the acceptability MPQAD modification was never the official position of the NRC.^{872/} However, he shared the concerns

^{865/} Marguglio, Tr. 6926.

^{866/} Id.

^{867/} Id.

^{868/} Marguglio, Tr. 6946-48.

^{869/} Marguglio, Tr. 6925.

^{870/} Marguglio, Tr. 6980-81.

^{871/} Keppler, Tr. 7032-7118.

^{872/} Keppler, Tr. 7089.

Mr. Gallagher articulated about the modification.^{873/} The assignment of Mr. Curland as the Site Quality Assurance Superintendent alleviates both his and Mr. Gallagher's concerns.^{874/} The present quality assurance organization, which Mr. Keppler views as the functional equivalent of that endorsed in his previous testimony, meets all regulatory requirements.^{875/} Mr. Keppler characterized the placement of additional management presence on site as an enhancement of the previous MPQAD organization.^{876/} He admitted that the NRC Staff's determinations on the acceptability of Quality Assurance organizations are a matter of subjective consideration.^{877/} Thus, even if Consumers Power did not agree with the NRC that the maintenance of the Site Quality Assurance Superintendent position was an improvement to the MPQAD, it would not indicate poor management attitude.^{878/}

Board Findings

318. We find that the present MPQAD organization with the management modification implemented in December 1981 - January 1982, provides reasonable assurance that the

^{873/} Keppler, Tr. 7032-34.

^{874/} Keppler, Tr. 7034-37, 7094.

^{875/} Keppler, Tr. 7090-91.

^{876/} Keppler, Tr. 7034-37.

^{877/} Keppler, Tr. 7091-92.

^{878/} Id.

Midland plant will be constructed and operated safely. The NRC regulations require no specific quality assurance organizational structure. A particular organization's compliance with the regulations must be judged on how its structure meets the needs of the project. The recent modification of the MPQAD management structure certainly addresses the particular needs of the Midland project. It introduces capable and continuing management presence at the project site, increasing management involvement in the plant's construction. Further, the division of the Site Quality Assurance Superintendent's responsibilities between on-line and administrative duties better ensures that both functions will be fulfilled. There was some concern expressed about Consumers Power's implementation of the modification without NRC Staff concurrence. We note that Consumers Power did informally notify the Staff of its intentions before implementing the changes. More importantly, once Consumers Power became aware of the NRC concerns, it rapidly responded to them. Indeed, Consumers Power's reinstatement of the Site Quality Assurance Superintendent role, even though it was not convinced of its necessity, reveals a positive cooperative attitude on the part of the licensee.

C. Audit Report F-77-32

319. The record pertaining to the quality assurance issues was reopened to admit and consider Consumers Power Audit Report F-77-32 and its relation to the Adminis-

tration Building grade beam failure.^{879/} Benjamin Marguglio,^{880/} and Donald Horn^{881/} from Consumers Power and Eugene J. Gallagher^{882/} of the NRC Staff testified concerning it.

320. Audit Report E-77-32 documents a review conducted from August to November 1977 of over 2,000 soils and moisture compaction test records by Consumers Power's quality assurance department.^{883/} The audit's objective was to determine if proper documentation for soils compaction and moisture content tests existed for the placement of structural backfill, north and west plant dike and plant area fill.^{884/} Donald Horn, the Consumers Power Quality Assurance Civil Engineering Supervisor, led the audit team^{885/} which examined records of soils tests conducted from May 1974 to June 1977 over an extensive plant area.^{886/}

321. The audit contained several findings. First, it determined that calculations made for some tests had used improper values for proctors; as a corrective

^{879/} Marguglio, Tr. 6504-07; 6530.

^{880/} Marguglio, Tr. 6504-07; 6513-18, 6518-75.

^{881/} Horn, Tr. 7962-65, 7992-94, 7997-8000, 8002-05, 8001-14, 8018, 8026-30.

^{882/} Gallagher, Tr. 6802-08, 6814-19.

^{883/} Board Exhibit No. 3, at p. 1; Marguglio, Tr. 6506, 6579-80; Horn, Tr. 7962, 7992, 7998.

^{884/} Id.

^{885/} Board Exhibit No. 3, at p. 1.

^{886/} Board Exhibit No. 3, at pp. 2-9, Horn, Tr. 7962; Marguglio, Tr. 6506.

action, it recommended that these data be recalculated.^{887/} Most of these recalculations did not change the acceptability of the tests, although they did change the test results.^{888/} Second, several documents indicated that failing tests had occurred, but no subsequent documents were found at the time of the audit which demonstrated that they had been "cleared" by passing tests.^{889/} As corrective action, the auditors requested that a determination be made if documentation existed to show that passing tests in the area "clear these failing tests."^{890/} This did not mean that at the time of the audit or actual soils placement, retests were taken until passing results were obtained.^{891/} Rather, the procedure to "clear" a failing test to a "passing" test was to recompact or recondition the soils in question and then to retest them.^{892/} The corrective action sought confirmation of this process through documentation.^{893/} For those tests whose clearing documentation could not be found, the audit requested that Project Engineering "justify" the in-place soils.^{894/} This required Project Engineering to examine, in

^{887/} Board Exhibit No. 3, at pp. 2-4; Marguglio, Tr. 6505-06.

^{888/} Board Exhibit No. 3, at pp. 2-4, 7-8.

^{889/} Board Exhibit No. 3, at pp. 4-7; Horn, Tr. 7965.

^{890/} Board Exhibit No. 3, at pp. 6-10.

^{891/} See Marguglio, Tr. 6513-15.

^{892/} Horn, Tr. 7965.

^{893/} Board Exhibit No. 3, at p. 6.

^{894/} Id., at pp. 8, 10.

the field, the actual condition of the soils through borings and other means.^{895/} If the Engineering examination found the soils inadequate, the corrective action always required the reworking or the replacement of the failed soils.^{896/} As a result of the audit, Mr. Horn concluded that there were a large number of errors in the documentation of the soils tests and that material represented by the failing tests would have to be evaluated.^{897/}

322. Mr. Horn and Mr. Marguglio were questioned concerning whether Audit F-77-32 should have been coupled with the settlement of the Administration Building grade beam in 1977 and interpreted as indications of plant-wide soils problems at that time. Mr. Marguglio stated that he was unaware of the Administration Building problem at the time of its occurrence.^{898/} In reviewing Mr. Marguglio's testimony it was determined that his statements could be understood to mean no one in the quality assurance department was aware of the grade beam failure in 1977.^{899/} This would not have been accurate. To avoid confusion, Consumers Power informed the Board that in fact Mr. Horn, a supervisor in the quality assurance department, had been made aware of the grade beam

^{895/} Horn, Tr. 7965.

^{896/} Horn, Tr. 8018, 8026-27.

^{897/} Horn, Tr. 7993.

^{898/} Marguglio, Tr. 6586.

^{899/} Consumers Power Exhibit No. 24.

settlement at the time of its occurrence by Project Management personnel.^{900/} Project Management told Mr. Horn it was investigating the cause of the beam failure.^{901/} Subsequently, he learned that the investigation concluded that the settlement of the beam was an isolated, localized incident.^{902/}

323. Mr. Horn testified that initially he was concerned about the beam problem,^{903/} however, his concerns were allayed upon the investigation findings that the beam failure was an isolated incident.^{904/} He did not interpret the beam failure and the audit report as indications of plant-wide soils problems even though soils specifications for the Administration Building fill were the same as the specifications for those areas examined in the audit.^{905/} Instead, in considering the investigation results in 1977, Mr. Horn gave greater weight to what he identified as significant differences between the two situations. First, the results of the grade beam failure investigation,^{906/} especially the borings, indicated a localized condition.^{907/} Second,

^{900/} Id.; Horn, Tr. 7959.

^{901/} Id.

^{902/} Consumers Power Exhibit No. 24; Horn, Tr. 7961-64, 7975; see also supra, at pp. 91-98, 182-86.

^{903/} Horn, Tr. 7959-60; 7974-75.

^{904/} Horn, Tr. 7961-64, 7975.

^{905/} Horn, Tr. 8012-14, 7990-91.

^{906/} See, supra, at pp. 91-92.

^{907/} Horn, Tr. 7962-64.

the grade beam failure occurred in a non-safety related (non-Quality) area; the audit primarily considered safety (Quality) areas.^{908/} This meant that although the soils specifications were identical, soils placement techniques, testing and inspection procedures were not.^{909/} Third, Audit F-77-32 concerned soils testing records, not a review of actual field soils placement.^{910/} Therefore, while its results could indicate a problem with documentation, at the time they did not represent unequivocal evidence of a problem with the actual soils placement.^{911/} Fourth, no other unusual building settlement had occurred in 1977.^{912/} Because of his conclusion that the beam condition was an isolated, localized incident, Mr. Horn never mentioned it to Quality Assurance management.^{913/}

324. As part of the diesel generator building settlement investigation in 1978, more soils borings around the plant were taken.^{914/} The results of those borings revealed to Mr. Horn an indication that the settlement of the diesel generator building reflected a site-wide soils pro-

^{908/} Horn, Tr. 7964, 7990-91.

^{909/} Id., 8009-11.

^{910/} Board Exhibit No. 3, at p. 1; Horn, Tr. 7998.

^{911/} See Horn, Tr. 7998.

^{912/} Horn, Tr. 7961.

^{913/} Id.

^{914/} Horn, Tr. 7980.

blem.^{915/} He also connected the earlier beam failure with this problem.^{916/} At the time Mr. Horn made the connection, the NRC, through Mr. Gallagher, was conducting an investigation into the soils problem.^{917/} However, since the beam failure occurred in a non-safety related area, Mr. Horn did not mention it to Mr. Gallagher.^{918/} Mr. Horn could not recall any discussions at all in 1978 among Consumers Power or Bechtel personnel concerning whether to inform the NRC about the administrative grade beam failure.^{919/}

325. As the stipulation between Consumers Power and the NRC Staff,^{920/} and Consumers Power's own witnesses admit, the soils placement activities and attendant quality assurance monitoring of them prior to December 1979 were not always adequate. Mr. Horn conceded that his discovery in 1977 of problems in soils testing documentation through Audit F-77-32 was not timely.^{921/} Further, he came to believe that quality control procedures in the soils area in 1977 were inadequate.^{922/} For example, at the time of Audit

^{915/} Horn, Tr. 7986-87.

^{916/} Horn, Tr. 7980-81.

^{917/} Horn, Tr. 7990.

^{918/} Id.

^{919/} Horn, Tr. 7982; see also Howell, Tr. 2929; Keeley, Tr. 1319, supra, at pp. 90-98.

^{920/} NRC Staff/Consumers Power Company Quality Assurance Stipulation, following Tr. 1175.

^{921/} Horn, Tr. 8003.

^{922/} Horn, Tr. 8015; Marguglio, Tr. 6583-84.

F-77-32 there were no procedures to track whether soils retests and reworks had been completed.^{923/} Finally, at the time of Audit F-77-32 no quality assurance overinspections of the actual field soils placements were done or required.^{924/}

326. Since then Consumers Power and Bechtel have made significant improvements in soils placement activities. Overinspections of soils placements are now required, prompting timely discovery of potential soils conditions.^{925/} According to Mr. Gallagher, no significant noncompliances, similar to those identified in NRC Investigation Report No. 78-20 and Audit F-77-32, have been discovered since 1979.^{926/} Immediately after Audit F-77-32, as part of the audit corrective action, Bechtel implemented effective tracking mechanisms to document and verify retesting and reworking of soils.^{927/} Mr. Horn characterized the present Bechtel Quality Control soils effort as better than adequate.^{928/}

327. According to Mr. Horn under current quality assurance procedures, there would be a greater appreciation of the implications of a non-safety related problem, such as the grade beam failure, if it occurred today.^{929/} For

^{923/} Horn, Tr. 8030-31.

^{924/} Horn, Tr. 7998.

^{925/} Horn, Tr. 7998; Gallagher, Tr. 6828-29.

^{926/} Gallagher, Tr. 6813.

^{927/} Horn, Tr. 8031.

^{928/} Horn, Tr. 8015-16.

^{929/} Horn, Tr. 8023-24.

example, Mr. Horn would have been made aware of such a problem not only through informal methods of communications but through formal established procedures, including his review of soils engineering reports and his participation in management and construction meetings.^{930/} As further evidence of improvements, Mr. Horn described the procedures developed for interface between safety and non-safety related areas in the remedial soils work.^{931/} Under the new process, MPQAD will review all safety and non-safety related procedures pertaining to the soils remedies.^{932/} MPQAD will also review all safety and non-safety related specifications and Quality Control requirements before their issuance.^{933/} In addition, there are integrated inspection hold points for safety activities.^{934/} Mr. Horn testified that the Consumers Power management has always been responsive to his needs as a quality assurance supervisor.^{935/} Specifically, he recalled a backlog of work.^{936/} This backlog could have affected the soils settlement problems.^{937/} However, when Mr. Horn sought

^{930/} Horn, Tr. 7964, 8025.

^{931/} Horn, Tr. 8022-23.

^{932/} Horn, Tr. 8023.

^{933/} Id.

^{934/} Horn, Tr. 8022.

^{935/} Horn, Tr. 8025-26; 8014.

^{936/} Id.

^{937/} Id.

additional personnel from Consumers Power management to relieve the backlog, management promptly provided him with the help.^{938/} The backlog has now been eliminated.^{939/}

Board Findings

328. No evidence presented in this reopened portion of the hearing relating to Audit F-77-32 leads us to alter our original conclusions concerning Consumers Power management attitude in carrying out its responsibilities under the Midland construction permits. Prior to December 6, 1979 there were inadequacies in the Midland soils placement effort which led to the plant-wide settlement problems. However, the evidence clearly demonstrates that reasonable assurance exists that these problems will not recur during the remainder of the plant's construction. Indeed, the additional evidence we have heard from Mr. Horn concerning quality assurance procedures for remedial measures bolsters that conclusion.

329. Further, this additional evidence concerning Audit F-77-32 does not demonstrate that Consumers Power management acted unreasonably in evaluating the Administration Building grade beam failure. Hindsight confirms that evidence existed in 1977, which if given different weight, would have revealed the plant-wide soils conditions in time

^{938/} Horn, Tr. 8008.

^{939/} Id.

to have prevented the problems which now confront us. What we cannot say is that the conclusion that the beam failure was an isolated incident was imprudent and unreasonable in 1977 or an indication of poor management attitude. Audit F-77-32 concerned itself with only a limited aspect of soils placement. While its results demonstrated a problem with the documentation of past soils tests, they did not unambiguously reveal actual field testing problems. On the other hand, there were also strong indications of the grade beam settlement's isolated nature. As the investigation showed, only one grade beam out of several failed. It alone had been subject to excavation and re-filling. Borings showed that the surrounding and other soils in safety related areas were good. Finally, the soils supporting the beam were non-safety related, while F-77-32 dealt with safety related areas. On this basis a conclusion could be reached, even in light of the results of Audit F-77-32, that the beam problem was localized. This conclusion certainly does not demonstrate the kind of casual inattention and callous disregard of facts which would lead us to infer a poor attitude with respect to quality assurance on the part of past or present Consumers Power management.

D. Quality Control Inspector Qualifications

330. An issue considered during the quality assurance portion of the hearings has been the qualifications of Quality Control inspectors at Midland. The May

1981 NRC Inspection Report No. 81-12 identified as "unresolved" a matter pertaining to that issue: whether the Quality Control inspector certification process in the electrical area meets the requirements and intent of industry-wide standards in ANSI N45.2.6 and NRC Regulatory Guide 1.58.^{940/} At the time of the inspection the MPQAD agreed to audit the certification process to resolve the question.^{941/} In October 1981, another NRC inspection report indicated that the the initial MPQAD audit was "inconclusive."^{942/} We reopened the quality assurance portion of this proceeding to hear evidence on this item as it relates to the issues we have already considered.

331. Ronald Gardner, a reactor inspector in the electrical area in the Plant Systems Section, Region III Office of the NRC,^{943/} originally identified the certification process item during the NRC May 1981 Inspection No. 81-12.^{944/} Mr. Gardner characterized the item as involving "potential" deficiencies with the experience and training of Quality

^{940/} Staff Exhibit No. 1 at pp. 25-28.

^{941/} Id. at p. 28.

^{942/} Tr. 5414 (October 1981 NRC Inspection Report 81-20, Item j).

^{943/} Gardner, prepared testimony at p. 1, following Tr. 8037.

^{944/} Gardner, Tr. 8038-39; Gardner, prepared testimony at p. 2, following Tr. 8037; cf. Staff Exhibit No. 1 at p. 1.

Control electrical inspectors.^{945/} From his review of Quality Control inspector records, it appeared that some inspectors had little or no Quality Control experience prior to their certification. In addition, he questioned the propriety of certification which occurred in some instances within three weeks of hire.^{946/} To answer these concerns Consumers Power agreed to audit the certification process to determine if inspections performed by certain Quality Control inspectors were acceptable and to verify the adequacy of the training, qualifications and examination of Quality Control personnel.^{947/} Consumers Power completed two audits, one in July 1981^{948/} and the other in November 1981.^{949/} These evaluated all certifications, not just those in the electrical area. The MPQAD also re-inspected the work already completed by certain electrical Quality Control inspectors.^{950/}

332. The Quality Control certification process at Midland has several stages. First, every prospective inspector receives as much formal and on-the-job training as is necessary for him to demonstrate adequate knowledge in

^{945/} Gardner, prepared testimony at p. 2, following Tr. 8037.

^{946/} Gardner, prepared testimony at p. 2, following Tr. 8037; Staff Exhibit No. 1 at pp. 25-28.

^{947/} Id.

^{948/} Consumers Power Exhibit No. 23.

^{949/} Consumers Power Exhibit No. 22.

^{950/} Gardner, prepared testimony at pp. 2-4, following Tr. 8037; Gardner, Tr. 8045, 8096.

the area in which he will be certified.^{951/} Second, after he exhibits this preparedness, he is permitted to take an oral test pertaining to the inspection plan to which he seeks certification.^{952/} The test examiner is required to ask the applicant a minimum of two questions in each of at least six areas of the plan.^{953/} Third, the applicant must complete a performance test of the particular inspection plan.^{954/}

333. The MPQAD July 1981 audit sought to assess the compliance of Quality Control inspector certifications with industry and regulatory standards.^{955/} The audit inspection team made two findings. The first required better documentation of the on-the-job training aspect of the certification process.^{956/} Although the Bechtel Quality Control section did not agree that such documentation was required by ANSI N45.2.6, it modified its procedures to include a commitment to document the training.^{957/} A second audit finding concerned the interpretation of a Quality

^{951/} Gardner, Tr. 8051.

^{952/} Id.; Tr. 8053-57.

^{953/} Gardner, Tr. 8057.

^{954/} Gardner, Tr. 8087-88.

^{955/} Consumers Power Exhibit No. 23, p. 1.

^{956/} Consumers Power Exhibit No. 23, at Audit Finding Report M-01-24-1-01.

^{957/} Id.

Control procedure; it too was closed out.^{958/} In an unresolved item, the auditors questioned the criteria used for determining equivalency standards for application of the ANSI N45.2.6 waiver provisions.^{959/} These provisions apply when a Quality Control inspector's education or experience does not meet the initial regulatory or industry requirements.^{960/} It was this item which prompted the NRC in October 1981 to leave the matter open until after the MPQAD completed the second, November 1981, audit.^{961/}

334. The November 1981 Audit evaluated the actual implementation of the certification program.^{962/} The audit team witnessed inspection performance demonstrations and oral examinations of Quality Control inspector candidates seeking certifications to welding, mechanical, civil and electrical plans.^{963/} In addition, they reviewed each discipline's personnel records and inspector training plans.^{964/} There were no audit findings or deficiencies identified.^{965/}

^{958/} Consumers Power Exhibit No. 23, at Audit Finding Report M-01-24-1-02.

^{959/} Consumers Power Exhibit No. 23, Audit Report p. 3 of 4.

^{960/} Id.

^{961/} Gardner, Tr. 8040-41, 8043-44; Consumers Power Exhibit No. 23, Audit Report p. 3 of 4.

^{962/} Consumers Power Exhibit No. 22; Marguglio, Tr. 6955.

^{963/} Consumers Power Exhibit No. 22, pp. 1-2.

^{964/} Id., p. 1.

^{965/} Id., pp. 2-3.

The audit team concluded that the Bechtel Quality Control examiners conducted comprehensive examinations and complied with all program requirements.^{966/} It recommended that the site MPQAD continue to overview the training/certification program to assure that the process adequately meets Midland's requirements.^{967/} The MPQAD accepted this suggestion. In general, they will overview the Quality Control certification process in all areas. In particular, they will review each certification which involves application of the waiver provisions.^{968/} Mr. Gardner recommends documentation of all overviews be a permanent part of a Quality Control inspector's records.^{969/}

335. Mr. Gardner returned to the Midland site after the November 1981 audit to review its results.^{970/} To verify the audit, Mr. Gardner tested the knowledge of three Quality Control electrical inspectors in the areas for which they were certified.^{971/} The inspectors had no Quality Control experience when hired and each had been certified within three months of his reporting date.^{972/} The Quality

^{966/} Id., p. 3.

^{967/} Id.

^{968/} Gardner, Tr. 8095-96.

^{969/} Id.

^{970/} Gardner, Tr. 8045-46.

^{971/} Gardner, prepared testimony at p. 3, following Tr. 8037; Gardner, Tr. 8046.

^{972/} Gardner, prepared testimony at p. 3, following Tr. 8037.

Control inspectors satisfactorily responded to Mr. Gardner's questions and demonstrated acceptable knowledge.^{973/} At this time Consumers Power also agreed to reinspect work of nine Quality Control electrical inspectors whose certifications the NRC questioned or against whom MPQAD had written an NCR at the time of the May 1981 Inspection.^{974/} At the time of the hearing on February 12, 1982, Consumers Power had completed a 100% re-inspection of the work of eight of the inspectors; it had reviewed almost 50% of the work of the ninth inspector.^{975/} Several inspection errors were identified.^{976/} Based upon the information from the re-inspections so far, Mr. Gardner has not determined whether any errors were the result of a particular cause.^{977/} He has concluded, however, that there is no correlation between an inspector's education and experience and any errors which he may commit in inspections.^{978/} Based on its appraisals Consumers Power has not found any of the nine inspectors to be unqualified.^{979/} If such a situation existed, the in-

^{973/} Id.; Gardner, Tr. 8046.

^{974/} Gardner, prepared testimony at p. 4, following Tr. 8037; Gardner, Tr. 8035-36; Marguglio, Tr. 7014.

^{975/} Gardner, prepared testimony at p. 4, following Tr. 8037; Gardner, Tr. 8068-70.

^{976/} Gardner, Tr. 8068, 8088-90, 8036.

^{977/} Gardner, Tr. 8090-91.

^{978/} Gardner, Tr. 8091-94.

^{979/} Marguglio, Tr. 7020-21.

spector's certification would be immediately withdrawn,^{980/}
the inspector given remedial training and then required to
be recertified before returning to work.^{981/}

336. Based on the audit results, his own investi-
gation, and commitments to document on-the-job training and
to provide continued MPQAD overview of the certification
process,^{982/} Mr. Gardner concluded that the Bechtel Quality
Control inspector certification meets Midland project, NRC
and ANSI N45.6.2 requirements.^{983/} Mr. Gardner stated that
Consumers Power has not abused the NRC Regulatory Guide 1.58
and ANSI N45.6.2 provisions in the certification process.^{984/}
He disagreed with Mr. Gallagher's recommendation that Consumers
Power be precluded from using the ANSI N45.6.2 waiver provi-
sions with regard to education and experience equivalencies.^{985/}
He finds the flexibility provided for in the ANSI standard
necessary.^{986/} The improvements in the Midland Quality
Control certification program address any prior conditions
which may have arisen due to the vagueness of the regulatory

^{980/} Id.

^{981/} Gardner, Tr. 8090.

^{982/} Gardner, Tr. 8038, 8044, 8060, 8096-97.

^{983/} Gardner, prepared testimony at p. 4, following Tr.
8037; Gardner, Tr. 8038.

^{984/} Gardner, prepared testimony at p. 3, following Tr.
8037.

^{985/} Gardner, Tr. 8094-95.

^{986/} Id.

guide.^{987/} Mr. Gardner does not believe that certification standards at Midland should be higher than those set forth in the NRC Regulatory Guide 1.58 and ANSI N45.6.2.^{988/}

Board Findings

337. We find that the certification process for Quality Control inspectors at Midland is adequate. Consumers Power has improved the Quality Control certification process, through its and Bechtel's commitments to better document and overview certifications. We have heard no evidence which leads us to question the certification process in the past. We find no need to impose upon the Midland site Quality Control certification requirements other than those it already meets through compliance with regulatory and industry-wide standards.

V. SUPPLEMENTAL CONCLUSIONS OF LAW

338. No evidence heard in the reopened proceedings leads us to change the evaluation presented on the original Consumers Power Conclusion of Law section.^{989/}

^{987/} Gardner, prepared testimony at p. 3, following Tr. 8037; Gardner, Tr. 8094-96.

^{988/} Gardner, prepared testimony at p. 3, following Tr. 8037.

^{989/} See supra, at pp. 190-91.

SUPPLEMENT TO APPENDIX A OF
CONSUMERS POWER COMPANY'S PROPOSED FINDINGS
OF FACTS AND CONCLUSIONS OF LAW

EXHIBIT INDEX

A. Licensing Board

Exhibit #3: Audit Report No. F 77-32 re: soil placement records.

B. Consumers Power

Exhibit #17: 10/13/81 letter from Keppler to Cook re: payment of \$38,000 civil penalty.

Exhibit #18: 2/3/81 letter from NRC to Howell re: payment of \$38,000 civil penalty.

Exhibit #19: 12/3/81 letter from Brunner to Licensing Board re: new MPQAD organization.

Exhibit #21: 1/26/81 letter from Cook to Keppler and Denton re: new MPQAD organization, attaching four enclosures, (1) QA Topical Report; (2) QA Topical Report; (3) QA Department Procedure; and (4) QA Organizational Chart dated 1/22/82.

Exhibit #22: Audit Report dated 12/14/81, regarding audit of QC inspector training program conducted 11/2-6/81.

Exhibit #23: Audit Report dated 7/24/81, regarding audit of QC inspector training program conducted 6/2/81-7/3/81.

C. NRC Staff

Exhibit #6: 9/30/81 letter from Cook to Denton regarding seismic models and auxiliary building soils remedial work, attaching seismic model reports for the auxiliary building and service water pump structure.

Exhibit #7: Nuclear Regulatory Commission Guidance for Future Conduct of the Licensee Assessment Process (NUREG-0834).

Exhibit #8: 1/2/81 letter from Keppler to Moseley transmitting (1) Action Plan resulting from the 11/24/80 management meeting and (2) 12/18/80 letter from Keppler to Cook re: the 11/24/80 meeting, attaching IE Inspection Reports Nos. 80-35 and 80-36.

Exhibit #9: 5/81 working paper - SALP Staff Summary of Midland.

Exhibit #10: Comments by NRR Project Manager, Darl S. Hood, entitled "SALP Input for Midland Project, Units 1 and 2".

Exhibit #11a and 11b: 4/23/81 computer listing of Midland non-compliances for 1979-1980.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of)	
)	Docket Nos. 50-329-OM
CONSUMERS POWER COMPANY)	50-330-OM
)	50-329-OL
(Midland Plant, Unit 1)	50-330-OL
and 2))	

CERTIFICATE OF SERVICE

I, JoAnne G. Bloom, one of the attorneys for Consumers Power Company, hereby certify that a copy of "CPCo Supplemental Proposed Findings of Fact and Conclusions of Law" was served upon all persons shown in the attached service list by deposit in the United States mail, first class, this 15th day of March, 1982, except for Barbara Stamiris who was served by deposit to Federal Express.

JoAnne G. Bloom
One of the Attorneys for
Consumers Power Company

SUBSCRIBED AND SWORN before
me this 15th day of March,
1981.

Notary Public

SERVICE LIST

Frank J. Kelley, Esq.
Attorney General of the
State of Michigan
Carole Steinberg, Esq.
Assistant Attorney General
Environmental Protection Div.
720 Law Building
Lansing, Michigan 48913

Myron M. Cherry, Esq.
One IBM Plaza
Suite 4501
Chicago, Illinois 60611

Mr. Wendell H. Marshall
RFD 10
Midland, Michigan 48640

Charles Bechhoefer, Esq.
Atomic Safety & Licensing Bd. Pnl.
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Frederick P. Cowan
6152 N. Verde Trail
Apt. B-125
Boca Raton, Florida 33433

Admin. Judge Ralph S. Decker
Route No. 4, Box 190D
Cambridge, Maryland 21613

Carroll E. Mahaney
Babcock & Wilcox
P.O. Box 1260
Lynchburg, Virginia 24505

James E. Brunner, Esq.
Consumers Power Company
212 West Michigan Avenue
Jackson, Michigan 49201

Steve Galdler, Esq.
2120 Carter Avenue
St. Paul, Minnesota 55108

Atomic Safety & Licensing
Appeal Pnl.
U.S. Nuclear Regulatory Comm.
Washington, D.C. 20555

Mr. C.R. Stephens
Chief, Docketing & Services
U.S. Nuclear Regulatory Comm.
Office of the Secretary
Washington, D.C. 20555

Ms. Mary Sinclair
5711 Summerset Street
Midland, Michigan 48640

William D. Paton, Esq.
Counsel for the NRC Staff
U.S. Nuclear Regulatory Comm.
Washington, D.C. 20555

Atomic Safety & Licensing
Bd. Panel
U.S. Nuclear Regulatory Comm.
Washington, D.C. 20555

Barbara Stamiris
5795 North River Road
Route 3
Freeland, Michigan 48623

Jerry Harbour
Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory Comm.
Washington, D.C. 20555