U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-346/88004(DRP) Operating License No. NPF-3

Docket No. 50-346

Licensee: Toledo Edison Company
Edison Plaza
300 Madison Avenue
Toledo, OH 43652

Facility Name: Davis-Besse 1

Inspection At: Oak Harbor, Ohio

Inspection Conducted: December 9, 1987 through January 8, 1988

Inspector: R. B. Landsman

Approved By: W. G. Guldemond, Chief
Reactor Projects Branch 2

1-28-88
Date

Inspection Summary

Inspection from December 9, 1987 through January 8, 1988 (Report No. 50-346/88004(DRP))
Areas Inspected: Special announced inspection of activities with regard to an allegation.
Results: Two violations were identified (failure to follow procedures - Paragraph 2.a (1) (a) and failure to take prompt and effective corrective actions after the procedural violation had been identified by the quality organization - Paragraph 2.a (1) (c)).

DETAILS

1. Persons Contacted

   a. Toledo Edison Company (TED)

   * L. Storz, Plant Manager
     L. Ramsett, Quality Assurance Director
     D. Briden, Safety Review Board Chairman
     G. Grime, Industrial Security Director
     M. Schefers, Information Management Director
   * G. Honma, Compliance Supervisor
     R. Butler I&C Superintendent
     C. Daft, Technical Planning Superintendent
     S. Zunk, Nuclear Group Ombudsman
   * D. Harris, Manager Quality Systems
     S. Filippucci, Nuclear Security Supervisor
     J. Dillich, Technical Support Manager
     D. Hallenbeck, Quality Systems Specialist
     M. O'Reilly, Attorney
     K. Dunn, Document Control Supervisor
     J. Hainline, Coordinator in Systems and Procedures
     T. Davis, Coordinator in Document Control
     S. Goldstein, Systems and Procedures Manager
     M. Roder, Administrative Procedure Coordinator in Technical Support
     C. Zimmerman, Safety Review Board Clerk
     D. Levering, Systems and Procedure Supervisor

   b. USNRC

   * P. Byron, Senior Resident Inspector
     D. Kosloff, Resident Inspector
     M. Farber, Reactor Inspector
     C. Weil, Investigation and Compliance Specialist
     I. Villalva, Reactor/Nuclear Engineer

   c. Other (Former TED Contract Employee)

   D. Till, Administrative Procedure Coordinator in Technical Support

   * Denotes those present at the exit meeting conducted telephonically on January 27, 1988.

2. Allegation Followup

   (Closed) RIII-87-A-0095: During the period from June 23 through November 10, 1987, the NRC received a number of concerns from a former employee at Davis-Besse. These concerns were reviewed by Region III both in-office and onsite with the following results:

a. Concern No. 1

Revision 27 to site administrative procedure AD-1805, "Procedure Preparation and Maintenance," dated May 19, 1987, was improperly processed in that the procedure was issued without the Quality Assurance (QA) Director's signature, contrary to the requirements of Section 5 of Toledo Edison's Nuclear Quality Assurance Manual.

(1) Findings: In evaluating this concern, the inspector reviewed Nuclear Group Procedure NG-AV-115, "Preparation and Control of Nuclear Group Division and Department Procedures," Revisions 26 and 27 of site administrative procedure AD-1805, "Procedure Preparation and Maintenance," and the administrative paperwork associated with the review and comment on Revision 27 to AD-1805. In addition, numerous individuals involved in preparing, reviewing, resolving comments on, and approving Revision 27 to AD-1805 were interviewed. Based on these activities the following information was obtained:

(a) NG-AV-115 is one of the controlling documents which imposes the requirements of the NRC approved Quality Assurance Program on preparation of Nuclear Group Procedures, and changes thereto. One of the requirements of NG-AV-115 is that all procedures and procedure changes affecting quality be approved by the Quality Assurance Department (QAD) prior to issuance and implementation. This requirement existed in Revision 26 to AD-1805 (a subordinate document) and was reflected in a then information-only site document entitled, "Test and Procedures Index" (T&PI), which identified those procedures requiring QAD approval. AD-1805 was identified on the T&PI as requiring QA approval.

The NRC does not specifically require this degree of in-line Quality Assurance Department (QAD) involvement in procedure preparation and change as part of the Quality Assurance regulations contained in 10 CFR 50, Appendix B; however, 10 CFR 50 Appendix B, Criterion V, does require that activities affecting quality be conducted in accordance with approved procedures. Thus, the procedure approval requirements contained in both NG-AV-115 and AD-1805, Revision 26 represent a conservative application of NRC requirements. This degree of conservatism in procedural control is not uncommon in the nuclear industry.

Revision 27 to AD-1805 was originated by the Technical Support Department. One of the changes proposed by Revision 27 was the deletion of QAD in-line approval of procedures and procedure changes. During the Revision 27 review process, which, in accordance with NG-AV-115, Revision 26 to AD 1805, and the T&PI, required QAD approval, QAD identified this change as unacceptable.

Ensuing attempts by both the Production and Quality departments at resolving QAD's comments were unsuccessful, and, on April 27, 1987, the draft Revision 27 was submitted to the site Safety Review Board (SRB) for resolution.

The SRB met on May 8, 1987, and, as indicated in the Procedure Development Form (PDF) for Revision 27, determined that NG-AV-115 would have to be revised to reflect the reduced level of QAD involvement in procedures and procedure changes before Revision 27 to AD-1805 could be approved and issued. The PDF was not signed by the QAD Director at this time because the requisite changes had not been made to NG-AV-115. The draft Revision 27 with SRB comments and the PDF without the QAD Director's signature were returned to the site Technical Support Group for continuing coordination of the revision process. On May 13, 1987, the Technical Support Manager signed the Revision 27 cover sheet indicating that the revision was ready for issuance. The Plant Manager also signed the cover sheet on May 13, approving its issuance and implementation. This signature process was reperformed on May 19, 1987. The second signatures by the Plant and Technical Support Managers were not required, and their purpose could not be determined. At the time of both signings, NG-AV-115 still required QAD approval of the revision. This approval had not been obtained as indicated by the lack of the QAD Director's approval signature. The failure to obtain required QAD Director approval prior to issuance of Revision 27 to AD-1805 was a violation of existing controlling procedures and was contrary to 10 CFR 50, Appendix B, Criterion V (346/87004-01(DRP)).

(b) During the interviews conducted regarding the circumstances surrounding the inappropriate approval and issuance of Revision 27 to AD-1805, the following pertinent information was identified:

i. The Technical Support Manager signed the cover sheet on May 13, 1987, based on verbal confirmation that all comments had been resolved.

ii. The Plant Manager signed the cover sheet on May 13, 1987, believing that the SRB had resolved QAD comments. He further stated that at the time he signed the cover sheet, he was unaware that a prerequisite revision to NG-AV-115 was required.

iii. On May 13, 1987, during the administrative processes supporting implementation of Revision 27 to AD-1805, including updating the T&PI, the fact that QAD had not approved the revision was brought to the attention of the Document Control (DC) Group, which was responsible for further processing and distribution, and the Systems and Procedures (S&P) Group, responsible for updating the T&PI. DC returned the procedure to Technical Support for resolution of this discrepancy prior to distribution.

iv. On May 14, 1987, an S&P Group supervisor signed the PDF with the notation to proceed with processing without QA concurrence.

v. Technical Support determined that QAD was not prepared to accept the necessary changes to NG-AV-115 to support implementation of Revision 27 to AD 1805.

Based on the results of interviews as discussed above, the lack of QA approval had been identified to at least three organizations assigned key functions in the procedure implementation process. Notwithstanding, Revision 27 to AD-1805 was issued on May 19, 1987.

(c) On May 19, 1987, QAD discovered that Revision 27 to AD-1805 was issued without its approval. Further attempts to resolve the concerns with Technical Support failed and, on June 26, 1987, QAD issued Potential Condition Adverse to Quality Report (PCAQR) 87-0322. This PCAQR was still open at the time of the inspection. A memorandum proposing escalation to a Management Corrective Action was prepared by the Director, QAD, on August 6, 1987. The purpose of this memorandum was to bring this issue to the attention of the Nuclear Group Vice President for resolution. This memorandum was not issued. The failure to take prompt and effective corrective action for the identified violation is a violation of 10 CFR 50, Appendix B, Criterion XVI (50-346/87-004-02(DRP)).

(d) QAD indicated during interviews that it is currently reviewing all procedures and changes issued under Revision 27 to AD-1805 to ensure that quality requirements were not deleted from site procedures. To date, no safety issues have been identified.

(2) Conclusions: Based on the above information, the following conclusions were reached:

(a) The changes made to AD-1805 by Revision 27 reduced the level of QAD involvement in the procedure control process.

(b) Revision 27 to AD-1805 was implemented in violation of Nuclear Quality Assurance Manual (NQAM) requirements. This failure to adhere to the NQAM is a violation of NRC requirements.

(c) The issuance of Revision 27 to AD-1805 in violation of NQAM requirements represents a deficiency in quality programs at Davis Besse in that the discrepancy leading to the violation was identified in accordance with approved practices prior to issuance and appropriate actions to establish compliance were not taken.

(d) Senior licensee management failed to take action to resolve a significant policy issue difference between the production organization and the independent quality organization, despite the fact that the issue had been identified to at least three cognizant organizations. This represents a violation of NRC corrective action requirements and, more importantly, points to a weakness in management performance.

b. Concern No. 2

Documentation of S&P supervisory direction to process Revision 27 to AD-1805 without QAD approval was taken from the alleger by site security when the alleger was escorted from the site.

(1) Findings: The alleger was escorted from the site on May 16, 1987, and the subject document was taken by security. During this inspection, a copy of this document was provided by the Davis Besse Ombudsman to the inspector. It is common practice for licensee organizations to recover licensee documents from individuals removed from the site. NRC regulations do not prohibit this.

(2) Conclusions: The concern was substantiated; however, there was no regulatory issue involved. The alleger's implication of attempted coverup was not substantiated, as the subject document was readily produced by the licensee.

c. Concern No. 3

Starting January 15, 1987, new revisions to procedures were not entered on the T&PI as required.

(1) Findings: As noted above, the T&PI was an information-only document and not subject to Quality Assurance Program controls. Notwithstanding, the inspection disclosed that during this time period, the responsibility for the T&PI was transferred from the SRB Clerk to DC and then to S&P, new computer systems were installed to track the T&PI, and DC was issuing new procedure manual indexes for site manuals. These changes were not proceduralized until Revision 27 to AD-1805 was issued, with the result that lines of responsibility were not clearly defined.

Some omissions to the T&PI did occur; however, a licensee audit in March-April 1987 identified these, and necessary corrections were made.

(2) Conclusions: The inspection substantiated that omissions occurred in the T&PI; however, interviews indicated that the problem had been identified by the licensee prior to the alleger's employment and that necessary corrective actions were in progress. Additionally, this issue is not a regulatory concern.

d. Concern No. 4

Inaccurate information was provided by S&P to management for reports on the status of assigned tasks.

(1) Findings: Personnel interviewed denied that this occurred. No written evidence could be found concerning this issue.

(2) Conclusions: This concern could not be substantiated. The alleged inaccurate information does not address regulatory or safety issues. Additionally, the alleger stated he was not aware of any problems with either associated records or records alterations.

e. Concern No. 5

An S&P supervisor directed the S&P staff to delay updating the computer data base used to track the procedure numbering system. The alleger was discouraged from bringing concerns to S&P and other management, and, when the alleger did discuss the situation with an S&P manager, was "chewed out."

(1) Findings: During the time frame in question, in an effort at more clearly establishing lines of responsibility, site management assigned S&P to issue, track, and revise indexes of procedure numbers. The responsibility for issuing new procedure indexes was later returned to DC. During this period an S&P supervisor purportedly was heard to comment that "if S&P doesn't do a good job on issuing procedure indexes, maybe DC will take the responsibility back". The supervisor denied having made this statement when confronted with it but did attribute the comment to the S&P Manager. Based on interviews with the alleger and several co-workers, the computer data base was updated regularly in spite of the perceived direction to the contrary from management.

Interviews with S&P supervisors and managers and the alleger disclosed that S&P management did approach the alleger to discuss this issue after he brought it to the attention of his supervisor.

(2) Conclusions: The concern that S&P management made statements that the S&P staff could interpret as direction to delay computer data base updates was substantiated. Notwithstanding, S&P did maintain the data base. In addition, S&P management made itself available to the alleger to discuss his concerns. Thus, the second portion of this concern was not substantiated.

f. Concern No. 6

The rules were not adhered to as illustrated by the following examples:

- Improper processing of Procedure AD-1805.
- The alleger was directed to not properly update the procedure numbering system.
- The alleger was directed to deviate from the established procedure for updating the Test and Procedure Index.
- Security wasn't informed that the alleger was fired on May 15, 1987; thus, it allowed him to come onsite on May 16, 1987.

(1) Findings. The inspector reviewed the first three items above in conjunction with inspection of other concerns. See previous discussion in this report.

The inspector's review of the last item determined that the alleger was not fired on May 15, 1987. The alleger was repeatedly instructed by supervision not to come to work on Saturday, May 16, 1987. The alleger disobeyed the directive and came in to do additional work. After purportedly disrupting work in DC he was asked to leave the site. At that time, termination proceedings were initiated by the alleger's supervisor and site access privileges were denied.

(2) Conclusions: The conclusions regarding the first three items are discussed above and within this report. The last item was not substantiated.

g. Concern No. 7

Insufficient time was expended on the development of a new maintenance procedure for the motor-driven auxiliary feedwater pump. Had the procedure been developed earlier, two previous failures would not have occurred. Also, the plant was inappropriately allowed to operate with the pump out of service.

(1) Findings: The inspector determined that the motor-driven auxiliary feedwater pump failed to operate twice, as stated by the alleger.

Following the June 1985 loss of feedwater event, the licensee initiated steps to install a motor-driven auxiliary feedwater pump to supplement the two existing steam-driven auxiliary feedwater pumps. Installation of this new pump was completed on January 10, 1986, without a maintenance procedure in place. On January 4, 1987, the licensee issued the pump vendor's manual with a licensee cover sheet as an approved maintenance procedure. Subsequent to the May 10, 1987 second failure, a licensee maintenance procedure was issued on May 13, 1987. This procedure was in the review cycle at the time of the May 10, 1987, failure. Interviews indicated that the procedure issuance was expedited after the event.

The first "failure" (January 11, 1986) was not, in fact, a failure. Rather, the control room operator became worried when the pump apparently did not start when he initiated the starting circuit. The plant at the time was in Mode 5, Cold Shutdown. Had the operator been properly trained on a new modification, he would have known that there was a 12-to 16-second time delay in the starting circuit to permit the bearing oil pump to develop normal oil pressure. This prelubrication is necessary before starting the main electrical motor.

The second "failure" (May 10, 1987) of the motor-driven auxiliary feed water pump also occurred while the unit was in cold shutdown. This failure occurred while operators were performing a valve lineup in preparation for placing the steam generators into wet layup and was also due to operator error. In this instance, an operator mistakenly shut a pump suction valve and caused the pump to seize. The pump was subsequently repaired and is presently operational.

(2) Conclusions: The staff determined that the alleger was not knowledgeable about the Davis-Besse auxiliary feedwater system. A maintenance procedure would not have prevented the problems involving the new motor-driven pump, as the problems were in no way related to maintenance. Finally, the plant was not allowed to operate while the pump was not operational.

h. Concern No. 8

Starting the plant had a higher priority than quality. The alleger presented no specific information to support this concern, and indicated it was only an opinion based on "gut instinct" and information obtained from co-workers.

(1) Findings: The alleger's concern is based on hearsay information obtained from conversations with co-workers. The alleger had no first-hand knowledge of any startup irregularities, since the plant was either at full power or being taken off-line for a planned extended maintenance outage during his employment.

The inspector's review indicated that the alleger's concerns regarding startup were based on his understanding of the June 9, 1985 event. After the event, Toledo Edison provided a Course-of-Action Plan to the NRC to improve the performance at the plant. The plan was designed to resolve NRC concerns and provide assurance that no undue risk to the health and safety of the public would result from the resumption of power generation. The NRC independently reviewed the status of the actions required to be completed prior to restart and concluded that licensee commitments had been satisfied, that necessary plant systems were tested prior to use, and that the plant was ready for power operations. Additionally, the NRC provided 24-hour inspection coverage during the initial plant restart operation to ensure a safe plant startup and noted no instances in which quality was sacrificed to satisfy schedular requirements.

(2) Conclusions: Based on the extensive NRC reviews and inspection activity that went into the Davis-Besse restart after the long outage, the inspector could find no basis for this concern.

i. Concern No. 9 The Temporary Procedure Modifications (T-Mods) Log may not have been kept up to date after the alleger's termination. There is also no one onsite with knowledge of how T-Mods are incorporated into specification revisions.

(1) Findings: T-mods are temporary procedure changes. Currently, they are called temporary approvals (TAs). Along with the name change, the responsible group for processing these changes changed from the Station Review Board (SRB) Clerk to Document Control (DC) to S&P. These changes occurred in 1986.

The mechanism to handle these changes was generally described in site Procedure AD-1805, Revision 25. Up to April 7, 1986, the SRB Clerk issued T-Mod numbers. These modifications were sequentially numbered after final approval of the changes by the Plant Manager. The Clerk logged each approved modification in a log book on her desk. The numbers were also entered into the old PRIME computer system. The Clerk would then forward the procedure change package to DC for processing. These T-Mods remained open until a new revision to the affected procedure was issued which incorporated the T-Mod. The SRB Clerk would then close the T-Mod. Some T-Mods are still open today.

Revision 26 to Procedure AD-1805, dated April 7, 1986, changed this mechanism and required that DC now issue the modification numbers and keep the log of the new TAs. Since the procedure wasn't very explicit, DC issued TAs without numbers. If the TA was not incorporated into a procedure change within the allowable 14 day timeframe, it was voided. DC had made up a separate control log book of these TAs. It was in the process of computerizing this tracking system during the time of the alleger's employment.

Concurrently, Systems and Procedures (S&P) was in the process of taking over the T-Mod Log from the SRB Clerk and the TA Log from Document Control. A new computer system (VAX) was to be used by S&P to do this. However, as it wasn't fully operational, the numbers had to be entered into the old PRIME computer system to ensure that no data was lost.

It wasn't until Revision 27 to AD-1805 was implemented that a detailed TA numbering system was initiated. The first TA number was issued on May 20, 1987.

In view of the transition which took place during the alleger's term of employment the inspector could understand why the alleger was concerned. This system as described was in fact confusing. When the alleger left the site, the transition was still in progress. After the alleger's termination, the individuals in DC and S&P who originally had these assignments kept the logs up to date. Subsequently, a Toledo Edison employee was given the full-time assignment to keep the T-Mods and TAs up to date.

(2) Conclusions: The concern was not substantiated.

j. Concern No. 10

Security did not remove the parking sticker from the alleger's car when the alleger was terminated.

(1) Findings: The staff determined that Davis-Besse parking stickers only allow one to park in the owner-controlled parking areas outside of the protected area. NRC security authority begins at the fence of the protected area.

(2) Conclusions: The explanation of this concern was discussed with the alleger during the November 10, 1987 interview. The alleger acknowledged that the NRC's jurisdiction doesn't extend to the owner-controlled area and stated that no further action was required.

k. Concern No. 11

The Ombudsman's Report No. 39 response on the alleger's concerns has questionable independence and accuracy. The Ombudsman did not properly record the alleger's concerns. The Ombudsman should have informed the alleger of the Whistle-Blowers Act.

(1) Findings: The Ombudsman Program at Davis-Besse is a licensee initiated program designed to provide an additional forum for employees to express concerns about activities and events. It has no regulatory basis. The program does not require that investigations of concerns be independent of the focus of the concerns, although that would be the ideal condition.

The program does require that the concerns of individuals be directed to a responsible Nuclear Group Director for investigation and resolution. Based on inspector review, the alleger's concerns were directed to the appropriate level of management. After discussions with cognizant individuals onsite, it appears that the resolution of Ombudsman's Report No. 39 was not done by an independent source. The prime author of the report was the alleger's second-level supervisor.

Based on the inspector's review of this concern, the following observations were made:

i. Several sessions between the NRC and the alleger were required to obtain a full characterization of the alleger's concerns. The concerns listed in the report appear to be a reasonable approximation of the concerns expressed to the NRC. No evidence of coverup or deliberate misrepresentation was discovered.

ii. The responses made to the Ombudsman Report were not based on an in-depth, comprehensive independent effort, with the result that definitive answers were not provided to the alleger by the licensee.

With regard to the Whistle-Blowers Act, the inspector determined that the licensee is in compliance with NRC regulations, Part 19 of 10 CFR, which require that each licensee post current copies of Form NRC-3, which states that if an employee believes he has been discriminated against for talking to the NRC, the employee may file a complaint with the U.S. Department of Labor within 30 days of the occurrence. The inspector determined that the alleger was required to take site training on the Ombudsman's program as well as on Part 19 and did pass a written test on this subject.

(2) Conclusions: The first portion of the alleger's concern was substantiated. The second portion of the concern was not substantiated in that the Ombudsman reasonably characterized the alleger's concerns. With regard to the Whistle-Blowers Act, the inspector concluded that the alleger was made aware of the provisions of the Act via mechanisms other than the Ombudsman Program and that these mechanisms satisfy existing regulatory requirements.

1. Concern No. 12

The alleger has been "blackballed" from future employment at Davis-Besse as a result of going to the NRC with concerns about the plant. The company also intentionally led the alleger on with promises of future employment for the sole purpose of eclipsing the 30-day statute of limitations that the Department of Labor has for investigating allegations of discrimination.

(1) Findings: NRC regulations prohibit discrimination against current employees for engaging in certain protected activities. One protected activity is providing the Commission information about possible violations of NRC requirements. The alleger provided the NRC with information about the plant; however, this was after his employment was terminated and after the alleger had been placed on the Denied Access List.

An employee who believes that he has been discriminated against may seek a remedy for the discrimination through an administrative proceeding of the Department of Labor. This proceeding must be initiated within 30 days after the alleged violation occurs. The alleger stated that he did go to the Department of Labor; however, he contacted it well after 30 days from being discharged. Thus, the Department of Labor dismissed the case based on the fact that the 30 days had expired.

Nevertheless, from interviews with personnel involved with the alleger onsite and from reviewing documents onsite, there are indications that the I&C Department wanted to hire the alleger after he was escorted offsite May 16, 1987. In fact, it appears that it was attempting to do so only to find out that the alleger was on the Plant Denied Access List. Thus, the alleger couldn't have been hired even if a position was open.

The staff could only find that individuals onsite probably informed the alleger that they would attempt to obtain other site employment in some other group. Co-workers attempted to obtain employment for the alleger in their group. In fact, the alleger was told privately that if a position opened up, an offer would be made; however, a position never opened up.

(2) Conclusions: The first portion of the concern was not substantiated in that, based on discussions with cognizant personnel, the alleger did not bring concerns to the NRC until after termination proceedings were completed. Regarding the second portion, no positive evidence could be found that the alleger was led to believe, by the Company, that there would be a future job at Davis-Besse. There is evidence that individuals attempted to hire him, but failed.

3. Exit Interview

During a conference call/telephonic exit interview with licensee representatives identified in paragraph 1, the inspector summarized the scope and results of the inspection and discussed the likely content of this inspection report. The licensee acknowledged the information and did not indicate that any of the information disclosed during the inspection could be considered proprietary in nature.