U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-346/85038(DRSS)

Docket No. 50-346 License No. NPF-3

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

Facility Name: Davis-Besse Nuclear Power Station, Unit 1

Inspection At: Edison Plaza, Toledo, Ohio and
Davis-Besse Site, Oak Harbor, OH

Inspection Conducted: December 2-6 and 10, 1985

Inspectors: T. Ploski (T. Ploski) 12/26/85
Date

for N. Williamsen (T. Ploski) 12/26/85
Date

Approved By: for M. Phillips, Chief (T. Ploski) 12/26/85
Emergency Preparedness Section Date

Inspection Summary

Inspection on December 2-6 and 10, 1985 (Report No. 50-346/85038(DRSS)
Areas Inspected: Special, announced inspection of the following aspects of the emergency preparedness program: licensee actions on previously identified items; performance of the corporate emergency organization drill; licensee actions on SALP commitments; emergency preparedness training; independent audits of the emergency preparedness program; and status of the TSC relocation study. The December 10, 1985 meeting addressed the inclusion of the City of Port Clinton in the plume exposure pathway Emergency Planning Zone (EPZ). The inspection involved 70 inspector-hours onsite and at Edison Plaza by three NRC inspectors.
Results: No violations of NRC requirements or deviations from commitments were identified.

DETAILS

1. Persons Contacted

a. Toledo Edison Personnel

+J. Williams, Jr., Vice President, Nuclear Operations
*S. Smith, Assistant Plant Manager, Maintenance
*L. Ramsett, Quality Assurance Director
#R. Klein, Nuclear Services Director
*N. Molter, Administrative Coordinator
#J. Scott-Wasilk, Environmental and Emergency Preparedness Manager
#R. Varley, Emergency Planning Supervisor
*R. Simpkins, Operations Training Manager
*B. Geddes, Quality Assurance Engineer
*J. Lietzow, Nuclear Licensing Specialist
F. Swanger, Supervisor, Shift Technical Advisers
C. Lietzow, Drill Controller, Planning Center
R. Markovich, Drill Controller, Engineering Support Center
B. Busse, Drill Controller, Financial Group
P. Carr, Drill Controller, Legal Group
L. Cech, Drill Controller, Procurement Group
A. Gephart, Drill Controller, Transportation Group
M. Teal, Drill Controller, Personnel Processing Group
K. Farr, Drill Controller, Public Relations
M. Findley, Drill Controller, Security
M. Beier, Drill Controller, Office Services
T. Kevern, Drill Controller, Emergency Control Center (ECC)
R. Palazzo, Drill Controller, ECC Dose Assessment
L. Klett, Drill Controller, ECC Communications
D. Gordon, Drill Controller, Control Room,
J. Kirkpatrick, Emergency Planning Staff
W. Begin, Emergency Planning Staff
C. Dupuy, Emergency Planning Staff

*Denotes personnel who attended only the December 6, 1985 exit interview.

+Denotes personnel who attended only the December 10, 1985 meeting.

#Denotes personnel who attended both the December 6 and 10, 1985 meetings.

b. Non-Licensee Personnel Attending the December 10, 1985 Meeting

J. Fritz, Mayor, City of Port Clinton
M. McLaury, Port Clinton Safety Director
J. Greer, Director, Ottawa County Disaster Services Agency
K. Cole, Nuclear Operations Office, Ohio Disaster Services Agency
W. Weaver, FEMA, Region V (by conference call)

2. Licensee Actions on Previously-Identified Items

(Closed) Open Item No. 346/85006-01: Unresolved Item regarding the independence of Quality Assurance (QA) Department personnel involved in the audits of the emergency preparedness program. This item was created due to the fact that two QA personnel who were involved in auditing the program also were among those assigned as Emergency Duty Officers (EDOs) in the onsite emergency organization. The concern was their independence if they would audit EDO-related or other aspects of the emergency preparedness program, per the requirements of 10 CFR 50.54(t). By memorandum dated November 11, 1985, both QA Department personnel who had been assigned EDO responsibilities were relieved of this additional duty and now have no position in the onsite emergency organization. This item is considered closed.

(Open) Open Items No. 346/85001-01 through -03: The licensee must re-evaluate all EAL conditions for applicability during any mode of plant operation and ensure that adequate procedural guidance is given to ensure that an emergency is properly classified and declared whenever appropriate EAL indicators have been satisfied (Open Item 50-346/85011-01); the licensee must have consistent wording in the footnotes preceding the EALs listed in the Emergency Plan and in procedure EI 1300.01 (Open Item 346/85011-02); and, the licensee must re-evaluate the need for requiring two of four indicators to be satisfied for the Alert EAL for the "Leak Rate greater than 50 gpm, but within High Pressure Injection System Capacity" condition (Open Item 346/85011-03).

The licensee was in the process of conducting an in-depth re-evaluation of the Station's EALs to address the aforementioned NRC concerns plus comments received from internal sources, including the new Plant Manager and the Shift Technical Advisors (STAs). The licensee planned to issue the revised EALs as part of Revision 10 to the Emergency Plan, which was scheduled to be issued in March 1986. These items remain open.

(Closed) Open Item No. 346/85011-04: Revise Item 4.a.e. of Attachment 2 to EI 1300.04 and 1300.05 to provide adequate guidance that affected offsite areas will be described to offsite authorities in terms of subareas, and that Subarea Number 1, which is about a two mile radius from the station, will always be included whenever offsite protective actions are recommended. In mid-October 1985, the licensee revised both procedures and the subarea boundaries of Subarea 1 and those portions of Lake Erie within the 10 mile Emergency Planning Zone (EPZ). Subarea 1 was redefined as those land areas generally within about two miles of the Station, while Subarea 8 was redefined to encompass all portions of Lake Erie within the EPZ. Both procedure revisions clearly indicated that Subareas 1 and 8 would be included in any offsite protective action recommendation. This item is considered closed.

(Closed) Open Item 346/85011-05: The licensee must develop and implement a system to ensure timely action to correct deficiencies in emergency supplies identified during periodic inventories. The inspector determined that the Emergency Planning staff, the Chemistry and Health Physics staff, and the Station's Safety Coordinator have agreed to and have implemented a revised method of accomplishing periodic inventories of various types of emergency supplies. Periodic inventory requirements were contained in revised procedure PT-5199.14 and new procedure PT-5199.27. Both procedures addressed the need for timely replacement of depleted or out-of-date supplies. This item is considered closed.

(Open) Open Item No. 346/85019-01: Differences between offsite geographic subareas depicted on large scale EPZ maps and those depicted in procedure AD 1827.12 contributed to the failure to include all areas within about a two mile radius of the station in the initial offsite protective action recommendation. The inspectors determined that the licensee was still in the process of eliminating differences between the subarea boundaries depicted on large scale EPZ maps, found onsite and at the Corporate Planning Center, and the maps found in procedures EI 1300.04, EI 1300.05, and AD 1827.12. This item remains open.

(Open) Open Item No. 346/85019-02: The failure to consult the station's EALs for applicability prior to downgrading from a General Emergency and later from an Alert, plus the incorrect procedural guidance that emergencies classified as at least an Alert must be downgraded below the Unusual Event class before commencing recovery activities, together resulted in inappropriate emergency declassification. The licensee indicated that revised guidance for downgrading an emergency classification and for declaring a Recovery mode of operation would be contained in Revision 10 to the Emergency Plan and in revisions to the relevant implementing procedures. The Plan revision is expected to be issued in March 1986. This item remains open.

(Open) Open Item No. 346/85034-01: The licensee must revise procedure AD 1839.00 to provide additional guidance regarding the information needs of the NRC Duty Officer. Training on the revised procedure, for all licensed personnel and the STAs, must be completed before restart. The inspectors determined that the STA Supervisor had completed the draft procedure ahead of schedule and that it was being submitted to the Station Review Board (SRB). The draft contained a slightly modified version of the Duty Officer's checklist so that the licensee's caller could better anticipate the NRC's information needs. Pending approval by the SRB, the licensee tentatively planned to conduct the required training in January 1986. This item remains open.

3. Corporate Emergency Preparedness Drill

One of the licensee's 1985 emergency preparedness goals was to complete initial training of the corporate emergency organization and to conduct a drill of this organization. Training of approximately 150 persons having positions in the corporate emergency organization took place during the second quarter of 1985. Due to the impact of the June 9th event on

the corporate staff and some changes to its normal organization, the initial drill was delayed from late September to December 3, 1985. In addition to various work areas at Edison Plaza, the licensee activated the Station's Emergency Control Center (ECC) for this drill. Involvement of the Control Room and Technical Support Center (TSC) was simulated through the use of controllers. The drill scenario was a modified version of that utilized in the 1985 practice exercise. Scenario modifications mainly involved the inclusion of a variety of messages from the Station or non-Toledo Edison sources to various staff at Edison Plaza, which were all intended to test the capabilities of the various corporate organization groups. The NRC was provided with copies of the scenario approximately one week before the drill, which was sufficient time to review the submittal and provide comments to the licensee.

The following corporate groups were activated for this drill: Executive Management; Engineering Support; Legal Services; Finance; Personnel Processing; Procurement; Transportation Support; Support Services; Office Services; Human Resources; Edison Operators; Security; and Public Relations (Director only). Two NRC inspectors observed the drill at the Edison Plaza. A number of licensee personnel served as controllers for the various groups. The inspectors attended two of the player critiques that immediately followed the drill and the all-controller critique session that occurred the next morning. The inspectors made the following conclusions regarding the corporate drill:

- The scenario provided a good challenge to the corporate organization.
- With very few exceptions, exercise participants demonstrated good understanding of their emergency response functions.
- The drill provided useful experience for the various groups in interfacing with each other or with the Station when dealing with a variety of problems.
- Communications between the Planning Center, Engineering Support Center (ESC), and the Station's emergency response centers should be promptly established once staffing of the corporate facilities is well underway.
- In general, the Planning Center staff was kept well informed of scenario events at the Station and at Edison Plaza.
- The Planning Center staff did a good job in monitoring offsite protective action recommendations; however, more concern could have been exhibited toward monitoring the implementation status of these recommendations.
- Planning Center staff should remain aware of current and forecast meteorological conditions and their impacts on onsite and offsite protective action recommendations formulated at the Station.

- Information on the current emergency classification and onsite and offsite protective actions should be posted in the ESC.

- Plume exposure pathway Emergency Planning Zone (EPZ) maps at Edison Plaza should include numerical and/or alphabetic wind direction references. The maps should be identical to those used onsite.

- The simulated arrival and briefing of a congressman and his staff was well handled by participants and controllers.

- Although not addressed in this scenario, the corporate organization should remain aware of all NRC activities in response to an emergency at the Station.

- Planning Center staff demonstrated proper concern for the wellbeing of Station personnel.

- The various groups adequately developed plans for long-term activation.

- The legal staff did a good job in responding to a number of problems. Staff actions were decisive. Documentation of activities was adequate and was forwarded to the Planning Center.

- Communications within the ESC were somewhat inhibited, as a speaker telephone line was often kept open with the Station.

- The reactor parameter status board was kept sufficiently current in the ESC.

- The procurement staff was aggressive in responding to equipment needs brought to its attention; however, on one occasion there was unnecessary confusion about the quantity and delivery location of nitrogen gas needed at the Station.

- The Personnel Processing Center was operated smoothly and efficiently. Processing activities were well done, even while the center was still being set up.

- Recordkeeping should be improved in the ESC.

The NRC staff will monitor the licensee's actions in response to the improvements suggested by the participants, drill controllers, and NRC observers.

4. Performance on SALP IV Initiatives

The following paragraphs summarize the progress made by the licensee during 1985 on the various initiatives undertaken as a result of the SALP IV evaluation of the emergency preparedness program. Additional details on the licensee's actions are contained in one or more of the following Inspection Reports: 50-346/85002(DRSS); 50-346/85006(DRSS); 50-346/85011(DRSS); 50-346/85019(DRSS); and 50-346/85034(DRSS).

a. Exercise-Related Initiatives

A successful exercise of the Station's emergency plan was conducted on schedule in July 1985. The sufficiently challenging scenario was developed by a committee comprised of licensee and consultant personnel. The licensee component of the committee was made up of persons drawn from various divisions. Their efforts toward preparing a complete, technically accurate scenario on schedule were give. appropriate senior management support. The licensee had indicated that a scenario development committee would be formed annually, but that its membership may vary. In order to improve the overall capabilities of the onsite emergency organization and to better prepare for the 1985 exercise, the licensee conducted a number of drill within the various emergency response facilities in addition to classroom training sessions. All sessions were critiqued and resulting comments were evaluated for possible action. The increased emphasis on conducting drills within the emergency response facilities also afforded controllers with additional opportunities to refine their skills. In contrast to the some exercise observations, the 1985 NRC exercise inspection team did not identify any significant examples of improper or inept controller actions.

b. Tracking of Improvement Items By the Licensee

In November 1985 the licensee fully implemented the computerized Emergency Planning Activity Scheduling System (EPASS), which is designed to track corrective actions being taken by the Emergency Planning staff with or without the assistance of other groups. Over five hundred action items have been added to the EPASS, including items which originated from NRC Inspection Reports, internal audits, training session critiques, drill critiques, and other sources. Responsible personnel and due dates have been identified for each item on the EPASS. Provisions exist for periodically informing senior management of any overdue items. Regional staff has been satisfied with the licensee's progress on developing and implementing the EPASS.

c. Establishment of a Lead/Alternate EDO System

In November 1985 the new Emergency Planning Supervisor completed all EDO training requirements. In view of his past involvement with the Station's emergency preparedness program, the new supervisor already had an in-depth knowledge of the overall program. By internal memorandum dated November 11, 1985, all persons who had been rotating the EDO duty on a weekly basis were officially notified that the practice was discontinued effective on that date. By memo dated November 25, 1985, four persons from the former pool of about twelve EDOs were designated as Alternate EDOs, with the understanding that the individual who is also a member of the Emergency Planning staff would be the first choice to assume the Lead EDO position in the absence of the Emergency Planning Supervisor. Regional staff is satisfied that the transition from a group of persons who rotated EDO duties on a weekly basis to a Lead/Alternate EDO concept has been completed in an appropriate manner.

d. Clarification of the Roles of the Shift Supervisors (SSs) and Shift Technical Advisors (STAs) on EDO Responsibilities

Both the SSs and STAs had completed interim EDO training during the first quarter of 1985; however, the STAs had subsequently requested additional interim-EDO training before they were willing to accept the possibility that the SS could transfer all interim-EDO responsibilities to the on-duty STA following an emergency declaration. This and other factors led to further internal discussions regarding the desirability of having an STA function as an interim-EDO in lieu of the SS, as had been described in Revision 9 to the Emergency Plan and relevant implementing procedures. By letter dated September 30, 1985, the licensee formally revised the intended use of STAs as interim-EDOs from that concept described in Revision 9 to the Emergency Plan. Although STAs will be trained as interim-EDOs, they would not function as such unless both the SS and Assistant SS were not in the Control Room or were both physically incapable of functioning as interim-EDO.

During October 1985 the licensee revised those implementing procedures which addressed the roles of the SS and STA on performing interim-EDO responsibilities to conform to the description found in the September 30th letter. All STAs received supplemental training on interim-EDO responsibilities on November 4-6, 1985, to satisfy a commitment in the licensee's Course of Action submittal to the NRC. The training was conducted by members of the Emergency Planning staff, one of whom had been an instructor in the Station's Training Department. The inspector reviewed the attendance sheets and final lesson plan for this training effort, and determined that all STAs had been given the training. The lesson plan indicated that the course was adequate in scope and depth, addressed relevant implementing procedures, and was up-to-date, especially regarding the finalized roles of the SSs and STAs on performing interim-EDO duties.

The inspectors determined, however, that there was some delay in ensuring that all licensed personnel would be formally informed of the final decision regarding the STAs' role in the performance of interim-EDO tasks. Licensed personnel would have until late December 1985 to complete the required reading file containing many recent procedure revisions, including those which clarified the roles of the SSs and STAs on interim-EDO duties. Consequently, the licensee committed to issue an internal memorandum to all licensed personnel to inform them of the intended SS/STA relationship on interim-EDO responsibilities in a more timely manner than available through the required reading file. This memo was issued on December 10, 1985.

e. Improvements to the Emergency Planning Staff

In early 1985 this staff had decreased to three full-time licensee personnel, including administrative support, plus a number of consultants. Specialized emergency preparedness training was mainly being done by consultants. A March reorganization resulted in an

Acting Manager of Environmental and Emergency Preparedness gradually assuming from the re-assigned Emergency Planning Supervisor all responsibilities for the emergency preparedness program, including improving the size and technical expertise of the staff. By October 1985, final selection of the Manager and Supervisor had been completed, and both persons were functioning in their positions. The supervisor's staff had expanded to thirteen identified positions, divided into the following areas of primary responsibility: onsite emergency planning; offsite emergency planning; corporate emergency planning; computer support; general support; and clerical support. Recruitment was completed by November and all staff were onboard by December 9th. The staff included persons having health physics, nuclear plant operations and training, environmental, and emergency planning backgrounds. During the staffing process much reliance was appropriately placed on consultants for conducting specialized emergency preparedness training. However, the licensee's staff has become increasingly involved in the lesson plan preparation and instruction processes, the most recent example being the staff's lead role in preparing and conducting the supplemental training for STAs on interim-EDO responsibilities. In summary, Regional staff has been satisfied in the growth of the Emergency Planning staff during 1985.

f. Roles of Quality Assurance and Emergency Planning Staffs in Audits of the Program

During 1985 the licensee provided adequate clarification regarding the preparation and review of checklists used by Quality Assurance (QA) Department staff when auditing the emergency preparedness program. Although it was appropriate for QA and Emergency Planning staffs to discuss the checklist at the audit's entrance meeting, it was clarified that the audited staff was prohibited from requesting deletions from the checklist before or after the audit, and could only suggest that the checklist be enlarged to better ensure that the requirements of 10 CFR 50.54(t) would be satisfied by the audit. Furthermore, any suggested additions to the checklists would be generally worded by topic area rather than being specific audit questions. The auditors would, therefore, be free to formulate specific questions on any new areas suggested during the audit entrance meeting.

A separate concern regarding the independence of auditors, who also held positions in the onsite emergency organization, has been resolved by the implementation of the Lead/Alternate EDO concept in early November 1985. Several persons in the QA Department who were also on the roster of EDOs were not selected as alternates to the Lead EDO, who was the new Emergency Planning Supervisor.

5. Recent Emergency Preparedness Training Activities

The inspectors determined that the new Vice President, Nuclear, the new Plant Manager, and Emergency Planning Supervisor have completed all training requirements for their emergency organization positions. As indicated in Paragraph 4, all STAs completed supplemental training on interim-EDO responsibilities in early November 1985. Due to a reorganization in the Maintenance Department, several persons were added to the roster of Operational Support Center (OSC) Managers. The inspectors verified that these individuals had successfully completed required training for this position on October 10-11, 1985. The inspectors also reviewed the associated lesson plan and concluded that it adequately addressed relevant procedures; however, the following are suggested improvements to the OSC Manager Lesson Plan:

- Greater emphasis should be placed on the habitability criteria for relocating the OSC.
- The lesson plan should also indicate that emergency repair teams must be called out for any OSC activation, as indicated in the implementing procedure.
- The lesson plan should clearly indicate who was responsible to call out personnel to form search and rescue, emergency repair, and re-entry teams.

6. Licensee Audits

The inspectors reviewed the records of several audits of the emergency preparedness program which had already been completed during 1985. All records of these audits were complete and readily available. Audit No. 1396 addressed the implementation of various EI - and AD - series procedures and the annual medical drill. The QA staff was adequately monitoring the Emergency Planning staff's progress on corrective actions for the audit findings. Some extensions on completing corrective actions had been granted, due to these actions being associated with the revision to the Emergency Plan scheduled for March 1986. QA staff was also adequately tracking corrective actions on three findings resulting from Surveillance No. 1473, which was performed during the annual exercise. The auditor tasked with observing the corporate drill also stated that a QA surveillance report would be generated for that event and that QA staff would more frequently audit the various emergency preparedness drills. The principal annual audit of the program was conducted during the period October 28 through November 15, 1985. The audit was performed by certified auditors from the SAIC company, with the assistance of one of the Station's QA staff. Only a draft audit checklist was available for review, as the audit report was still in preparation by SAIC. It was evident, however, that the checklist had largely been based on the criteria of NUREG 0654, Revision 1.

7. Completion Status of the Technical Support Center (TSC)

As indicated in Inspection Report No. 50-346/85034(DRSS), the licensee was conducting a feasibility study to determine whether some TSC staff could be relocated from the current TSC within the Davis-Besse Administration Building (DBAB) to a TSC to be reconfigured from available workspace within the protected area. If the creation of a TSC within the protected area was feasible, any remnants of the TSC organization and equipment remaining at the DBAB would likely be merged with personnel and equipment in the building's Emergency Control Center (ECC) to form, in essence, a single Emergency Operations Facility (EOF) at the DBAB. Based on discussions with the licensee, the inspectors determined that the licensee's initial plan to convert several work areas within the Control Room's emergency ventilation system envelope into a TSC was probably not feasible. In early December, the licensee was determining whether work space in the vicinity of the Radiation Access Control Area (RACA) or on the turbine deck could be converted into a suitable TSC. The licensee indicated that its feasibility study would be completed at the end of January 1986. The inspectors requested that the licensee keep Region III Emergency Preparedness staff informed of the progress on the TSC relocation feasibility study.

8. Emergency Planning Zone (EPZ) Meeting - December 10, 1985

The meeting was held at the Davis-Besse site with those representatives denoted in Section 1 to discuss the December 9, 1985 letters from the Federal Emergency Management Agency (FEMA) to the State of Ohio, especially as they related to the inclusion of the City of Port Clinton in the EPZ. A brief description of the events that had occurred prior to the issuance of the letters was provided. The City of Port Clinton representatives stated that they did not feel any major obstacle would exist, provided that the entire city was included in the EPZ and that the extra provisions provided to Ottawa County were also provided to the City. Licensee representatives agreed with the city's position, and another meeting between the licensee and city representatives was scheduled to work out the details. Both the NRC and FEMA representatives described their respective regulations regarding this issue.

9. Meetings

a. December 6, 1985 Exit Interview

The inspectors discussed their preliminary findings with those licensee representatives denoted in Paragraph 1. The licensee agreed to consider the items discussed. The Operations Training Manager committed to issue a memo within one week to all licensed personnel regarding the finalized relationship between the Shift Supervisors and Shift Technical Advisors regarding performance of interim-EDO responsibilities. The licensee indicated that none of the matters discussed were proprietary in nature.

b. December 10, 1985 Meeting

The inspector participated in a meeting on FEMA's response to the proposed revision to the plume exposure pathway EPZ borders, especially as it related to the inclusion of the City of Port Clinton, with those governmental and licensee representatives denoted in Paragraph 1.