

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-346/86007(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: Davis-Besse Site, Oak Harbor, OH

Inspection Conducted: April 21-25 and 30, 1986

Inspectors: *T. Ploski*
T. Ploski
Team Leader

5/8/86
Date

N. Williamsen
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5/8/86
Date

Approved By: *W. Snell*
W. Snell, Chief
Emergency Preparedness Section

5/8/86
Date

Inspection Summary

Inspection on April 21-25 and 30, 1986 (Report No. 50-346/86007(DRSS))

Areas Inspected: Routine, unannounced inspection of the following aspects of the emergency preparedness program: licensee actions on previously identified items; emergency detection and classification; protective action decisionmaking; notifications and communications; changes to the emergency preparedness program; shift staffing and augmentation; knowledge and performance of duties (training); public information program; licensee audits; and maintaining emergency preparedness. The inspection was performed by two NRC inspectors and two consultants.

Results: No violations of NRC requirements were identified.

DETAILS

1. Persons Contacted

- *D. Amerine, Assistant Vice President, Nuclear
- *L. Storz, Plant Manager
- *M. Stewart, Training Director
- *T. Myers, Nuclear Safety and Licensing Director
- *W. O'Connor, Assistant Plant Manager, Operations
- *R. Klein, Nuclear Services Director
- *J. Scott-Wasilk, Environmental and Emergency Preparedness Manager
- **R. Varley, Emergency Planning Supervisor
- *J. Buck, Lead Internal Auditor
- *B. Geddes, Associate Quality Assurance Auditor
- *B. Cope, Lead Onsite Emergency Planner
- **J. Lietzow, Nuclear Licensing Specialist
- B. DeMaison, Lead Offsite Emergency Planner
- M. Findlay, Offsite Emergency Planner
- D. Gordon, Onsite Emergency Planner
- N. Flood, Emergency Planning Secretary
- R. Mizik, Shift Supervisor
- D. Staudt, Shift Supervisor
- S. Wise, Shift Supervisor
- N. Wahl, Assistant Shift Supervisor
- R. Dietz, Assistant Shift Supervisor
- G. Hillebrecht, Assistant Shift Supervisor
- J. Rogers, Shift Technical Advisor
- T. Lange, Shift Technical Advisor
- D. Brown, Shift Technical Advisor
- P. Timmerman, Operations Training Instructor
- J. Freel, Training Instructor
- R. Rutledge, Training Instructor
- T. Bloom, Licensing Engineer
- R. Strauss, Fire Marshall
- G. Reed, Emergency Planning Consultant
- A. Lee, Emergency Planning Consultant
- S. Danielson, Emergency Planning Consultant

*Indicates those who attended the April 25, 1986 exit interview.

**Indicates those who participated in the April 30, 1986 conference call.

2. Licensee Action on Previously Identified Items

(Closed) Open Item No. 346/85011-01: The licensee must reevaluate all Emergency Action Level (EAL) conditions for applicability during any mode of plant operation to ensure that an emergency is properly declared whenever appropriate EAL indicators have been satisfied. The inspectors determined that this reevaluation had taken place and that appropriate changes in mode applicability for certain EALs had been made. This item is closed.

(Closed) Open Item No. 346/85011-02: The licensee must have consistent wording, especially regarding the meaning of asterisks, in footnotes and by individual EALs listed in the Emergency Plan and in Procedure EI 1300.01. The inspector reviewed Revision 10 to EI 1300.01 and discussed the manner in which EALs are to be listed in Revision 10 to the Emergency Plan, which will be issued in May 1986. The inspector determined that the use of asterisks and differently worded footnotes regarding mode applicability had been discontinued. Instead, applicable modes were specified by each EAL. This item is closed.

(Closed) Open Item No. 346/85011-03: The licensee must reevaluate the need for requiring two of four indicators to be satisfied for the Alert EAL for the "Leak Rate Greater than 50gpm, but within High Pressure Injection System Capacity" Condition. The inspector reviewed the EALs listed in Revision 10 to EI 1300.01 and determined that the EAL in question had been revised so that any one of several indicators, rather than multiple indicators, would be sufficient to warrant an Alert declaration. This item is closed.

(Closed) Open Item No. 346/85034-01: The licensee must revise Procedure AD 1839.00, Station Operations, to provide additional guidance to communicators in order to better anticipate the information needs of the NRC Duty Officer. Associated training to all licensed personnel and Shift Technical Advisors (STAs) must be completed before startup. The inspectors determined that AD 1839.00 had been revised to include a copy of the current revision to the NRC Duty Officer's Event Notification Worksheet. Licensed personnel and STAs had been trained on this procedure revision and the need to complete a copy of the worksheet for call documentation purposes, during their recent training shifts. The inspector determined that AD 1839.00 had again been revised in late April 1986 to delete obsolete guidance regarding the time requirements for initially notifying the NRC Duty Officer of any emergency declaration. This guidance contained in Revision 14 to AD 1839.00 accurately reflected the requirement of 10 CFR 50.72(a)(3) and was consistent with guidance found in implementing Procedures EI 1300.02 through EI 1300.05, that were referenced by Control Room personnel during walkthroughs conducted during this inspection. This item is closed.

3. Emergency Detection and Classification (82201)

Walkthroughs, using a station blackout scenario, were conducted with three sets of shift personnel each consisting of a Shift Supervisor, an Assistant Shift Supervisor, and a Shift Technical Advisor. The scenario and associated general discussion of emergency preparedness topics were structured to assess the adequacy of training and personal knowledge regarding accident detection and classification; offsite notification requirements; onsite and offsite protective action decisionmaking; and activation of the onsite emergency organization. Each group of personnel were prebriefed that their interview session was "open book," that teamwork was encouraged, and that clarifications and additional data would be provided upon request.

The overall performance of the three sets of personnel was adequate. Appropriate emergency classifications were made. Personnel demonstrated a good understanding of normal and accident plant chemistry; knowledge of Emergency Action Level (EAL) setpoints for satisfying various EAL indicators; the possible offsite consequences associated with the four emergency classes; and initial offsite notification requirements.

Revision 10 to Procedure EI 1300.01 became effective in January 1986. This procedure included the Station's EALs, which were reevaluated during this inspection. The revision was largely a regrouping of EALs into the following categories: primary system events; reactor coolant system leakage; safety system functions; electrical failures; secondary system events; radioactive releases; hazards to station operations; natural events; and miscellaneous. As indicated in Section 2 of this report, Revision 10 also included changes to several EALs in response to Open Items and improvement items identified during a previous routine inspection, and similar concerns expressed by new Station management and/or shift personnel. The inspectors concluded that the revised EALs were improved over those previously in use. The reformatting should make specific EALs easier to locate, as was intended by the licensee's Emergency Planning (EP) staff. The EP staff indicated that the revised EALs would be included in the next revision to the Emergency Plan, which was scheduled for submittal to the NRC in May 1986.

The revised EALs were compared to the guidance in NUREG-0654, Revision 1. Differences were then discussed with those members of the EP staff who were involved in the revision process. The inspectors concluded that the revised EALs allowed for appropriate classification of emergencies, per the regulatory guidance, except as follows:

- Although an EAL Condition associated with a Site Area Emergency classification addressed an extended (at least 15 minutes) loss of all offsite and all onsite AC power, no EAL condition associated with an Alert classification was found for a shorter duration loss of all offsite and all onsite AC power. The licensee must add an Alert EAL for the situation of a loss of all onsite and all offsite AC power that lasts under 15 minutes. This is an Open Item. (346/86007-01)
- A Site Area Emergency would be classified per the EALs if all annunciator alarms and the station computer were lost for over 15 minutes during a transient. The licensee indicated that the station computer was added to this EAL condition as the computer would fall behind during certain transients. However, the 15 minute duration given in the EAL condition was less conservative than the regulatory guidance which included no such element of time. The licensee must reevaluate the rationale for including a 15 minute time duration in the Site Area Emergency EAL for loss of all annunciators and the station computer. This is an Open Item. (346/86007-02)
- The Station's EALs indicated that an Alert would be classified for any fire that could potentially affect a safety system, provided that offsite fire fighting support was also required. Regulatory

guidance indicated that an Alert declaration was appropriate for this type of fire, whether or not offsite fire fighting assistance was requested or required. The licensee must reevaluate the Alert EAL for fires potentially affecting safety systems, with respect to the perceived need to have requested offsite firefighting support before making an Alert classification. This is an Open Item. (346/86007-03)

- The Station's EALs for "Hazards to Station Operations" did not include an Unusual Event EAL for the condition of a turbine rotating component failure causing a rapid plant shutdown. The licensee must add an Unusual Event EAL for a turbine rotating component failure that causes a rapid plant shutdown. This is an Open Item. (346/86007-04)
- The Unusual Event EAL for earthquakes included as an indicator that the quake must also be confirmed by a seismic instrumentation alarm. Regulatory guidance does not indicate that confirmation is necessary via a seismic monitoring system's alarm. Therefore, it could be possible that the station's seismic monitoring equipment may be partially or totally inoperable or out of calibration at the time of a seismic event; thus, an Unusual Event would not be declared if the monitoring system did not alarm. The licensee must revise the earthquake EAL associated with an Unusual Event classification to include provisions for making the classification in the case that the station's seismic monitoring equipment is partially or totally out of service or out of calibration. This is an Open Item. (346/86007-05)

In addition, the following items should be considered for improvement:

- The General Emergency EAL associated with loss of fission product barriers should list indicators, such as failed fuel monitors or containment radiation levels, in addition to the stated primary coolant sample results as sufficient evidence of cladding failure.
- A typographical error in the containment pressure indicators for the Alert EAL for abnormal containment atmosphere should be corrected.

4. Protective Action Decisionmaking (82202)

Two of the groups of shift personnel interviewed during this inspection were asked questions regarding onsite and offsite protective actions. The groups were readily able to locate and utilize procedural guidance for offsite protective action decisionmaking. All knew that a protective action recommendation was required following any General Emergency declaration. Regarding onsite protective actions, those asked responded correctly to questions on assembly and accountability requirements; considerations prior to ordering evacuation of nonessential personnel; and emergency worker exposure limits and the associated need to select volunteers for lifesaving and vital equipment repair tasks.

Based on the above findings, this portion of the licensee's program was adequate.

5. Notifications and Communications (82203)

During the Control Room walkthroughs described in Sections 3 and 4, the inspectors required shift personnel to complete an initial offsite notification form, as found in EI-series procedures, for State and local officials. The inspectors noted that several persons had difficulty in completing that portion of the form which was meant to provide a brief description of the circumstances that had warranted an emergency declaration. The inspectors concluded that the apparent difficulty in completing the form was due to the individuals' concern for expressing the EAL conditions and indicators in terms they thought State and local officials would readily understand. The inspectors noted that the Station's EALs did not have a numbering or other scheme which could be referenced by senders and recipients of initial notification messages. Implementation of such a scheme should eliminate the situation where shift personnel, at the time of an emergency declaration, delay transmission of an initial notification message (or perhaps transmit incomplete information) while they wrestle with perceived problems of how best to describe technical plant conditions in words that can be readily understood by State and local officials. The licensee must develop, for use during transmission of initial notification messages to State and local officials, an improved method for adequately describing those plant conditions which warranted the emergency declaration. This is an Open Item. (346/86007-06)

The licensee's emergency communications equipment was described in Section 7.5.2 of the Emergency Plan. The following upgrades in equipment were underway:

- Sheriff's Radio Tower: This tower will be owned by the licensee and space on the tower will be made available to various organizations that may need additional radio communications capabilities for emergency purposes. Telephone trunk lines from the Toledo Edison phone system will be carried to a commercial radio/telephone interface for the Sheriff's tower so that the new radio equipment for the offsite radiation monitoring teams can utilize the phone system. The schedule for the tower was on time. Erection and operation was expected in August 1986.
- Siren Upgrade: The existing prompt notification (siren) system has had three types of problems: (a) activation of a siren causing voltage spike which can burn out the electronic controller, thereby leaving the siren in an "on" mode until someone goes to the siren and turns it off; (b) the electronic apparatus is moisture-sensitive and will occasionally cause a failure, again in the "on" mode; (c) the encoding for siren activation is relatively primitive to the extent that a siren could be activated by an unauthorized person. The system upgrade in progress was intended to resolve these problems. All sirens will be equipped with more reliable controllers. Siren electronics will be less sensitive to moisture. The encoding system

will be upgraded. Additional built-in diagnostics will allow remote interrogation of electronic components. The licensee will have a system monitoring console, while Ottawa and Lucas Counties will have system controlling consoles.

As a result of the revision to the 10-mile Emergency Planning Zone (EPZ) border, several additional sirens will be installed in Port Clinton and in the western portion of the EPZ. Equipment delivery has been delayed by the supplier, and all deliveries were not expected to be completed before August 1986. Thus, although some system modifications should be completed by September 1986, completion of all siren system upgrades will likely be later in 1986.

- Portable Communications for RMTs: The Radiation Monitoring Teams (RMTs) will have the emergency use of new 4-wheel drive vehicles which were already onsite. Radio equipment for these vehicles included a "scrambled" mode of operation and a new radio frequency. Delivery and installation of all radio equipment was on-schedule. Task completion was expected by mid-June, 1986.

The inspector reviewed records of late 1985 and early 1986 communications drills performed per Procedure PT 5108.01. These included two monthly, three quarterly, and one annual drill. All drills were performed on schedule and were adequately documented. The exception to the otherwise satisfactory drills was the lack of acceptance criteria for tests of the pager system. The inspector noted instances where not all persons paged had responded; however, there were no indications that the tests were considered unacceptable and corrective actions had been completed. This problem had been identified during a May 1985 Quality Assurance (QA) audit. Although corrective actions were near completion, two extensions had been granted and completion of all corrective actions had taken an inordinately long twelve months.

With the exception of the lengthy delay in completing corrective actions regarding acceptance criteria for pager tests, this portion of the licensee's program was adequate.

6. Changes to the Emergency Preparedness Program (82204)

a. Status of the 10-mile Emergency Planning Zone (EPZ) Boundary Issue

By correspondence dated March 19, 1986, the Federal Emergency Management Agency (FEMA) responded to the Ohio Disaster Services Agency's (ODSA) multipoint proposal to redefine the EPZ boundaries. FEMA rejected a portion of the proposal which would have deleted from the present EPZ non-federally controlled lands within Jerusalem Township in neighboring Lucas County. FEMA has formally informed the ODSA that an emergency plan for the affected portion of Lucas County must be submitted to FEMA Region V within 120 days of the FEMA response (mid-July 1986). The new offsite emergency plan and procedures could be "stand alone" documents for Lucas County, focusing on Jerusalem Township, or an annex to the host (Ottawa)

county plans addressing Jerusalem Township. FEMA also set the same 120 day deadline for scheduling a 1986 public meeting and an exercise of the new plan and procedures for Jerusalem Township.

FEMA agreed with other aspects of the ODSA's proposal, regarding the extension of the EPZ to include all of the City of Port Clinton; exclusion of the small segment of Sandusky County currently within the EPZ; and the adjustment of southern and western portions of Harris and Benton Townships in Lucas County to better coincide with political borders or roadways. These changes will result in some additions to the present prompt notification (siren) system. The ODSA was apparently taking the lead role in modifying the Ottawa County plan and implementing procedures to address these border adjustments.

The inspector reviewed internal correspondence and correspondence between the licensee and the ODSA related to the development of an adequate emergency plan and implementing procedures covering Jerusalem Township in Lucas County. The inspector also discussed this planning effort with cognizant members of the licensee's EP staff. The inspector concluded that the licensee has maintained a positive attitude toward working with State and local officials in redefining the EPZ border, especially in resolving the FEMA concern regarding Lucas County. The licensee had recently selected a group of about six contractors who will be tasked with developing a new plan and implementing procedures for affected areas in Lucas County. Although the licensee will use contractors to develop these plans and procedures, the EP staff has correctly recognized their need to remain closely involved in this effort, as they will remain responsible for maintaining good working relationships with affected government officials once the contractors have completed their task.

On April 30, 1986 the licensee informed the inspector that the April 28 meeting with representatives of the ODSA, Lucas County and Jerusalem Township governments had taken place. The parties have agreed that the required offsite plan and procedures will be in the form of a "stand alone" document for Lucas County, rather than as an annex to Ottawa County's plan and procedures. The ODSA will inform FEMA of this decision, and could request a time extension for plan and procedure development. It was also possible that time extensions would be requested for an exercise of the new Lucas County plan and a public meeting on this plan. The licensee agreed to keep Region III staff informed of activities related to the resolution of the Lucas County emergency planning issue.

b. Completion Status of Emergency Response Facilities (ERFs)

The inspector toured the licensee's ERFs, both within the protected area and within the Davis-Besse Administration Building (DBAB), and discussed their completion status with senior station management and cognizant members of the EP staff.

Revision 9 to the Emergency Plan described the Operations Support Center (OSC) as the Conference Room and offices on the fifth floor of the Station's Office Building. The licensee planned to convert two adjacent rooms across the hallway from the Plant Manager's office on the fifth floor into one large room which would serve as the OSC for maintenance and Chemistry and Health Physics (C and HP) technicians, under the direction of an OSC Manager. Conversion of these work areas into one OSC workspace was scheduled for completion by the September 1986 exercise.

As indicated in Inspection Report No. 50-346/86008, the licensee had completed the Technical Support Center (TSC) relocation feasibility study and concluded that the TSC would remain in the DBAB, at least through 1986. However, the licensee still planned for the senior C and HP individual onsite to report to the former Central Alarm Station (CAS) adjacent to the Control Room rather than to the DBAB's TSC. This Emergency C and HP Manager would be joined by the Emergency Assistant Plant Manager, who formerly reported to the Control Room, and one licensee communicator. The inspector toured this former CAS area and saw that it was being used as storage space. The licensee indicated that the room had about 86.2 square feet of floor space, was within the Control Room's emergency ventilation system envelope, and would be the Assistant Shift Supervisor's office during normal operations. The licensee indicated that there would be space and communications equipment for one NRC Site Team representative, although the licensee had been informed in February 1986 that two or perhaps three NRC Site Team personnel may need to be located in this room. The licensee still planned to demonstrate this area as an emergency response facility during the September 1986 exercise. The Plant Manager and senior EP staff indicated that a total relocation of the TSC from the DBAB to workspace within the protected area was still considered feasible, but not under the current fiscal year's budget. The EP Supervisor indicated his willingness to meet with Region III staff in May 1986 to further discuss NRC Site Team personnel and equipment needs within the former CAS area.

Regarding the DBAB's TSC, the inspector shared the concern of the licensee's EP and Quality Assurance (QA) staffs that the facility remain readily available for emergency response. The room has been made into workspace for 12 to 15 persons, some of whom have positions in the emergency response organization. Although their workspaces were to be largely restricted to areas along the walls of the TSC, one of the findings of Audit No. 1473 indicated concern that the central area in the TSC was too often being used as unauthorized workspace. The licensee indicated that there were plans to enclose the central portion of the TSC within glass partitions to better restrict it from unwanted use. Relocation of persons using peripheral portions of the TSC as normal workspace was also being considered.

Expansion of the Emergency Control Center (ECC), which is the licensee's EOF, was in progress during the inspection. This expansion would result in ECC dose assessment staff and their NRC Site Team counterparts being moved from a corner of the current ECC to a larger workspace which had been a small conference room. The ECC and dose assessment rooms would be separated by a wall having a large window, to allow view into both areas and reduce noise levels in the ECC room due to the relocation of computer equipment used in dose assessment. The licensee was also ready to raise wall-mounted status boards in the ECC to improve their visibility to all ECC staff. The licensee planned for the ECC expansion to be completed by July 1986.

Based on the above findings, this portion of the licensee's program was adequate; however, the following items should be considered for improvement:

- The licensee's EP staff should promptly inform NRC staff of any significant delays in completion of modifications to any current or proposed emergency response facilities.
- Unauthorized use of TSC workspace should be prohibited.

c. Changes to the EP Staff's Organizational Structure

The EP Staff's internal structure has changed from what had existed as recently as February 1986. The lead responsibilities for onsite and corporate emergency planning efforts have been assigned to the same individual, due primarily to uncertainties regarding changes in the licensee's corporate organizational structure following the recent merger. The EP Supervisor was also in the process of hiring replacements for the staff's secretary and a staff level position having responsibilities for emergency organization and ERF revisions.

Effective sometime in May 1986, the licensee planned to revise the organizational structure of persons reporting to the Assistant Vice President, Nuclear. Currently the Manager of Environmental and Emergency Preparedness, the Special Programs Manager, and the Nuclear Fuel Manager report to the Assistant Vice President Nuclear through the Nuclear Services Director. The Nuclear Services Director position would be deleted from the organizational structure.

d. Changes to the Emergency Organization's Structure

There were still uncertainties regarding how the licensee's corporate emergency organization, based in Edison Plaza in downtown Toledo, would be impacted by the recent merger with the Cleveland Electric Illuminating Company to form Centerior Corporation. As a result, the licensee has made a reasonable decision to suspend annual training of the corporate emergency organization until the Toledo Edison and Centerior corporate organizations have been adequately defined and stabilized.

The inspector reviewed internal correspondence dated April 1986, which identified persons to be assigned positions in the revised onsite (Station and DBAB) emergency organization. Based on discussions with the Plant Manager and senior EP staff, the inspector understood that the licensee's goal was to have at least three persons trained for each key position in the revised onsite emergency organization with no instances of personnel being on the roster for more than one key position. The only exception to this appropriate goal was that the two individuals filling the Emergency Director and Company Spokesman positions would be drawn from the same group of five senior Nuclear Mission staff. The inspector noted, however, that only two persons had as yet been identified in the early April memorandum for eight supervisory or support staff positions. This was primarily due to the aforementioned changes in the EP staff and uncertainties regarding the availability of various Public Relations staff from Toledo Edison or Centerior's corporate organizations. The inspectors supported the EP Staff's goals of having at least three persons trained for each key emergency organization position, with minimal cases of persons being trained to fill multiple positions in a "three-deep" organization.

e. Revision to the Station's Emergency Plan and Implementing Procedures

At the time of the inspection, the draft of Revision 10 to the Station's Emergency Plan was at least 80 percent complete. The major cause of the delay in submitting a complete draft for NRC review had been the uncertainty as to how the plan would address Jerusalem Township in Lucas County. Based on the April 28 decision reached with State and local officials, the licensee indicated on April 30 that a complete draft of Revision 10 to its emergency plan would be submitted for NRC review by May 19, 1986. Significant changes in this document will include: the current revision to the Station's EALs; the revised onsite emergency organizational structure; descriptions of the modified ERFs; descriptions of the revised 10-mile EPZ, especially regarding the City of Port Clinton and Lucas County; and the addition of a third local hospital located beyond the expanded border of the EPZ.

Revision to the Station's Emergency Plan Implementing Procedures (EPIPs) has been impacted by an overall effort to restructure Nuclear Mission procedures. A new hierarchy of procedures has been under development at the Nuclear Mission, division, and departmental levels. Although Nuclear Mission and division procedures regarding Emergency Planning were not yet complete, the EP staff had begun restructuring of the EPIPs so that 1986 specialized emergency preparedness training including these procedures would proceed as scheduled between mid-June and August. The inspector reviewed a draft of Revision 0 to EP-AD-0005, titled "Preparation and Control of Emergency Planning Procedures." This procedure addressed the drafting, review, approval, distribution, revision, cancellation, and periodic review of EPIPs. While it assigned responsibility for determining whether a proposed EPIP revision would decrease an

EPIP's effectiveness, Revision 0 to EP-AD-0005 did not adequately address the process for determining whether an EPIP revision warranted training of affected personnel in between annual training cycles, and how such training could be accomplished and documented. The inspector also reviewed a proposed listing of the restructured EIPs and was told that the EP staff planned to have the emergency implementing procedures available for training in June 1986, while the bulk of the administrative type procedures to be used by the EP staff would be completed by September 1986.

Based on the above findings, this portion of the licensee's program was adequate; however, the following item should be considered for improvement:

- The licensee should establish administrative controls that assign responsibility for determining whether EPIP revisions warrant training of affected personnel in between annual training cycles, and that address how any such training would be accomplished and documented.

7. Shift Staffing and Augmentation (82205)

The licensee's provisions for accomplishing timely staff augmentation have been adequately described in the Emergency Plan; in Procedure AD 1827.17, "Emergency Call System;" and in Administrative Memos 19, 37, 18, 41, and 42. The procedure described the licensee's notification methodology, while the Administrative Memos listed the information necessary to contact persons assigned to all types of emergency response roles. Sufficient numbers and types of emergency response personnel had been identified to indicate that the augmentation goals of NUREG-0654, Table B-1, could be met.

The inspector reviewed records of off-hours augmentation drills conducted on March 25, 1985, July 2, 1985, and January 3, 1986. The drill records included completed "phone list forms" that each of the key personnel used as an aid in calling out personnel to fill predetermined positions, as well as "answer-sheets," one for each person, whereon such additional personnel recorded the time when they would be able to arrive at the site. Based on all the records and supporting sheets, the drills were satisfactory. The augmentation drills of March 25, 1985 and January 3, 1986 properly contained conclusions that the drills were satisfactory. However, the cover sheet for the drill of July 2, 1985 lacked any conclusions regarding drill adequacy.

An equipment upgrade was underway for shift augmentation. A computer-based system was on order which will activate the pagers upon a phone call from the Control Room. The system will "prompt" the users, both Control Room personnel and others, by high-quality digitalized voice messages. As the personnel respond to their page by telephoning in, the system will record their calls. At any time after declaration of an emergency and activation of the system, the Control Room personnel can interrogate the system and identify those key personnel who have not

responded. The system can then be utilized to telephone non-responders. The system recognizes time of day, so that any phone calls will first be made to the most likely location (home or office). The system will be on a non-interruptible bus; nonetheless, if the automated system fails, the pager system can, by itself, be activated from the Control Room. The first week of June, 1986 was the scheduled date for system installation and operational tests.

Based on the above findings, this portion of the licensee's program was adequate; however, the following item should be considered for improvement:

- The licensee should indicate on all augmentation drill records whether or not the drill was successful. Any identified problems and corrective actions taken should also be documented.

8. Knowledge and Performance of Duties (Training) (82206)

The inspectors reviewed certain aspects of the licensee's emergency preparedness training program. The 1986 training effort for the onsite (Station and DBAB) emergency organization was outlined in an April 2, 1986 memorandum from the Assistant Vice President, Nuclear. Required reading activities will be conducted between mid-May and the end of June. Classroom training would take place from mid-June through July. Tabletops and drills were scheduled between late July through August, culminating in a practice exercise. A training matrix was available for review. It contained required courses for each emergency organization position, estimated training hours per course, and indicated additional training requirements for new members of the emergency organization. Based on discussions with the EP staff, the inspectors concluded that the group would conduct the majority of the training, with some consultant assistance. Work on the lesson plans had recently begun. Lesson plans would address relevant procedures, though the revised EIPs were concurrently under development.

During the Control Room walkthroughs, the inspectors solicited comments regarding the emergency preparedness training program. The inspectors concluded that the training had been conducted through a combination of required readings, lectures during training shifts, and relatively infrequent special training sessions. However, there did appear to be several cases where EIPs had been revised and shift personnel remembered being initially aware of the changes only upon encountering them in the EIP manuals. Although the shift personnel interviewed demonstrated adequate familiarity with the revised EALs, the majority of them did not remember that the training on these EALs had been accomplished via required reading in February 1986. The inspectors recommendation to improve the licensee's method of conducting required training between annual cycles was provided in Section 6e.

Several persons stated that during the last two or three years they had proposed changes to various EIPs; however, they did not always receive feedback on their suggestions. The inspectors noted, however, that one of the STAs had assisted EP staff in preparing the recently revised EALs.

Based on the above findings, this portion of the licensee's program was adequate; however, the following item should be considered for improvement:

- The EP staff should continue to solicit and accept for consideration changes to EPIPs that are made by shift personnel and others in the emergency organization. It is also important for the EP staff to then provide feedback to the persons who made the suggestions.

9. Public Information Program (82209)

The inspectors discussed proposed changes in the licensee's public information program with members of the EP staff. The licensee had been distributing copies of its public information pamphlets to residences and public gathering places within an approximate 15 mile radius of the station. Thus, the revision to the EPZ's border would not decrease the size of the geographic area in which the information has been made available.

The licensee stated the pamphlet distribution had been occurring in June of recent years. However, it planned to convert its emergency information publication from a pamphlet to a calendar, which would probably not be ready for distribution until sometime in September 1986. The inspectors did not review any preliminary version of the calendar. However, the licensee indicated that the emergency information it would include should be improved from that provided in the current publication, as new ideas had been obtained in reviews of a recent FEMA guidance document and the emergency information publications for the Callaway and Clinton nuclear power plants.

Based on the above findings, this portion of the licensee's program was adequate.

10. Licensee Audits (82210)

The inspector reviewed records of QA Department audits and surveillances of the emergency preparedness program that were conducted since the October 1985 special inspection. These efforts were also discussed with members of the QA and EP staffs.

The major audit of the program was conducted by a contractor, assisted by a licensee auditor familiar with the emergency preparedness program, between October 28 and November 15, 1985. The audit checklist, consisting of over 100 items, was based on NUREG-0654, Revision 1. Reference documents included the Station and corporate emergency plans and implementing procedures; the State and Ottawa County emergency plans and implementing procedures; drill and exercise records; training records; and a tour of the licensee's emergency response facilities. This audit was adequate in scope and depth per the requirements of 10 CFR 50.54(t). The inspector reviewed the completed audit checklist, final audit reports, and records of QA followup actions on the ten findings. All records were complete and readily available. Auditor and EP staff followup actions on

identified findings were documented per departmental procedures. Four of the ten findings were already closed, and the QA staff was adequately tracking progress on the remaining six findings. The auditors' overall conclusions regarding the State and County plans and procedures versus the criteria of NUREG-0654, Revision 1, as well as any relevant findings and recommendations for improvement, were transmitted in mid-December by memos from the EP staff to the ODSA and Ottawa County DSA.

Surveillance No. Q-205 was conducted in late January 1986 to evaluate various aspects of the Station's response to an earthquake, including whether or not an Emergency Plan activation was warranted and had relevant emergency procedures been implemented.

The inspector determined that the QA records of a surveillance on the December 1985 corporate emergency organization's drill and an April 1986 audit of several program aspects were not yet complete. QA staff indicated that the relevance of some of the surveillance report's findings were uncertain in view of the recent merger with another utility. Also, several findings would probably be issued with the April 1986 audit report, which was in preparation.

Based on the above findings, this portion of the licensee's program was adequate.

11. Maintaining Emergency Preparedness (92706)

The inspector determined that the licensee had established a committee, composed of licensee and contractor personnel, charged with the development of an adequate scenario for the September 1986 exercise. A Babcock and Wilcox simulator was being utilized to generate and evaluate Control Room data for the scenario. The licensee planned to conduct drills within individual ERFs and drills involving several ERFs prior to a practice exercise scheduled for August 1986. The licensee has planned for a utility-only exercise in September 1986 with the understanding that if FEMA would require the ODSA to conduct an exercise of the new Lucas County emergency plan, that exercise would be conducted after the September 1986 exercise performed to meet NRC requirements. The licensee's progress on preparations for the September 1986 exercise was adequate.

The inspector reviewed records associated with 1985 training of offsite support agencies and discussed this training effort with members of the EP staff. The annual media briefing was conducted by the licensee's public relations staff, licensee management, and representatives of the Ohio and Ottawa County Disaster Services Agencies (DSAs). Available records included an agenda and attendance sheet. During the period February 18-27, 1985, the licensee assisted the Ohio and Ottawa County DSAs in conducting annual training sessions for local offsite support agencies. The licensee had not maintained adequately detailed records of this "Radiological Monitoring Course," as the EP staff had felt that the

State and County DSAs would maintain such records. At the inspector's request, the licensee did obtain a course outline and some attendance sheets which were sufficient to verify that at least some of the sessions had taken place as scheduled and what topics had been addressed. Topics covered in the "monitoring course" included: atomic structure; types of radiation; terminology; biological effects of ionizing radiation; dosimetry; survey instruments; the EPA's protective action guidelines; the Station's EALs; and the four emergency classes. The EP staff also indicated that they had occasionally accompanied DSA representatives to other offsite agency training sessions. However, documentation for only an April 1986 session was available.

The inspector examined records of the 1985 annual medical drill, two offsite RMT drills, and several onsite Health Physics drills. The records of the medical and RMT drills were complete and adequately detailed, though somewhat disorganized in their folders. Records of the onsite Health Physics drills were maintained by the C and HP Department, rather than by the EP staff. Apparently no Health Physics drill involving the Post-Accident Sampling System (PASS) had been conducted since early 1985, as the system has been out of service for repairs and modification and was not expected to be operable until September 1986. This problem had already been identified during a QA audit of the emergency preparedness program. In the Emergency Plan, the licensee had committed to semiannual Health Physics drills, including at least an annual drill involving the PASS. The inspectors advised the licensee that the inoperability of the PASS was not sufficient justification for not conducting a 1986 drill involving those aspects of post-accident sample collection, handling, and analysis techniques that could still be practiced.

The inspector determined that the various drills and training sessions had been critiqued and that some critique comments had been entered on the computerized Emergency Preparedness Activity Scheduling System (EPASS), which was also used as an action item tracking system by the EP staff. However, the inspector could not ascertain from available records who had been responsible for deciding which internal critique items would be acted upon, or the rationale behind these decisions.

Based on the above findings, this portion of the licensee's program was adequate; however, the following items should be considered for improvement:

- The licensee should maintain adequately detailed records of all offsite support agency training sessions that it assists State and county DSAs in conducting. Such readily available records should at least include a list of attendees and a sufficiently detailed agenda.
- The licensee should maintain adequate records to indicate who was responsible for deciding which internal critique items would be acted on or be dismissed, and the bases for these decisions.

12. Exit Interview

On April 25, the inspectors met with those licensee representatives identified in Paragraph 1 to present and discuss their preliminary findings. The licensee agreed to consider the items discussed and indicated that none of the matters discussed were proprietary in nature.