

I. GeneralReference

The licensee has shown significant progress toward improving the performance in the areas of reactor operations and security. The company corporate structure has been arranged to separate the Nuclear Program from the Fossil Operation activities. Several meetings were held between the station personnel and the company president and chief operating officer. Staffing was significantly increased, especially in the operations and I & C areas. An outside consultant conducted a comprehensive review of station management, operation and maintenance procedures, engineering support and training.

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A final report was issued and the recommendations implemented. Another consultant conducted a review of possible methods to improve plant reliability. Reliability has significantly improved in 1981.

The training program for all plant staff, directed toward improving the job related skills, has been implemented. The Performance Appraisal Branch Inspection rated training as good (PAS Appraisal Report 50-346/80-03).

The number of LER's has decreased considerably (1978 - 127, 1979 - 134, 1980 - 94, first seven months of 1981 - 38). The safety implications of these LER's has also decreased.

A special corporate investigation group has been reviewing all LER's with special emphasis on personnel errors and repetitive equipment problems.

Two groups of engineers previously located in the corporate offices have been relocated onsite to expedite the implementation of facility changes. The system of tracking, preplanning of procurement and scheduling of work has been consolidated. An experienced maintenance contractor is currently onsite to supplement the maintenance on facility modifications activities.

Maintenance personnel have been permanently assigned to the support of Security to provide a continuous preventive maintenance program and also a repair program of the security equipment. Daily inspections by the Quality Assurance group are being conducted to improve the implementation of all security measures. Numerous visits to the site by corporate management were conducted to review the dialy problems of the

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other cor-
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subject is

security personnel. A self inspection program conducted by the site security management is being conducted.

exempt from disclosure.

II. Specific

A. Contention: "The Davis-Besse facility displayed evidence of weakness in the area of security and plant operations."

1. Basis

a. Security

During the SALP period, five inspections, including one investigation, were performed in this area. Twelve infractions and eight deficiencies were identified in the five inspections. In addition, one deficiency was identified by the resident inspectors during an operations inspection. Immediate Action Letter was issued because of security concerns identified during the inspection of April 30 - May 2, 1980. - During the two regulatory performance meetings held this year (February 29 and June 4, 1980), licensee corporate representatives were told of our concerns with the security program. Our concerns included the licensee's capability to install and maintain all security related equipment in an operable condition, availability of spare parts for security related equipment, and the morale of the site security organization. Security supervision, both corporate and site, must be more effective. Since the regulatory meetings, we continue to question the effectiveness of the licensee's corrective action. This opinion is based on the results of two security inspections (June 5-6 and September 9-12, 1980) and the one operations inspection (August 1980) in which a total of six items of security noncompliance (5 infractions and one deficiency) were identified.

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Note: All other reports exempt from disclosure.

As a result of January 29, 1981 management meeting the licensee forwarded a corporate level developed plan to improve security. The six step improvement program was reviewed during this inspection. The results of our inspection showed that the licensee

has adequately addressed the areas which were identified as causing weaknesses in the security program. The activity regarding each of their commitments is significant and the results, to date, have shown a steady, positive improvement in both management and equipment functions. Region III plans to complete two additional security inspections at the facility prior to the end of 1981 to monitor the licensees continuing efforts.

b. Operations

During the SALP period, nine inspections were performed in this area. Four infractions and eight deficiencies were identified. None of the items involved an immediate hazard to the public. One infraction involved the use of an outdated copy of a procedure by a control room operator. One infraction involved exceeding the time allowed to change and verify a reactor protective system setpoint when changing from four to three reactor coolant pumps. One infraction involved the failure of the Corporate Nuclear Review Board to review all Technical Specification violations. The fourth infraction involved out-of-date plant drawings. The last three infractions were identified in 1979.

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79-30; 80-01;
80-14; 80-15;
80-19; 80-23;
and 80-25

The items of noncompliance in the operations area do not represent a major regulatory concern, however, the Region has been concerned about the other aspects of licensee performance in the operations area. These matters were identified prior to the SALP appraisal period.

Although satisfactory progress has been observed in most of the identified areas, continued improvement is required in the areas of facility change requests and repetitive equipment problems.

As a direct result of concerns expressed by members of the Davis-Besse operations staff and NRC followup interviews, a meeting was held by Region III with plant and corporate management on February 28, 1980, to discuss shift staffing, training of nonlicensed personnel, the ability to

respond to emergency conditions, and the overall depth of the licensee's staff. As a result of the site interviews and the management meeting, the licensee's program to upgrade the experience level of non-licensed members of the shift operating crews were confirmed by an NRC Order issued on March 5, 1980. The licensee complied with the order.

During the period of April 7, 1980 through November 3, 1980, the unit was shutdown for refueling, maintenance, and modifications. During the outage the Decay Heat Removal System flow was inadvertently interrupted a total of ten times. Since license amendment No. 24 was issued, which allows for the removal of power from the Decay Heat Removal isolation valves, there have been no additional events involving the loss of Decay Heat Removal Flow.

A large number of serious regulatory concerns existed with the Davis-Besse operation prior to the SALP period. These concerns were such that during that time, Davis-Besse's performance in the reactor operations area was clearly below average compared with that of other Region III licensee's. Progress has been made with respect to most of the areas of concern. However, due to the time it has taken to resolve some of these concerns, and the lack of sufficient operating time to observe the results of the licensee's corrective actions, we do not have a meaningful basis to modify the rating for the period in question.

2. NRC Action

The licensee identified a corrective action program to resolve these concerns. NRC concerns and the licensee's corrective actions were monitored in meetings with the licensee on April 18, 1979, May 31, July 17 and September 19, 1979, February 29, 1980, and June 4, 1980.

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Report Nos.
50-346/79-08;
79-12; 79-20;
79-26 and 80-07.

3. Licensee Corrective Actions

See discussion under Item 1, General

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B. Contention

"The security area was characterized by numerous items of noncompliance resulting in several enforcement conferences between the NRC and licensee management.

See discussion on Contention A.

C. Contention

"Weakness in both corporate and site security control contributed to difficulties in the maintenance of security related equipment."

1. Basis

Considerable downtime of the security equipment due to the lack of spare parts and maintenance technicians whose priority assignment was the security equipment.

Reports exempt from public disclosure.

2. NRC Actions

Series of management meetings. See NRC Actions under Contention A. An inspection conducted by the Performance Appraisal Branch subsequent to the SALP period rated the security areas as average.

PAS Inspection Report No. 50-346/80-03.

3. Licensee Corrective Action

(See General Discussion)
The corrective action for all noncompliances issued have been reviewed during an inspection conducted in June, 1981 and found to be acceptable.

Reports exempt from public disclosure.

D. Contention

"Performance in the area of plant operations was variable with some evidence of improvement near the end of the evaluation period."

See Contention A.

E. Contention

"Plant operations during the evaluation period were characterized by instances of personnel error and failure to follow procedures, staffing problems, repetitive equipment problems and problems in managing facility changes and modifications."

1. Basis

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50-346/80-33.

Number and Nature of Licensee Event Reports
during SALP period:

Type of Events:

(a) Personnel Error	17
(b) Design/Manf/Constr/Install	23
(c) External Cause	1
(d) Procedure Deficiency	16
(e) Component Failure	40
(f) Other	10
Total	107

Licensee Event Reports Reviewed:

LER No. 50-346/79-105 through 79-134
LER No. 50-346/80-01 through 80-77

Evaluation of LER's:

The licensee submitted 107 LER's during the SALP period. This represents an improvement over previous years (1978-127, 1979-134, and the first ten-months of 1980-78). For the SALP period the licensee coded the cause of 17 LER's (16%) to personnel error. Two personnel errors were attributed to licensed personnel (both involved missed surveillance, 80-07 and 80-39).

The other fifteen personnel error LERs involved nonlicensed personnel; five were TECo employees (two resulted in loss of decay heat, 80-44 and 80-60, while the other three were of lesser significance, 79-126, 80-31, and 80-56), and ten were contractor personnel (three involved loss of power to safety related equipment, 80-12, 80-20, and 80-22; one involved loss of decay heat, 80-58; one involved loss of negative pressure boundary, 80-66; and the other five were of lesser safety significance). If contractor personnel errors could have been eliminated the number of personnel errors would have been comparable to other facilities in Region III. The licensee's reporting requirements differ and are much more stringent than other facilities.

Evaluation of noncompliances:

See Contention A.1.b and Contention L.

2. NRC Actions

Series of Management meetings.

3. Licensee Corrective Action

LER review group with special effort on personnel errors and repetitive equipment problems.

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Training program improved on all station personnel.

Procedure review group to streamline procedures. Experience of maintenance contractor to help with maintenance workload.

Augment staffing in the operations and I & C groups.

F. Contention

"This (plant operations) resulted in a series of management meetings between the NRC and licensee."

1. Basis

The meetings were held to discuss the licensee's programs to improve the operation of the Davis-Besse Station.

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2. NRC Actions

Management meetings to monitor corrective actions were scheduled with the licensee.

3. Licensee Action

See discussion under item 1, General

G. Contention

"Some of the problem areas identified prior to the evaluation period were still in the process of being corrected by the licensee."

1. Basis

A large number of facility change requests were still showing considerable amounts of work to be accomplished. The number of nuisance alarms had been reduced but not to the level expected. Staffing goals were not reached, although improvements were made.

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2. NRC Action

Conducted management meetings and continued in inspection coverage to follow progress.

3. Licensee Actions

Continue management attention to the above mentioned areas.

H. Contention

"Instances were identified where nonlicensed members of the plant staff had insufficient training."

1. Basis

Six experienced equipment operators (Non-licensed operators) were assigned regular shift work for training to become licensed operators. The remaining equipment operators were trained only in certain zones. The training was adequate for routine operations but did not cover all safety related equipment such that they could be relied upon if needed in other work zones during an emergency.

2. NRC Actions

An order modifying the license was issued on March 5, 1980, which required additional personnel to be assigned to the day shift and to expedite a training schedule for equipment operators.

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Report No.
50-346/80-09;
80-07.

3. Licensee Action

Returned equipment operators (non-licensed) to shift work. Increased staff in operations department. Accelerated the training for licensed and nonlicensed personnel during the plant outage.

I. Contention

"The licensee program to upgrade the experience level of non-licensed members of the shift operating crews was confirmed by an NRC order."

1. Basis

See Contention H.

2. NRC Action

Order issued on March 5, 1980.

3. Licensee Corrective Action

See Contention H.

J. Contention

"Although responsive to most NRC concerns, the licensee's responses to (a) IE Bulletin 80-06 (Engineered Safety Feature Reset Controls) and to; (b) Three Mile Island - Lessons Learned Category "A" Items, indicated a problem in management coordination and attention."

(a)

1. Basis

Toledo Edison's initial response indicated that prior testing had been completed on safety systems which obviated the need for schematic review against actual wiring installation. Some testing had not actually been completed. Overall response to the bulletin was inadequate indicating that Toledo Edison management review has been insufficient.

2. NRC Action

Both IE and NRR requested further investigations and information related to the bulletin to assure the intent of the original requests were understood by Toledo Edison.

3. Licensee Action

Management attention resulted in further review and testing in compliance with the bulletin requests.

(b)

1. Basis

Toledo Edison's commitment schedule in response to NRR's September 13, 1979, and October 30, 1979, letters showed one of the worst agreements with our schedule. Also, lack of detail in the licensee's submittals made it initially impossible to verify that their commitments would result in implementation of Category "A" requirements in accordance with NUREG-0578 criteria.

2. NRC Actions

Requests for additional information and an onsite review of implementation plans were held with Toledo Edison. Our evaluation stressed the need for complete implementation in accordance with NUREG-0578 criteria.

3. Licensee Actions

Adequate attention was given by management to provide sufficient manpower to devote to preparing implementation plans in response to NRC requests. Plant modifications required by Category "A" requirements were given high priority to assure completion within commitment schedule.

K. Contention

"The responses were either incomplete or not comprehensive; therefore requiring revisions or submittal of additional information."

1. Basis

Toledo Edison Company's responses are generally thorough and directly responsive to the actions and information of the requesting letter. On the extremes are Emergency Planning upgrade responses, in which they excelled, and Lessons Learned Category "A" responses in which many deficiencies were identified in the initial response.

2. NRC Actions

Requests for additional information to assure the intent of the original requests were understood by the licensee.

3. Licensee Actions

Time and effort expended in providing responses has been satisfactory. Minor exceptions have occurred and sufficient manpower has been devoted to provide adequate management reviews.

L. Contention

"Davis-Besse received a relatively large number of noncompliance when compared to other facilities." -

1. Basis

Number and nature of noncompliance items

Noncompliance Categories

Violations	1
Infractions	18
Deficiencies	21

Areas of Noncompliance

	<u>Sanction Points</u>
Operations	56
Rad. Protection	128
Security	138
Construction	0
Total Points	322

Inspection reports covered by this review (Report Numbers)
50-346/79-29 through 79-34
50-346/80-07 through 80-26

2. NRC Actions

Management meetings. Inspection-hours onsite was three times the national average. One of the first groups of sites with a resident inspector, August, 1979.

3. Licensee Actions

See item under General discussion.

M. Contention

"The majority of the noncompliances were in the security area."

See Contention A and L.

N. Contention

"The licensee also received a civil penalty as a result of an individual overexposure that occurred in April, 1980."

1. Basis

One radiation protection inspection was performed during the refueling outage. Three items of noncompliance, one violation and two infractions - all associated with a single overexposure event were identified and resulted in a civil penalty.

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Report No.
50-346/80-12.

2. NRC Actions

Civil Penalty issued in the amount of \$13,000.00.

3. Licensee Actions

Procedures were revised to include the following requirements:

(1) A health and physics management representative has to accompany personnel for entry into extremely high radiation areas.

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(2) Procedure changes require that two high range survey instruments of different types be used when entering all high radiation areas.

(3) A permanent locked door was installed at the location to preclude a direct path between the incore detector housing and the personnel doorway.

0. Contention

"A performance appraisal team inspection, completed in November, 1980 but covering the evaluation period, revealed average and above average performance in several areas, especially training. The inspection revealed a significant weakness only in the area of procurement of safety-related components."

1. Basis

Executive summary for this inspection:

PAS Inspection
Report No.
50-346/80-03

A team of seven NRC Inspection Specialists from the Performance Appraisal Section conducted an announced inspection at the Davis-Besse site and Toledo Edison Corporate office during October 27 - November 21, 1980. Management controls in nine areas were inspected. A summary of results of the inspection is given below. While improvements were noted in most of the areas examined, a number of weaknesses were identified during the appraisal. One area was considered good, seven average, and one poor.

Training - Good: The effectiveness of the training program was enhanced by active management support, a number of highly motivated and qualified instructors, and continuing program development. Improvement was needed in the area of continuing training for maintenance personnel.

Committee Activities - Average: The review committees were composed of capable individuals who possessed positive attitudes toward improving the adequacy and effectiveness of facility activities. Both committees, however, needed to expand their review activities, increase their responsiveness to identified problem areas, and direct management attention to needed improvements.

Quality Assurance Audits - Average: Audit findings were well researched and involved substantial safety issues. However, significant weaknesses were noted regarding audit guidance, checklists, audit followup, and certain aspects of management support for the program.

Design Changes and Modifications - Average: While there were a large backlog of Facility Change Requests and an apparent lack of safety evaluations in the interface between construction activities and the plant during operation, the established program appeared to have been implemented in a satisfactory manner.

Maintenance - Average: Most of the maintenance personnel were familiar with the requirements of the maintenance program, and except for some minor instances, the program

was being satisfactorily implemented. Two significant weaknesses were noted during the inspection. Some routine safety related maintenance activities, which were beyond the skill of the crafts, were being performed using unreviewed maintenance instructions. There was also an excessive backlog of outstanding maintenance work.

Review and Control of Licensed Activities - Average: The licensee had an effective operating organization. Improvements were needed in equipment operator staffing and control of procedures. Weaknesses were noted in certain Control Room operations such as the tolerance of excessive numbers of alarm indications.

Corrective Actions Systems - Average: The licensee had not established a system to prioritize the different methods used to identify deficiencies. Engineering activities had been redirected to reduce an existing backlog of these identified deficiencies.

Physical Protection - Average: Management involvement has been increasing to minimize the items of noncompliance, resolve equipment problems, and improve the overall effectiveness of the security program. However, additional management attention was needed in the areas of personnel screening, search procedures, the number of persons granted access to the vital areas, and equipment problems.

Procurement - Poor: Numerous violations of regulatory requirements were observed in the area of material storage and handling. These are detailed in the body of the report. Procurement should be recognized as an activity in which both impacts and is affected by the full range of utility organizations: Operations, engineering, quality assurance, quality control, administration, security and training. Effective procurement is directly related to safety of operations as well as plant reliability.

There appeared to be three root causes of the nonconforming conditions found in procurement: (1) an indifferent attitude on the part of upper management toward Quality Assurance in procurement activities, (2) the failure of middle management to control procurement actions and storeroom personnel activity, and (3) the failure to train procurement personnel in the basics of quality assurance and ANSI standards.

As documented in previous NRC correspondence, the past regulatory and operating performance of the Davis-Besse Nuclear Power Plant has been less than desired. However, it was the Performance Appraisal Section's judgment that actions initiated by Toledo Edison Company since late 1979, partly in response to the inspection and enforcement efforts of Region III, have been responsive to identified concerns and should provide for improved future performance. The Davis-Besse site has received the best appraisal

of all facilities visited by the Performance Appraisal Team thus far. These actions included a corporate reorganization which has increased emphasis on activities affecting the Davis-Besse Plant.

2. NRC Actions

Management meetings - see previous items.

3. Licensee's Corrective Actions

The licensee has initiated a program to improve the area of procurement which was rated "poor" during the PAS inspection. A response to the PAS Findings was documented in TECo letter Serial No. 694, dated March 6, 1981, to the IE Director.

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The program consists of:

(1) Direct Corporate Management Attention

- (a) Increase management attention
- (b) Improve training and reduce personnel error
- (c) Assure adequate manning

(2) Provide and maintain adequate storage of safety related components and materials.

- (a) Correct deficiencies on Class "A" storage facilities
- (b) Correct deficiencies on Class "B" storage facilities
- (c) Segregation of flammable material
- (d) Segregation of chlorides/caustics
- (e) Provide food and drink preparation area
- (f) Correct deficiencies on Class "C" storage facilities

(3) Control the storage of safety related materials.

- (a) Controlled access
- (b) Provide proper parts and material identification and legible tags
- (c) Identify parts and materials with storage levels as appropriate
- (d) Procedures for shelf life control

(4) Provide for handling equipment inspection and certification.

- (a) Inspection program
- (b) Certification

The licensee is currently doing a feasibility study for long-term improvement of the storage facilities.

On October 22-24, 1980, the TECo QA conducted an Audit (NO. 719) of the procurement activities of the company. As a result of the audit, 23 audit finding reports were issued. The areas covered by the QA findings reflect the concerns expressed by PAS.

On November 20, 1980, as a result of discussions between the QA Director and the PAS team members, a stopwork notice (80-01) was issued preventing issuance of any safety related material which had not been properly packaged and stored until the material had been inspected and the quality verified.