

NRC NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 50-346/80-33

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

Meeting At: Toledo Edison Corporate Office, Toledo, OH

Meeting Conducted: December 5, 1980

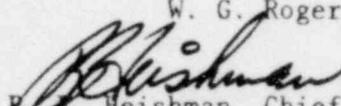
NRC Personnel Present: J. G. Keppler, Director, Region III

R. F. Heishman, Chief, Reactor Operations and Nuclear  
Support Branch

R. F. Warnick, Chief, Reactor Projects Section 3

L. A. Reyes, Senior Resident Inspector

W. G. Rogers, Resident Inspector

Approved By:   
R. F. Heishman, Chief,  
Reactor Operations and  
Nuclear Support Branch

12/23/80

Meeting Summary

Management Meeting on December 5, 1980 (Report No. 50-346/80-33)

Areas Discussed: Management meeting held at the NRC's request to discuss the regulatory performance of the activities at the Davis-Besse Nuclear Power Station as concluded in the NRC's Systematic Appraisal of Licensee Performance (SALP) program.

Results: A summation of the licensee performance evaluation was presented. Areas of concern were discussed with corporate management. The performance at the Davis-Besse facility was considered to be adequate.

## DETAILS

### 1. Persons Contacted:

#### Toledo Edison Company

W. A. Johnson, President and Chief Operating Officer  
R. P. Crouse, Vice President, Nuclear  
L. C. Philips, Vice President, Administrative Services  
M. R. Polk, Director, Industrial Security  
T. D. Murray, Station Superintendent  
B. R. Beyer, Assistant Station Superintendent  
J. H. Short, Director, Nuclear Engineering and Construction

### 2. Areas Discussed

- a. The background of the SALP program was presented, including the development, the need for evaluation, the method of evaluation, and the purposes of the SALP program.
- b. The results of the NRC's evaluation of the licensee's performance were discussed. A copy of the evaluation is enclosed.
- c. An analysis of Davis-Besse's noncompliance data for the SALP period (November 1, 1979 - October 31, 1980) was presented. Comparative data for the years 1975-1979 and for the first nine months of 1980 for all plants in Region III were presented.
- d. An analysis of the significance of the Licensee Event Reports (LER's) submitted for Davis-Besse during the SALP period was presented. A comparison of the significance of Davis-Besse's LER's with those submitted by other RIII operating plants was presented.
- e. The licensee's progress in correcting concerns previously identified by Region III in a series of management meetings with Toledo Edison was discussed. In addition, the Performance Appraisal Branch inspection was discussed briefly.

### 3. Licensee Comments

During the presentation of the SALP by the NRC the licensee commented on each of the areas in paragraph 2 and discussed several matters of concern as follows:

- a. The licensee has observed that plants with standardized Technical Specifications (STS) usually submit many more LER's than plants without the STS. The licensee also commented about the relationship between onsite inspection hours and items of noncompliance.
- b. During the discussion of the confirmatory order relative to staffing, the licensee discussed possible NRC overreaction to what they believed was a TECO labor relations matter.

- c. Concern was expressed over the number of, and requested response times for, the many NRC requests for action such as TMI Action Plan items, IE Bulletins, NRR requests, and new regulations. They indicated the NRC should establish priorities and more realistic response times.
- d. The licensee indicated the SALP failed to give credit for some of the improvements and changes that have been accomplished at great expense to the licensee especially fire protection modifications. Region III did not inspect fire protection during the SALP period.
- e. The licensee indicated their desire to meet with Region III personnel periodically to discuss Davis-Besse performance. The licensee indicated that SALP reviews on a six month period do not allow sufficient time to accomplish long term improvements between appraisals.

DAVIS-BESSE UNIT 1  
PERFORMANCE EVALUATION REPORT

REGION III

LICENSEE PERFORMANCE EVALUATION (OPERATIONS)

Facility: Davis-Besse Unit 1

Licensee: Toledo Edison Company

Unit Identification:

<u>Docket No.</u>	<u>License No./Date of Issuance</u>
50-346	NPF-3/April 22, 1977

Reactor Information:

NSSS	Babcock & Wilcox
MWT	2772

Appraisal Period: November 1, 1979 to October 31, 1980

Appraisal Completion Date: November 12, 1980

Review Board Members: \*

R. F. Heishman, Chief, Reactor Operations and Nuclear Support Branch  
R. F. Warnick, Chief, Reactor Projects Section 3  
J. F. Donahue, Chief, Physical Security Section  
T. J. Madeda, Security Inspector  
M. J. Oestman, Radiation Specialist  
M. P. Phillips, Radiation Specialist  
W. L. Fisher, Chief, Fuel Facilities Projects and Radiation Support Section  
T. N. Tambling, Project Inspector  
W. G. Rogers, Resident Inspector  
L. A. Reyes, Senior Resident Inspector  
C. J. Paperiello, Chief, Environmental and Special Projects Section  
W. L. Axelson, Emergency Planning Analyst, NRR  
G. Fiorelli, Chief, Reactor Construction and Engineering Support Branch  
J. A. Hind, Chief, Safeguards Branch

\*Either attended review board meeting on November 12, 1980 or provided written or verbal input to the evaluation.

A. Number and Nature of Noncompliance Items

Noncompliance category:

Violations	1
Infractions	18
Deficiencies	21

Areas of noncompliance: Points

Operations	56
Rad. Prot., Environ, Mon., Emerg, Plan., Confir. Mcas.	128
Security	138
Construction	0
Total Points	322

Inspection reports covered by this review (Report Numbers):

50-346/79-29 through 50-346/79-34  
50-346/80-01 through 50-346/80-28

Evaluation of noncompliance items:

Operations - During the SALP period, 19 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.

The items of noncompliance in the operations area do not represent a major regulatory concern, however, the Region has been concerned about other aspects of licensee performance in the operations area. These matters were identified prior to the SALP appraisal period. The licensee identified a corrective action program to resolve these concerns. NRC concerns and the licensee's corrective actions were discussed in meetings with the licensee on April 18, 1979, May 31, July 17 and September 19, 1979, February 29, 1980 (see the following paragraph), and June 4, 1980.

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 29, 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 nonlicensed members of the shift operating crews was 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 1, 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 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.

FFMS

- (Radiation Protection, Environmental Monitoring, Emergency Planning, and Confirmatory Measurements) During the SALP period four inspections were performed in these areas. One violation, two infractions, and four deficiencies were identified in the four inspections.

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. The Region III special appraisal of the licensee's Health Physics Program has not been conducted but is scheduled to be done in January of 1981.

Without the overexposure the licensee's performance in the area of Health Physics would have been rated better than average as compared to the performance of other Region III licensees. The rating was lowered to "average" in acknowledgment of the overexposure. It is concluded that the inspection frequency remain unchanged. The results of the Health Physics Appraisal inspection could modify this recommendation, however.

During the SALP period one inspection was conducted in the areas of analytical quality control, environmental monitoring, and emergency planning. Four deficiencies were identified in the area of environmental monitoring. None of the four involved hazard to the public. The licensee's performance in the area of analytical quality control is rated "average"; in the area of environmental monitoring the licensee's performance is rated "average" with respect to both nonradiological matters and radiological matters as compared to the performance of other Region III Licensees. In the area of emergency planning the licensee is ahead of most Region III licensee's in developing a plan and procedures to meet the new 10CFR50, Appendix E requirements. The licensee is the only one in Region III that has conducted a fully integrated drill and for that reason no comparison can be made with respect to their performance as compared to other Region III licensees.

Safeguards - 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. An 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 two 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.

The licensee's performance in the area of security is rated "below average" as compared to the performance of other Region III licensees. Accordingly, the inspection frequency will be increased. It is necessary that licensee corporate management increase their participation in the management of site security; that site management be made accountable for the implementation of the security program; and that site management place a higher priority on improving the security program.

Construction - During the SALP period six inspections were performed in this area. No items of noncompliance were identified. The licensee's performance in this area is rated "average" as compared to the performance of other Region III licensees.

Summary - The noncompliance history is of regulatory concern in the security area. The licensee's overall regulatory performance is acceptable. Licensee management needs to focus more attention on the implementation of security requirements. In addition, licensee management needs to continue efforts to correct the other concerns identified in NRC/Licensee management meetings.

B. Number and Nature of Licensee Event Reports

Type of Events:

(A) Personnel Error	17
(B) Design/Manf/Const/Install	23
(C) External Cause	1
(D) Procedure Deficiency	16
(E) Component Failure	40
(F) Other	<u>10</u>
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 LFR'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 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 coded the cause of 16 LER's (15%) to procedural deficiency. Three caused loss of decay heat (80-43, 80-49, and 80-57), two resulted in missing the personnel airlock surveillance test (80-16 and 80-74), and one resulted in loss of negative pressure boundary (80-47). The other ten were random and of lesser significance.

Other LER's appeared to be causally linked in the areas of control rod position indication (8), surveillance requirements exceeded (8), nuclear instrumentation channels (3), and borated water storage tank level indication (2).

C. Escalated Enforcement Actions

Civil Penalties            \$13,000    June 20, 1980

Inspection Report No. 50-346/80-12: One violation for inadequate exposure rate evaluations and two infractions, one for overexposure to direct radiation and one for failure to follow procedures regarding planning and preparation.

Orders

- (1) March 5, 1980 - Confirmatory Order regarding shift staffing and training.
- (2) April 21, 1980 - Crystal River Lessons Learned Confirmatory Order

Immediate Action Letters

May 2, 1980 - Security Inspection 50-346/80-13

D. Management Conferences Held During Past Twelve Months

February 29, 1980 - Discussion of training and experience levels of non-licensed operating personnel and the findings of the security inspection.

June 4, 1980 - Discussion of progress and changes made to improve management controls, staffing, training, plant operations, and to reduce equipment problems; review and assessment of security inspection findings; and enforcement action on a personnel overexposure.

E. Justification of Evaluations of Functional Areas Categorized as Requiring an Increase in Inspection Frequency/Scope

### Security

Increased inspection frequency is warranted in this area to followup on Region III concerns and the numerous items of noncompliance identified during the SALP period.

### Emergency Planning

Increased inspection scope is warranted in this area because of the recent changes in 10CFR50, Appendix E. This is applicable to the other Region III licensees.

## F. Other Observations

### Management Control

The items of concern identified in the previously referenced management meetings will continue to be followed closely by the resident inspectors. Continued licensee attention to these matters is required.

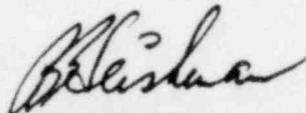
### Performance Appraisal Branch Inspection

The NRC's Performance Appraisal Branch (PAB) conducted an intensive inspection during the weeks of October 27-31, November 3-7, and 17-21, 1980. The inspection report has not yet been prepared. Because the report has not been prepared and because the PAB inspection was not completed in the SALP period, the findings were not included in this appraisal. The problems identified by PAB will be followed up by Region III. This will require increased inspection attention in QA audits, committee activities, procurement, and possibly other areas.

DAVIS-BESSE UNIT 1  
PERFORMANCE EVALUATION

Inspection  
Frequency and/or Scope

FUNCTIONAL AREA	Increase	No. Change	Decrease
1. Management Control		x	
2. Plant Operations		x	
3. Refueling Operations & Activities		x	
4. Maintenance		x	
5. Surveillance & Preoperational Testing		x	
6. Training		x	
7. Radiation Protection		x	
8. Environmental Protection		x	
9. Emergency Planning	x		
10. Fire Protection		x	
11. Security & Safeguards	x		
12. Design Changes & Modifications		x	
13. Reporting		x	
14. QA Audits		x	
15. Committee Activities		x	
16. Quality Control		x	
17. Procurement		x	



R. F. Heishman, Chief,  
Reactor Operations and  
Nuclear Support Branch

12/23/80  
(Date)