

September 9, 1985

Docket No. 50-346

DISTRIBUTION

Docket File

Mr. Joe Williams, Jr.  
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Dear Mr. Williams:

SUBJECT: MAINTENANCE SURVEY AT DAVIS BESSE NUCLEAR POWER STATION

This letter confirms discussions between the NRC Project Manager and Mr. T. Myers of your staff on August 15, 1985 regarding the subject survey. Davis-Besse was one of the plants selected for a survey under the NRC Maintenance and Surveillance Program. This program was developed in support of the Commissions 1984 Policy and Planning Guidance (NUREG-0885, Issue 3).

The maintenance survey at Davis-Besse will commence on September 16, 1985 and will generally follow the schedule shown in Enclosure 1 to this letter. Enclosure 2 presents an outline of the five major areas included in the survey and some general categories of interest within each of those areas. It is the intent of the survey team (Enclosure 3) to conduct informal discussions with the individuals identified in the schedule. The exit interview scheduled for the morning of September 20, 1985 may be, at your option, conducted as an informal discussion or in a meeting format. The staff will document its conclusions in a Safety Evaluation which will be issued prior to plant restart.

In order to carry out the survey as efficiently as possible, we request your assistance in: 1) providing plant access for the survey team; and 2) requesting that the individuals identified in Enclosure 1 reserve time for discussions with the survey team on the days identified. Individual discussions are expected to last 1 to 2 hours.

Questions regarding the survey may be addressed to Mr. George Dick of my staff. He may be reached at (301) 492-8174.

Sincerely,

\*ORIGINAL SIGNED BY

JOHN F. STOLZ\*

John F. Stolz, Chief  
Operating Reactors Branch #4  
Division of Licensing

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P PDR

Enclosures: As Stated

cc w/enclosures:  
See next page

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ORB#4:DL  
JStolz  
9/9/85

Mr. J. Williams  
Toledo Edison Company

Davis-Besse Nuclear Power Station  
Unit No. 1

cc:

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## DAVIS BESSE PRELIMINARY SITE VISIT SCHEDULE

## MONDAY

8:00 Arrive at site, get cleared for unescorted access, and badge in

10:30 Meet with Resident

11:00 Briefing to senior utility staff on purpose of visit

12:00 Lunch

1:00 Plant tour, including warehouse and maintenance spaces, but not the auxiliary building

3:00 Meeting with senior utility maintenance staff to discuss program and interview schedule

4:30 Collect applicable ACDs and other controlled documents

## TEAM 1

## TEAM 2

## TUESDAY

AM	Operations Manager	Maintenance Manager
PM	SS/CRO/Aux Operator SS/CRO/Aux Operator (next shift)	Personnel Assistant

## WEDNESDAY

AM	Warehouse Manager QC Manager QC Staff	Personnel Assistant
PM	Engineering and Technical Services Maintenance Manager Health Physics	Auxiliary Building Tour (Maintainability considerations)

## THURSDAY

AM	Electrical Supervisor and Foreman I&C Supervisor and Foreman Mechanical Supervisor and Foreman	Procedures Program Supervisor Maintenance procedures writer f f
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PM	Electrical Craftsmen	Maintenance Training Staff
	I&C Craftsmen	
	Mechanical Craftsmen	
	Maintenance Records Review	

FRIDAY

AM	QA Auditor--Corporate	In-Service Testing Manager
	Manager Design Control	

PM	Briefing to Resident
	Exit Interview

## ADMINISTRATION AND ORGANIZATION OF MAINTENANCE

## OBJECTIVES:

- o Describe the formal organization structure of the maintenance unit (department)
- o Describe plant policy, goals, and objectives and administrative procedures for implementing the maintenance program.
- o Describe how maintenance is managed and controlled using administrative procedures.
- o Describe the external and internal communication/coordination regarding plant maintenance programs.
- o Describe the maintenance information, planning, and scheduling system.

## CATEGORIES/ITEMS:

## --Formal Structure

- o Organization chart
- o Description of the number and type of major maintenance work units (e.g., mechanical, electrical, and I&C) at the plant and at the utility
- o Rank of maintenance manager
- o Supervisory level at which the maintenance units are linked
- o Number and type of formal or ad hoc committees or task forces that are involved with maintenance issues
- o Whether or not the maintenance manager reports offsite
- o Formal interaction with other plant work units

## --Administrative Policies and Procedures

- o General questions about policies and procedures
- o Definitions and policies regarding preventive, corrective, and predictive maintenance
- o Determination of maintenance and surveillance needs.

## --Administrative Control

- o General control questions
- o Quality control
- o Vendor technical information control
- o Personnel control

## --Administrative Coordination and Communication

- o General questions on coordination and communication policies and procedures
- o Coordinating committees, ad hoc groups, and task forces involved in maintenance

## --Administrative Information and Planning

- o Maintenance planning
- o Maintenance monitoring systems
- o On-line maintenance data bases
- o Indicators of maintenance performance

## FACILITIES AND EQUIPMENT

### OBJECTIVES:

- o Describe the features of the facilities that affect the performance of maintenance.
- o Describe the extent and availability of maintenance equipment and tools related to detection, diagnosis, disassembly, repair, testing, and monitoring of plant systems and equipment problems.
- o Describe the maintenance spare parts inventory system.
- o Describe maintenance-intensive components and tasks.
- o Describe the human factors aspects of the equipment and facilities.

### CATEGORIES/ITEMS:

#### --Facilities

- o Workshops
- o Tool cribs
- o Contaminated items storage
- o Warehouse space

#### --Equipment and tools

- o Movement of heavy equipment
- o Calibration of measuring and test equipment
- o Procedures for the control of equipment and tools
- o Intra-plant communication system
- o Equipment for minimizing radiation dose to workers
- o Design and qualification of equipment
- o Predictive maintenance equipment

#### --Inventory

- o Requirements for availability of inventory
- o Method for determining inventory orders
- o Controls over inventory
- o Centralization/decentralization of inventory storage
- o Shelf life of inventory

#### --Maintenance-intensive components and tasks

- o Number and type of maintenance-intensive components and tasks
- o Special provisions for working on maintenance-intensive components and tasks

#### --Human factors considerations

- o Labelling and location aids
- o Maintainability
- o Design and maintenance of environmental features

## TECHNICAL PROCEDURES

### OBJECTIVES

- o Describe the requirements for maintenance procedures and the method for determining their development, use, and control.
- o Describe how maintenance procedures are written.
- o Describe the verification/validation program for maintenance procedures.
- o Describe how maintenance procedures are reviewed and updated.
- o Describe the use of maintenance procedures.

### CATEGORIES/ITEMS

- Requirements for maintenance procedures
  - o How requirements are established
  - o How it is determined which maintenance procedures are to be written.
- Writing maintenance procedures
  - o Writer's guide for specifying content and format
  - o Who writes procedures
  - o Vendor technical data used as procedures
- Verification/Validation
  - o System for verification
  - o System for validation.
  - o Who carries out verification/validation
  - o Changes to procedures
- Review and Update
  - o Requirements for review and update
  - o Who does review and update
- Training on procedures
- Procedure use
  - o Policy on the use of procedures
  - o Provisions for QC hold points

## PERSONNEL

## OBJECTIVES:

- o Describe the staffing size and staffing policies.
- o Describe staff qualifications and qualification policies.
- o Describe recruitment and selection policies and procedures.
- o Describe training program and policies for maintenance staff.

## CATEGORIES/ITEMS:

## --Staffing

- o Process for determining staffing requirements
- o Staffing levels by craft as a function of plant staff, utility-added staff, and contractor personnel.
- o Staff retention
- o Salary structure
- o Shift work schedule
- o Union jurisdiction

## --Qualifications of plant staff and contracted staff

- o Method for determination of personnel qualifications

## --Recruitment and selection

- o Where recruited
- o How recruited

## --Training

- o Plant training
- o Vendor-sponsored training
- o Training program staff
- o Requalification training
- o Special training for staff who supervise contractors during an outage.

## WORK CONTROL

## OBJECTIVES:

- o Describe the work initiation system
- o Describe the work planning system
- o Describe the work scheduling system
- o Describe the work execution system
- o Describe the work closing/documentation system
- o Describe the work performance analysis system

## CATEGORIES/ITEMS

## --Work initiation

- o Who can initiate a work order
- o Does all work need to be done using the work order process
- o Staff training with regard to maintenance needs
- o Equipment history and performance trends

## --Work planning

- o Determination of whether work is to be done by plant staff or contracted staff
- o Rad protection and OSHA considerations
- o Special process considerations
- o Prioritization of maintenance and surveillance

## --Work scheduling

- o Sign-offs from other organizational units
- o Spare parts and tool considerations
- o Equipment considerations

## --Work execution

- o Configuration control for plant drawings
- o Independent verification
- o QC hold points
- o Safety grade vs. non-safety grade equipment

## --Work closing/documentation

- o Independent verification

## --Work performance analysis

- o Post-maintenance testing
- o Program analysis

## NRC MAINTENANCE SURVEY TEAM MEMBERS

<u>Name</u>	<u>Affiliation</u>	<u>Social Security Number</u>
Drew Persinko (Team Leader)	NRC/Division of Human Factors Safety	150-46-3082
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George F. Dick	NRC/Division of Licensing	579-54-4712
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