

Duke Power Company
McGuire Nuclear Generation Department
12700 Hagers Ferry Road (MG01A)
Huntersville, NC 28078-8985

T. C. McMEekin
Vice President
(704)875-4800
(704)875-4809 FAX



DUKE POWER

April 15, 1994

U. S. Nuclear Regulatory Commission
Washington, D. C. 20555
Attn: Document Control Desk

Subject: McGuire Nuclear Station
Docket Nos. 50-369, 50-370
Systematic Assessment of Licensee Performance
Report No. 50-369/94-01, 50-370/94-01
Response to Identified Maintenance Weaknesses

Gentlemen:

Mr. Stewart D. Ebnetter's letter dated March 17, 1994 transmitted the SALP Report for McGuire Nuclear Station for the period August 2, 1992 through February 5, 1994. The report was discussed with Duke Power representatives during a meeting held on March 29, 1994 at McGuire Nuclear Station.

As requested in Mr. Ebnetter's letter, we plan the following corrective actions to address weaknesses identified in the functional area of Maintenance.

We have established two major areas of management attention at McGuire Nuclear Station. These are to improve human performance (sponsored by the Station Manager) and to improve equipment reliability (sponsored by the Engineering Manager). Each project that becomes a part of these focus areas will be managed utilizing a newly implemented project management process. Management controls will be significantly strengthened by utilizing the project management process. This process includes regular project review meetings to address project status and review measures established to monitor improvement.

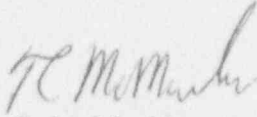
We will establish periodic progress review meetings to go over in detail our planned corrective actions. These meetings will assure the NRC is kept informed about the progress made with initial corrective action efforts and review new programs that may result from self-assessment efforts.

9404210171 940415
PDR ADOCK 05000369
Q PDR

IE 40
11

Attached are brief descriptions of each focus area, planned projects, and milestone schedules.

Very truly yours,



T. C. McMeekin

EMG/jsd

Attachments

xc: Mr. S. D. Ebnetter
Regional Administrator, Region II
U. S. Nuclear Regulatory Commission
101 Marietta St., NW, Suite 2900
Atlanta, Georgia 30323

Mr. Victor Nerses
U. S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
One White Flint North, Mail Stop 9H3
Washington, D.C. 20555

Mr. George Maxwell
NRC Senior Resident Inspector
McGuire Nuclear Station

HUMAN PERFORMANCE IMPROVEMENT

Station performance weaknesses have indicated a need to significantly improve human performance. A review of current human performance initiatives will identify those that require management attention at the Division and Site level. An assessment of previous incidents was conducted to determine the need for additional projects and/or initiatives. The Problem Identification Process will be utilized on an on-going basis (trending of cause codes) to determine the need for additional projects and the effectiveness of improvement initiatives. Each project will have an assigned sponsor, a project charter and milestone schedule. Projects will be tracked and reviewed regularly at management project review meetings. A human performance measure will be developed and utilized to trend progress toward improved human performance.

Human Performance Projects

1. Human Performance Focus Team

The top issues being addressed by this project are Procedure Use and Adherence, Procedure Development (Quality, Change Backlog), Color Coding, Independent Verification and Communication of Expectations.

2. Risk Assessment

Specifically as a result of the Unit 2 steam leak in containment event, risk assessment was recognized as a weakness needing attention. A process was developed in Mechanical Maintenance to perform a daily risk assessment of scheduled activities. The objective is to improve attention to detail, improve communication between Operations and Maintenance, instill a sensitivity for work on plant systems and focus management / supervisory oversight of maintenance activities. The process of daily risk assessment will be expanded to include all groups performing maintenance and testing activities in the plant.

3. Control of Non-Assigned Individuals

Oversight of maintenance performed by individuals not permanently assigned to McGuire has been a weakness. An improvement project has been initiated to clearly define expectations for work sponsors, ensure appropriate training and communication of the responsibilities and systematically assess the effectiveness of the new program through in-plant reviews.

4. Self-Assessment

An additional level of self assessments will be added in the McGuire Station Division. Review of lower tier problem trends will indicate the need to conduct station group self-assessments. A structured approach will be used, to include observation training, use of observation guide sheets, crew debriefs and recommended follow-up actions.

5. Human Performance Enhancement System (HPES)

HPES is an INPO program dealing with human performance improvement that will receive renewed commitment. There will be a focus on near miss investigations and review of employee identified problems. Reports providing improvement recommendations will be acted on by management.

6. Work Around Problems

A process will be developed to assure plant situations that require special compensatory measures during plant operations, are expeditiously identified / prioritized for corrective action.

7. Management Involvement

A structured process will be developed to assure higher levels of station management involvement in plant activities. It is important for management to be visible and available to clarify expectations as we implement improvement project tasks.

Attachment 2 is a high level milestone schedule indicating completion dates for some of the key project milestones. During our management meeting, more detail will be discussed.

EQUIPMENT RELIABILITY IMPROVEMENT

Numerous power reductions, shutdowns, and automatic trips have indicated a need to significantly improve equipment reliability. A process has been developed to prioritize major equipment problem resolutions. Each of these problems will be managed as a project with an assigned sponsor, a project charter, and milestone schedule and will be tracked and reviewed regularly at management project review meetings. The PIP process will be used on an on-going basis to identify equipment reliability issues and effectiveness of improvement initiatives.

An equipment reliability performance measure will be developed and utilized to trend progress toward improved equipment reliability.

The following is the initial major equipment problem resolution list:

1. Feedwater Regulating Valve Reliability
2. Current Steam Generator Reliability
3. Cold Leg Accumulators (CLA) Out Leakage and Inventory Decrease Problem
4. Radiation Monitors (EMF) Availability
5. Unit 1 Residual Heat Removal System Suction Line Pressurization
6. 7300 System (Process Protection/Process Control System) Reliability
7. 250 VDC Non-Safety Related Station Battery (DP) Capacity Problem
8. High Priority Chronic Valve Problems (Emergency Core Cooling System Checks, Containment Purge Ventilation System and Containment Ventilation Cooling Water System Penetration Valves, Pressurizer Cavity Valves)
9. Cutler Hammer E-30 Indicating Switches Reliability
10. Containment Penetration Bellows Degredation Problem

There are other projects in place which will serve to improve reliability of equipment in the plant. For example, a project is being coordinated between the three sites which will produce a consistent set of testing philosophies and policies to assure that equipment is being tested and challenged in a way to assure that it will perform its intended functions.

Attachment 3 is a high level milestone schedule indicating completion dates for some of the key project milestones. During our management meeting, more detail will be discussed.

Attachment 2

IMPROVE HUMAN PERFORMANCE KEY MILESTONES

	Item	<u>Scheduled Completion Date</u>
1.	Identify human performance improvement projects and assign project sponsors	4/15/94
2.	Establish Human Performance Measure	5/1/94
3.	Consolidate station measures for procedure discrepancy reduction, work backlog, maintenance effectiveness and project milestone completion.	5/1/94

Attachment 3

IMPROVE EQUIPMENT RELIABILITY KEY MILESTONES

	<u>Item</u>	<u>Scheduled Completion Date</u>
1.	Identify equipment reliability projects and assign sponsors	Complete
2.	Establish Equipment Reliability Measures	6/1/94
3.	Establish an Equipment Testing Philosophy - Phase I	6/1/94