



WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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January 4, 1991
G02-91-003

Docket No. 50-397

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

Gentlemen:

Subject: NUCLEAR PLANT NO. 2, OPERATING LICENSE NO. NPF-21
NRC INSPECTION REPORT 90-05
RESPONSE TO MAINTENANCE TEAM INSPECTION ISSUES

Reference: Letter. RP Zimmerman (NRC) to DW Mazur (SS),
same subject, dated August 9, 1990

As requested in the referenced cover letter to the subject inspection report, the purpose of this correspondence is to provide comments pertaining to concerns identified during the NRC Maintenance Team Inspection, including the expected date for restoring Control Room Emergency Chiller CCH-CR-1A to operable status.

As summarized below and discussed in detail in the subject inspection report, the inspection team identified the following generic concerns:

1. In some instances plant personnel appeared willing to accept inadequate work instructions and to depart from work instructions without proper authorization.
2. In some instances plant personnel appeared to fail to recognize needed corrective actions.
3. Plant personnel appeared to defer needed corrective actions. In this regard the team noted that, in some instances, the plant staff appeared to rationalize regulatory requirements at the expense of timely corrective action.

The Supply System acknowledges the validity of these concerns and, as a result, several improvement initiatives either have been or will be implemented to address the problems identified. The following is a description of those initiatives for improving performance in the areas identified.

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As a result of the several problems identified during repair efforts associated with the broken flex conduit on temperature element CMS-TE-12 in the drywell, Supply System management directed that a formal Incident Investigation and Category 1 (the highest level) Root Cause Analysis (RCA) be performed for this event. The scope of the RCA included analysis of the deviation from established work instructions, the failure to document work performed, work instruction preparation, the role of Quality Control and the impact on Plant equipment. The focus of the Incident Investigation was to look into the specifics of the event from a broader context, including an investigation of work practices, a review of previous work performed by the individuals involved, and training provided. Although there were followup issues and recommendations identified, it was concluded from both the RCA and the Incident Investigation that the flagrant deviation from approved work instructions which occurred during the CMS-TE-12 repair efforts is not a common practice and; therefore, was considered to be an isolated incident.

With regard to work instruction preparation and implementation, the work control process has been completely restructured. Plant Procedure (PPM) 1.3.7, "Maintenance Work Request (MWR)", was revised to include new requirements and changed standards, and is written in a format that supports computer-generated work instructions. The long term expectation is to convert this process to a computerized Local Area Network (LAN) that will handle site-wide MWR processing and tracking. The new procedure revision (11) was implemented on August 6, 1990, and existing work packages written to Revision 10 will be phased out by January 31, 1991. The goal of this complete revision is to provide work packages that contain all of the information necessary to perform the work, and to present a clear picture of what work was accomplished, by standardizing work package preparation and processing. Training on this new process has been provided to more than 300 craft and exempt personnel involved in preparing and reviewing work instructions.

The new MWR procedure provides seven pages of instructions and rules for performing work in the field. Included in these instructions is direction that, if the work instructions are not clear or if the craftsmen do not agree with what is required, personnel involved should inform their supervisor prior to performing the work to resolve their concerns. In addition, during the release-for-work process; the craftsmen are required to review the complete work package for scope and content. The procedure also contains several pages of instructions concerning work package format and content which is intended to provide for consistent and well written work packages. Furthermore, as part of the Maintenance Improvement Program, a procedure upgrade effort is currently underway which includes a new verification and validation process. The validation effort is being performed by the craftsmen in the field.

Efforts, which are also related to work instruction preparation and implementation, are in progress for a complete overhaul of the Preventive Maintenance Program. The Supply System has contracted with General Physics Corporation for a review of the entire WNP-2 PM Program utilizing Reliability-Centered Maintenance (RCM) techniques to develop recommended maintenance tasks and frequencies. This effort began during the Spring of 1990 and will continue over a 30 month period, with recommendations implemented incrementally during that time as individual system studies are completed. As part of the review, the contractor will utilize industry and plant failure data, vendor guidance, and individual system failure mode and effect analyses. This data will provide the contractor with the information necessary to make recommendations for future preventative maintenance and condition monitoring activities, such as lubrication oil sampling and changeout frequencies. This overall evaluation of the PM Program will also provide for a review, by Plant Maintenance and Technical personnel, of those recommendations developed by the contractor.

Preventive Maintenance Program improvement initiatives include preparation of component specific work instructions for each recommendation and expansion of the existing monitoring program to better predict component condition. This effort will also include a review of existing task descriptions to verify adequacy, and either improve the description or provide additional instructions as necessary. Through implementation of this thorough, detailed approach, future PM Program activities can be performed with assurance of a sound basis for each task.

Significant improvements have been made to the Plant Problem Reporting Process. This process prescribes the use of Problem Evaluation Request (PER). A PER is a document used to provide a controlled method to formally communicate the existence of a problem to plant management for action. It is a single sheet form which can be initiated by anyone knowledgeable of an existing or potential problem which requires resolution. All PERs are reviewed by the Management Review Committee (MRC) for initial assessment, assignment of priority and allocation of resources. This process is a significant improvement in our ability to identify and resolve problems by lowering the threshold for problem identification and involving several members of the management staff in problem resolution (including scheduling) and followup. Furthermore, the MRC is comprised of members of the Plant Operating Committee (POC). In this collective decision making environment, identified problems are assigned a priority based on the impact to the Plant and Plant personnel. In several instances, the MRC has directed that either a POC Immediate Disposition Approval Request and/or a 10CFR50.59 evaluation be performed for problems based on either their impact, or where the resolution needed to be delayed.

Further improvements are also in progress pertaining to evaluation of those situations where equipment must be out of service for an extended period of time. Plant Procedure 1.3.43, "10CFR50.59 Evaluation Process," is currently being revised to assign the Work Control Group the responsibility of reviewing work for 10CFR50.59 impact. This centralized group is responsible for schedule coordination of MWR work instructions, MWR implementation, MWR closeout, preventive maintenance activities and special tests and inspections. As part of its duties, the Work Control Group will identify and track those components that cannot be repaired in a timely manner. As part of the decision process for such components, an operability evaluation would be performed to determine the safety significance. If a structure, system or component will not be repaired in a timely manner, the evaluation will be performed to determine if the equipment is either safety-related, is required for the current operational mode of the Plant, or is non-safety related that impacts the function of safety-related equipment. For all safety-related structures, systems or components that are not covered by the Technical Specifications and its associated action statements, an operability evaluation would be required to determine the allowable outage time. An operability evaluation would also be required to determine the allowable outage time for those non-safety related structures, systems or components that impact the safety function of safety-related equipment. Furthermore, Plant System Engineers have the responsibility for periodically evaluating the status of long-standing maintenance issues.

Efforts are also currently underway to re-evaluate Area/Floor Coordinator responsibilities, both from a procedural and management expectation standpoint. Included as a current responsibility of the Area/Floor Coordinators is to identify degradation and abnormalities of equipment and structures, and bring such information to the attention of Plant management. An evaluation will be performed to determine if additional guidance is needed or can be provided for enhancing the awareness of the coordinators pertaining to the material condition of the Plant in those areas for which they are responsible.

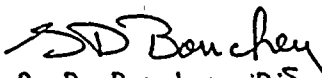
With regard to Control Room Emergency Chiller CCH-CR-1A, significant repair efforts have been underway which included seismic qualification testing of repair parts, chemical cleaning and Freon flushing. During these efforts, several PERs have been written documenting chiller status and management resolution of the problems identified. A vendor representative is currently on site to assist with repair efforts associated with reassembly of the compressor and motor. Following reassembly, an operational test will be performed on the unit. It is anticipated that chiller CCH-CR-1A will be restored to operable status during January, 1991. Furthermore, the additional operability reviews previously described are intended to ensure management attention to these types of situations in the future.

In summary, management expectations in the areas of work package preparation, review and implementation; and problem identification and resolution are such that work is to be performed correctly the first time with followup actions where necessary. Personnel are held accountable for following established policy and procedures during work performance. If problems arise, personnel are expected to bring those concerns to the attention of management. Furthermore, efforts are currently being taken to increase supervisor/engineer sensitivity to problem identification and timely resolution.

Page Five
RESPONSE TO INSPECTION REPORT 90-05
January 4, 1991

These expectations, coupled with the improvement initiatives described, and supervisory involvement in the field, are intended to address concerns such as those identified during the maintenance team inspection.

Very truly yours,


G. D. Bouchey, Director
Licensing & Assurance

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