U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No:

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Docket No:

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License No:

NPF-21

Licensee:

Washington Public Power Supply System

P.O. Box 968

Richland, WA 99352

Facility Name: Washington Nuclear Project No. 2 (WNP-2)

Meeting at:

Portland, Oregon

Meeting Conducted: August 25, 1988

Prepared by:

J. Bosted, Senior Résident Inspector

Approved by:

P. H. Johnson, Chief

Reactor Projects Section 3

Summary:

A Management Meeting was held August 25, 1988 at the request of the Region V. Regional Administrator to review with the Supply System Board of Directors the results of the recent Systematic Assessment of Licensee Performance (SALP) and other items of concern to the NRC.

Weaknesses in performance were reviewed in the Operations, Engineering and Quality Assurance areas. Examples were provided illustrating the major concerns. The concerns seemed to have two common causes: insufficient management involvement in activities and insufficient follow through on past commitments and corrective actions.

DETAILS

1. Management Meeting Participants

NRC Participants

- J. B. Martin, Regional Administrator
- C. J. Bosted, Senior Resident Inspector

WPPSS Executive Board

- C. Halverson, Board Chairman
- P. Knight, Chairman, Operations Board
- V. Claussen, Board Member
- K. Cochrane, Board Member
- C. Duffie, Board Member S. Farmer, Board Member
- R. Foleen, Board Member
- P. Nolan, Board Member
- W. Scott, Board Member
- S. Steinborn, Board Member
- F. Ward, Board Member

WPPSS Participants

- D. W. Mazur, Managing Director
 - J. Shannon, Deputy Managing Director
 - A. L. Oxsen, Assistant Managing Director for Operations
 - G. D. Bouchey, Director, Licensing and Assurance
 - G. R. Peterson, Director, Administration

 - G. Doupe, Esq., Chief Counsel
 J. Perko, Chief Financial Officer
 J. Burn, Director, Engineering

 - B. Holmberg, Manager, Construction Projects
 - P. Hliboki, Executive Assistant Managing Director, OFC
 - S. Reese, Legal Administrative Supervisor
 - S. Payne, Director, Internal Audits

Bonneville Power Administration

- R. Mazurkiewicz, Chief, Operations Branch
- S. Hickey, Assistant Administrator, Office of Energy Resources
- D. Perlas, Deputy Assistant Administrator Office of Energy Resources
- J. Lewis, Director, Division of Nuclear Projects
- E. Revell, Chief, Management Systems Branch

State of Washington

- W. Fitch, Exec. Secretary, Energy Facility Site Evaluation Council
- K. Sedore, Supply System Board of Directors Representing the City of Richland

2. Background

The recent SALP report contained Category 3 ratings in the areas of Operations and Engineering/Technical Support. The basis for these ratings were discussed with the Supply System Management in previous meetings.

On August 25, 1988, the Region V Regional Administrator met with the Supply System Board of Directors during their scheduled monthly meeting. This meeting was at the request of Mr. Martin in order to review the recent SALP Report and emphasize NRC concerns with the operation of WNP-2 directly with the Board of Directors.

The meeting convened at 10:00 a.m.

3. Meeting Topics

Mr. Halverson (WPPSS Board Chairman) opened the meeting by welcoming Messrs. Bosted and Martin to the August Board meeting and introduced the members of the Board, the Supply System staff, and guests from Bonneville Power Administration and the State of Washington.

Mr. Martin began the discussion by stating that, during the past few years, he had observed that one disturbing characteristic of plants encountering difficulty around the country was that top management was not aware of developing problems until too late. In many cases, the chairmen of the board for these plants have indicated that nobody had told them of the problems that were occurring. Mr. Martin stated that he did not want this to be the case with the Supply System. He stated that his main reason for this meeting was to make sure that the highest levels of the Supply System were aware of the past problems and that there was no confusion on the Board's part about the NRC's concerns.

Mr. Martin continued by stating that a decline had been observed by the NRC in the performance of the Operations and Engineering groups, and that the Maintenance and Quality Assurance groups were not far behind. However, the performance of these groups met minimum requirements and were not considered as unsafe or unsatisfactory. Mr. Martin then read the definition of the SALP Category 3 to the board. He wanted to ensure the Board that there was still time to act before an unsatisfactory situation developed.

Mr. Martin reviewed the situation in the Plant Operations functional area. When WNP-2 started operations in 1984, the plant staff had the highest experience level in the Region; about 60% of the operators had previously been licensed at other plants. Despite this high experience level, the startup program and initial operations were considered among the poorest of all U.S. plants under similar circumstances. Since startup, things have improved. However, they were not considered to have improved to the degree that they should have, nor to the level which the organization was capable of achieving. Mr. Martin emphasized this by reviewing several significant operating events which have occurred during the last year.

These events were the following:

- (a) Rupture of the secondary containment.
- (b) Spill of highly radioactive resin.
- (c) System lineup deficiencies leading to near electrocution.
- (d) Several instances of loss of control of reactor vessel level.

The NRC considered that these events were all the more disturbing since they contained numerous opportunities for plant personnel to prevent them. Furthermore, several of the problems were preceded by similar occurrences that received no followup action and were not dealt with properly. In the case of the electric shock events, the Supply System's QA group had identified in the past that there was a problem with clearance orders, yet no corrective action was taken.

Mr. Martin observed that the type of performance in the Plant Operations area over the last year was not what one would expect from a nuclear power plant that had been operating for 4 years. In addition, if this performance is not turned around, it could lead to serious mishaps.

The Engineering and Technical Support areas were the next topics for discussion. Mr. Martin pointed out that the NRC had devoted considerable effort toward inspection of design, engineering, and technical support activities over the last couple of years at all nuclear plants. He also stated that these were areas that had not received much attention in the past, and consequently, many problems with technical work were found. The situation at WNP-2 was considered especially difficult because of the large number of contractors and engineering firms that had performed work at WNP-2. The basic problems found in these areas were the following:

- (a) Personnel who operate, maintain, and modify the plant did not fully understand the design.
- (b) There was an urgent need to recover and document the design of the plant before all the documents and people were gone. In addition, the problem will become more difficult as the time from construction gets longer.
- (c) Design work was being performed poorly; work was sent back to be re-performed several times before it could be effectively implemented in the plant. In addition, management was not aware of the inadequate product that was sent to the plant.
- (d) The as-built plant did not always match the design.

Mr. Martin followed up by stating that the Engineering group must play a more important role in the day to day operation of the plant. The engineers must get out into the plant and become familiar with the performance of the plant and not wait for operations to bring them problems. Engineering needs to find problems before they occur. Mr. Martin stated that nuclear plants are a technical endeavor and one should expect to see the Engineering people deeply involved in a proactive vs. reactive way.

Mr. Martin went on to discuss the area of Quality Assurance and addressed not only the QA organization, but all the various safety oversight groups. He stated that not all significant problems have been brought to the proper levels of management and that QA has not played a strong enough role in the past. In addition, Engineering and QA must be viewed at the same level as Operations by all personnel within the Supply System organization. Mr. Martin pointed out that if the quality oversight groups are not doing their jobs, then everyone will suffer. Depending on NRC or INPO to find problems, or worse yet allowing them to self reveal, was not considered a satisfactory approach. In addition, the whole organization seemed to be resistant to self-criticism in the past.

Mr. Martin noted that the Supply System has put together an action plan to deal with most of these concerns. However, there have been corrective action plans in the past which have not been fully effective. He emphasized this by pointing out that the reactor Post Trip Review Procedure took six months to be issued and that the Root Cause Assessment Procedure took nine months. Mr. Martin stated that he was hopeful that the present improvement plan would work, but experience with WNP-2 had made him skeptical.

The discussion continued with Mr. Martin stating that he was disturbed by recent all-hands briefings given by plant management. He felt that personnel might interpret the content of the briefings in a tone that the Supply System was receiving too much criticism from the NRC, INPO, and the public, and that these were the reasons for demanding improvement. Mr. Martin emphasized that this would represent a distorted motivation. The reason for improvement should be the recognition that WNP-2 was not living up to its potential as a safe and reliable energy resource, rather than to avoid criticism.

Mr. Martin concluded his remarks by telling the Board that it could take a couple of years to make substantial improvements in performance, and that the Supply System should have a means to measure progress and accomplishments. He stated that he did not think that several hundred people would do a better job based on a motivation of not getting criticized by the NRC or INPO. Mr. Martin also stated that the plant was safe, but the trend was not positive. He then urged the Board members to see the plant and conditions for themselves.

Mr. Knight, Chairman of the Operations Board, then thanked Mr. Martin and stated that he was embarrassed that Mr. Martin had to come to the meeting for this kind of presentation. Mr. Knight then opened up the meeting for questions from the other Board members. Mr. Martin answered several questions.

The meeting adjourned at 11:30 a.m.