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NRC**Washington Public Power Supply System**

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REGION V IRE

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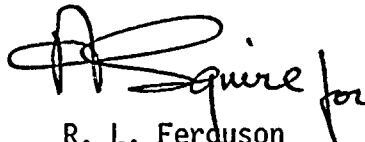
Mr. D. M. Sternberg  
SALP Board Chairman and  
Chief Reactor Projects, Branch No. 1  
U.S. Nuclear Regulatory Commission  
Region V  
1450 Maria Lane, Suite 210  
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Subject: NUCLEAR PROJECT NO. 2  
SYSTEMATIC ASSESSMENT OF LICENSEE  
PERFORMANCE (SALP) RESPONSE

Reference: SALP Report dated October 27, 1982, D. M. Sternberg to  
R. G. Matlock.

The above referenced SALP report identified two (2) Category 3 weakness areas which the WNP-2 Project is required to respond to. In addition to responding to these 2 Category 3 items, the Project has also elected to respond to the three (3) other Category 2 areas of perceived weakness. The Project's response to each of the five (5) areas are included as Attachment A to this letter.

If there are any questions concerning this matter, please contact Roger Johnson, Project QA Manager, WNP-2, at (509) 377-2501, extension 2712.



R. L. Ferguson  
Managing Director

MER/kd

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## ATTACHMENT A

### WNP-2 SALP RESPONSE

The following provides a restatement of the two Category 3 and selected Category 2 items identified as weaknesses within the SALP Report and the Supply System's response to those items.

#### CATEGORY 3

##### Electrical Power Supply and Distribution

###### Analysis

A major area of concern, discussed in the last assessment period, involved the lack of a clear definition of acceptance criteria for insuring the electrical independence of redundant safety related circuits. The Licensee's criteria, which had been submitted as a response to NRR question 031.100, was found to be not acceptable to the NRC. A revised criteria, submitted in June 1981, was not clearly reflected in FSAR Amendments submitted in May, 1982. This new criteria is presently under NRR review. The regional inspection program remains uncertain of the status of the current installation with respect to acceptable independence criteria. During this assessment period, Burns and Roe continued to hold this problem within their organization. The installation contractor, the Construction Manager, and the Licensee have not taken an active part in assuring the quality of electrical installations with respect to separation criteria.

Outstanding deficiencies in the separation and identification of cables within the power generation control complex have been identified by the Licensee as early as 1978 and remain unresolved.

###### Conclusion

###### Category 3

###### Board Recommendations

A major review of electrical installations to verify conformance to acceptable independence criteria is required.

###### Supply System Response

In recent months, electrical separation has become an issue of concern with the NRC. Electrical separation has been a subject of extensive discussion during the last several years. It is believed that poor communication and more recently, the lack of clarity in a FSAR Amendments, have contributed greatly to this problem.

Recognizing the importance of this issue, the Supply System established a Task Force in September, 1982, to revisit electrical separation; both the criteria and its implementation in the field. On October 6, 1982, the Supply System made a presentation to the NRC (Licensing and Region V) on electrical separation. The purpose of that meeting was to discuss the Task Force activities and approach to resolve this concern.



The prime issues are: 1) The adequacy and clarity of the electrical separation design criteria, and 2) the difficulty in verifying its implementation in the field. The steps taken and ongoing activities to address these issues include:

- The October 6, 1982 presentation to clarify criteria, discuss concerns, and initiate improved communications.
- The review of existing criteria and generation of improved analysis to better justify some design criteria aspects.
- Ongoing discussions with the NRC to address progress and resolve outstanding concerns.
- The generation of an electrical separation design criteria/verification document to clearly state the criteria and provide a common baseline, and to provide sufficient information in a manner to ease the field verification difficulty.

The completion dates for major milestones are:

- Issue the electrical separation design criteria/verification document by the middle of December.
- Complete the analysis upgrade and Task Force review activities by end of January, 1983.

#### Construction Deficiency Reports

During this assessment period, an effective tracking system for insuring implementation of proposed corrective actions to resolve reported construction deficiencies remains absent in the Licensee's program. Many of the issues reported by the Licensee under 10CFR50.55(e) requirements remain unresolved long after the Licensee's final report submittal. Notable among these are deficiencies in the fuel pool cooling system installation, concrete expansion anchor installation, load-bearing grout installation, and independence of redundant circuits within the power generation control complex. Final reports on these deficiencies were submitted as early as 1979. However, corrective actions did not appear to have been properly implemented during the assessment period.

#### Conclusion

##### Category 3

#### Recommendations

The Licensee should devote additional effort to insuring that proposed corrective actions to reported construction deficiencies are fully implemented.

#### Supply System Response

The Project recognizes that for some of the older outstanding construction deficiency reports, follow-up action to assure proper and continued implementation of the corrective action has been somewhat lacking. To enhance our assurance that our commitment/corrective actions have been adequately implemented, Project Quality Assurance (PQA) has incorporated as part of the site surveillance program, follow-up surveillances on construction deficiency reports. A standard checklist has been developed for these surveillances to assure uniformity in the verification effort. The checklist includes verification of such attributes as drawings, procedures, NCR's and implementation of Project Engineering Directives (PED's).



The construction deficiency surveillance checklist will be used in conjunction with the standard surveillance report form, and processed in accordance with the Quality Assurance Instruction 10-2, "Quality Assurance Surveillance Program." A copy of the completed surveillance will be filed with the construction deficiency report. This addition to the surveillance program will provide the additional visibility necessary to assure thorough follow-up and implementation of our commitments made by way of construction deficiency reports.

## CATEGORY 2

### Construction Deficiency Reports

Licensee should place additional emphasis on insuring implementation of corrective actions defined in construction deficiency reports.

### Conclusion

Category 2

Recommendations - Same as above

Supply System Response - Same as above

### Corrective Actions

There have been cases this period where the Licensee approached problem resolution in a manner different than that formally committed to the NRC and delayed notifying the NRC of these changes. One such item involved the reduction of hardware inspections from 100 percent to 10 percent as related to SRC's. This area represents a continued weakness in the Licensee's program.

### Conclusion

Category 2

### Supply System Response

The Construction Manager's QA Department has committed to review and verify the corrective action plans for open NRC Inspection Items to ensure that the commitments reflect current implementation.

With respect to the SRC's, the construction contractor is developing a response to NRC Item 82-18/01 which identified this concern.

Revised responses to previously identified NRC enforcement items which were resolved on the basis of SRC implementation will be formally transmitted to Region V once Item 82-18/01 is resolved.





## Piping Systems and Supports

### Analysis

A major Quality Assurance Program breakdown was identified during the early part of the prior appraisal period. This included design, as-built documentation, minimum pipe wall thickness, and sway brace assembly adequacy questions. The specific and general matters have been or are being addressed by the Licensee, but were not completed by the end of this appraisal period. Progress toward resolution of the issues has been noted and constitutes improvement in this area.

During the current appraisal period the Licensee limited the mechanical contractor work scope to identification and resolution of discrepancies in documentation of prior work. New piping and pipe hanger work was assumed by Bechtel. This permitted the contractor to focus total resources on an intensive quality assurance effort relating to materials acceptability and installation adequacy. This effort intensified in the second half of the appraisal period with over 300 engineer and clerical personnel performing a 100% review of all procurement and installation records. No NRC items of noncompliance were identified relative to the review effort.

Initial Bechtel efforts demonstrated loss of process control as identified by the ASME authorized inspector; the specific matters have since been resolved. One NRC item of noncompliance was identified relative to adherence to procedures for removal of piping surface defects. The matter has since been resolved. Bechtel has also experienced difficulties in controlling materials, and has identified document control problems in lost weld records. These matters suggest a continued weakness in process control. This area has been identified by the Licensee Quality Assurance Department which is attempting to effect improvements.

### Conclusion

#### Category 2

#### Supply System Response

On June 23, 1982, the Supply System QA Department identified, via Management Corrective Action Request (MCAR) three (3) areas indicative of process control problems requiring immediate attention. They were: 1) Timely issuance of NCR's; 2) violation of hold points; and 3) adherence to approved procedures. The contractor responded on July 29, 1982 with actions designed to improve in-process control. The Supply System subsequently verified the contractor's actions and has noted improvement in this area. In addition, and as a result of lessons learned from RPV Hydro, the construction contractor's organization structure was changed from an area concept to a system team concept. The new organization structure resulted in the Quality Control Department being able to provide closer supervision to the work process inspections and document control. Also, QC supervision has established Inspector Daily Status Sheets that provide current accountability of QC records. These new controls were presented in a meeting by the construction contractor to Supply System QA and the NRC Resident Inspector on September 20, 1982.

