

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9106120176 DOC.DATE: 91/06/06 NOTARIZED: NO DOCKET #  
 FACIL:50-397 WPPSS Nuclear Project, Unit 2, Washington Public Powe 05000397  
 AUTH.NAME AUTHOR AFFILIATION  
 FILES,C.L. Washington Public Power Supply System  
 BAKER,J.W. Washington Public Power Supply System  
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 91-013-00:on 910507,nonconforming conditions identified  
 in surveillance procedure verification program.Caused by  
 less than adequate controls & barriers.Corrective actions  
 not identified to date.W/910606 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 18  
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

### NOTES:

|           | RECIPIENT<br>ID CODE/NAME | COPIES<br>LTTR ENCL | RECIPIENT<br>ID CODE/NAME | COPIES<br>LTTR ENCL |
|-----------|---------------------------|---------------------|---------------------------|---------------------|
|           | PD5 LA                    | 1 1                 | PD5 PD                    | 1 1                 |
|           | ENG, P.L.                 | 1 1                 |                           |                     |
| INTERNAL: | ACNW                      | 2 2                 | ACRS                      | 2 2                 |
|           | AEOD/DOA                  | 1 1                 | AEOD/DSP/TPAB             | 1 1                 |
|           | AEOD/ROAB/DSP             | 2 2                 | NRR/DET/ECMB 9H           | 1 1                 |
|           | NRR/DET/EMEB 7E           | 1 1                 | NRR/DLPQ/LHFB10           | 1 1                 |
|           | NRR/DLPQ/LPEB10           | 1 1                 | NRR/DOEA/OEAB             | 1 1                 |
|           | NRR/DREP/PRPB11           | 2 2                 | NRR/DST/SELB 8D           | 1 1                 |
|           | NRR/DST/SICB8H3           | 1 1                 | NRR/DST/SPLB8D1           | 1 1                 |
|           | NRR/DST/SRXB 8E           | 1 1                 | <u>REG FILE</u> 02        | 1 1                 |
|           | RES/DSIR/EIB              | 1 1                 | RGN5 FILE 01              | 1 1                 |
| EXTERNAL: | EG&G BRYCE,J.H            | 3 3                 | L ST LOBBY WARD           | 1 1                 |
|           | NRC PDR                   | 1 1                 | NSIC MURPHY,G.A           | 1 1                 |
|           | NSIC POORE,W.             | 1 1                 | NUDOCS FULL TXT           | 1 1                 |

### NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK,  
 ROOM PI-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION  
 LISTS FOR DOCUMENTS YOU DON'T NEED!

FULL TEXT CONVERSION REQUIRED  
 TOTAL NUMBER OF COPIES REQUIRED: LTTR 33 ENCL 33

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

P.O. Box 968 • 3000 George Washington Way • Richland, Washington 99352

Docket No. 50-397

June 6, 1991

G02-91-115

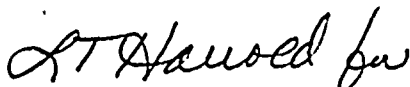
Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Subject: NUCLEAR PLANT NO. 2  
LICENSEE EVENT REPORT NO. 91-013

Dear Sir:

Transmitted herewith is Licensee Event Report No. 91-013 for the WNP-2 Plant. This report is submitted in response to the report requirements of 10CFR50.73 and discusses the items of reportability, corrective action taken, and action taken to preclude recurrence.

Very truly yours,



J. W. Baker (M/D 927M)  
WNP-2 Plant Manager

JWB:ac

Enclosure:

Licensee Event Report No. 91-013

cc: Mr. John B. Martin, NRC - Region V  
Mr. C. Sorensen, NRC Resident Inspector (M/D 901A)  
INPO Records Center - Atlanta, GA  
Ms. Dottie Sherman, ANI  
Mr. D. L. Williams, BPA (M/D 399)  
NRC Resident Inspector - walk over copy

*TE22*  
*11*  
*Cent No*  
*P085602777*

## LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Washington Nuclear Plant - Unit 2 DOCKET NUMBER (2) 0 5 0 0 0 3 9 7 1 OF 1 17 PAGE (3)

TITLE (4) Technical Specification - Surveillance Procedure Verification Program  
Identification of Non-Conforming Conditions

| EVENT DATE (5) |     |      | LER NUMBER (6) |                   |                 | REPORT DATE (7) |     |      | OTHER FACILITIES INVOLVED (8) |  |                  |
|----------------|-----|------|----------------|-------------------|-----------------|-----------------|-----|------|-------------------------------|--|------------------|
| MONTH          | DAY | YEAR | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER | MONTH           | DAY | YEAR | FACILITY NAMES                |  | DOCKET NUMBER(S) |
| 0              | 5   | 07   | 91             | 91                | 1               | 0               | 6   | 91   |                               |  | 0 5 0 0 0 0      |

OPERATING MODE (9) 5 THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

| POWER LEVEL (10) | 20.402(b) | 20.406(a)(1)(i) | 20.406(a)(1)(ii) | 20.406(a)(1)(iii) | 20.406(a)(1)(iv) | 20.406(a)(1)(v) | 20.406(c) | 20.406(c)(1) | 20.406(c)(2) | 20.406(c)(2)(i) | 20.406(c)(2)(ii) | 20.406(c)(2)(iii) | 50.73(a)(2)(iv) | 50.73(a)(2)(v) | 50.73(a)(2)(vii) | 50.73(a)(2)(viii)(A) | 50.73(a)(2)(viii)(B) | 50.73(a)(2)(ix) | 73.71(b) | 73.71(c) | OTHER (Specify in Abstract below and in Text, NRC Form 366A) |  |
|------------------|-----------|-----------------|------------------|-------------------|------------------|-----------------|-----------|--------------|--------------|-----------------|------------------|-------------------|-----------------|----------------|------------------|----------------------|----------------------|-----------------|----------|----------|--|--|
| 0 0 0            |           |                 |                  |                   |                  |                 |           |              |              |                 | X                |                   |                 |                |                  |                      |                      |                 |          |          |  |  |

LICENSEE CONTACT FOR THIS LER (12) NAME Carl L. Fies, Compliance Engineer TELEPHONE NUMBER 51019317171-1201319 AREA CODE

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

| CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NRPDS | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NRPDS |
|-------|--------|-----------|--------------|---------------------|-------|--------|-----------|--------------|---------------------|
|       |        |           |              |                     |       |        |           |              |                     |
|       |        |           |              |                     |       |        |           |              |                     |
|       |        |           |              |                     |       |        |           |              |                     |

SUPPLEMENTAL REPORT EXPECTED (14) X YES (If yes, complete EXPECTED SUBMISSION DATE) NO EXPECTED SUBMISSION DATE (15) 0 17 0 13 911

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16):

On May 7, 1991 the first of several items of non-compliance with the WNP-2 Technical Specification was identified as part of a program of Surveillance Procedure verification. This Surveillance Procedure Verification Program was initiated by the Supply System as a result of problems found in recent months. A total of 115 potential deficiencies were identified by contract Engineers and this effort is complete. A further evaluation by the Plant Staff was performed on each potential problem item to identify the validity and necessary follow-up actions. A total of seven items were identified as reportable problems by this process when the time cutoff date for this LER occurred. The seven items cover a variety of subjects involving items of non-compliance. Some of the items are issues where compliance is not possible and a Technical Specification Change or other relief will be requested. This LER should be considered a preliminary document as the investigation of these items is still in progress. A revision to this LER will be submitted prior to July 3, 1991 to provide an update of these initial seven items and additional reportable items that are discovered by the review.

Immediate and further corrective actions include additional testing, Plant Procedure changes, requests for Technical Specification changes or other relief, and possible design changes. General corrective actions have not been identified to date but will be included in the LER revision.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-830), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

| FACILITY NAME (1)                 | DOCKET NUMBER (2)     | LER NUMBER (6) |                   |                 | PAGE (3) |  |  |
|-----------------------------------|-----------------------|----------------|-------------------|-----------------|----------|--|--|
|                                   |                       | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER |          |  |  |
| Washington Nuclear Plant - Unit 2 | 0 5 0 0 0 3 9 7 9 1 1 | 0 1 1 3        | 0 1 0 0 2         | OF 1 1 7        |          |  |  |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

Abstract (continued)

The root causes for these events include less than adequate barriers and controls for program changes and less than adequate test procedures, directives/requirements, and design. A contributing factor for a number of issues in the total population of 115 is a heightened expectation to resolve any discrepancy between the wording of the Technical Specification requirements and the actual means of accomplishing the requirement. The root cause analysis has not been completed and will be discussed further in the revised LER.

The safety significance of each item and the whole program was evaluated and it has been concluded the events posed no threat to the health and safety of either the public or plant personnel.

Plant Conditions

Power Level - 0 %  
Plant Mode - 5

General Event Description

On May 7, 1991 the first of several items of non-compliance with the WNP-2 Technical Specification was identified as part of a program of Surveillance Procedure verification. This Surveillance Procedure Verification Program was initiated by the Supply System as a result of problems found in recent months (see Similar Events below). The goal of the effort was to assure:

1. That each Technical Specification Surveillance Requirement is addressed in one or more plant procedures that implements the surveillance requirements.
2. That the plant procedures utilized to meet the surveillance requirements properly reflect the frequency requirements. Further, the review was to assure that conditional requirements for performance of surveillance activities were identified in an appropriate initiating procedure.
3. That any special equipment configurations or conditions which must be met during surveillance testing, and were specifically identified in the Technical Specifications, were properly included in the appropriate procedures. For example "both flow control valves are in the same position".
4. That each procedure contains a specific set of acceptance criteria which clearly indicate to the performer that the surveillance requirements have been met.
5. That the Scheduled Maintenance System (SMS) data base (Technical Specification Surveillance Listing) contains each surveillance requirement and denotes the applicable MODE and frequency (if applicable) as well as the implementing plant procedure.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20556, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

|                                   |                       |                |                   |                 |          |        |
|-----------------------------------|-----------------------|----------------|-------------------|-----------------|----------|--------|
| FACILITY NAME (1)                 | DOCKET NUMBER (2)     | LER NUMBER (8) |                   |                 | PAGE (3) |        |
|                                   |                       | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER |          |        |
| Washington Nuclear Plant - Unit 2 | 0 5 0 0 0 3 9 7 9 1 1 | —              | 0 1 3             | —               | 0 0 0 3  | OF 1 7 |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

A total of 115 potential deficiencies were identified by contract Engineers and this effort is complete. These potential problems were then assigned to Plant Staff Engineers for further evaluation and this effort is nearing completion. Plant Staff Engineers were requested to evaluate each potential problem for validity and, where necessary, write a Problem Evaluation Request (PER). This would make the problem visible to management and allow resources to be assigned to fix the problem and for the formal evaluation of the item for reportability. This part of the effort is in the final stages of review but had not been completed prior to the cutoff date for LER preparation. A total of seven items were identified as reportable problems by this process. Any additional reportable items will be included in the revised LER. In the event description below each reportable condition is described in a separately numbered paragraph.

This LER is written with each item discussed as a separately numbered paragraph under the major headings of Specific Event Description, Immediate Corrective Action, Further Evaluation, Specific Further Corrective Action, and Specific Safety Significance. A general discussion of all items is found under General Event Description above and General Further Corrective Actions, General Safety Significance, and Similar Events below.

Specific Event Description

1. Response Time Testing - The first problem discovered by the program concerns the Response Time Test Requirements for Instruments associated with the Reactor Protection System (RPS) (Technical Specification Table 3.3.1-2), Isolation Actuation (Table 3.3.2-3), and Emergency Core Cooling Systems (ECCS) (Table 3.3.3-3). The Technical Specification requirement associated with these three tables each state, "Each test shall include at least one channel per trip system such that all channels are tested at least once every N times 18 months, where N is the total number of redundant channels in a specific isolation trip system" (Paragraphs 4.3.1.3, 4.3.2.3, and 4.3.3.3).

For the majority of the trip functions there are two trip systems with 2 redundant channels in each trip system (please see attached sketch). For this condition all four channels are to be tested in 36 months  $[(N=2) \times 18]$ . A review of the present testing schedule shows the channels are tested on a 12 month frequency resulting in all four channels being tested in 48 months which does not meet the Technical Specification requirement.

An additional problem was identified with the phrase, "Each test shall include at least one channel per trip system....". In some cases surveillance testing was performed on channels A and B or on Channels C and D which does not meet Technical Specification Requirements.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 600 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

| FACILITY NAME (1)                 | DOCKET NUMBER (2)   | LER NUMBER (6) |                   |                 | PAGE (3) |   |        |
|-----------------------------------|---------------------|----------------|-------------------|-----------------|----------|---|--------|
|                                   |                     | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER |          |   |        |
| Washington Nuclear Plant - Unit 2 | 0 5 0 0 0 3 9 7 9 1 | —              | 0 1 3             | —               | 0 0 0    | 4 | OF 1 7 |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

2. SLC Functional Test - The second item discovered was an error in procedure PPM 7.4.1.5, Standby Liquid Control (SLC) Injection Functional Test. This test is used to verify Reactor Water Cleanup (RWC) Valve 4 (RWC-V-4) isolation as part of SLC initiation. This is a required Technical Specification CHANNEL FUNCTIONAL TEST to be performed at least every 18 months per Table 4.3.2.1-1 (Item 3.f). There are two channels (corresponding to the two SLC trains) feeding the trip system to close RWC-V-4 and only one was being tested each year (every 12 months) rather than both in 18 months as required by the Technical Specifications.
3. Sensor Channel Calibration - This item documented the failure to implement literal compliance with the Technical Specification definition of CHANNEL CALIBRATION for items such as thermocouples, resistance temperature detectors, orifices, pitot tubes, etc. The definition of CHANNEL CALIBRATION states it shall, "...encompass the entire channel including the sensor....". This cannot be done for items such as those specified on Technical Specification Table 4.3.2.1-1 Items 1.d, 1.e, 3.b, 3.c, and many more involving temperature sensing and other loops.
4. Effluent Monitors - This concerns the Technical Specification Surveillance requirements for radioactive gaseous and liquid effluent monitoring. For ease of description this item is separated into four parts as noted below:
  - a. This part concerns the CHANNEL FUNCTIONAL TEST performed on the Low Range Noble Gas Activity Monitors (REA-RIS-19, TEA-RIS-13, and WEA-RIS-14). These monitoring systems measure the radioactivity in the reactor building, turbine building and radwaste building exhausts prior to discharge to the atmosphere. They provide no automatic mitigation functions. The quarterly surveillance requirements are listed in Technical Specification Table 4.3.7.12-1 and the attendant Table Notations (1) on p.3/4 3-95. Table Notation (1)b requires demonstrating that control room alarm annunciation occurs if a circuit failure is present. This action was removed in a previous revision to the surveillances in August 1988. In addition, Table Notation (1)c requires demonstrating that control room alarm annunciation occurs if the "instrument controls not set in operate mode". These monitors are KAMAN Science model 952279 Log Count Rate Meters (LCRM). These are not provided with an operate mode switch and therefore cannot successfully meet this requirement.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 600 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-630), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

| FACILITY NAME (1)                 | DOCKET NUMBER (2)     | LER NUMBER (6) |                   |                 | PAGE (3) |    |      |
|-----------------------------------|-----------------------|----------------|-------------------|-----------------|----------|----|------|
|                                   |                       | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER |          |    |      |
| Washington Nuclear Plant - Unit 2 | 0 5 0 0 0 3 9 7 9 1 - | 0 1 3          | -                 | 0 0 0           | 5        | OF | 1 17 |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

- b. This part concerns the CHANNEL FUNCTIONAL TEST performed on the Liquid Radwaste Effluent Line Gross Radioactivity Monitor (FDR-RIS-606). This monitoring instrument measures the radioactivity in the radwaste liquid effluent discharge prior to its entering the cooling tower blowdown line. It provides automatic closure of the radwaste system discharge valve. The quarterly surveillance requirements are listed in Technical Specification Table 4.3.7.11-1, Item 1.a, and the attendant Table Notation (1) on p.3/4 3-88. The Technical Specification requires demonstrating that, "...automatic isolation of this pathway and control room alarm annunciation occurs...." for any of the listed conditions (measured levels above alarm/trip setpoints, high voltage abnormally low, when the instrument indicates downscale failure, and when the instrument controls are not set in the operate mode). The presently installed instrument provides automatic isolation of the discharge pathway only on measuring radiation levels above the trip setpoint. The requirement to provide isolation on high voltage abnormally low, when the instrument indicates downscale failure and when the instrument controls are not set in the operate mode cannot be met with our current design.
- c. This part concerns the CHANNEL FUNCTIONAL TEST performed on the Turbine Building Sump Gross Radioactivity Monitors (FD-RIS-1, 2, and 3). This system monitors the three nonradioactive drain sumps in the turbine building. The normal effluent discharge path is via the storm drain system to an evaporative basin. In the event of any radioactive liquid system failure contaminating these sumps to a level above the instrument setpoint, the monitor would automatically divert the effluent to the radwaste system for processing. The trip setpoints are set such that diversion is initiated prior to exceeding technical specification limits for liquid effluent. The quarterly surveillance requirements are listed in Technical Specification Table 4.3.7.11-1, Item 1.b and the attendant Table Notation (5) on p.3/4 3-88. The Technical Specification requires demonstrating that, "...automatic isolation of this pathway and control room alarm annunciation occurs...." for any of the listed conditions (measured levels above alarm/trip setpoints; high voltage abnormally low; and when the instrument indicates downscale failure). The presently installed instrument provides automatic isolation of the discharge pathway only on measuring radiation levels above the trip setpoint. The requirement to provide isolation on high voltage abnormally low and when the instrument indicates downscale failure cannot be met with our current design.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-830), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

| FACILITY NAME (1)                 | DOCKET NUMBER (2)   | LER NUMBER (6) |                   |                 | PAGE (3) |        |
|-----------------------------------|---------------------|----------------|-------------------|-----------------|----------|--------|
|                                   |                     | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER |          |        |
| Washington Nuclear Plant - Unit 2 | 0 5 0 0 0 3 9 7 9 1 | —              | 0 1 3             | —               | 0 0 0 6  | OF 1 7 |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

- d. This part concerns the CHANNEL FUNCTIONAL TEST performed on the Turbine Service Water System Effluent Line Gross Radioactivity Monitor (TSW-RIS-5). This monitor measures the radioactivity level of the service water returning flow to the circulating water system. This monitor provides no automatic mitigation function. The quarterly surveillance requirements are listed in Technical Specification Table 4.3.7.11-1, Item 2.a and the attendant Table Notation (2) on p.3/4 3-88. Table Notation (2) Item 3 requires demonstrating that control room alarm annunciation occurs if the "instrument controls not set in operate mode". This monitor is a KAMAN Science model 952279 Log Count Rate Meter (LCRM). This monitor is not provided with adjustable control switch, an operate mode switch and therefore cannot successfully meet this requirement.
5. Primary Containment Valve Position - Technical Specification Table 4.3.7.5-1, Item 27 requires "Primary Containment Valve Position" to have a CHANNEL CHECK monthly and a CHANNEL CALIBRATION at least one per 18 months. Two problems were discovered in the surveillance program relative to this requirement. First, a small number of Primary Containment valves were not being tested. Second, for the valves that were being tested the frequency of testing was per the requirements of the ASME Pump and Valve Test Program under Technical Specification 4.0.5 which requires a Valve Position Indication (VPI) verification or equivalent every two years. While this was being performed it does not meet the 18 month frequency requirements of Technical Specification Table 4.3.7.5-1, Item 27.
6. Emergency Ventilation Damper Position - Technical Specification Table 4.3.7.5-1, item 25 requires the "Emergency Ventilation Damper Position" to have a CHANNEL CHECK monthly and a CHANNEL CALIBRATION at least one per 18 months. There were two problems associated with implementation of this requirement:
- a. A CHANNEL CHECK was not being performed on the equipment required. FSAR Paragraph 7.5.1.16, Emergency Ventilation Damper Position Indication, states, "Damper position indication is provided in the control room for all dampers necessary to prevent release of radioactive gases to the environment or for the protection of operating personnel during accident conditions." PPM 7.4.3.7.5.1, Accident Monitoring Instrumentation-Channel Checks, listed 14 components where a monthly CHANNEL CHECK is done to this requirement. In addition, PPM 7.4.7.2.1, Control Room Emergency Filtration System "A" Operability and PPM 7.4.6.5.3.1, SGT System Operability Test performs a CHANNEL CHECK on additional components. A total of four dampers (SGT-V-4A1, 4A2, 4B1, and 4B2) were identified where a CHANNEL CHECK was not being performed per the requirements of the Technical Specifications. These dampers are open when SGT is running in the recirculation mode and is discharging into the Reactor Building.
- b) A CHANNEL CALIBRATION per the requirements of the Technical Specifications was not being performed on any Emergency Ventilation Damper Position Indication items.



LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-630), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

| FACILITY NAME (1)                 | DOCKET NUMBER (2)       | LER NUMBER (6) |                   |                 | PAGE (3) |     |
|-----------------------------------|-------------------------|----------------|-------------------|-----------------|----------|-----|
|                                   |                         | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER |          |     |
| Washington Nuclear Plant - Unit 2 | 0 5 0 0 0 3 9 7 9 1 1 - | 0 1 1 3        | -                 | 0 1 0 0 1 7     | OF       | 1 7 |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

7. Balance of Plant Isolation - Technical Specification surveillance requirement 4.6.3.2 states that, "Each primary containment automatic isolation valve shown in Table 3.6.3-1 shall be demonstrated OPERABLE during COLD SHUTDOWN or REFUELING at least once per 18 months by verifying that on a containment isolation test signal each automatic isolation valve actuates to its isolation position". This requirement is implemented by Plant Procedure PPM 7.4.3.2.2.11, Balance of Plant Logic System Functional Test. A review of this procedure showed that three valves associated with containment exhaust and supply purging (CEP-V-1A, CEP-V-1B, and CSP-V-1) were inadvertently omitted from the procedure in 1987. Thus, the surveillance requirement was not demonstrated for these valves during refueling in 1988, 1989 and 1990.

Immediate Corrective Action

Immediate corrective action was initiated for each of the items discovered by the surveillance procedure verification program. They are enumerated below in separately numbered paragraphs corresponding to the event description above:

1. Response Time Testing - Additional surveillance tests were identified which would bring the plant into compliance with Technical Specification Requirements 4.3.1.3, 4.3.2.3 and 4.3.3.3. A total of 26 additional tests were performed.
2. SLC Functional Test - A procedure change was made to Plant Procedure PPM 7.4.1.5, Standby Liquid Control (SLC) Injection Functional Test, to add the additional contact into the logic chain for RWCU isolation.
3. Sensor Channel Calibration - No immediate corrective action was taken on this item. However, action was assigned to resolve this item with the NRC.
4. Effluent Monitors - The problems with the effluent monitors were reviewed by the Plant Operating Committee (POC) and a determination was made to declare the instruments inoperable. At 1300 hours on May 21, 1991 Technical Specification Action Statement (TSAS) 3.3.7.12.b (110) was entered for the associated Noble Gas Activity Monitors. At the same time TSAS 3.3.7.11.b (100) and (101) were entered for the associated Liquid Effluent Monitors. These action statements require periodic sampling and analysis of the effluent streams. The POC also directed that an evaluation be performed and presented to the NRC to justify exit from the TSAS noted above.
5. Primary Containment Valve Position - An effort was undertaken to identify all primary containment valves that have indication in the control room. This effort is still in progress and the results will be reported in the revision to this LER.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 600 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

YEAR SEQUENTIAL REVISION  
NUMBER NUMBER NUMBER

Washington Nuclear Plant - Unit 2

0 5 0 0 0 3 9 7 9 1 0 1 3 0 0 0 8 OF 1 17

TEXT (If more space is required, use additional NRC Form 366A's) (17)

6. Emergency Ventilation Damper Position - An effort was undertaken to identify all Emergency Ventilation Dampers. A total of thirty dampers were identified that fall under the definition in the Technical Specifications and the FSAR. This includes twenty dampers associated with Secondary Containment and ten associated with Control Room Ventilation. Plant Procedure, PPM 7.4.3.7.5.1, Accident Monitoring Instrumentation-Channel Checks, was modified to perform additional channel checks on dampers (SGT-V-4A1, 4A2, 4B1, and 4B2). A new Plant Procedure PPM 7.4.3.7.5.1A, Emergency Ventilation Damper Channel Calibration Test was written to perform the CHANNEL CALIBRATION on the thirty valves.
7. Balance of Plant Isolation - PPM 7.4.3.2.2.11 was modified to add the three valves back into the procedure.

Further Evaluation and Corrective Action

## A. Further Evaluation

These events are being reported per the requirements of 10CFR50.73(50.73(a)(2)(i)(B) as "....Any operation or condition prohibited by the plant's Technical Specifications...."

Further evaluations were performed on each of the items discovered by the surveillance procedure verification program. They are enumerated below in separately numbered paragraphs corresponding to the event description above:

1. Response Time Testing - Further evaluation indicates the requirements of this Technical Specification were never fully implemented. For example, the Nuclear Steam Supply Shutoff System (NSSSS) trip function of High Drywell Pressure was reviewed. A test was performed on all channels during the startup period in 1984. However, revision 0 to Plant Procedure PPM 7.4.3.2.3.3, Primary Containment Isolation On High Drywell Pressure (Channel A)-RTT, states under the purpose (paragraph 7.4.3.2.3.3.1), "....this test for trip Channel A is to be performed during the first refueling cycle and at each 36 month interval thereafter." Revision 0 to PPM 7.4.3.2.3.32, Primary Containment Isolation on High Drywell Pressure (Channel B) - RTT, states, "....this test for trip Channel B is to be performed with Channel A and at each 36 month interval thereafter." These statements do not meet the Technical Specification requirements. This was verified by a review of testing records which showed that both Channels B and C for this trip function were not tested in 1985. Thus, the requirement that each test include one channel per trip system every 18 months was not met. In addition, changes were made to the test program in 1987 that allowed 48 months between channel testing. This resulted in a violation of the N X 18 requirement in addition to the one channel per trip system per 18 month requirement.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

| FACILITY NAME (1)                 | DOCKET NUMBER (2)     | LER NUMBER (6) |                   |                 | PAGE (3)  |       |
|-----------------------------------|-----------------------|----------------|-------------------|-----------------|-----------|-------|
|                                   |                       | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER |           |       |
| Washington Nuclear Plant - Unit 2 | 0 5 0 0 0 3 9 7 9 1 1 | —              | 0 1 3             | —               | 0 1 0 0 9 | OF 17 |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

2. SLC Functional Test - Further evaluation of Plant Procedure PPM 7.4.1.5, Standby Liquid Control (SLC) Injection Functional Test, showed this error was not the result of a change but was an oversight in initial procedure preparation.
3. Sensor Channel Calibration - This issue is recognized as common to the industry and is being documented because a literal interpretation of Technical Specifications would mandate it. As a generic issue the Supply System is attempting to determine a resolution consistent with recognized industry practices and implement it accordingly. Resolution of this issue will be addressed in follow on revisions to this LER.
4. Effluent Monitors - Further evaluation of the problem with the effluent monitors showed the problems could be divided into three categories:
  - a. The Noble Gas Monitors (REA-RIS-19, TEA-RIS-13, and WEA-RIS-14) and the Service Water System Effluent Monitor (TSW-RIS-5) cannot meet the Technical Specification requirement for control room annunciation if "instrument controls not set in operate mode". In this case the inherent features of the instrument do not allow for compliance with the Technical Specifications.
  - b. The Noble Gas Monitors (REA-RIS-19, TEA-RIS-13, and WEA-RIS-14) also have the problem of not meeting the requirement to alarm if a circuit failure is present. The procedure that performed this surveillance was changed in August 1988 when the low counts alarm setpoint was being changed. This change was made to prevent a frequent downscale alarm condition.
  - c. The Liquid Radwaste Effluent Line Monitor (FDR-RIS-606) and the Turbine Building Sump Gross Radioactivity Monitors (FD-RIS-1, 2, and 3) do not meet the Technical Specification Requirement to provide isolation on high voltage abnormally low and when the instrument indicates downscale failure. In this case the instruments have this feature but the output is fed to an alarm circuit rather than an isolation circuit. In addition, for FDR-RIS-606 the instrument has an operate mode switch. However, this switch provides an alarm only, and does not provide isolation as required by the Technical Specification.
5. Primary Containment Valve Position - Further evaluation showed problems with the surveillance procedures and the Surveillance Monitoring System (SMS). There are 19 PPMs listed in the Scheduled Maintenance System (SMS) that implement this Tech Spec requirement number, 4.3.7.5.27. A review of these procedures found that only 1 out of the 19 referenced the requirement. Thus there is a risk that the procedure could be changed, over time, and the requirement eliminated.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-830), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

| FACILITY NAME (1)                 | DOCKET NUMBER (2)     | LER NUMBER (6) |                   |                 | PAGE (3) |  |
|-----------------------------------|-----------------------|----------------|-------------------|-----------------|----------|--|
|                                   |                       | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER |          |  |
| Washington Nuclear Plant - Unit 2 | 0 5 0 0 0 3 9 7 9 1 - | 0 1 3 -        | 0 0 1 1 0         | OF 1 1 7        |          |  |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

Further evaluation showed there is no listing of components defined where this requirement applies. This is complicated by the fact that applicability of this requirement to specialty valves such as check valves and squib valve has not been formally documented.

6. Emergency Ventilation Damper Position - A review of surveillance procedures in the SMS data base found they did not reference Tech Spec requirement number 4.3.7.5.25 nor did they perform a CHANNEL CALIBRATION that meets requirements. There were two procedures listed in the SMS data base that implement this requirement. PPM 7.4.6.5.2.1, Reactor Building Ventilation Isolation Valve Operability, and PPM 7.4.6.5.3.4, Standby Gas Treatment System - Manual Initiation, Bypass Damper, and Heater Test. No other surveillance procedures were found that performed the surveillance. The Plant Procedures that performed the CHANNEL CHECKS, PPM 7.4.3.7.5.1, Accident Monitoring Instrumentation-Channel Checks, PPM 7.4.7.2.1, Control Room Emergency Filtration System "A" Operability and PPM 7.4.6.5.3.1, SGT System Operability Test were not listed in the SMS data base.
7. Balance of Plant Isolation - Further evaluation of the event showed revision 2 of PPM 7.4.3.2.2.11, in effect during the 1987 refueling outage, referenced CEP-V-1A, CEP-V-1B, and CSP-V-1. These valves were listed on Attachment A, page 3 of 3, of the procedure which is the data sheet for Relay Cabinet One (RC-1). In September 1987 procedure revision 3, which included the addition of an item on the data sheet, was approved by the Plant Operating Committee. This copy of the procedure continued to list the three CEP and CSP valves. However, when revision 3 of the procedure was signed on September 23, 1987 the valves were not listed on page 3 of 3 on Attachment A. It is assumed they were deleted somewhere in the clerical/administrative process used to prepare procedures for final signature.

A preliminary root cause was evaluated for each item discovered by the review.

1. Response Time Testing - This testing was not being done correctly during the startup phase of WNP-2 and later changes were made to decrease the frequency of testing. The root cause was determined to be Less Than Adequate Procedures and Barriers and Controls for Program Changes.
2. SLC Functional Test - The Logic System Functional Test for SLC did not verify the logic for RWCU-V-4 Closure for both SLC trains each year. The root cause was Less Than Adequate Test Procedures.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

|                                   |                       |                |                   |                 |          |     |
|-----------------------------------|-----------------------|----------------|-------------------|-----------------|----------|-----|
| FACILITY NAME (1)                 | DOCKET NUMBER (2)     | LER NUMBER (6) |                   |                 | PAGE (3) |     |
|                                   |                       | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER |          |     |
| Washington Nuclear Plant - Unit 2 | 0 5 0 0 0 3 9 7 9 1 1 | 0 1 3          | 0 1 0             | 1 1             | OF       | 1 7 |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

3. Sensor Channel Calibration - The root cause for the Primary Sensor Calibration on Thermocouples, Orifices, etc. was Less Than Adequate Directives/Requirements since the hardware does not support the requirements.
4. Effluent Monitors - The Radioactive Effluent Monitoring Instrumentation Problems have multiple root causes. These include Less than Adequate Directives/Requirements, Inadequate Barriers and Controls for Program Changes and Less Than Adequate Design.
5. Primary Containment and Emergency Ventilation Valve Position - For the Primary Containment Isolation Valve and Emergency Ventilation Damper Position CHANNEL CHECK and CALIBRATION the root cause was Less Than Adequate Procedures.
6. Balance of Plant Isolation - The Three Primary Containment Valves were omitted from the procedure somewhere in the Administrative process. The root cause was Inadequate Barriers and Controls for Program Changes.

The general root cause is still being evaluated. This LER will be revised to provide this updated evaluation prior to July 3, 1991.

There were no structures, components or systems that were inoperable prior to the start of this event which contributed to the event.

#### B. Specific Further Corrective Actions

Further corrective action was initiated for each of the items discovered by the verification program. They are enumerated below in separately numbered paragraphs corresponding to the event description above:

1. Response Time Testing - Twenty-six additional surveillance tests will be performed prior to startup to bring the plant into compliance with Technical Specification Requirements 4.3.1.3, 4.3.2.3 and 4.3.3.3.
2. SLC Functional Test - The channel functional test for RWCU-V-4 was performed using modified procedure PPM 7.4.1.5.
3. Sensor Channel Calibration - A Technical Specification change or other relief will be requested. For this item, the only means of resolution appears to be a change in the wording of the Technical Specification.
4. Effluent Monitors - Further corrective actions for the effluent monitors are being taken consistent with the further evaluation discussed above:
  - a. For the Noble Gas Monitors (REA-RIS-19, TEA-RIS-13, and WEA-RIS-14) and the Service Water System Effluent Monitor (TSW-RIS-5) where the inherent features of the instrument do not allow for compliance with the requirements a Technical Specification change or other relief will be requested.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 600 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

| FACILITY NAME (1)                 | DOCKET NUMBER (2)             | LER NUMBER (8) |                   |                 | PAGE (3) |          |
|-----------------------------------|-------------------------------|----------------|-------------------|-----------------|----------|----------|
|                                   |                               | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER |          |          |
| Washington Nuclear Plant - Unit 2 | 0   5   0   0   0   3   9   7 | 9   1          | -   0   1   3     | -   0   0   1   | 2        | OF 1   7 |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

- b. For the Noble Gas Monitors (REA-RIS-19, TEA-RIS-13, and WEA-RIS-14) the CHANNEL FUNCTIONAL TEST Procedures (PPMs 7.4.3.7.12.5, 7.4.3.7.12.11, and 7.4.3.7.12.17) will be changed to require verification of the front board annunciator, 4.851.51, Drop 6.5, BOARD - RAD 24 TROUBLE.
- c. For the Liquid Radwaste Effluent Line Monitor (FDR-RIS-606) and the Turbine Building Sump Gross Radioactivity Monitors (FD-RIS-1, 2, and 3) a design change will be considered to require isolation on high voltage abnormally low and when the instrument indicates downscale failure. Since this cannot be accomplished immediately interim relief from this requirement will be requested.
5. Primary Containment Valve Position - Primary Containment valve position indication testing will be performed to bring the station into compliance with the Technical Specification prior to startup from the refueling outage.
6. Emergency Ventilation Damper Position - Additional Emergency Ventilation Damper position indication testing will be performed to bring the station into compliance with the Technical Specification prior to startup from the refueling outage.
7. Balance of Plant Isolation - The three valves CEP-V-1A, CEP-V-1B, and CSP-V-1 will be tested prior to startup from this refueling outage.

C. General Further Corrective Actions

The Supply system recognizes that the number of specific items of non-compliance is a symptom of a broader programmatic issue. The number of problems discovered by the one-time contractor review points to programmatic problem that will require further general corrective actions. While it is too early to define the specific program corrections these will be evaluated and discussed in a subsequent revision to this LER.

Specific Safety Significance

The Safety Significance of each item is discussed below. Individually these items have no safety significance.

1. Response Time Testing - Tests were being performed on all redundant channels and trip systems. There has never been a failure of an instrumentation response time test at WNP-2 which would imply there is no safety significance to this non-compliance item. Additional tests will be completed before plant startup.
2. SLC Functional Test - All logic for isolation of RWCU-V-4 on SLC initiation was being tested on a 24 month frequency versus the Technical Specification requirement of an 18 month frequency. No failures were detected during this testing.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20558, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

| FACILITY NAME (1)                 | DOCKET NUMBER (2)             | LER NUMBER (6) |                   |                 | PAGE (3)  |    |       |
|-----------------------------------|-------------------------------|----------------|-------------------|-----------------|-----------|----|-------|
|                                   |                               | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER |           |    |       |
| Washington Nuclear Plant - Unit 2 | 0   5   0   0   0   3   9   7 | 9   1   1      | —   0   1   3     | —   0   1   0   | 1   1   3 | OF | 1   7 |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

3. Sensor Channel Calibration - The failure of sensors is covered by other regulatory requirements of redundancy and diversity. Therefore, failure of an individual sensor will have no safety significance.
4. Effluent Monitors - The Safety Significance of each part of the item associated with the radioactive gaseous and liquid effluent monitoring is discussed below.
- a. The Low Range Noble Gas Activity Monitors (REA-RIS-19, TEA-RIS-13, and WEA-RIS-14) measure the radioactivity in the reactor building, turbine building and radwaste building exhausts prior to discharge to the atmosphere. If these instruments were to become inoperable the intermediate range monitors would continue to monitor the release from each building at higher levels. These instruments are diverse and not subject to the same failure modes. In addition, a sampling program is in place in accordance with the requirements of Technical Specification 4.11.2.1.2. This program requires sampling on a periodic and event driven basis.
  - b. The Liquid Radwaste Effluent Line Gross Radioactivity Monitor (FDR-RIS-606) measures the radioactivity in the radwaste liquid effluent discharge prior to its entering the cooling tower blowdown line. It provides automatic closure of the radwaste system discharge valve. If this instrument were to be inoperable other methods are in place to monitor the Liquid Radwaste release. First, keylock valves are in place to assure a release only occurs under controlled conditions. Second, a batch sample is collected and analyzed prior to discharge in accordance with the requirements of Technical Specification 4.11.1.1.1. This is used to project the dose expected from the discharge in accordance with the requirements of 4.11.1.1.2. A discharge will not be allowed unless the samples are in conformance of these requirements.
  - c. The Turbine Building Sump Gross Radioactivity Monitors (FD-RIS-1, 2, and 3) monitors the three nonradioactive drain sumps in the turbine building. The normal effluent discharge path is via the storm drain system to an evaporative basin. In the event of excess contamination in these sumps, the monitor would automatically divert the effluent to the radwaste system for processing. The Turbine Building does not normally contain significant sources of radioactive liquids. A composite sampler is installed in each of the monitored non-radioactive drain sumps. As an added precaution monthly samples are taken in the discharge area.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 600 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

|                                   |  |                |                   |                 |          |  |
|-----------------------------------|--|----------------|-------------------|-----------------|----------|--|
| FACILITY NAME (1)                 | DOCKET NUMBER (2)                                | LER NUMBER (6) |                   |                 | PAGE (3) |  |
|                                   |  | YEAR           | SEQUENTIAL NUMBER | REVISION NUMBER |          |  |
| Washington Nuclear Plant - Unit 2 | 0 5 0 0 0 3 9 7 9 1 1 - 0 1 3 - 0 1 0 1 4 OF 1 7 |                |                   |                 |          |  |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

- d. The Service Water System Effluent Line Gross Radioactivity Monitor (TSW-RIS-5) measures the radioactivity level of the service water returning flow to the circulating water system. This monitor provides no automatic mitigation function. If this instrument were inoperative, however, the monitor in the Circulating Water Blowdown line, CBD-RIS-608, would detect elevated levels of activity and isolate the blowdown. In addition, a monthly sludge sample is taken in the Cooling Tower Basins. These samples detect very low levels of radioactivity which have seasonal variations providing some assurance that significant releases would be detected.
5. Primary Containment Valve Position - For the vast majority of the containment isolation valves the ASME required test was performed on a two year frequency. The Technical Specifications require an 18 month frequency. The valves not previously included in the testing program are small in number. These valves are tested in other ways by performance of System Operability Tests, MOVATs tests, Logic System Functional Tests, Local Leak Rate Tests, etc. While these tests do not perform the specific test required by a CHANNEL CALIBRATION (Technical Specification 4.3.7.5-1 Item 27) they provide some assurance that the control room indication of valve status was functional and accurate.
6. Emergency Ventilation Damper Position - For the Emergency Ventilation Damper Position issue, the intent of the CHANNEL CALIBRATION is achieved by performing other surveillance procedures. The twenty dampers associated with Secondary Containment have the following four tests performed that, taken together, verify damper position:

| Procedure      | Title  | Frequency |
|----------------|--|-----------|
| 7.4.6.5.1.2    | SGT Functional Test                                      | 18 month  |
| 7.4.6.5.2.1    | Reactor Building Ventilation Isolation Valve Operability | 3 month   |
| 7.4.6.5.3.1    | SGT Operability Test                                     | 1 month   |
| 7.4.6.5.3.2A,B | SGT Pressure Drop  | 18 month  |



LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-630), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

Washington Nuclear Plant - Unit 2

0 | 5 | 0 | 0 | 0 | 3 | 9 | 7 | 9 | 1 | - | 0 | 1 | 3 | - | 0 | 0 | 1 | 5 | OF | 1 | 7

TEXT (If more space is required, use additional NRC Form 366A's) (17)

The ten Emergency Ventilation Dampers associated with the Control Room also meet the intent of the CHANNEL CALIBRATION by performing other procedures as follows:

| Procedure | Title                                     | Frequency |
|-----------|---|-----------|
| 8.3.147   | Normal and Remote Isolation Valve Leakage | 18 month  |
| 7.4.7.2.8 | Control Room Vent. Flow Test              | 18 month  |
| 7.4.7.2.3 | Control Room Filter Test                  | 18 month  |

The successful completion of these tests is an indication of the operability of position indication on the Emergency Dampers.

7. Balance of Plant Isolation - For the three Containment Isolation Valves (CSP-V-1, CEP-V-1A, and CEP-V-1B) that were inadvertently dropped from the Logic System Function Test other valves in series (CSP-V-2, CEP-V-2A, and CEP-V-2B) were part of this test. Thus one of the containment valves on each penetration was always tested.

### General Safety Significance

Since a number of non-compliance items were discovered as a result of the Surveillance Program verification an evaluation of the general safety significance is in order. Each individual item appears to be backed up by other equipment and/or procedures. In several cases the frequency of testing was not in compliance with the Technical Specifications but periodic tests were being performed.

We do, however, regard the programmatic aspects of this item as an important issue that has potential safety significance. General corrective actions will be defined to prevent recurrence of this problem in the future (see General Further Corrective Actions above).

### Similar Events

During the period from 1984 to 1989 there were instances of reported events concerning non-compliance with the Technical Specifications. However during 1990 and early 1991 these events appeared to increase in frequency, due in part, to an on-going Technical Specification Improvement Program at WNP-2. LER 90-007 reported that there was no Plant procedure requirement to check for water in the Diesel Generator Fuel Oil Day Tanks. LER 90-008, reported Plant procedures had not required one portion of the Triaxial Response Spectrum Recorder Transmitter to be calibrated or tested as required by the Technical Specifications. LER 90-027 reported the failure to sample diesel generator fuel oil for sulfur. LER 91-002

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATIONESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS  
INFORMATION COLLECTION REQUEST: 600 HRS. FORWARD  
COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS  
AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR  
REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO  
THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE  
OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

|                                   |                       |                |                      |                    |          |  |
|-----------------------------------|-----------------------|----------------|----------------------|--------------------|----------|--|
| FACILITY NAME (1)                 | DOCKET NUMBER (2)     | LER NUMBER (8) |                      |                    | PAGE (3) |  |
|                                   |                       | YEAR           | SEQUENTIAL<br>NUMBER | REVISION<br>NUMBER |          |  |
| Washington Nuclear Plant - Unit 2 | 0 5 0 0 0 3 9 7 9 1 - | 0 1 3 -        | 0 0 1 6              | OF                 | 1 7      |  |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

reported on the condition where the Reactor Recirculation System Jet Pump Operability Testing was not in Literal Compliance with the Technical Specifications due to inadequate procedures. LER 91-003 reported on inadequate Technical Specification Surveillance Testing of the Standby Gas Treatment HEPA filters. LER 91-003 will be revised to address a similar deficiency in Charcoal filter testing when the root cause analysis is complete. LER 91-005 reported a condition where the oxygen concentration in the Wetwell was not being monitored once per seven (7) days as required by the Technical Specifications. LER 91-008 reported a condition where mode 5 (refueling) was entered with the reactor coolant temperature above the Technical Specification value of 140 degrees F. This requirement was not in a Plant Procedure. As a result of the recent trend in Technical Specification Non-Compliance events the Supply System hired an outside contractor to review the Technical Specification surveillance requirements against Plant procedures. This LER is a direct result of the contractor review.

EIIS InformationText ReferenceEIIS Reference

|  | <u>System</u> | <u>Component</u> |
|--|---------------|------------------|
| Reactor Protection System (RPS)  | JC            | --               |
| Emergency Core Cooling Systems (ECCS)  | BM,BO,BG      | --               |
| Standby Liquid Control (SLC)   | BR            | --               |
| Reactor Water Cleanup (RWCU)   | CE            | --               |
| RWCU Valve 4 (RWCU-V-4)  | CE            | V                |
| Low Range Noble Gas Activity Monitors<br>REA-RIS-19, TEA-RIS-13 & WEA-RIS-14 | IL            | RA               |
| Liquid Radwaste Effluent Line Gross<br>Radioactivity Monitor EDR-RIS-606     | IL            | RA               |
| Turbine Building Sump Monitors<br>(FD-RIS-1, 2, &3)                          | IL            | RA               |
| Turbine Service Water Effluent Line<br>Monitor (TSW-RIS-5)                   | IL            | RA               |
| Primary Containment  | NH            | -                |

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATIONESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS  
INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD  
COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS  
AND REPORTS MANAGEMENT BRANCH (P-830), U.S. NUCLEAR  
REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO  
THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE  
OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

YEAR SEQUENTIAL NUMBER REVISION NUMBER

Washington Nuclear Plant - Unit 2

0 5 0 0 0 3 9 7 9 1 1 - 0 1 3 - 0 0 1 1 7 OF 1 7

TEXT (If more space is required, use additional NRC Form 366A's) (17)

Text ReferenceEIIS Reference

|  | <u>System</u> | <u>Component</u> |
|--|---------------|------------------|
| Containment Exhaust Purge<br>Valves 1A & 1B (CEP-V-1A, 1B) | VA            | V                |
| Containment Supply Purge<br>Valve 1 (CSP-V-1)              | VA            | V                |
| Nuclear Steam Supply Shutoff<br>System (NSSSS)             | BD            | -                |
| Standby Gas Treatment (SGT)                                | BH            | -                |
| Containment Exhaust Purge<br>Valves 2A & 2B (CEP-V-2A, 2B) | VA            | V                |
| Containment Supply Purge<br>Valve 2 (CSP-V-2)              | VA            | V                |
| Secondary Containment                                      | BH            | -                |
| Control Room Ventilation                                   | VH            | -                |

LER 91-013

