

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION IV 612 EAST LAMAR BLVD, SUITE 400 ARLINGTON, TEXAS 76011-4125

May 5, 2010

Mr. J. V. Parrish Chief Executive Officer Energy Northwest P.O. Box 968, Mail Drop 1023 Richland, WA 99352-0968

SUBJECT: COLUMBIA GENERATING STATION - NRC SUPPLEMENTAL INSPECTION

REPORT 05000397/2010008

Dear Mr. Parrish

On March 26, 2010, the NRC completed a supplemental inspection pursuant to Inspection Procedure 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," at your Columbia Generating Station. The enclosed inspection report documents the inspection results, which were discussed during the exit meeting on March 26, 2010, with Mr. S. Oxenford and other members of your staff.

As required by the NRC Reactor Oversight Process Action Matrix, the NRC performed this supplemental inspection in accordance with Inspection Procedure 95001. The purpose of the inspection was to examine the causes for and actions taken related to the performance indicator for Unplanned Scrams per 7000 Critical Hours crossing the threshold from Green (very low risk significance) to White (low to moderate risk significance) in the 2nd quarter of 2009.

The NRC conducted this supplemental inspection to provide assurance that (1) the root causes and contributing causes for the risk significant issues were understood; (2) the extent of condition and extent of causes of the issues were identified; and (3) the corrective actions were or will be sufficient to address and preclude repetition of the root and contributing causes. The inspection consisted of examination of activities conducted under your license as they related to safety, compliance with the Commission's rules and regulations, and the conditions of your license.

The inspection concluded that the individual root causes of the reactor scrams and the organizational issues leading up to them were adequately defined and understood and the corrective actions resulting from the evaluations appropriately addressed the identified causes. However, the inspectors identified weaknesses associated with the tracking of completed actions, as discussed in the report details. The inspectors concluded that the weaknesses were not reflective of significant performance issues. The corrective actions completed and those scheduled for completion should be sufficient to prevent recurrence of this issue.

Based on the results of this inspection, no findings of significance were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room). Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

/RA/

Wayne C. Walker, Chief Project Branch A Division of Reactor Projects

Docket: 50-397 License: NPF-21

Enclosure:

Inspection Report 05000397/2010008 w/ Attachment: Supplemental Information

cc w/Enclosure:

Chairman
Energy Facility Site Evaluation Council
P.O. Box 43172
Olympia, WA 98504-3172

Manager, Regulatory Programs Energy Northwest P.O. Box 968, Mail Drop PE20 Richland, WA 99352-0968

Chairman
Benton County Board of Commissioners
P.O. Box 190
Prosser, WA 99350-0190

William A. Horin, Esq. Winston & Strawn 1700 K Street, NW Washington, DC 20006-3817 Lynn Albin Washington State Department of Health P.O. Box 7827 Olympia, WA 98504-7827

Ken Niles Assistant Director Nuclear Safety and Energy Siting Division Oregon Department of Energy 625 Marion Street NE Salem, OR 97301-3737

Special Hazards Program Manager Washington Emergency Management Division 127 W. Clark Street Pasco, WA 99301

Chief, Technological Hazards Branch FEMA Region X Federal Regional Center 130 228th Street, SW Bothell, WA 98021-9796

Mike Hammond
Chairperson, Radiological Assistance Committee
Region X
Federal Emergency Management Agency
Department of Homeland Security
Federal Regional Center
130 228th Street, SW
Bothell, WA 98021-9796

Electronic distribution by RIV:

Regional Administrator (Elmo.Collins@nrc.gov)

Acting Deputy Regional Administrator (Art.Howell@nrc.gov)

DRP Director (Dwight.Chamberlain@nrc.gov)

DRP Deputy Director (Anton.Vegel@nrc.gov)

DRS Director (Roy.Caniano@nrc.gov)

DRS Deputy Director (Troy.Pruett@nrc.gov)

Senior Resident Inspector (Ronald.Cohen@nrc.gov)

Resident Inspector (Mahdi.Hayes@nrc.gov)

Branch Chief, DRP/A (Wayne.Walker@nrc.gov)

Senior Project Engineer, DRP/A (David.Proulx@nrc.gov)

Columbia Site Secretary (Crystal.Myers@nrc.gov)

Public Affairs Officer (Victor.Dricks@nrc.gov)

Public Affairs Officer (Lara.Uselding@nrc.gov)

Branch Chief, DRS/TSB (Michael.Hay@nrc.gov)

RITS Coordinator (Marisa.Herrera@nrc.gov)

Regional Counsel (David.Roth@nrc.gov)

Regional State Liaison Officer (Bill.Maier@nrc.gov)

NSIR/DPR/EP (Eric.Schrader@nrc.gov)

NSIR/DPR/EP (Steve.LaVie@nrc.gov)

Congressional Affairs Officer (Jenny.Weil@nrc.gov)

OEMail Resource

ROPreports

Only inspection reports to the following:

DRS/TSB STA (Dale.Powers@nrc.gov)

OEDO RIV Coordinator (Leigh.Trocine@nrc.gov)

File located: R:_Reactors\COL2010008dlp.doc

SUNSI Rev Compl.	Yes □ No	ADAN	ИS	Yes □ Ne	0	Reviewer Init	ials	ww
Publicly Avail	Yes □ No	Sens	itive	□ Yes 🗷 N	0	Sens. Type Ir	nitials	ww
RI:DRP/A	RI:DRS/PSB2		SPE:D	RP/A	C:E	RS/PSB2	C:DRP/	A
MHayes	ERuesch		DProu	lx	G۷	/erner	WWalke	er
/RA/	/RA/		/RA/		/RA	V	/RA/	
5/3/10	5/3/10		4/29/1	0	5/3	/10	5/5/10	

U.S. NUCLEAR REGULATORY COMMISSION REGION IV

Docket: 50-397

License: NPF-21

Report: 05000397/2010008

Licensee: Energy Northwest

Facility: Columbia Generating Station

Location: Richland, Washington

Dates: March 22-26, 2010

Inspectors: D. Proulx, Senior Project Engineer, Team Leader

M. Hayes, Resident Inspector E. Ruesch, Reactor Inspector

Approved By: W. Walker, Chief Project Branch A

Division of Reactor Projects

- 1 - Enclosure

SUMMARY OF FINDINGS

IR 05000298/201008; 03/22/2010 -03/26/2010; Energy Northwest; Columbia Generating Station; Supplemental Inspection - Inspection Procedure 95001

Cornerstone: Initiating Events

The NRC performed this supplemental inspection to assess the licensee's evaluations associated with five reactor scrams which occurred in 2009. The cumulative effect of these scrams was that the performance indicator for Unplanned Scrams per 7000 Critical Hours crossed the threshold from Green (very low risk significance) to White (low to moderate risk significance) for the second quarter of calendar year 2009. The licensee performed individual root cause evaluations for each of the reactor scrams. In addition, the licensee performed a common cause analysis to identify any organizational, performance, or process issues that led to the White performance indicator. During this supplemental inspection, performed in accordance with Inspection Procedure 95001, the inspectors determined that for each reactor scram, and for the cumulative affect of all the scrams together, the licensee performed comprehensive and thorough evaluations in which specific problems were identified, adequate root cause and common cause evaluations, including extent of condition and extent of cause, were performed, and corrective actions were taken or planned to prevent recurrence.

- 2 - Enclosure

REPORT DETAILS

4. OTHER ACTIVITIES

4OA4 Supplemental Inspection (95001)

.01 Inspection Scope

The NRC performed this supplemental inspection in accordance with Inspection Procedure 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area." The purpose of this inspection was to assess the licensee's evaluation associated with the White performance indicator for Unplanned Scrams per 7000 critical hours affected the Initiating Events cornerstone in the reactor safety strategic performance area. The objectives of this inspection were to provide assurance that

- The risk significant performance issues; the root and contributing causes were understood
- The extent of condition and extent of cause were identified
- Corrective actions were sufficient to address the root and contributing causes and to prevent recurrence

Columbia Generating Station entered the Regulatory Response Column of the NRC's Action Matrix in the second quarter of 2009 as a result of the performance indicator for Unplanned Scrams per 7000 critical hours changing to low to moderate safety significance (White). This performance indicator crossed the threshold from Green to White following five unplanned reactor scrams that occurred in calendar year 2009.

Columbia Generating Station performed root cause analyses for each of the individual reactor scrams referenced above as well as a root cause analysis for the common causes that led to crossing the performance indicator threshold.

The team reviewed the licensee's root cause analyses in addition to other evaluations and assessments conducted in support of and as a result of the root cause analyses. The team reviewed corrective actions that were taken or planned to address the identified causes. The team also held discussions with licensee personnel to ensure that the root and contributing causes and the contribution of safety culture components were understood and corrective actions taken or planned were appropriate to address the causes and preclude repetition.

.02 Evaluation of Inspection Requirements

.02.01 Problem Identification

- 3 - Enclosure

a. <u>Determination that the evaluation documented who identified the issue (i.e., licensee-identified, self-revealing, or NRC-identified) and under what conditions the issue was identified</u>

This supplemental inspection focused on six reactor scrams which occurred between August 2008 and November 2009. The licensee performed a root cause evaluation for each of the scrams individually and a common cause evaluation of the six scrams in aggregate. The team determined that all six scrams were appropriately identified as self-revealing.

b. <u>Determination that the evaluation documented how long the issue existed and prior opportunities for identification</u>

The common cause evaluation appropriately identified the period over which the scrams occurred. The evaluation also identified that this series of scrams was a repetitive condition of a series of scrams which occurred between July 2004 and June 2005. The cause of this previous series of scrams was the subject of a previous supplemental inspection which was documented in NRC Inspection Report 05000397/2006009.

Each of the root cause evaluations documented and evaluated a single reactor scram. Because these scrams were events, not conditions, the licensee did not have prior opportunities for identification. Prior opportunities to identify and correct the causes of the scrams were evaluated for each event. These evaluations are further discussed in Section 02.02.c of this inspection report.

c. <u>Determination that the evaluation documented the plant-specific risk consequences, as applicable, and compliance concerns associated with the issue</u>

The team determined that each of the root cause evaluations appropriately documented the risk consequences and compliance concerns of the associated scram and that the common cause evaluation appropriately documented the consequences of the six scrams in the aggregate. Each of the cause evaluations reviewed by the team contained a "Significance" section which documented the industrial and nuclear safety significance of the event, the actual or potential radiological and environmental consequences of the event, and the financial and regulatory impact of the event.

d. <u>Findings</u>

No findings of significance were identified.

02.02 Root Cause and Extent of Condition Evaluation

a. <u>Determination that the problem was evaluated using a systematic methodology to</u> identify the root and contributing causes

To evaluate these six reactor scram events and their common cause, the licensee used combinations of the following root cause analysis techniques:

- 4 - Enclosure

- Personnel Interviews
- Failure Mode Analysis
- Barrier Analysis
- Equipment Failure Evaluations
- Precursor Evaluations
- NRC Safety Culture Evaluations
- Event and Causal Factors Analysis (Apollo Method)
- Management Oversight Risk Tree (MORT) Analysis

For each of the six individual scrams, analyses were originally performed using the Apollo Method. Following the fifth scram on August 5, 2009, the licensee initiated the common cause evaluation using Management Oversight Risk Tree (MORT) analysis. Using the results of this analysis, the original root cause evaluations were revised to include more appropriate root and contributing causes and corrective actions. The licensee incorporated the root and contributing causes of the sixth scram, which occurred on November 9, 2009, into the common cause evaluation after the common cause evaluation had been completed.

During the supplemental inspection performed in 2006 for the series of reactor scrams which occurred between July 2004 and June 2005, the inspector noted that the licensee's root cause determination program was informal in that the specific techniques to be applied to a particular issue were not specified by procedure. The inspector further identified that the training provided to the root cause analysts was not sufficient to ensure an adequate and consistent knowledge level for the use of all the available methods. The inspector specifically noted that even though a more sophisticated root cause technique was discussed in procedure SWP-CAP-02, "Cause Determination," Revision 3, none of the root cause evaluations that were examined during the 2006 inspection used a MORT analysis or similar formal method to determine the root cause(s); while not required by procedure, the more formal MORT analysis may have provided additional insights to station management such that some of these scrams could have been avoided. This evaluation was documented in NRC Inspection Report 05000397/2006009.

During this inspection, the team noted that after performing a MORT analysis of the first five scram events, the licensee determined that the causes of the events were more organizationally-focused and less equipment-focused than the causes that had been originally determined in the initial drafts of the cause evaluations. This more thorough analysis enabled the licensee to develop more specific, measurable, achievable, relevant, and timely corrective actions and enhancements to site procedures than were contained in the original versions.

b. <u>Determination that the root cause evaluation was conducted to a level of detail</u> commensurate with the significance of the problem

The team determined that the initial drafts of the cause evaluations lacked some analytical detail necessary to adequately determine root and contributing causes.

- 5 - Enclosure

However, after performing a more formal analysis using MORT techniques and incorporating the results into the cause evaluations, the evaluations contained an appropriate level of detail for the significance of the problem.

Specifically, the common cause evaluation contained substantial detail on the causes of each individual scram event and the commonalities among them. The inspectors determined that the licensee's analysis of the common cause was thorough and that it adequately incorporated the common root and contributing causes from each of the six reactor scram events.

c. <u>Determination that the root cause evaluation included a consideration of prior occurrences of the problem and knowledge of prior operating experience</u>

Each of the cause evaluations included a section reviewing internal (Columbia Generating Station) and external (industry) operating experience. In general, these sections included relevant operating experience information along with a discussion of how each item applies or does not apply to the specific situation. When appropriate, these sections also included analysis of how better incorporation of this operating experience information into station procedures could have provided opportunities for earlier identification of the causes of the events, allowing the licensee to prevent the events from occurring or lessening their severity.

d. <u>Determination that the root cause evaluation addressed the extent of condition and the extent of cause of the problem</u>

In each of the root cause evaluations, the licensee adequately evaluated the extent of condition and extent of cause for the associated reactor scram. In each case, the extent of condition and extent of cause evaluation was appropriate for the conditions that existed and the information available at the time the individual root cause evaluation was performed. In the case of the earlier scram events, the root cause evaluations were revised to incorporate extent of condition and extent of cause information from the later events. The common cause evaluation appropriately incorporated extent of condition and extent of cause information from each of the six root cause evaluations.

In the common cause evaluation, the licensee identified three organizational causes for the six scrams. However, an analysis of the length of time that these organizational causes existed, a key element in determining the extent of cause, was not included. Further, in the quality assurance review of the root and common cause analyses, the problem identification criterion that "the evaluation documented how long the condition existed and any prior opportunities for identification" was inappropriately listed as "N/A." While the team determined that, in general, the results of the extent of cause evaluation were adequate, inclusion of an analysis of the length of time that the causes existed would have more thoroughly addressed their extent.

e. <u>Determination that the root cause, extent of condition, and extent of cause evaluations</u> appropriately considered the safety culture components as described in IMC 0305

- 6 - Enclosure

In each of the cause evaluations reviewed by the team, the licensee screened root, common, and contributing causes against the safety culture components described in NRC Inspection Manual Chapter 0305. The team determined that these evaluations were adequate and that applicable safety culture components were identified when appropriate.

f. Findings

No findings of significance were identified.

02.03 Corrective Actions

a. <u>Determination that appropriate corrective actions are specified for each root and contributing cause or that the licensee has an adequate evaluation for why no corrective actions are necessary</u>

The team determined that the corrective actions for each root and contributing cause contained in the cause evaluations were appropriate. In the cause evaluation, the licensee listed specific corrective action(s) for each determined cause or extent-of-cause item. Each cause evaluation also included several enhancements that did not specifically address the root or contributing causes, but that if implemented would likely result in improved barriers to prevent future occurrence of similar events.

The actions taken by the licensee to effect these enhancements often took the form of management "initiatives." The team determined the organizational effectiveness of some of these management initiatives to be questionable. In discussions with system engineers, the team determined that the results of these management initiatives are generally more action items for the individual engineers; the ways that these actions fit into the overall initiative is usually unclear. Individual workers at times feel that they are "drowning" in initiatives. Personnel variously stated that the initiatives were not well prioritized, that it was often difficult to integrate and prioritize all of the initiative actions into the normal workload, and that the big picture behind the individual initiatives was not always well communicated to the staff.

For example, as a corrective action for the common cause associated with a "weakness in implementation of policies, procedures and programs (particularly Maintenance) [which] resulted in non-safety related equipment failures" (CC3), the licensee initiated a "Procedure of the Week" campaign wherein managers and supervisors would discuss the importance of certain procedures with their staff. The procedures that were chosen were procedures that historically had given the site the most difficulty in implementation. The team conducted interviews with licensee staff; none of the staff who were asked were familiar with the campaign. Though the licensee had not closed the overall action request as complete in the corrective action program, each of the department managers had completed their individual tasks for implementation of the campaign.

The team identified one notable exception to the above observation where substantial organizational change had resulted from a management initiative. One of the corrective

- 7 - Enclosure

actions from the common cause evaluation (CCA1.2) was to improve monitoring and trending of non-safety-related system components by system engineers. Through interviews, the team determined that though monitoring and trending had formerly been a standard practice, it had decreased over a period of several years. Instead, the focus for system engineers had shifted from predicting and preventing equipment failures to responding to failures after the fact. The team determined that the refocusing of the engineering staff on monitoring/trending, including setting aside Tuesday mornings for system engineers to perform monitoring and trending of their systems, had been effectively implemented and had been well-received by the licensee staff.

b. <u>Determination that corrective actions have been prioritized with consideration of risk significance and regulatory compliance</u>

The team determined that while, in general, the corrective actions were appropriate to correct the identified root and common causes, the licensee's method for tracking some corrective actions was inadequate. Through discussions with licensee personnel, the team determined that the closure notes included in one action were inaccurate. The closure of this action had been reviewed and determined to be accurate by a management Corrective Action Closure Review Committee. Further, the team noted that for several of the corrective actions for root and common causes, the licensee's method for tracking completion was inadequate.

For example, corrective action CCA1.4 from the common cause evaluation is to "confirm enhancement of system health reporting and Plant Health Committee effectiveness by implementing the AR 203163 actions." The deliverable associated with this corrective action is that "the AR 203163 actions have been effectively implemented and closed." However, AR 203163 is a "SELF"-type action request (AR), not a condition report (CR). "SELF" AR's are unaudited tracking devices which, by procedure, are not part of the licensee's corrective action program. While the closure of actions in category A and B "CR"-type action requests are reviewed by the Corrective Action Closure Review Committee for adequacy, the closure of actions within "SELF" AR's is not tracked or reviewed. The team noted that several actions of AR 203163 had been canceled without justification; licensee personnel indicated that this was appropriate because the AR was categorized as "SELF". The team determined that this was an inadequate tracking method for corrective actions from root and common cause evaluations. The licensee entered this in the corrective action program as AR/CR 214964.

A weakness in the prioritization and implementation of corrective actions was previously noted by the NRC during its biennial problem identification and resolution inspection in September 2009, and was documented in Inspection Report 05000397/2009008. The problem identification and resolution team also noted that while the licensee's establishment of the Corrective Action Closure Review Committee in January of 2008 had improved performance in corrective action closure, the efforts to improve had not yet been completely effective. Based on its review of corrective actions contained in the root and common cause evaluations reviewed during this supplemental inspection, including the example above, this team concludes that the licensee's performance in implementation and closure of corrective actions still requires improvement.

- 8 - Enclosure

c. <u>Determination that a schedule has been established for implementing and completing</u> the corrective actions

The licensee established adequate schedules for completion of the specified corrective actions. As appropriate, some corrective actions were tied to refueling outages while others were more short term such as procedure revisions or training updates. The team did not identify any specific concerns with the scheduling or completion of established corrective actions.

d. <u>Determination that quantitative or qualitative measures of success have been developed</u> for determining the effectiveness of the corrective actions to prevent recurrence

The licensee included in each cause evaluation specific actions to evaluate the effectiveness of each corrective action. Additionally, the licensee had established a management Corrective Action Closure Review Committee to review the closure of all actions category A and B "CR"-type action requests. While the team determined this to be a generally effective method for ensuring proper closure of the types of action requests which the committee reviewed, other types of AR's were not reviewed for appropriate closure. This was further discussed in section 02.03.b, above.

e. <u>Findings</u>

No findings of significance were identified.

40A6 Management Meetings

Exit Meeting Summary

The team presented the inspection results to Mr. S. Oxenford, Site Vice President, Columbia Generating Station, and other members of licensee management on March 26, 2010. The licensee acknowledged the information presented. The team verified that information received from the licensee was not proprietary or that all proprietary information had been returned. The licensee did not identify any proprietary information.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

- D. Atkinson, Vice President, Operations Support
- J. Bekhazi, Plant General Manager
- B. Boyum, Assistant Engineering General Manager
- D. Brown, Operations Manager
- D. Coleman, Manager, Regulatory Programs
- G. Cullen Assistant to Vice President, Nuclear Generation
- S. Gambhir, Vice President, Technical Services
- D. Gregoire, Licensing Engineer
- M. Humphreys, Licensing Supervisor
- P. Inserra, Performance Improvement Manager
- B. Jenkins, Maintenance Manager
- C. Moon, Training Manager
- S. Oxenford, Vice President, Nuclear Generation
- R. Parmalee, Systems Engineering Manager
- V. Parrish, Chief Executive Officer
- B. Sherman, Engineer, Bonneville Power Administration
- D. Swank, Engineering General Manager
- R. Torres, Quality Manager

NRC

W. Walker, Chief, Reactor Projects Branch A

R. Cohen, Senior Resident Inspector

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

<u>Opened</u>			
None			

Opened and Closed

None

Discussed

None

LIST OF DOCUMENTS REVIEWED

Condition Reports

200756	203746	210520
207245	203753	211985
202384	203774	212293
200350	203795	212535
196662	203843	212904
192240	203846	213828
185299	205640	214564
190618	206128	
200756	206650	
203117	206883	
203163	207877	

Procedures

Number	<u>Title</u>	Revision
1.5.17	Equipment Reliability Program Description	0
MI-1.9	Maintenance Fix-It-Now Team	5
CDM-01	Cause Determination Manual	0
DES-2-1	Plant Design Changes	30
SWP-CAP-01	Corrective Action Program	19
3.1.10	Operating Data and Logs	61
4.820.B2	820.B2 Annunciator Panel Alarms	16
SOP-MT-OIL-OPS	Main Turbine Lube Oil Operations	4
SYS-2-15	System Engineer Certification	0
CDPM-01	Cause Determination Practitioners Manual	4
1.5.13	Preventative Maintenance Optimization Living Program	18
SYS-2-1	Conduct of System Engineering Manual (COSEM)	1
SWP-CAP-06	Condition Review Group (CRG)	10
SWP-PJM-04	Plant Health Committee	1

SYS-4-31	System and Equipment Performance Monitoring and Trending Program	1
10.25.179	Flexible and Rigid Link Removal, Inspection, and Installation	5
10.25.215	High Potential Testing of 4.16kV and 6.9kV Non- Segregated Buses	0
MI-1.8	Conduct of Maintenance	40
WCI-4	Online Work Control Process	25
1.3.76	Integrated Risk Management	17
MI-1.9.1	Rework Accountability Program	6
SYS-2-15	System Engineering Certification	0

Miscellaneous Documents

Number	<u>Title</u>	Revision
9-SR-10-01	Quality Review of the Root Cause Analyses of Six Reactor Scrams Using NRC Inspection Procedure 95001	March 10, 2010
	Station Health Action Report	March 23, 2010
	Self-Assessment Report Number 187903: Operator Fundamentals Self Assessment	December 11, 2009
	Training presentation & attendance list – Personnel Qualification Database item ES001124	
	Training presentation & attendance list – Personnel Qualification Database item ES001156	
	Training presentation & attendance list – Personnel Qualification Database item ES001178	
6081364-SA	ESI Special Assessment of the Emergency Diesel Governor Control System, Associated Components, Processes and Procedures	0
	Human Performance Focus Area: Procedure Use and Adherence	

Energy Northwest Self-Assessment Plan	0
Feedwater and Condensate Deep Dive	February 26, 2010
Work Order Feedback Training	
Strong Technical Conscience Culture & OE Review	
Lower Tier Apparent Cause Analysis Focus Area on Technical Conscience	0