September 30, 1999

Mr. J. E. Cross
President
Generation Group
Duquesne Light Company
Post Office Box 4
Shippingport, Pennsylvania

SUBJECT: MID-CYCLE PLANT PERFORMANCE REVIEW - BEAVER VALLEY POWER STATION

On September 16, 1999, the NRC staff completed the mid-cycle Plant Performance Review (PPR) of Beaver Valley Power Station. The staff conducted these reviews for all operating nuclear power plants to integrate performance information and to plan for inspection activities at your facility over the next six months. Normally, the focus of the mid-cycle PPR would be limited to identifying changes in performance over the last six months, and to allocate inspection resources accordingly. However, since we plan to conduct a public meeting to discuss performance following this review, we also have included assessment results from the review process in this letter. At the public meeting, we will discuss performance insights from both this letter and those described in the April 9, 1999, letter forwarding the results of the last full PPR.

Several forced shutdowns occurred on both units since the full PPR. On February 14 operators shut down Unit 1 to repair a leak in the "C" main turbine condenser. The unit returned to power operation on February 25 and operated at or near full power until April 13 when the unit began a planned mid-cycle surveillance testing outage. The unit restarted on April 30 but was forced to shut down on May 1 due to particulate fouling within the main unit generator hydrogen seal oil system. Unit 1 resumed power operation on May 7 and remained at or near full power through the end of the assessment period.

Unit 2 began the period at full power and shut down for a refueling outage on February 26. The unit resumed power operation on April 12. Operators shut down the unit on July 18 due to an inoperable emergency diesel generator. The unit resumed power operation on July 27 and remained at or near full power through the end of the assessment period.

The full PPR noted improvements in the operations and engineering areas. The condition report program was actively used to identify and pursue problems; however, several condition report program challenges existed. Since the full PPR, overall station performance gradually improved with the exception of performance surrounding the July 16, 1999, Unit 2 event. Improvements were observed in control and support of outage activities. The planned refueling and surveillance testing outages were safely performed and benefitted from improved work coordination and schedule adherence. Material condition of safety related systems is generally good. However, equipment problems, such as Unit 1 main generator hydrogen seal oil system contamination and Unit 2 service water fouling, which led to forced plant outages, indicate the need to continue material condition improvements.

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Operator response to plant events was generally good. Management actions led to notably improved human performance during the Unit 2 refueling outage in March 1999 and the Unit 1 surveillance outage in April 1999. For example, improved preevolution briefings and better outage work coordination reduced the burden on the operating crews. Operator adherence to procedures was generally good; however, procedural deficiencies and a large procedure change backlog continued to challenge the operators. A significant exception to the overall good performance involved the response to the July 1999 Unit 2 loss of 2DF 4 kilovolt emergency bus event. Operator actions to be implemented during a loss of all seal cooling for the reactor coolant pumps were not adequately incorporated into plant procedures, emphasized in operator training, or indicated by the control room annunciators. Additionally, the response of the Beaver Valley Power Station organization to degraded conditions in the Unit 2 service water system did not include appropriate considerations for a potential common mode failure of the emergency diesel generators, and the management team was slow to apply the lessons learned from the event to Unit 1. Based on this review, we plan to conduct the normal core inspection program through March 2000, although we will continue to place additional emphasis on reviewing the procedure change and corrective action backlogs, as stated in the April 9, 1999, full PPR letter.

Work activities were performed safely during the Spring 1999 Unit 1 and 2 planned outages, and work coordination improved somewhat. Although a gradual reduction in the corrective maintenance backlog was noted, the backlog was high and degraded equipment conditions contributed to several forced shutdowns. The on-line maintenance program effectively incorporated maintenance rule and plant risk insights. Work schedule implementation generally improved; however, poor communications, untimely work package planning, and inconsistent pre-job walkdowns extended several safety related work activities on a number of occasions. Examples included greater than expected repair times for quench spray chemical injection, auxiliary feedwater, and low head safety injection system repairs. Surveillance activities were performed safely. In addition to the normal core inspections, we plan to conduct an initiative inspection to review work planning and coordination, and the maintenance backlog.

Engineering performance improved in a number of areas including post accident dose assessment, risk significant operator workaround reduction, and circuit breaker preventive maintenance performance. Engineering support to resolve emergent equipment problems, such as emergency diesel generator 2-2 and Unit 1 main generator voltage regulator failures, and check valve leakage in the safety injection and auxiliary feedwater systems, was generally good. However, on several occasions, engineers did not sufficiently monitor their systems to verify that recommended corrective actions were effectively implemented. Examples included the poorly prioritized repair of a river water pump, an ineffective service water system biofouling control program, and an incomplete restoration plan for an inoperable emergency diesel generator. Use and dissemination of industry operating experience information was strong. For example, the 10 CFR 21 reporting of design basis accident control room dose deficiencies alerted the industry to this concern. Based on this review, in addition to the normal core inspections, we plan to conduct an initiative inspection to review prioritization and resolution of longstanding design issues, as stated in the April 9, 1999, full PPR letter.

Overall performance in the Plant Support area continued to be effective, as discussed in the full PPR. The Unit 2 refueling outage was conducted with appropriate radiological controls. The

emergency preparedness program remained acceptable, with strengths noted in the facilities, equipment, and training portions of the program. Based on this review, we plan to conduct the normal core inspection program through March 2000.

Enclosure 1 contains a historical listing of plant issues, referred to as the Plant Issues Matrix (PIM), that were considered during this PPR process to arrive at an integrated review of licensee performance trends. The PIM includes items summarized from inspection reports or other docketed correspondence between the NRC and DLC from September 1998 through August 1999. As noted above, greater emphasis was placed on those issues identified in the past 6 months during this performance review. The NRC does not attempt to document all aspects of licensee programs and performance that may be functioning appropriately. Rather, the NRC only documents issues that the NRC believes warrant management attention or represent noteworthy aspects of performance. In addition, the PPR may also have considered some predecisional and draft material that does not appear in the attached PIM, including observations from events and inspections that had occurred since the last NRC inspection report was issued, but had not yet received full review and consideration. This material will be placed in the PDR as part of normal issuance of NRC inspection reports and other correspondence.

This letter advises you of our plans for future inspection activities at your facility so that you will have an opportunity to prepare for these inspections and to provide us with feedback on any planned inspections which may conflict with your plant activities. Enclosure 2 details our inspection plan through March 2000 to coincide with the scheduled implementation of the revised reactor oversight process in April 2000. Included in the plan are NRC non-inspection activities. Also, as is the case with all pressurized water reactors, we plan to follow up on your response to Generic Letter 98-02, "Loss of Reactor Coolant Inventory and Associated Potential for Loss of Emergency Mitigation Functions While in a Shutdown Condition." The rationale or basis for each inspection outside the core inspection program is discussed above so that you are aware of the reason for emphasis in these program areas. Resident inspections are not listed due to their ongoing and continuous nature.

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact Mr. Peter Eselgroth at 610-337-5234 with any questions you may have.

Sincerely,

Original Signed By:

Richard V. Crlenjak, Deputy Director
Division of Reactor Projects

Docket Nos. 50-334, 50-412
License Nos. DPR-66, NPF-73

Enclosures: 1. Plant Issues Matrix
2. Inspection Plan

cc w/encls:
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United States Nuclear Regulatory Commission

PLANT ISSUE MATRIX

By Primary Functional Area / Issue Date

Region I

BEAVER VALLEY

Date	Source	Functional Area	ID	Type	Template Codes	Item Title / Item Description
07/29/1999	1999007	Pri: OPS	NRC	NEG	Pri: 4B	**The licensee's 1997 Probability Risk Assessment shows reactor coolant pump seal failures**
		Sec:			Sec: 3A	The licensee's 1997 Probability Risk Assessment shows that reactor coolant pump seal failures contribute 50% of the total core damage frequency for BV Unit 2. This risk insight was not previously used to identify improvements in plant procedures, operator training, or control room alarm human-factors that would assist with mitigation of this risk significant event.
Dockets Discussed:					Ter: 5A	
05000412 BEAVER VALLEY 2						
07/29/1999	1999007-01	Pri: OPS	NRC	NCV	Pri: 1B	**The Beaver Valley Unit 2 Operating crew failed to recognize that all seal cooling for two RCPs was lost**
		Sec:			Sec: 3A	The BV Unit 2 operating crew failed to recognize that all seal cooling for two RCPs was lost and consequently, they did not implement actions specified in an alarm response procedure to protect the seals. The importance of these actions was not emphasized in training or indicated by the human factoring of the control room annunciators. The failure to implement this procedure is a violation of TS 6.8.1, which has been entered in the licensee's corrective action program and is being treated as a non-cited violation consistent with the NRC Enforcement Policy.
Dockets Discussed:					Ter: 5A	
05000412 BEAVER VALLEY 2						
07/29/1999	1999007-02	Pri: OPS	NRC	NCV	Pri: 1C	**The licensee failed to develop procedures for loss of emergency power**
		Sec:			Sec: 5C	The licensee failed to develop procedures for loss of emergency power, as required by Regulatory Guide 1.33 and the Technical Specifications. Although Operations department personnel knew procedure guidance was lacking in this area, the "loss of bus" procedure had not been identified as a required procedure. This violation of TS 6.8.1, has been entered in the licensee's corrective action program and is being treated as a non-cited violation consistent with the NRC Enforcement Policy.
Dockets Discussed:					Ter: 3A	
05000412 BEAVER VALLEY 2						
07/24/1999	1999004	Pri: OPS	NRC	NEG	Pri: 3A	**Operations management did not take timely action to ensure two problems associated with the July 18 Unit 2**
		Sec:			Sec: 1A	Operations management did not take timely action to ensure two problems associated with the July 18 Unit 2 forced shutdown, were addressed for Unit 1 applicability. Specifically, Unit 1 operators were not trained on or aware of procedure revisions for loss of reactor coolant pump seal cooling and emergency diesel generator 1-1 cooling was not properly evaluated until questioned by the inspectors.
Dockets Discussed:					Ter: 3B	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
07/24/1999	1999004	Pri: OPS	NRC	NEG	Pri: 3A	**The operations manual procedure change backlog was high but decreasing**
		Sec:			Sec: 1C	The operation manual procedure change backlog was high (1700) but decreasing. The changes not yet incorporated, although not critical for performance of the procedures, required operators to compensate through preevolution briefings or additional compensatory actions such as using partial procedures and caution tags. These actions placed additional burdens on the operating crews and were a type of operator workaround.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
07/24/1999	1999004	Pri: OPS	NRC	POS	Pri: 1B	**On July 16, Unit 2 operators took prompt action to isolate an electrical fault and deenergize the 2DF emergen**
		Sec:			Sec: 3A	On July 16, Unit 2 operators took prompt action to isolate an electrical fault and deenergize the 2DF emergency 4 kilovolt electrical bus. The nuclear shift supervisor and assistant nuclear shift supervisor quickly defined priorities and maintained orderly command and control. Coordination between system engineers, maintenance technicians, and operations personnel to safety restore the 2DF bus and associated loads was outstanding. Operators safety completed a technical specification required shutdown on July 18. Reference LER 50-412/99-06; LER 50-412/99-07..
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						

United States Nuclear Regulatory Commission

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By Primary Functional Area / Issue Date

Region I

BEAVER VALLEY

Date	Source	Functional Area	ID	Type	Template Codes	Item Title / Item Description
07/24/1999	1999004	Pri: OPS	NRC	POS	Pri: 1C	**Two operating crews responded well during simulator training scenarios.**
		Sec:			Sec: 1B	Two operating crews responded well during simulator training scenarios in their identification of equipment failures and emergency operating procedure usage. Simulator instructors were knowledgeable of the facility and effectively used lessons learned and industry information during the training. Fidelity issues with the simulator and the control room were effectively tracked and resolved.
Dockets Discussed:					Ter: 3A	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
06/12/1999	1999003	Pri: OPS	NRC	NEG	Pri: 1B	**Following a March 29 loss of 4kV bus event, the NSS made a poor configuration control decision.**
		Sec:			Sec: 3A	Following a March 29 loss of 4kV bus event, the nuclear shift supervisor made a poor configuration control decision when he secured the emergency diesel generator prior to isolating the degraded 2-5 battery charger which caused the event. Reference LER 50-412/99-05.
Dockets Discussed:					Ter: 3C	
05000412 BEAVER VALLEY 2						
06/12/1999	1999003	Pri: OPS	Licensee	NEG	Pri: 3A	**Operators failed to properly evaluate a source range nuclear instrumentation surveillance test.**
		Sec:			Sec: 2A	Operators failed to properly evaluate a source range nuclear instrumentation surveillance test. Corrective actions were appropriate. Reference LER 50-412/99-01.
Dockets Discussed:					Ter: 5A	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
06/12/1999	1999003	Pri: OPS	NRC	POS	Pri: 3A	**The Onsite Safety Committee effectively recognized, reviewed, and evaluated plant changes affecting nuclea**
		Sec:			Sec: 4C	The Onsite Safety Committee effectively recognized, reviewed, and evaluated plant changes affecting nuclear safety. The meetings were well organized as the meeting agenda and items under review were consistently distributed and reviewed in advance. This allowed the committee members to review a large volume of items and focus on the items with greatest safety significance.
Dockets Discussed:					Ter: 5B	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
05/01/1999	1999002	Pri: OPS	NRC	MISC	Pri: 3C	**Significant overtime worked for Unit 2 refueling outage**
		Sec:			Sec:	Significant overtime was worked for the Unit 2 refueling outage, but hours were carefully tracked in accordance with procedures. While no events were attributed to fatigue or excessive workload, management of overtime, especially for operators (20 to 32 percent overtime), continued to be a challenge.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
03/20/1999	1999001	Pri: OPS	NRC	NEG	Pri: 5C	**Corrective action program did not fully evaluate or resolve several recent deficient conditions.**
		Sec:			Sec: 3A	The corrective action program did not fully evaluate or resolve several recent deficient conditions, including compensatory actions associated with emergency bus degraded voltage instrumentation and technical specification (TS) limiting condition of operation action and surveillance requirements. Common factors included department manager acceptance of incomplete condition report investigations, insensitivity to TS requirements, and hesitancy to initiate condition reports. Following discussions with inspectors, senior management established a team to evaluate the corrective action deficiencies and determine whether underlying weaknesses exist.
Dockets Discussed:					Ter: 5B	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						

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By Primary Functional Area / Issue Date

Region I

BEAVER VALLEY

Date	Source	Functional Area	ID	Type	Template Codes	Item Title / Item Description
03/20/1999	1999001	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: 3A Ter: 1C	**Outage configuration control improved.** Outage configuration control improved, based on implementation of the computer-based clearance system in May 1998, combined with additional clearance reviews by senior reactor operators and reactor operators. The clearances associated with the service water system and a residual heat removal valve repair were properly written and completed. **Dockets Discussed:** 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2
03/20/1999	1999001	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: 3A Ter: 5A	**Refueling activities including the reactor cavity draindown were generally conducted well** Refueling activities including the reactor cavity draindown were generally conducted well. Preevolution briefings, procedure adherence, and supervisor oversight were good. Technical specification (TS) surveillance requirements were met and were well controlled. Refueling personnel and Quality Services Unit personnel provided critical self-identification of problems and captured them into the corrective action program. Management oversight was evident in support of the activities. **Dockets Discussed:** 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2
03/20/1999	1999001	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: 5A Ter:	**Operators maintained comprehensive and accurate logs that clearly identified significant activities and appli** Operators maintained comprehensive and accurate logs that clearly identified significant activities and applicable technical specification limiting conditions of operation. Plant problems described in the logs, were effectively transferred into the corrective action system for resolution. **Dockets Discussed:** 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2
03/20/1999	1999001	Pri: OPS Sec:	NRC	POS	Pri: 1C Sec: 5A Ter:	**The Independent Safety Evaluation Group pre-outage safety review verified that the Unit 2 outage schedule p** The Independent Safety Evaluation Group (ISEG) pre-outage safety review verified that the Unit 2 outage schedule provided sufficient safety margin. The ISEG provided a comprehensive ongoing review of work scope and schedule changes and real time assessment of plant risk throughout the refueling outage. Station personnel maintained an awareness of key safety parameters during the outage through effective communication of shutdown safety status sheet information on a shiftly basis. **Dockets Discussed:** 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2
03/20/1999	1999001	Pri: OPS Sec:	NRC	POS	Pri: 3A Sec: 5A Ter: 5C	**Human performance was generally good.** Human performance was generally good. Station personnel maintained a low tolerance threshold by identifying numerous minor human performance deficiencies at the beginning of the Unit 2 refueling outage. Management aggressively responded to these problems with a plant-wide work stoppage to review the problems, improve preevolution briefing standards, and reenforce self-checking techniques. Increased senior plant management observations of preevolution briefings added emphasis to self-checking techniques. These timely actions helped to prevent more significant human performance errors. **Dockets Discussed:** 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2
03/20/1999	1999001-01	Pri: OPS Sec:	Licensee	NCV	Pri: 2B Sec: 3A Ter: 2A	**Inadequate Source Range High Voltage Setpoint Leads to Failure to Comply with Technical Specifications** An inadequate calibration procedure, due to unclear vendor technical information and a lack of understanding by the system engineer, resulted in plant operation with one of the two required source range nuclear instruments inoperable. The root cause and corrective actions were appropriate to preclude repetition. Reference LER 50-412/98-14. (Violation of TS 3.3.1; Enforcement Discretion per VII.B.1 of the Enforcement Policy.) **Dockets Discussed:** 05000412 BEAVER VALLEY 2

United States Nuclear Regulatory Commission

PLANT ISSUE MATRIX

By Primary Functional Area / Issue Date

Region I

BEAVER VALLEY

Date	Source	Functional Area	ID	Type	Template Codes	Item Title / Item Description
02/06/1999	1998011	Pri: OPS Sec:	Self	NEG	Pri: 3A Sec: 1C Ter: 1A	**Poor Procedures and Human Performance Weaknesses Result in a Loss of Main Condenser Vacuum and Sub** Poor procedures and human performance weaknesses resulted in an uncontrolled reduction of main condenser vacuum and subsequent Unit 1 reactor trip during condenser waterbox cleaning. Poor procedures also caused an uncontrolled reduction of vacuum and turbine trip during unit restart.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
02/06/1999	1998011	Pri: OPS Sec:	NRC	NEG	Pri: 3A Sec: 5B Ter:	**Condition Report Investigation Response Quality has Improved** While condition report investigation response quality has improved since May 1998, the Corrective Action Review Board rejection rate continued to indicate a performance weakness.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
02/06/1999	1998011	Pri: OPS Sec:	NRC	NEG	Pri: 5C Sec: 3A Ter:	**Corrective Action Implementation Following the Unit 1 Reactor Trip was Adequate** Corrective action implementation following the Unit 1 reactor trip was adequate, yet some related procedural deficiencies, which could cause event recurrence, were not addressed until questioned by the inspectors.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
02/06/1999	1998011	Pri: OPS Sec:	NRC	POS	Pri: 1B Sec: 5B Ter:	**Unit 1 Operators Initiate a Manual Reactor Trip** Unit 1 operators alertly initiated a manual reactor trip from 73% reactor power, when they could not recover main condenser vacuum. The event review team and the nuclear safety review board comprehensively reviewed the event and identified appropriate corrective actions prior to restart.
Dockets Discussed: 05000334 BEAVER VALLEY 1						
02/06/1999	1998011	Pri: OPS Sec:	NRC	POS	Pri: 5B Sec: 3A Ter:	**Off-Site Review Committee Meets Regulatory Requirements** Off-Site Review Committee (ORC) meeting periodicity, content, and membership quorum met regulatory requirements. External ORC member participation has improved the quality of station chemistry and radiological audits.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
02/06/1999	1998011	Pri: OPS Sec:	NRC	POS	Pri: 5B Sec: 5A Ter: 4C	**Condition Report Backlog has Decreased Approximately 50%** The condition report investigation backlog has decreased approximately 50% since May 1998. The corrective action backlog, especially in the Engineering and Maintenance departments, remained high with over 1000 open items. Deficiencies continued to be identified and inputted into the corrective action system.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						

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Region I

BEAVER VALLEY

Date	Source	Functional Area	ID	Type	Template Codes	Item Title / Item Description
02/06/1999	1998011	Pri: OPS	NRC	POS	Pri: 5C	**Corrective Action Review Board Conducted Comprehensive Reviews of Condition Report Investigation Resp**
		Sec:			Sec: 3A	The Corrective Action Review Board (CARB) conducted comprehensive reviews of condition report investigation responses, with a rejection or table rate of 20%. CARB membership diversity contributed to noteworthy findings including a concern associated with the use of permanent caution tags and configuration control.
Dockets Discussed:					Ter: 4C	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
02/06/1999	1998011-01	Pri: OPS	NRC	VIO IV	Pri: 1C	**Inoperable Meteoroloigcal Tower Instrumentation**
		Sec:			Sec: 5B	Quality Services Unit personnel identified that procedures and practices may have been inadequate to assure technical specification (TS) surveillance requirements for meteorological monitoring instrumentation were satisfied. Investigation of the issue was incomplete and corrective actions were untimely. Absent NRC involvement, the licensee would not have recognized and reported several related violations of TS. These deficiencies represented a breakdown of the corrective action program across the organization and resulted in a violation. Reference LER 50-334(412)/98-29 (Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action.")
Dockets Discussed:					Ter: 5C	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
01/06/1999	1998009	Pri: OPS	NRC	POS	Pri: 1A	**Review of Selected Operation Procedures Associated with Unit 2 Charging HHSI Systems**
		Sec:			Sec: 2A	The review of selected operation procedures associated with the Unit 2 charging and high head safety injection systems, including those for venting and operations surveillance testing of the charging pump, identified no safety issues. Similarly, no negative issues were observed in the verification of applicable valve lineups against plant configuration.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
12/26/1998	1998010	Pri: OPS	Licensee	POS	Pri: 3A	**Primary Component Cooling Water Pump "A" Test**
		Sec:			Sec: 2B	Operators performed the primary component cooling water pump surveillance test accurately and in conformance with procedures. Due to high pump vibrations, the procedure could not be completed satisfactorily. Operations exited the procedure and restored the system correctly.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
12/26/1998	1998010	Pri: OPS	Licensee	POS	Pri: 3A	**Secondary Side Leak of the "B" Steam Generator Blowdown Sample Line.**
		Sec:			Sec: 5B	On November 19, a containment entry team successfully stopped a secondary side leak of the "B" steam generator blowdown sample line. The troubleshooting plan was well developed and executed. The prejob and containment entry briefings were very detailed and included lessons learned from previous containment entries.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
12/26/1998	1998010	Pri: OPS	Licensee	STR	Pri: 3A	**Operator Awareness During Routine Activities**
		Sec:			Sec: 1A	Operators were alert and demonstrated questioning attitudes during routine plant activities. Careful scrutiny of planned work activities prior to authorization precluded conditions not permitted by technical specifications and potential reactor plant transients. Discrepancies were promptly acted on and entered into the station's corrective action program.
Dockets Discussed:					Ter: 5A	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						

United States Nuclear Regulatory Commission
PLANT ISSUE MATRIX
By Primary Functional Area / Issue Date

Region I
BEAVER VALLEY

Date	Source	Functional Area	ID	Type	Template Codes	Item Title / Item Description
11/14/1998	1998006	Pri: OPS Sec:	Licensee	POS	Pri: 1B Sec: 2A Ter: 5C	**Unit 2 Forced Shutdown Due to Inoperable Station Battery** On November 1, Unit 2 operators performed a technical specification required shutdown due to an inoperable station battery. The shutdown was performed in a controlled manner and communications during reactivity changes were clear. The lessons learned critique following the forced outage was productive and identified several recommendations to improve the organization's ability to respond to degraded material conditions. (Section O1.2)
Dockets Discussed: 05000412 BEAVER VALLEY 2						
11/14/1998	1998006	Pri: OPS Sec:	Self	POS	Pri: 2A Sec: 5B Ter: 5C	**Response to Loss of Unit 1 Annunciator Panel A-9** In response to a loss of annunciator panel "A-9" on October 15, the Unit 1 control room Assistant Nuclear Shift Supervisor developed and implemented a comprehensive plan to verify safety significant plant parameters.
Dockets Discussed: 05000334 BEAVER VALLEY 1						
11/14/1998	1998006	Pri: OPS Sec:	NRC	POS	Pri: 5B Sec: 3A Ter:	**Management Response to Multiple Unit 1 Equipment Problems** The Management Review Team effectively assessed equipment condition and proposed repair actions for the multiple equipment problems experienced on Unit 1, October 15. System engineering and maintenance participation contributed to effective problem solving. Previous action to correct the reactor coolant system flow spiking was slow and ineffective.
Dockets Discussed: 05000334 BEAVER VALLEY 1						
11/16/1998	1998008	Pri: OPS Sec:	NRC	NEG	Pri: 1A Sec: 5A Ter: 1C	**Review of Self-Assessment Program** The team concluded that while the self assessment program satisfied administrative requirements, the operation's self assessments reviewed did not consistently provide management with worthwhile operator performance insights or recommend improvements.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
11/16/1998	1998008	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: 3A Ter:	**Control Room Observations** Operator actions observed during this inspection were all conducted in a safe and controlled manner. Operations personnel consistently adhered to management standards and expectations regarding communications, and control board awareness. Three-part communications, peer and self-checking were routinely used by the operators. Shift turnovers were effective in ensuring that the operators were well informed of plant conditions, and that important plant status information was conveyed to the oncoming shift. Non-licensed operators did an excellent job taking plant logs and addressing plant deficiencies during the shiftly rounds. Log keeping practices were consistent with the administrative requirements.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
11/16/1998	1998008	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: 3A Ter:	**Operations Procedures and Documentation** The team concluded that overall procedure adherence/usage was excellent. The quality of the procedures reviewed was adequate. Operators were aware of management's expectations for procedure compliance. A large backlog of recommended procedure revisions exists. The large backlog of recommended procedure revisions indicated the need for a more focused effort to incorporate these changes to enhance the overall quality of operation's procedures.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						

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Date	Source	Functional Area	ID	Type	Template Codes	Item Title / Item Description
11/16/1998	1998008	Pri: OPS	NRC	POS	Pri: 1A	**Status of Monitoring Equipment/Components**
		Sec:			Sec: 3A	The present process for monitoring the status of equipment/components was appropriate. Operations shift personnel employed rigorous controls on entering a Technical Specification Limiting Condition for Operation. The control room staff was well informed of ongoing activities in the plant. The shift management provided appropriate oversight of shift activities and pre-evolution briefs were well organized. Additionally, the team concluded that the Bases for Continued Operation for Unit 2 were completed in a manner consistent with NRC guidance.
					Ter: 5C	
Dockets Discussed:						
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
11/16/1998	1998008	Pri: OPS	NRC	POS	Pri: 1A	**Review of Training Records**
		Sec:			Sec: 3B	A review of 1998 cycle requalification training records indicated that licensed operators for both units were up-to-date with their required annual requalification training and were completing their requalification training in a timely manner.
					Ter:	
Dockets Discussed:						
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
11/16/1998	1998008	Pri: OPS	NRC	POS	Pri: 1C	**Operational Status of Facilities and Equipment**
		Sec:			Sec: 2B	The safety tagging requirements established for maintenance activities were appropriate. The recent change to a computer based clearance tagging process was noted as an enhancement. The implementation of the safety and configuration tagging administrative requirements by plant operators was effective.
					Ter: 3B	
Dockets Discussed:						
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
11/14/1998	9812090040	Pri: OPS	NRC	LIC	Pri: 5C	**Unit 2 Submittal of License Amendment Request for One-time Extension of Fast Bus Transfer Surveillance T**
		Sec:			Sec: 3C	Submittal of the license amendment request for a one time extension of the Unit 2 fast bus transfer surveillance test was not timely in that it would have required an expedited review by the NRC staff to meet the requested completion date. The subject test was not a new requirement and the potential need for the amendment was previously known by the licensee. The untimely submittal respresents a continued weakness in planning and scheduling of TS surveillance tests and amendment requests.
					Ter:	
Dockets Discussed:						
05000412 BEAVER VALLEY 2						
10/03/1998	1998005	Pri: OPS	Licensee	POS	Pri: 1A	**On September 2, Unit 2 experienced a loss of charging flow for 3 minutes. Control room operators responde**
		Sec:			Sec:	On September 2, Unit 2 experienced a loss of charging flow for 3 minutes. Control room operators responded promptly and identified a probable cause.
					Ter:	
Dockets Discussed:						
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
10/03/1998	1998005	Pri: OPS	NRC	POS	Pri: 1B	**The Unit 2 reactor startup was safely performed. Emergent problems were addressed safely and comprehen**
		Sec:			Sec: 3A	The Unit 2 reactor startup was safely performed. Emergent problems were addressed safely and comprehensively. Operator performance was generally good and employed the stop, think, act, and review (STAR) principle. An exception to the good human performance contributed to a turbine/generator trip while bringing the unit on line.
					Ter:	
Dockets Discussed:						
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10/03/1998	1998005	Pri: OPS	NRC	POS	Pri: 5C	**Lessons learned from the Unit 1 startup were appropriately developed and implemented prior to the Unit 2 re**
		Sec:			Sec: 1C	Lessons learned from the Unit 1 startup were appropriately developed and implemented prior to the Unit 2 restart. The successful transfer from the bypass to the main feedwater regulating valves was a notable example of an implemented improvement.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
10/03/1998	1998005	Pri: OPS	NRC	STR	Pri: 5C	**The licensee developed and implemented a Unit 2 Restart Action Plan to provide assurance that known cond**
		Sec:			Sec: 1C	The licensee developed and implemented a Unit 2 Restart Action Plan to provide assurance that known conditions adverse to quality were corrected and that personnel, processes, and equipment were ready for unit restart. The corrective actions were comprehensive to address the root causes for the extended forced unit outage.
Dockets Discussed:					Ter:	
05000412 BEAVER VALLEY 2						
10/03/1998	1998005-01	Pri: OPS	Licensee	NCV	Pri: 4A	**FAILURE TO MAINTAIN INTAKE STRUCTURE DESIGN IN ACCORDANCE WITH DESIGN BASIS, ENFORCEME**
		Sec:			Sec: 5A	Quality Services Unit personnel identified a long-standing plant design discrepancy. While addressing this issue, engineers identified an unreviewed safety question affecting the Unit 1 River Water and Unit 2 Service Water systems. Interim compensatory actions were implemented and determined to be appropriate. Long-term corrective actions included processing an UFSAR change to correct the existing UFSAR description discrepancies. Reference LER 50-334/98-24. (Violation of 10CFR50, Appendix B, Criterion III, " Design Control;" Enforcement discretion per VII.B.3 of the Enforcement Policy.)
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
07/29/1999	1999007-03	Pri: MAINT	NRC	EEI	Pri: 5B	**Macro biological fouling (biofouling) in the service water piping**
		Sec:			Sec: 4B	Macro biological fouling (biofouling) in the service water piping that supplies the diesel generator was not detected during a biocide treatment on July 7. Seven days later, a rapid and substantial degradation of service water flow occurred during an unrelated diesel generator surveillance test. The management team was slow to understand the effects of the July 7 biocide treatment for common mode failure and failed to protect EDG 2-1 from heat exchanger fouling. This series of events resulted in Emergency Diesel Generator 2-2 being inoperable for longer than the 72-hour allowed outage time of the Technical Specifications. Additionally, the initial plan for EDG 2-2 operability restoration was incomplete, until challenged by the inspectors. This apparent violation of TS 3.8.1.1 is being considered for escalated enforcement action.
Dockets Discussed:					Ter: 3A	
05000412 BEAVER VALLEY 2						
07/29/1999	1999007-04	Pri: MAINT	NRC	EEI	Pri: 4B	**The plan to prevent biofouling of the service water system was inadequate and poorly implemented**
		Sec:			Sec: 3A	In 1995, the licensee developed a plan for the prevention of biofouling in the service water system. Although plans for the type of biocide treatments were established, frequencies for those treatments were not included in the plan. Subsequently, the licensee failed to perform these treatments consistently and frequently enough to be effective. An increase in the Zebra mussel population at the service water intake structure in 1998 was a missed opportunity to identify this problem. This apparent violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," is being considered for escalated enforcement action.
Dockets Discussed:					Ter: 2B	
05000412 BEAVER VALLEY 2						
07/29/1999	1999007-05	Pri: MAINT	NRC	NCV	Pri: 3A	**On July 7, a chemistry technician failed to follow the procedure for sampling of the service water system dur**
		Sec:			Sec:	On July 7, a chemistry technician failed to follow the procedure for sampling of the service water system during a bulk chemical treatment activity. As a result, the intended biocide concentration was not applied to the "A" train of service water. This failure to follow procedures is being treated as a Non-Cited Violation, consistent with Appendix C of the NRC Enforcement Policy. (Violation of TS 6.8.1)
Dockets Discussed:					Ter:	
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07/29/1999	1999007-06	Pri: MAINT	NRC	EEI	Pri: 4B	**The licensee failed to provide adequate acceptance criteria in its procedure for bulk chemical treatments of t**
		Sec:			Sec: 2B	The licensee failed to provide adequate acceptance criteria in its procedure for bulk chemical treatments of the service water system. Specifically, the emergency diesel generators were not monitored to assess the impact of biofouling dislodged during the treatment. The lack of acceptance criteria, coupled with the simultaneous treatment of both service water trains, created the potential for a common mode failure and a significant reduction in safety margins. The failure to develop an adequate procedure for bulk chemical treatments is an apparent violation. (10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings")
					Ter: 3A	
Dockets Discussed:						
05000412 BEAVER VALLEY 2						
07/24/1999	1999004	Pri: MAINT	NRC	POS	Pri: 2A	**The Units 1 and 2 auxiliary feedwater systems were in overall good material condition.**
		Sec:			Sec: 1C	The Unit 1 and 2 auxiliary feedwater systems were in overall good material condition as demonstrated by high maintenance rule system availability and low backlog of work orders. Open engineering items were properly prioritized and tracked.
					Ter: 4B	
Dockets Discussed:						
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
07/24/1999	1999004	Pri: MAINT	NRC	WK	Pri: 3A	**Work delays for several Unit 1 activities either increased plant risk or required operations personnel tochang**
		Sec:			Sec: 1C	Work delays for several Unit 1 activities either increased plant risk or required operations personnel to change their planned schedule and make additional plant manipulations. Several factors contributed to poor work schedule implementation including operations and maintenance manpower constraints, poor communication between operations and maintenance personnel, untimely and incomplete work package planning, and poor quality pre-job walkdowns. The poor work schedule implementation represented a programmatic weakness.
					Ter: 2A	
Dockets Discussed:						
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
07/24/1999	1999004-01	Pri: MAINT	NRC	NCV	Pri: 1C	**In March 1999, poor planning and recognition of the importance of chain hoists to support the Unit 2 equipm**
		Sec:			Sec: 4A	In March 1999, poor planning and failure by maintenance personnel to recognize of the importance of chain hoists to support the Unit 2 containment equipment hatch was the root cause of the hatch not being fully closed during fuel movement. Reference LER 50-412/99-03. (Violation of TS 3.9.4. Enforcement discretion per Appendix C of the NRC Enforcment Policy)
					Ter: 3A	
Dockets Discussed:						
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
06/12/1999	1999003	Pri: MAINT	NRC	NEG	Pri: 2A	**In one instance, corrective maintenance for a degraded river water pump was not perfomred in a timely mann**
		Sec:			Sec: 2B	In one instance, corrective maintenance for a degraded river water pump was not performed in a timely manner. The delay reflected communications and scheduling deficiencies for time sensitive recommended maintenance.
					Ter: 3A	
Dockets Discussed:						
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
06/12/1999	1999003	Pri: MAINT	NRC	NEG	Pri: 2B	**A minor weakness in the ownership and control of materials beging staged to support the 12-week schedule**
		Sec:			Sec: 3A	A minor weakness in the ownership and control of materials being staged to suport the 12-week schedule was identified and captured in the corrective action program.
					Ter:	
Dockets Discussed:						
05000334 BEAVER VALLEY 1						
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06/12/1999	1999003	Pri: MAINT	NRC	POS	Pri: 2B	**On-line maintenance was performed safely and in accordance with proper procedures.**
		Sec:			Sec: 3A	On-line maintenance was managed consistent with equipment availability assumptions contained in the Beaver Valley Unit 1 & 2 Probabilistic Risk Assessments. The on-line maintenance procedure was comprehensive and well understood. Incorporation of maintenance rule insights was a strength. Work week managers actively tracked and communicated job status to the Nuclear Shift Supervisor (NSS), which support sound decision making with respect to configuration control. Occasional performance deficiencies, such as NSS authorization of work without recognizing system operability relationships were properly addressed through the condition report system.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
06/12/1999	1999003	Pri: MAINT	NRC	POS	Pri: 3A	**Surveillance testing was performed safely.**
		Sec:			Sec: 4B	Surveillance testing was performed safely, with appropriate supervisory attention, and in accordance with proper procedures. System engineers and maintenance personnel coordinated effectively to investigate an unexpected 2-4 vital bus inverter transfer to its alternate power supply.
Dockets Discussed:					Ter: 2A	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
06/12/1999	1999003	Pri: MAINT	NRC	POS	Pri: 5C	**In response to an NRC violation, the licensee took strong actions to reiterate station policy for safe operation**
		Sec:			Sec: 2B	In response to an NRC violation, the licensee took strong actions to reiterate station policy for safe operation and maintenance of plant equipment. Training was effective and lessons learned from the violation were stressed during pre-evolution briefings for subsequent auxiliary feedwater pump tests. Reference VIO 50-334/98-04-01.
Dockets Discussed:					Ter: 3A	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
05/01/1999	1999002	Pri: MAINT	NRC	NEG	Pri: 1C	**Surveillance procedure deficiencies involving incomplete precautions, initial conditions, and acceptance crit**
		Sec:			Sec: 2B	Surveillance procedure deficiencies involving incomplete precautions, initial conditions, and acceptance criteria continued to challenge the operating staff.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
05/01/1999	1999002	Pri: MAINT	Self	NEG	Pri: 2A	**Unit 1 main generator hydrogen seal oil pressure degraded**
		Sec:			Sec: 2B	Unit 1 main unit generator hydrogen seal oil pressure degraded during unit restart from the surveillance testing outage. Corrosion products fouled the seal oil system filters and forced a plant shutdown from 15% power. Reference PN1-99-021.
Dockets Discussed:					Ter: 3A	
05000334 BEAVER VALLEY 1						
05/01/1999	1999002	Pri: MAINT	NRC	POS	Pri: 3A	**Post-maintenance testing requirements were properly specified and performed**
		Sec:			Sec: 2B	Post-maintenance test (PMT) requirements were properly specified and performed following equipment maintenance during the Unit 2 refueling outage and the Unit 1 surveillance testing outage. Senior reactor operators assigned to the one-stop-shop effectively managed PMT schedule implementation and ensured equipment was promptly restored to service following planned maintenance.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
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05/01/1999	1999002	Pri: MAINT	NRC	POS	Pri: 3A	**Twelve surveillance tests were performed well with strong preevolution briefings.**
		Sec:			Sec: 3B	Twelve surveillance tests were performed well with strong preevolution briefings. In most cases, operators successfully identified and compensated for procedure deficiencies prior to performing the surveillance test.
Dockets Discussed:					Ter: 5A	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
05/01/1999	1999002	Pri: MAINT	NRC	POS	Pri: 3A	**Work activities were safely coordinated through the one-stop-shop**
		Sec:			Sec: 3C	Work activities were safely coordinated through the one-stop-shop during the Unit 2 refueling and Unit 1 surveillance testing outages. The improved work activity coordination effectively reduced burden on the control room staff. The reduced burden enabled the nuclear shift supervisors to focus more directly on maintaining safe shutdown plant conditions and contributed to improved human performance.
Dockets Discussed:					Ter: 2B	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
03/20/1999	1999001	Pri: MAINT	NRC	POS	Pri: 2A	**The preventive maintenance program effectively maintained and performance testing monitored the safety re**
		Sec:			Sec: 3A	The preventive maintenance program effectively maintained and performance testing monitored the safety related heat exchangers.
Dockets Discussed:					Ter: 2B	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
03/20/1999	1999001	Pri: MAINT	NRC	POS	Pri: 2B	**Nine observed planned maintenance activities were performed safely and in accordance with maintenance w**
		Sec:			Sec: 3A	The nine observed planned maintenance activities, including station battery replacement, auxiliary feedwater pump inspection, and residual heat system valve repair, were performed safely and in accordance with maintenance work instructions. The work packages, including post-maintenance testing requirements, were good. Maintenance supervisors demonstrated good job ownership and leadership in the field.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
03/20/1999	1999001	Pri: MAINT	NRC	POS	Pri: 3A	**Seven observed surveillance tests were performed safely and in accordance with proper procedures.**
		Sec:			Sec: 5A	The seven observed surveillance tests were performed safely and in accordance with proper procedures. Management placed more emphasis on preevolution briefings for infrequently performed evolutions following several minor human performance deficiencies observed early in the refueling outage. The assignment of test directors, the quality of preevolution briefings, and test implementation for safety injection full flow tests were excellent.
Dockets Discussed:					Ter: 3C	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
02/06/1999	1998011	Pri: MAINT	Self	NEG	Pri: 2A	**Poor Material Condition Prevented Station Personnel from Routinely Chlorinating the Unit 1 Circulating Wate**
		Sec:			Sec: 3A	Poor material condition of the chlorination system prevented station personnel from routinely chlorinating the Unit 1 circulating water system to preclude marine fouling during the past several months. Main condenser performance significantly degraded, which necessitated condenser waterbox isolation and cleaning. This evolution led to an uncontrolled reduction of condenser vacuum requiring operators to manually trip the reactor. Reference LER 50-334/99-01.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
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02/06/1999	1998011	Pri: MAINT	NRC	NEG	Pri: 3A	**In Some Cases, Such as Unit 1 LHSI, Safety Related System Unavailability was Not Effectively Managed**
		Sec:			Sec: 2B	In some cases, such as Unit 1 low head safety injection, safety related system unavailability was not effectively managed, due to work scheduling and coordination deficiencies.
Dockets Discussed:					Ter: 5A	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
02/06/1999	1998011	Pri: MAINT	NRC	POS	Pri: 3A	**Four Surveillance Tests were Performed Safely and in Accordance with Proper Procedures.**
		Sec:			Sec: 1A	Four surveillance tests were performed safely and in accordance with proper procedures. Field operators effectively supported surveillance tests.
Dockets Discussed:					Ter: 3B	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
02/06/1999	1998011	Pri: MAINT	NRC	POS	Pri: 3A	**Three Routine Maintenance Activities were Performed Safely and in Accordance with Proper Procedures.**
		Sec:			Sec: 3B	Three routine maintenance activities were performed safely and in accordance with proper procedures. An emergent Unit 2 service water pump work activity was properly planned and implemented. The control room door was safely repaired due to good coordination between engineering personnel, operators, and maintenance planners.
Dockets Discussed:					Ter: 4B	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
02/06/1999	1998011	Pri: MAINT	NRC	STR	Pri: 4B	**Maintenance Rule Program Continued to Properly Monitor the Effectiveness of Maintenance**
		Sec:			Sec: 2A	The maintenance rule program continued to properly monitor the effectiveness of maintenance. The periodic program assessment demonstrated strong system engineering involvement and monitoring of the program and individual systems. The effectiveness of corrective actions was generally good for systems evaluated under the (a)(1) category.
Dockets Discussed:					Ter: 2B	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
02/06/1999	1998011-02	Pri: MAINT	Licensee	NCV	Pri: 3A	**Inappropriate Surveillance Testing Results in Unit 2 Control Room Emergency Ventilation System Uplanned I**
		Sec:			Sec: 4B	Poor self checking, failure to perform a procedure in the sequence it was written, and insufficient post maintenance testing requirements resulted in the "B" Control Room Emergency Ventilation System train being unrecognized as inoperable for two days. (Violation of TS 6.8.1.c; Enforcement Discretion per VII.B.1 of the Enforcement Policy.)
Dockets Discussed:					Ter: 2B	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
01/06/1999	1998009	Pri: MAINT	NRC	NEG	Pri: 2A	**Corrective Maintenance Backlog of Open Unit 2 Maintenance Work Requests**
		Sec:			Sec:	In the area of Corrective Maintenance, the current backlog of open Unit 2 Maintenance Work Requests (129) for the charging high head safety injection (HHSI) systems was significant. However, a sampling of open Maintenance Work Requests identified no system operability concerns.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
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Date	Source	Functional Area	ID	Type	Template Codes	Item Title / Item Description
01/06/1999	1998009	Pri: MAINT Sec:	NRC	POS	Pri: 2A Sec: 2B Ter:	**Within the Scope of Review, the Applicable Portions of AC and DC Power, Service Air, and Component Cooli** Within the scope of review, the supporting systems, including ac and dc power, service air, and component cooling water, were capable of providing the resources necessary for the proper operation of the chemical volume control and high head safety injection systems. The preventive maintenance (PM) procedures related to these systems were generally acceptable and the PM activities consistent with approved procedures.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
01/06/1999	1998009	Pri: MAINT Sec:	NRC	POS	Pri: 2A Sec: 2B Ter:	**Review of Selected System Test Procedures and Test Results and Discussions with Responsible IST Test En** The review of selected system test procedures and test results and discussions with responsible IST test engineers indicated that the testing of the charging and high head safety injection systems was acceptable. Procedures were comprehensive and properly implemented.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
12/26/1998	1998010	Pri: MAINT Sec:	Licensee	NEG	Pri: 3A Sec: 2B Ter: 1C	**Poor Work Planning** On two occasions, poor work planning, including inadequate identification of clearance boundaries, posed challenges to the operations staff. The planning deficiencies could have resulted in reactor plant transients and conditions not permitted by technical specifications.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
12/26/1998	1998010	Pri: MAINT Sec:	NRC	POS	Pri: 3A Sec: 1A Ter:	**Routine Surveillance** Four surveillance tests were performed safely and in accordance with proper procedures. Good communication was observed.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
12/26/1998	1998010	Pri: MAINT Sec:	NRC	POS	Pri: 3A Sec: 3C Ter: 2B	**Routine Maintenance** Six routine maintenance activities were performed safely and in accordance with proper procedures. Peer checking, supervisor and contractor oversight, and communications with control room operators were good. Improvements were noted in minimization of Limiting Condition of Operation durations.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
11/14/1998	1998006	Pri: MAINT Sec:	NRC	NEG	Pri: 1A Sec: 3A Ter:	**Unplanned LCO Time During Unit 2 Maintenance** The "A" train of supplemental leak collection and release system remained inoperable for over 48 hours in part due to poor communication between the operating crew and the system engineer, and demonstrated operator weaknesses in evaluating degraded conditions.
Dockets Discussed: 05000412 BEAVER VALLEY 2						

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11/14/1998	1998006	Pri: MAINT	NRC	POS	Pri: 3A	**Maintenance Repair Work Activities on Main Steam Pressure, Loop 2, Channel 2 Pressure Bi-stable**
		Sec:			Sec: 3B	Maintenance repair work activities on the main steam pressure, loop 2, channel 2 pressure bi-stable and the "A-9." Annunciator Panel fuse replacement were performed promptly and effectively in a technically sound manner. Minor discrepancies were identified in the maintenance work request and in the fuse failure root cause determination.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
11/16/1998	1998008	Pri: MAINT	NRC	NEG	Pri: 2A	**Maintenance Backlog**
		Sec:			Sec: 3C	The efforts to reduce the fairly sizeable corrective maintenance backlog have not been fully effective. Station management established an aggressive non-outage corrective maintenance backlog goal, which continues to challenge a not yet mature 12-week work management process. A selective sampling of two important safety systems identified appropriate prioritization of open MWRs and no adverse individual or cumulative effects of the backlogged preventive and corrective MWRs. Planned and completed MWRs reviewed were properly documented and post-maintenance testing was appropriate to the work performed.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
11/16/1998	1998008	Pri: MAINT	NRC	POS	Pri: 2A	**Maintenance and Material Condition of Facilities and Equipment**
		Sec:			Sec: 4B	Material condition and housekeeping at both units were generally good. Corrective and preventive maintenance practices were appropriately defined and systems performance monitoring for those systems within the scope of the Maintenance Rule was appropriate.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
11/16/1998	1998008	Pri: MAINT	NRC	POS	Pri: 3A	**Observation of Maintenance Activities**
		Sec:			Sec: 2B	Surveillance and maintenance activities observed by the team were properly performed with good procedural adherence, proper planning and execution, good self-checking, and appropriate supervisory oversight.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
11/16/1998	1998008	Pri: MAINT	NRC	POS	Pri: 3B	**Maintenance Staff Training and Qualification**
		Sec:			Sec: 2B	The training department personnel implemented an adequate maintenance training program, and appropriately maintained individual training records. Maintenance technicians received the appropriate levels of training for performing selected activities.
Dockets Discussed:					Ter: 3C	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
11/16/1998	1998008	Pri: MAINT	NRC	POS	Pri: 3C	**Maintenance Organization/Administration and Quality Assurance of Activities**
		Sec:			Sec: 5C	First-line supervisor oversight of field activities was observed to be good and maintenance management oversight and direction appropriate. Quality Assurance audits were critical and a sampling review of the responses to adverse findings were determined appropriate and timely.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
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Region I

BEAVER VALLEY

Date	Source	Functional Area	ID	Type	Template Codes	Item Title / Item Description
11/16/1998	1998008	Pri: MAINT	NRC	POS	Pri: 5A	**Maintenance and Material Condition of Facilities and Equipment**
		Sec:			Sec: 1C	The programs for the identification and disposition of control room deficiencies and operator work-arounds was adequate. The licensee has recently created a multi-disciplined Control Room Operator Deficiency team to help reduce the number of deficiencies. The team concluded that deficiencies were being properly identified for inclusion into these programs.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
10/03/1998	1998005	Pri: MAINT	NRC	NEG	Pri: 3A	**The out-of-service times for two components (quench spray pump and system station service transformer) w**
		Sec:			Sec: 5B	The out-of-service times for two components (quench spray pump and system station service transformer) were prolonged due to maintenance activities which were not properly planned or coordinated. The safety related equipment was unavailable for a longer time period beyond that necessary to complete the work.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
10/03/1998	1998005	Pri: MAINT	NRC	POS	Pri: 3A	**Operating personnel generally demonstrated good command and control of surveillance testing. The preevo**
		Sec:			Sec: 1A	Operating personnel generally demonstrated good command and control of surveillance testing. The preevolution briefings for the high head safety injection and auxiliary feedwater full flow tests were comprehensive and discrete test abort criteria were established.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
10/03/1998	1998005	Pri: MAINT	NRC	POS	Pri: 3A	**Maintenance work observed (including emergency diesel generator circuit breaker repair) was professional a**
		Sec:			Sec: 3B	Maintenance work observed (including emergency diesel generator circuit breaker repair) was professional and thorough. Troubleshooting was accurate and complete. Command and control and necessary precautions were implemented well. Good self-checking by a maintenance technician prevented a potential oil spill in the emergency diesel generator cubicle. Good contingency planning on the direct current circuit breaker repair resulted in a well executed work activity.
Dockets Discussed:					Ter: 1A	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
10/03/1998	1998005	Pri: MAINT	NRC	NEG	Pri: 3A	**On September 2, Unit 2 experienced a loss of charging flow for 3 minutes. Maintenance supervision did not**
		Sec: OPS			Sec: 5A	On September 2, Unit 2 experienced a loss of charging flow for 3 minutes. Maintenance supervision did not aggressively pursue operator concerns and the loss of flow reoccurred 3 hours after the initial event. It was determined that maintenance technicians had stood on a swing arm check valve in the path causing the loss of flow.
Dockets Discussed:					Ter:	
05000412 BEAVER VALLEY 2						
10/03/1998	1998005-02	Pri: MAINT	Licensee	NCV	Pri: 1C	**MISS[illegible]QUIREMENTS, ENFORCEMENT DISCRETION GRANTED FOR THIS SL3 PROBLEM UNDER VII.B**
		Sec:			Sec: 3B	Significant deficiencies in TS surveillance testing program resulted in over 50 LERs in the last 18 months. Long-standing problems resulted from broad knowledge deficiencies regarding TSs, a nonconservative philosophy regarding TS interpretation, and poor TS quality. Corrective actions and root cause assessments were comprehensive. The issues were discovered and appropriately resolved in response to a July 1997 escalated enforcement action. (Multiple TS Violations; Enforcement Discretion per VII.B.4 of the Enforcement Policy.) Reference LERS 334/97-26, 27, 28, 29, 30, 34, 37, 40, 43, 334/98-01, 03, 04, 05, 06, 07, 08 & 08-01, 09, 10, 11 & 11-01, 13, 14 & 14-01, 15, 17, 18 & 18-01, 19, 20 & 20-01, 23, 25, 26 & 26-01, 27 LER 412/97-04 & 04-01 & 04-02, 05, 09, 98-01, 02, 03, 04, 07 & 07-01 & 07-02,
Dockets Discussed:					Ter: 5C	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						

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Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
07/29/1999	1999007	Pri: ENG	NRC	POS	Pri: 4B	**Equipment aligned to the 4kV emergency bus that was affected by the EDG 2-2 failure responded as expected**
		Sec:			Sec: 2A	Equipment aligned to the 4 kV emergency bus that was affected by the EDG 2-2 failure responded as expected during the low voltage condition which existed for approximately 75 seconds. The licensee's engineering evaluations for loads that were running, or received start signals, were technically sound. In addition, electrical tests were used to confirm the condition of the affected equipment.
Dockets Discussed:					Ter:	
05000412 BEAVER VALLEY 2						
07/29/1999	1999007	Pri: ENG	NRC	POS	Pri: 4B	**The licensee identified the most probable cause of the EDG 2-2 failure**
		Sec:			Sec: 5C	The licensee identified the most probable cause of the EDG 2-2 failure on July 16 as an intermittent control relay contact in the voltage regulator circuit. A questioning attitude throughout the engineering evaluation and root cause analysis was observed, and the licensee made effective use of the vendor support. The voltage regulator repairs and retest were appropriate. Long term corrective actions recommended by the Event Response Team are reasonable actions to prevent recurrence of the relay failure.
Dockets Discussed:					Ter: 2A	
05000412 BEAVER VALLEY 2						
07/29/1999	1999007-07	Pri: ENG	NRC	POS	Pri: 4A	**The safety-related 125 volt batteries and DC system responded normally during the loss of power to their cha**
		Sec:			Sec: 4B	The safety-related 125 volt batteries and DC system responded normally during the loss of power to their chargers. TS requirements for the DC distribution system were appropriately implemented. The licensee's engineers provided a reasonable assessment of the batteries' performance during this event and concluded that the battery discharge rates were within their design.
Dockets Discussed:					Ter:	
05000412 BEAVER VALLEY 2						
07/29/1999	1999007-08	Pri: ENG	NRC	POS	Pri: 4B	**The licensee appropriately evaluated the operational condition of the reactor coolant pump**
		Sec:			Sec: 5B	The licensee appropriately evaluated the operational condition of the reactor coolant pump (RCP) seals after the loss of all seal cooling (concurrent loss of both seal injection and thermal barrier flow). Based on plant data taken before, during, and after the event, the licensee determined no significant heat up of the seals occurred.
Dockets Discussed:					Ter:	
05000412 BEAVER VALLEY 2						
07/24/1999	1999004	Pri: ENG	Licensee	MISC	Pri: 5C	**Licensee identification of three recent violations of technical specification setpoint or calibration requiremen**
		Sec:			Sec: 5A	Licensee identification of three recent violations of technical specification (TS) setpoint or calibration requirements demonstrate improved questioning attitudes by station personnel. However, they also demonstrate that previous activities such as the 1997-1998 TS surveillance review project and the ongoing Updated Final Safety Analysis Report verification project were not of sufficient depth to identify these TS non-compliances. Programmatic corrective actions, including continued Engineering Safety Principles training were adequate to improve station personnel's awareness of TS requirements. Reference LERs 50-334/99-03 and 50-412/99-04.
Dockets Discussed:					Ter: 5B	
05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
07/24/1999	1999004	Pri: ENG	NRC	POS	Pri: 4B	**The Industry Operating Experience program instruction was comprehensive and effectively managed.**
		Sec:			Sec: 1C	The Industry Operating Experience (IOE) program instruction was comprehensive and effectively managed and backlogs were reduced by 30%. Engineers and operations personnel understood the IOE program and actively used the IOE database. Evaluations were typically thorough, technically sound, and clearly documented in IOE Positions Statements. Application of industry information regarding electrical circuit breaker maintenance and testing was a strength. IOE engineers actively communicated station issues which held potential generic industry interest.
Dockets Discussed:					Ter: 3A	
05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						

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Date	Source	Functional Area	ID	Type	Template Codes	Item Title / Item Description
07/24/1999	1999004	Pri: ENG	NRC	POS	Pri: 4B	**The long-standing Problem Review Team effectively selected, prioritized, and resolved longstanding equipm**
		Sec:			Sec: 2A	The Long-Standing Problem Review Team effectively selected, prioritized, and resolved long-standing equipment problems affecting the efficiency, reliability, and safety of Beaver Valley Power Station plant operations. The completed resolutions to the long-standing equipment problems were technically sound. The problems in process of resolution were being addressed in a careful and timely manner commensurate with their difficulty and safety significance.
Dockets Discussed:					Ter: 5C	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
07/24/1999	1999004	Pri: ENG	NRC	POS	Pri: 4B	**System and design engineers provided good support on emergent Unit 2 shutdown issues.**
		Sec:			Sec: 3A	System and design engineers provided good support on emergent Unit 2 shutdown issues such as check valve leakage in the safety injection and auxiliary feedwater systems.
Dockets Discussed:					Ter: 5C	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
08/10/1999	9906090003	Pri: ENG	NRC	LIC	Pri: 4B	**In general, licensing submittals have been technically adequate.**
		Sec:			Sec: 3A	In general, licensing submittals have been technically adequate and timely However, the attention to detail in submittals has been inconsistent. For example: 1) The licensee's July 9 1998 submittal, which requested revision of the maximum allowable reactor power level based on the number of operable main steam safety valves, included technical specification changes which were not addressed in the licensee's application for technical specification amendment. 2) The licensee's December 24, 1998 submittal which requested relocation or deletion of technical specification requirements was technically insufficient with regard to the Unit 1 rod position deviation. (Contact: D. Collins/NRR)
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
08/02/1999	9904220122	Pri: ENG	NRC	LIC	Pri: 4B	**Submittal of a one-time Technical Specification extention of the Unit 1 steam generator inspection interval wa**
		Sec:			Sec: 3A	Submittal of a one-time technical specification extension of the Unit 1 steam generator inspection interval was not timely. The November 11, 1998 submittal requested issuance of the amendement by December 30, 1998, which allowed the staff insufficient time to complete their reviews and meet the requested completion date. (Ref: DPR-66 License Amendment 221, issued April 16, 1999) (Contact: D. Collins/NRR)
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
06/12/1999	1999003	Pri: ENG	NRC	MISC	Pri: 4B	**The nuclear engineering self-assessments reviewed satisfied administrative requirements.**
		Sec:			Sec: 4C	The nuclear engineering self-assessments reviewed satisfied administrative requirements and confirmed expected results. However, the assessments did not provide substantial recommendations or corrective actions.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
06/12/1999	1999003	Pri: ENG	NRC	POS	Pri: 2B	**Controls for the receipt, storage, and handling of safety-related equipment and material were effectively main**
		Sec:			Sec: 3A	Controls for the receipt, storage, and handling of safety-related equipment and material were being effectively maintained.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						

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Date	Source	Functional Area	ID	Type	Template Codes	Item Title / Item Description
06/12/1999	1999003	Pri: ENG	NRC	POS	Pri: 3B	**The licensee established, implemented, and maintained an effective ventilation system surveillance program**
		Sec:			Sec: 4B	The licensee established, implemented, and maintained an effective ventilation system surveillance program with respect to charcoal adsorption surveillance tests, high efficiency particulate and charcoal filters mechanical efficiency tests, and air flow rate tests.
Dockets Discussed:					Ter: 3A	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
06/12/1999	1999003	Pri: ENG	Licensee	POS	Pri: 4B	**The licensee properly evaluated and reported January 1999 Unit 1 degraded condenser vacuum reactor trip e**
		Sec:			Sec: 2A	The licensee properly evaluated and reported the January 1999 Unit 1 degraded condenser vacuum reactor trip event. Corrective actions were appropriate and engineers performed a detailed assessment which correctly elevated the circulating water system into Maintenance Rule category (a)(1) performance monitoring.
Dockets Discussed:					Ter: 5B	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
06/12/1999	1999003	Pri: ENG	NRC	POS	Pri: 4B	**System engineers recently performed good trending of Unit 1 river water pump performance.**
		Sec:			Sec: 2B	System engineers recently performed good trending of Unit 1 river water pump performance. Performance data was carefully reviewed and used to determine pump maintenance frequency.
Dockets Discussed:					Ter: 5B	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
06/12/1999	1999003	Pri: ENG	Licensee	POS	Pri: 4B	**Engineers identified and corrected several nonconservative assumptions used in dose assessment calculati**
		Sec:			Sec: 5B	Engineers identified and corrected several nonconservative assumptions used in dose assessment calculations for design basis accidents (DBA). For two DBA types, the errors could have permitted control room operator radiological dose to exceed regulatory requirements. Extent of condition causal analysis, basis for continued operation evaluations, and 10 CFR 21 reporting were comprehensive. Reference LER 50-334(412)/99-02.
Dockets Discussed:					Ter: 5C	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
05/01/1999	1999002	Pri: ENG	NRC	POS	Pri: 4B	**Good root-cause assessment by system engineers and maintenance personnel provided timely corrective ac**
		Sec:			Sec: 3B	Good root-cause assessment by system engineers and maintenance personnel provided timely corrective actions for several safety-related Unit 2 refueling outage equipment problems. A system engineer was aggressive in his resolve to identify and correct a Unit 1 repetitive breaker problem.
Dockets Discussed:					Ter: 3A	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
05/01/1999	1999002	Pri: ENG	Self	NEG	Pri: 4B	**4 kV supply breaker tripped resulting in a loss of offsite power to the Unit 2 'A' train emergency bus.**
		Sec: OPS			Sec: 3A	On March 29, while shutdown, a 4 kV supply breaker tripped resulting in a loss of offsite power to the Unit 2 "A" train emergency bus. The emergency diesel generator started and reenergized the emergency bus as designed. System engineer confusion and communication deficiencies delayed isolation of a degraded battery charger, which caused the event. Additionally, the Nuclear Shift Supervisor made a poor configuration control decision when he secured the emergency diesel generator prior to isolating the degraded 2-5 battery charger from the battery bus. This increased the likelihood of a repeat event. Reference LER 50-412/99-05.
Dockets Discussed:					Ter: 5B	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						

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Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
03/20/1999	1999001	Pri: ENG	NRC	POS	Pri: 4B	**Two Unit 2 design changes were properly implemented to correct risk significant deficiencies.**
		Sec:			Sec: 3A	Two Unit 2 design changes were properly implemented to correct risk significant deficiencies which had necessitated longstanding operator workarounds. The service water pump seal supply modification was well written including a detailed safety evaluation and comprehensive installation test plan. Engineers demonstrated thorough knowledge of the design change and closely monitored both installation and testing. Foreign material exclusion controls, configuration controls, and communications were appropriate during design change installation and testing.
Dockets Discussed:					Ter: 3B	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
03/20/1999	1999001	Pri: ENG	NRC	POS	Pri: 4B	**System engineers activity supported planned work activities during the Unit 2 refueling outage.**
		Sec:			Sec: 3A	System engineers actively supported planned work activities during the Unit 2 refueling outage.
Dockets Discussed:					Ter: 3C	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
03/20/1999	1999001	Pri: ENG	NRC	POS	Pri: 4B	**System engineers conducted comprehensive monitoring and assessment of safety related heat exchangers.**
		Sec:			Sec: 3A	System engineers conducted comprehensive monitoring and assessment of safety related heat exchangers.
Dockets Discussed:					Ter: 4A	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
03/20/1999	1999001	Pri: ENG	NRC	POS	Pri: 4C	**Planning and implementation of second 10-year interval**
		Sec:			Sec: 3A	Planning and implementation of the second 10 year interval, first period, inspection, including comprehensive steam generator inspections, was consistent with American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (B&PVC) Section XI requirements.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
03/20/1999	1999001	Pri: ENG	NRC	POS	Pri: 4C	**Unit 2 refueling outage number 7 nondestructive examinations.**
		Sec:			Sec: 3A	Unit 2 refueling outage number 7 nondestructive examinations were implemented in accordance with ASME B&PVC Section XI and Section III rules for magnetic particle, ultrasonic, and radiographic examination and were performed by qualified and certified inspectors using acceptable procedures. Stuck reactor vessel head closure studs were properly evaluated.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
01/06/1999	1998009	Pri: ENG	NRC	NEG	Pri: 4A	**Qualified Life Calculation for the Unit 2 Charging HHSI Pump Motor**
		Sec:			Sec: 5A	The qualified life calculation for the Unit 2 charging/high head safety injection pump motor did not include margin for the post-accident temperature profile, as stated in NUREG 0588 and IEEE standard 323, prior to its use in the calculation, and did not take into account pump operation at high flow, as indicated in the Westinghouse qualification document cited in the calculation. However, because the calculated qualified service life was well above the expected duty cycle for these pumps, the discrepancies had no safety impact on the qualification status of the motors.
Dockets Discussed:					Ter: 3A	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						

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Date	Source	Functional Area	ID	Type	Template Codes	Item Title / Item Description
01/06/1999	1998009	Pri: ENG Sec:	NRC	POS	Pri: 3A Sec: 5B Ter: 4C	**Corrective Action Review Board Review of Condition Reports** The Corrective Action Review Board review of Condition Reports (CRs) provided positive insights in the problem identification, cause analysis, and corrective action process. Good synergism existed among the board members in their consideration of the CRs and the identified corrective actions. **Dockets Discussed:** 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2
01/06/1999	1998009	Pri: ENG Sec:	NRC	POS	Pri: 3A Sec: 5B Ter: 5A	**Quality Assurance Organization was Actively Involved in Plant Activities** The Quality Assurance (QA) organization was actively involved in plant activities and had developed a top 10 list of plant focus issues. The QA plan and verification of technical specification (TS) testing requirements was well laid out. The review performed by QA, the Operating Experience Group, and Systems Engineering indicated good self assessment efforts by the disciplines involved. **Dockets Discussed:** 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2
01/06/1999	1998009	Pri: ENG Sec:	NRC	POS	Pri: 4A Sec: 4B Ter:	**Design Change Packages and Temporary Evaluation Reviews Related to Charging and HHSI Systems** The Design Change Packages and Technical Evaluation Reviews related to the Charging and High Head Safety Injection systems, including their associated Safety Evaluations and calculations, were typically well written, properly addressed the bases for change, and correctly evaluated the safety impact. The documents reviewed also showed an improving trend in clarity and referencing of supporting material. **Dockets Discussed:** 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2
01/06/1999	1998009	Pri: ENG Sec:	NRC	POS	Pri: 4A Sec: 4C Ter: 5A	**Design Basis Documents for HHSI Systems and Supporting Systems were Well Written** Design Basis Documents for the High Head Safety Injection (HHSI) and Supporting Systems were comprehensive and well written, current, and in use by Engineering. The Updated Final Safety Analysis Report (UFSAR) Verification Project had been useful in identifying and correcting HHSI related discrepancies, both in the UFSAR and associated documents. Discrepancies were being properly handled and entered into the plant Corrective Action Program. **Dockets Discussed:** 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2
01/06/1999	1998009-01	Pri: ENG Sec:	NRC	VIO IV	Pri: 4A Sec: 5A Ter: 3A	**The Unit 2 dc voltage drop calculation incorrectly assumed that, during steps 2 to 6 of the diesel generator lo** The Unit 2 dc voltage drop calculation incorrectly assumed that, during steps 2 to 6 of the diesel generator loading sequence, the voltage for closing several circuit breakers that supply power to major 4 kV safety-related loads was based on normal battery charger output voltage. This assumption did not recognize that during that period, because of the high load demand, the battery charger would operate at limiting condition and would, therefore, be unable to provide normal output voltage. Although subsequent evaluations by the licensee indicated that conservatism was available in the cable length and operating temperature, the failure to correctly analyze the performance of the battery charger under calculated bus loading conditions and to properly verify the adequacy of the calculation assumptions resulted in a violation (10CFR50, Appendix B," Design Control "). **Dockets Discussed:** 05000412 BEAVER VALLEY 2
01/06/1999	1998009-02	Pri: ENG Sec:	Licensee	NCV	Pri: 4B Sec: 2A Ter: 2B	**Engineering Failed to Recognize the Need for Circuit Breaker Refurbishment** Engineering failed to recognize the need for circuit breaker refurbishment and did not take action to address this need until the manufacturer recommended refurbishment periods had expired by several years and breaker failures to actuate as expected had begun to occur. Also, testing of some 480V and 4160V air circuit breakers did not reflect the minimum calculated voltage for those breakers. As a result of the failures, they conducted thorough evaluations, took acceptable actions to reasonably assure the operability of the breakers, and revised the applicable test procedures to envelope calculated voltages at the breaker operating coils (Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action;" Enforcement Discretion per VII.B.1 of the NRC Enforcement Policy). **Dockets Discussed:** 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2

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11/14/1998	1998006	Pri: ENG Sec: OPS	Licensee	POS	Pri: 4B Sec: 5A Ter:	**Unit 2 Forced Shutdown Due to Inoperable Station Battery** Enhanced individual cell voltage monitoring due to station battery degradation was good and led to prompt identification of an inoperable battery condition. Reference LER 50-412/98-12.
Dockets Discussed: 05000412 BEAVER VALLEY 2						
11/14/1998	1998006-01	Pri: ENG Sec:	Licensee	NCV	Pri: 2A Sec: Ter:	**Non-Safety Related Mechanical Seal Assembly Installed in Quency Spray Pump 'A' 2QSS-P21A - Reference L** Procurement engineers identified and corrected a deficiency associated with non-safety related material in the 'A' quench spray pump. Reference LER 50-412/98-10 (Noncited violation of TS 3.6.2.1; Enforcement Discretion per VII.B.1 of the Enforcement Policy.)
Dockets Discussed: 05000334 BEAVER VALLEY 1						
11/14/1998	1998006-02	Pri: ENG Sec:	Licensee	NCV	Pri: 4B Sec: 5B Ter:	**GL 96-01 Issues - Inadequate TS Testing - Reference EA 98-525 and LERS 50-412/96-03 & 96-03-01; 97-07; 98-** Engineers conducted a detailed review of Unit 2 safety related logic testing as requested in NRC GL 96-01. Ten separate logic testing discrepancies were identified and resolved. Correction of these deficient conditions improved the reliability of several important safety systems. (Violation of 10CFR50, Appendix B, Criterion XI, "Test Control;" Enforcement Discretion per VII.B.3 of the Enforcement Policy.)
Dockets Discussed: 05000412 BEAVER VALLEY 2						
11/14/1998	1998006-03	Pri: ENG Sec:	Licensee	NCV	Pri: 5A Sec: 5C Ter:	**Inadequate Design Control of the Hydrogen Recombiners - Reference LER 50-412/98-11** The licensee identified and corrected several long-standing design issues. The discoveries demonstrate a continued questioning attitude. (Violation of 10CFR50, Appendix B, Criterion III, "Design Control;" Enforcement Discretion per VII.B.1 of the Enforcement Policy.)
Dockets Discussed: 05000412 BEAVER VALLEY 2						
10/03/1998	1998005	Pri: ENG Sec:	NRC	POS	Pri: 4B Sec: 4C Ter: 2B	**System engineers demonstrated comprehensive system knowledge and performance monitoring techniques** System engineers demonstrated comprehensive system knowledge and performance monitoring techniques regarding 480 volt breakers and station flood seals. Recommendations to preclude additional functional failures and work with industry experts to develop improved maintenance and monitoring practicies were excellent. The Maintenance Rule Steering Committee properly evaluated performance for these systems and established appropriate performance goals.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
10/03/1998	9810290011	Pri: ENG Sec:	NRC	LIC	Pri: 4A Sec: Ter:	**The description of changes, tests, and experiments performed under the provisions of 10 CFR 50.59 describe** The description of changes, tests, and experiments performed under the provisions of 10 CFR 50.59 described in the annual report, were sufficiently detailed to determine that the conclusions regarding these changes were reasonable. The changes have been properly incorporated in the Unit 1 and Unit 2 UFSARs.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						

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Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
06/12/1999	1999003	Pri: PLTSUP	NRC	POS	Pri: 3A	**A generally efffective program for maintaining occupational exposures as low as is reasonably achievable ha**
		Sec:			Sec: 3B	A generally effective program for maintaining occupational exposures as low as is reasonably achievable (ALARA) has been established. Management involvement in the ALARA program, incorporation of ALARA principles into plant modifications, and establishment of exposure goals were appropriate. An effective training program for ALARA has been implemented fo: both radiological workers and radiation protection technicians.
Dockets Discussed:					Ter: 1C	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
06/12/1999	1999003	Pri: PLTSUP	NRC	POS	Pri: 3A	**Radioactive liquid and gaseous effluent control programs were effective**
		Sec:			Sec: 3B	Radioactive liquid and gaseous effluent control programs were effective. The Offsite Dose Calculation Manual contained sufficient specification and instruction to acceptably implement and maintain the radioactive liquid and gaseous effluent control programs. The Quality Assurance and Quality Control programs to validate radioactive liquid and gaseous effluent control program analytical results were effective.
Dockets Discussed:					Ter: 1C	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
05/01/1999	1999002	Pri: PLTSUP	NRC	POS	Pri: 2A	**Housekeeping was good for Unit 1 containment at conclusion of Unit 1 surveillance outage activities**
		Sec:			Sec: 3A	Housekeeping, including storage of equipment, boric acid leaks, and structural support condition, was good for the Unit 1 containment at the conclusion of Unit 1 surveillance outage activities.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
05/01/1999	1999002	Pri: PLTSUP	NRC	POS	Pri: 2B	**Radiation protect program was effective during the Unit 2 refueling outage**
		Sec:			Sec: 3A	The radiation protection [illegible] effective during the Unit 2 refueling outage. Appropriate controls for personnel radiation protection were [illegible] n the radiologically controlled areas. Enhanced informational postings, especially in the containm[illegible] maintaining occupational exposures as low as is reasonably achievable (ALARA).
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
05/01/1999	1999002	Pri: PLTSUP	NRC	POS	Pri: 5A	**Scope and depth of Quality Services Unit surveillances were adequate to identify and document program def**
		Sec:			Sec: 5B	The scope and depth of Quality Services Unit surveillances conducted for the Unit 2 refueling outage, and as part of the annual health physics program audit, were adequate to identify and document program deficiencies. All identified deficiencies were entered into the condition report program and tracked through resolution.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
03/20/1999	1999001	Pri: PLTSUP	NRC	POS	Pri: 3A	**Fitness-for-Duty and Security Program audits were comprehensive in scope and depth.**
		Sec:			Sec: 5B	The Fitness-for-Duty and Security Program audits were comprehensive in scope and depth, audit findings were reported to the appropriate level of management, and the audit program was being properly administered. In addition, a review of the documentation applicable to the self-assessment program indicated that the program was being effectively implemented to identify and resolve potential weaknesses.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						

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PLANT ISSUE MATRIX
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Region I
BEAVER VALLEY

Date	Source	Functional Area	ID	Type	Template Codes	Item Title / Item Description
03/20/1999	1999001	Pri: PLTSUP Sec:	NRC	POS	Pri: 3C Sec: 3A Ter:	**Security force members were properly trained, equipment properly maintained, and security and safeguards** Security force members were properly trained, security equipment was properly maintained, and security and safeguards activities were effectively conducted in a manner that protected public health and safety in the areas of access authorization, alarm stations, communications, and protected area access control of personnel and packages. Management support was adequate to ensure effective implementation of the security program, and was evidenced by adequate staffing levels and allocations of resources to support programmatic needs.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
02/06/1999	1998011	Pri: PLTSUP Sec:	NRC	POS	Pri: 2A Sec: 4A Ter: 4C	**The Security System Design was Robust and therefore was Minimally Impacted by Winter Storms** The security system design was robust and therefore was minimally impacted by the winter storms in early January. Compensatory measures taken were appropriate.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
12/26/1998	1998010	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: 2B Ter:	**Quality Assurance of Analytical Measurements** The environmental laboratory continued to implement effective Quality Assurance and Quality Control programs for the radiological environmental monitoring program samples, and continued to provide effective validation of analytical results. The programs were capable of ensuring independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample media.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
12/26/1998	1998010	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: 3A Ter: 4B	**Fire Protection Facility Tour** Housekeeping, control of combustible materials, and the material condition of the fire protection equipment installed in the plants were excellent.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
12/26/1998	1998010	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: 3A Ter: 5C	**Fire Barrier Penetration Seals** Fire barrier penetration seals in both units were in good condition. The fire barrier penetration seal reviewed conformed to the design configuration that had been tested for a 3-hour rating.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						
12/26/1998	1998010	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: 4B Ter:	**Implementation of Radiological Environmental Monitoring Program** Overall, the licensee effectively maintained and implemented the radiological environmental monitoring program in accordance with regulatory requirements.
Dockets Discussed: 05000334 BEAVER VALLEY 1 05000412 BEAVER VALLEY 2						

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Date	Source	Functional Area	ID	Type	Template Codes	Item Title / Item Description
12/26/1998	1998010	Pri: PLTSUP	NRC	POS	Pri: 1C	**Meteorological Monitoring**
		Sec:			Sec: 4B	The licensee effectively maintained and implemented a meteorological monitoring program in accordance with regulatory requirements.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
12/26/1998	1998010	Pri: PLTSUP	NRC	POS	Pri: 5A	**Scope and Adequacy of Review of Fire Protection Program to Resolve Issues in PR 2-96-789**
		Sec:			Sec: 1C	The Quality Services Unit (QSU) has done an excellent job identifying areas for improvement in the fire protection program through their program audits. The QSU is ahead of the industry in that they started reviewing post-fire safe shutdown procedures and methodologies in 1995.
Dockets Discussed:					Ter: 3A	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
12/26/1998	1998010	Pri: PLTSUP	NRC	POS	Pri: 5A	**Quality Assurance Audit Program**
		Sec:			Sec: 5B	Audits were of sufficient depth to assess the implementation of the radiological environmental monitoring program and meteorological monitoring program.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
12/26/1998	1998010-01	Pri: PLTSUP	NRC	IFI	Pri: 5C	**Incomplete Corrective Actions for Some Fire Protection Program Audit Identified Deficiencies**
		Sec:			Sec: 4B	Corrective actions for some fire protection program audit identified deficiencies (particularly safe shutdown analysis actions not being properly implemented in the post-fire shutdown procedures) had not been completed for a significant time period. The Nuclear Engineering Department review of post-fire shutdown procedures against the fire protection design basis had not been started at the end of the inspection, nor had the plan for conducting the review been finalized and approved.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
12/26/1998	1998010-02	Pri: PLTSUP	Licensee	NCV	Pri: 4A	**Inadequate Fire Protection Safe Shutdown Analysis for Boric Acid to Boric Acid Blender Valve 2CHS*FCV113**
		Sec:			Sec: 5A	An electrical engineer identified a deficiency in the fire protection safe shutdown analysis which affected a boration flowpath. Corrective actions were appropriate. (Reference LER 50-412/98-05. Non-cited violation of license condition 2.F. Enforcement discretion per VII.B.1 of the Enforcement Policy.)
Dockets Discussed:					Ter: 1C	
05000412 BEAVER VALLEY 2						
11/14/1998	1998006	Pri: PLTSUP	NRC	POS	Pri: 3A	**Review RP&C Program (Collection, Processing, Transport, Disposition of Radwaste)**
		Sec:			Sec:	An effective program for the collection, processing, transport and disposition of radioactive materials and radwaste has been established. All reviewed shipments were determined to be in accordance with applicable regulations. Waste processing conducted in accordance with the Process Control Program was found to meet the standards for waste form and classification.
Dockets Discussed:					Ter:	
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Date	Source	Functional Area	ID	Type	Template Codes	Item Title / Item Description
11/14/1998	1998006	Pri: PLTSUP	NRC	POS	Pri: 3A	**Review of RP&C Program (Rad Controls)**
		Sec:			Sec:	Effective radiological controls were established and implemented during the clean out of various sumps and tanks located in the radiologically controlled areas.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
11/14/1998	1998006	Pri: PLTSUP	NRC	POS	Pri: 3B	**Staff Training and Qualification in RP&C**
		Sec:			Sec:	The program for the training of HAZMAT employees handling radioactive materials was effectively established and implemented. All personnel involved in these activities were determined to be knowledgeable of the regulations.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
11/14/1998	1998006	Pri: PLTSUP	NRC	POS	Pri: 3B	**Quality Assurance in Radiological Protection and Chemistry Activities**
		Sec:			Sec:	An effective program for the review of the Process Control Program and related radwaste and transportation activities, including those activities performed by vendors has been established, including an effective corrective actions tracking and resolution process as demonstrated by the scope and quality of audits and surveillances performed.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
10/07/1998	1998007	Pri: PLTSUP	NRC	POS	Pri: 3A	**Miscellaneous EP Issues**
		Sec:			Sec: 3B	The licensee's critique process was good. Post-exercise facility debriefs were generally candid. At the formal critique, the licensee identified numerous issues, in addition to those identified by the NRC. Overall, the critique was balanced with positive and negative findings and was appropriately self-critical.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
10/07/1998	1998007	Pri: PLTSUP	NRC	STR	Pri: 1C	**EP Staff Knowledge and Performance**
		Sec:			Sec: 3A	Overall licensee performance during this exercise was good as the emergency response organization demonstrated that it could implement the emergency plan. Facilities were activated in a prompt manner. Classifications and notifications were accurate and timely. Protective action recommendations were appropriate. Briefings and command and control in the technical support center and emergency operations facility were good. Minor communications problems in the operations support center and radiological operations center were observed. Some minor issues were observed regarding dose assessment, but overall performance in that area was good.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
05000412 BEAVER VALLEY 2						
10/03/1998	1998005	Pri: PLTSUP	NRC	NEG	Pri: 3A	**Effective radioactive contamination controls were implemented for steam generator inspections, but isolated**
		Sec:			Sec: 5A	Effective radioactive contamination controls were implemented for steam generator inspections, but isolated instances of workers waiting in a supine position, in posted contaminated areas, were observed. This reflected lack of worker sensitivity to the potential for personnel contamination and attention to ongoing activities.
Dockets Discussed:					Ter:	
05000334 BEAVER VALLEY 1						
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Date	Source	Functional Area	ID	Type	Template Codes	Item Title Item Description
10/03/1998	1998005	Pri: PLTSUP	NRC	POS	Pri: 3A	**Effective Radiological Controls Established and Implemented for Unit 2 Steam Generator Inspections**
		Sec:			Sec:	Effective radiological controls were established and implemented for the Unit 2 steam generator inspections, including very good oversight of radiological work activities and implementation of appropriate occupational radiation exposure minimization techniques.
Dockets Discussed:					Ter:	
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Legend

Type Codes:

BU	Bulletin
CDR	Construction
DEV	Deviation
EEI	Escalated Enforcement Item
IFI	Inspector follow-up item
LER	Licensee Event Report
LIC	Licensing Issue
MISC	Miscellaneous
MV	Minor Violation
NCV	NonCited Violation
NEG	Negative
NOED	Notice of Enforcement Discretion
NON	Notice of Non-Conformance
OTHR	Other
P21	Part 21
POS	Positive
SGI	Safeguard Event Report
STR	Strength
URI	Unresolved item
VIO	Violation
WK	Weakness

Template Codes:

1A	Normal Operations
1B	Operations During Transients
1C	Programs and Processes
2A	Equipment Condition
2B	Programs and Processes
3A	Work Performance
3B	KSA
3C	Work Environment
4A	Design
4B	Engineering Support
4C	Programs and Processes
5A	Identification
5B	Analysis
5C	Resolution

ID Codes:

NRC	NRC
Self	Self-Revealed
Licensee	Licensee

Functional Areas:

OPS	Operations
MAINT	Maintenance
ENG	Engineering
PLTSUP	Plant Support
OTHER	Other

EEIs are apparent violations of NRC Requirements that are being considered for escalated enforcement action in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action" (Enforcement Policy), NUREG-1600. However, the NRC has not reached its final enforcement decision on the issues identified by the EEIs and the PIM entries may be modified when the final decisions are made.

URIs are unresolved items about which more information is required to determine whether the issue in question is an acceptable item, a deviation, a nonconformance, or a violation. A URI may also be a potential violation that is not likely to be considered for escalated enforcement action. However, the NRC has not reached its final conclusions on the issues, and the PIM entries may be modified when the final conclusions are made.

ENCLOSURE 2

09/30/1999 08:41:03

BEAVER VALLEY

Inspection / Activity Plan

09/01/1999 - 03/31/2000

Units	Inspection Activity	Title	Number of NRC Inspectors / Individuals	Planned Dates Start	Planned Dates End	Inspection Type
1, 2	IP 83750	Occupational Radiation Exposure	1	11/01/1999	11/05/1999	Core
1, 2	IP 71001	Licensed Operator Requalification Program Evaluation	2	11/16/1999	11/20/1999	Core
1, 2	IP 2515/142	Draindown During Shutdown and Common-Mode Failure (NRC GL 98-02)	1	12/06/1999	12/10/1999	Safety Issues
1, 2	IP 37550	Engineering	1	01/23/2000	01/27/2000	Regional Initiative
1, 2	IP 62702	Maintenance Program	1	01/23/2000	01/27/2000	Regional Initiative
1, 2	IP 37001	10 CFR 50.59 Safety Evaluation Program	2	01/24/2000	01/28/2000	Core
1, 2	IP 73753	Inservice Inspection	2	02/28/2000	03/03/2000	Core
1, 2	IP 83750	Occupational Radiation Exposure	2	02/28/2000	03/03/2000	Core
1, 2	IP 84750	Radioactive Waste Treatment, And Effluent And Environmental Monitoring	1	03/06/2000	03/10/2000	Core

This report does not include INPO and OUTAGE activities.
This report shows only on-site and announced inspection procedures.