

March 24, 1999

Virginia Electric and Power Company
ATTN: Mr. J. P. O'Hanlon
Senior Vice President - Nuclear
Innsbrook Technical Center
Dominion Boulevard
Glen Allen, VA 23060

SUBJECT: PLANT PERFORMANCE REVIEW - NORTH ANNA POWER STATION

On February 5, 1999, the NRC staff completed a Plant Performance Review (PPR) of the North Anna Power Station. The staff conducts these reviews for all operating nuclear power plants to develop an integrated understanding of safety performance. The results are used by NRC management to facilitate planning and allocation of inspection resources. PPRs provide NRC management with a current summary of licensee performance and serve as inputs to the NRC's senior management meeting (SMM) reviews. PPRs examine information since the last assessment of licensee performance to evaluate long term trends, but emphasize the last six months to ensure that the assessments reflect current performance. The PPR for North Anna involved the participation of all technical divisions in evaluating inspection results and safety performance information for the period January 1997 through January 1999. The NRC's most recent summary of licensee performance was provided in a letter of February 21, 1997, and was discussed in a public meeting with you on March 6, 1997.

As discussed in the NRC's Administrative Letter 98-07 of October 2, 1998, the PPR provides an assessment of licensee performance during an interim period that the NRC has suspended its Systematic Assessment of Licensee Performance (SALP) program. The NRC suspended its SALP program to complete a review of its processes for assessing performance at nuclear power plants. At the end of the review period, the NRC will decide whether to resume the SALP program or terminate it in favor of an improved process.

During the last six months, Unit 1 experienced no reactor trips. On October 8, Unit 1 completed a 26 day refueling outage. Two power reductions occurred on Unit 1 in October to repair an electrohydraulic control system leak and for main condenser water box maintenance. Unit 2 has operated at or near 100 percent power during the last six months with the exception of a reactor trip that occurred on September 17 when a lightning strike on the turbine building induced electrical noise in the reactor protection system.

Overall performance at North Anna was acceptable. Operations continued to focus on plant safety. Human performance problems, especially during refueling outages, indicated a decline in operations performance during infrequently performed evolutions. Operator requalification and initial training remained effective and the quality of initial license examinations has improved. Overall, plant material condition was very good with one noted exception in the auxiliary feedwater (AFW) pipe tunnels. In general, engineering was involved and supportive of plant operations. However, several examples of inadequate or untimely problem resolution were noted. Plant support areas including radiological protection, effluent and environmental

monitoring, water chemistry, emergency preparedness, and security programs continued to be effective.

Performance in the operations area was consistent. Management operating decisions were conservative. Routine operations were well controlled and operators effectively responded to plant transients. Plant systems, especially engineered safety systems, were found to be properly aligned. Startup and shutdown activities were often well performed and overall coordination of such activities was carefully controlled. A number of human performance problems, especially during refueling outages, indicates a decline in operations performance during infrequently performed evolutions. Operations personnel performed new Independent Spent Fuel Storage Installation activities in a well planned and effective manner. Self-assessment activities and the corrective action program were effective in identifying and eventually correcting problems. The requalification and initial licensing training programs were effective. Initial licensing examination quality has improved. Core inspections in operations are planned. The core inspection for operation of an Independent Spent Fuel Storage Installation will focus on fuel loading, welding and heavy lifts.

Performance in the maintenance area was consistent. Maintenance activities were generally performed in accordance with work instructions by knowledgeable personnel with technical and management support. Excluding the poor material conditions in the AFW pipe tunnels and continued problems with microbiological induced corrosion in the service water system, plant material condition was very good. In general, surveillance testing was conducted in a thorough and professional manner, in accordance with approved procedures, by knowledgeable personnel, and test data met acceptance criteria. Surveillance testing deficiencies, including specific program testing problems and implementation errors, occurred and were subsequently addressed. Inservice inspection (ISI) activities were generally well planned and executed with the exception of activities regarding several AFW pipe supports which were not included in the program. Core inspections are planned in the maintenance area. The core ISI inspection will focus on the augmented ISI program and activities to address microbiologically induced corrosion in service water piping.

Performance in the engineering area, including engineering support, remained consistent. Management involvement and oversight were noted in many aspects of engineering activities. The current design control process and procedures were adequate to maintain the design basis and implement design changes. Engineering performance in the areas of problem identification and evaluation continued to be effective; however, a negative trend was noted in the area of problem resolution. There were performance-based examples of inadequate corrective actions where equipment problems were not aggressively pursued and corrected. The initial proposed corrective action for a violation involving pipe supports not installed in accordance with the drawings was inadequate. Only after NRC involvement was adequate corrective action initiated. Corrective actions to resolve corrosion of the AFW tunnel pipe supports which had been initially identified in September 1996 were also inadequate. A FW safety system engineering inspection (SSEI) conducted in July 1998 concluded that the system met the design basis requirements, however, mechanical calculations had numerous discrepancies. Design and installation of AFW electrical equipment was in accordance with good industry practices, NRC requirements and the licensing basis. In addition to the core engineering inspections, a regional initiative inspection will focus on followup of SSEI violations. Also based on the SSEI findings a portion of the core corrective action program inspection will focus on problem resolution for engineering activities.

Performance in the plant support area was consistent. The radiation protection and occupational exposure control programs remained effective in minimizing collective dose and establishing an overall decreasing trend in personnel exposures. The effluent and environmental monitoring programs properly monitored radiological releases and the impact of plant operations in areas surrounding the site. Radiological and work controls for the Independent Spent Fuel Storage Installation were well planned and properly implemented. The emergency preparedness program continued to maintain the site in a state of full operational readiness to respond to emergencies. Equipment readiness and personnel proficiency were demonstrated during a fully successful biennial exercise. Security personnel demonstrated that they were fully capable of performing their duties on a day-to-day basis, and were highly motivated and trained with appropriate equipment to implement contingency response actions. The maintenance of the security equipment was a strength of the security program. Performance of the fire protection program continues at an acceptable level. Fire brigade members demonstrated their knowledge and familiarity with the fire fighting equipment during drills. Core inspections are planned in the plant support area.

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 view of licensee performance trends. The PIM includes items summarized from inspection reports or other docketed correspondence between the NRC and Virginia Electric & Power Company. 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.

This letter advises you of our planned inspection effort resulting from the North Anna PPR review. It is provided to minimize the resource impact on your staff and to allow for scheduling conflicts and personnel availability to be resolved in advance of inspector arrival onsite. Enclosure 2 details our inspection plan for the next eight months. The rationale or basis for each inspection outside the core inspection program is provided 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.

We will inform you of any changes to the inspection plan. If you have any questions, please contact me at (404) 562-4550.

Sincerely,

Orig signed by Robert C. Haag

Robert C. Haag, Chief
Reactor Projects Branch 5
Division of Reactor Projects

Docket Nos. 50-338, 50-339
License Nos. NPF-4, NPF-7

Enclosures: 1. Plant Issues Matrix
2. Inspection Plan

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United States Nuclear Regulatory Commission
PLANT ISSUES MATRIX
by SALP Functional Area

NORTH ANNA

22-Mar-99

DATE	TYPE(s)	SEC. SFA	SOURCE(s)	ID'd	ISSUE(s)	SMM CODES
OPERATIONS						
8/10/98	Positive	IR 98-04 O8.1	NRC		The procedures used for the empty cask dry run to simulate the actual fuel loading and unloading processes were adequate. The licensee completed a successful cask dry run with adequate preparation and procedures.	<input checked="" type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 <input checked="" type="checkbox"/> 5
8/10/98	Positive	IR 98-04 O5.1	NRC		A licensed operator simulator training scenario was challenging and training personnel provided appropriate feedback to the operating crew following completion of the simulator exercise. Overall operator performance was good as evidenced by proper procedure usage, command and control, and communications. Annunciator response communications was recognized by the licensee as an area for needed improvement.	<input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> B <input checked="" type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F
8/10/98	Positive	MAINT	IR 98-04 O4.1	NRC	An operator conducted auxiliary building rounds in a thorough and professional manner and was knowledgeable of plant systems. Housekeeping conditions in the auxiliary and fuel handling buildings were good.	<input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> B <input checked="" type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F
8/10/98	Positive	MAINT	IR 98-04 O2.1	NRC	Miscellaneous components associated with the Unit 2 service water supply and return to the recirculation spray heat exchangers were in good condition. All valves were in their required positions and properly labeled. The as-built condition of the system reflected plant drawings and the valve checklist procedure. Housekeeping conditions in the main steam valve house basement were good.	<input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> B <input checked="" type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F
8/10/98	Positive	MAINT	IR 98-04 O1.4	NRC	The Unit 1 power reduction to repair the main generator hydrogen leak was carefully controlled. Procedures were properly followed, crew communications were good, and supervisory oversight was appropriate. The decision to remove the main generator from service to repair the hydrogen leak demonstrated conservative decision making.	<input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> B <input checked="" type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F
8/10/98	Positive	MAINT	IR 98-04 O1.3	LICENSEE	NCV was identified for failing to establish a fire watch within one hour as required by the licensee's fire protection program when the EDG room carbon dioxide fire protection systems were inoperable. The air intake louvers for 2H and 2J EDG rooms were blocked open without proper authorization and without recognizing that this rendered the carbon dioxide fire protection systems inoperable.	<input checked="" type="checkbox"/> A <input checked="" type="checkbox"/> B <input checked="" type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F

NORTH ANNA

DATE	TYPE(s)	SEC. SFA	SOURCE(s)	ID'd	ISSUE(s)	SMM CODES				
						1	2	3	4	5
8/10/98	Positive	IR 98-04 O1.2	NRC		Tag outs for the hydrogen analyzer and the feedwater and charging systems were properly performed. All components were in their required positions and were properly labeled. The scope of the tag outs was appropriate for the work performed.	A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6/29/98	NCV	IR 98-03 O4.3	SELF		An NCV was identified for failure to properly align the liquid waste system. An operator improperly marked procedure steps as not applicable which resulted in the failure to reposition two radioactive liquid waste system valves.	A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6/29/98	VIO	IR 98-03 O4.1	LICENSEE		A VIO was identified for failure to properly implement a system tag out. A drain valve in the outside recirculation spray system was mistakenly opened and tagged in lieu of the required drain valve in the residual heat removal system. Also, operators failed to initiate corrective actions when the problem was initially discovered.	A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6/29/98	Positive	IR 98-03 O1.3	NRC		The Unit 2 reactor startup and subsequent power ascension were well controlled. Operators received focused training on startup activities prior to the actual startup. Personnel congestion in the control room during the power ascension was noted.	A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6/29/98	-	IR 98-03 O1.2	NRC		TS requirements, including those for source range neutron flux monitor and containment integrity, were met during core onload activities. Core onload was carefully controlled by knowledgeable personnel.	A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5/18/98	Positive	Maint	IR 98002 O2.3	NRC	AT THE BEGINNING OF THE UNIT 2 REFUELING OUTAGE, CONTAINMENT CONDITIONS WERE GOOD. CONTAINMENT COATINGS WERE INTACT. BORON DEPOSITS WERE MINIMAL, AND AREAS WERE TYPICALLY FREE OF DEBRIS AND DIRT.	A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5/18/98	Positive		IR 98002 O2.1	NRC	OPERATOR RESPONSE TO A FEEDWATER TRANSIENT - A LOSS OF PROPER UNIT 1 FEEDWATER HEATER CASCADING OPERATION - WAS IN ACCORDANCE WITH PLANT PROCEDURES.	A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NORTH ANNA

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5/18/98	VIO	IR 98002 O1.2	SELF	A VIOLATION WAS IDENTIFIED FOR A LICENSED OPERATOR'S FAILURE TO PERFORM A TEST PROCEDURE STEP. AN INSIDE RECIRCULATION SPRAY PUMP WAS INADVERTENTLY STARTED AFTER THE OPERATOR USED INFORMATION ON A MAGNETIC SIGN TO COMPLETE A STEP IN LIEU OF ACTUALLY PERFORMING THE STEP. THE LICENSEE INITIALLY FAILED TO RECOGNIZE THAT THE LACK OF PROCEDURE GUIDANCE ON THE USE OF MAGNETIC SIGNS WAS AN IMPORTANT CONTRIBUTOR TO THE VIOLATION.		1 2 3 4 5 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4/3/98	Positive	Maint	IR 98001 O4.1	NRC	TECHNICAL SPECIFICATION REQUIREMENTS WERE MET WHEN A UNIT 1 SERVICE WATER PUMP WAS REMOVED FROM SERVICE. OPERATOR'S WERE KNOWLEDGEABLE OF LIMITING CONDITION FOR OPERATION AND REQUIRED SYSTEM PRESSURES.	1 2 3 4 5 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4/3/98	Positive	IR 98001 O4.4	NRC	THE DECISION TO REMAIN AT A REDUCED POWER LEVEL WHILE THE B CONDENSATE PUMP WAS REPAIRED DEMONSTRATED CONSERVATIVE MANAGEMENT OVERSIGHT BY AVOIDING PLANT CONFIGURATIONS THAT COULD CAUSE STEAM GENERATOR TRANSIENTS OR CHALLENGE THE PLANT'S OPERATION		1 2 3 4 5 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2/23/98	Positive	IR 97012 O4.1	NRC	TRAINING EFFECTIVE IN PREPARATIONS OF AN OPERATOR WHO PERFORMED LOCAL OPERATION OF TRIP AND BYPASS BREAKERS. OPERATOR DISPLAYED GOOD TECHNIQUES; HOWEVER, COMMUNICATION WAS INFORMAL.		1 2 3 4 5 <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2/23/98	Negative	IR 97012 E2.1	NRC	AUXILIARY OPERATOR KNOWLEDGE OF THE UNIT 2 AUXILIARY FEEDWATER TERRY TURBINE STEAM SUPPLY VALVE LEAKAGE NEEDED IMPROVEMENT. GREATER EQUIPMENT HEALTH AWARENESS REQUIRED.		1 2 3 4 5 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2/23/98	Positive	ENG	IR 97012 O2.1	NRC	FREEZE PROTECTION PROCEDURES WERE THOROUGH AND EFFECTIVELY IMPLEMENTED. OVERALL CONDITION OF THE HEAT TRACE SYSTEM WAS ADEQUATE. ENGINEERING EVALUATED LONG STANDING HEAT TRACE SYSTEM DEFICIENCIES AND INITIATED EFFORTS TO IMPROVE SYSTEM PERFORMANCE.	1 2 3 4 5 <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1/12/98	Positive	ENG	IR 97-11 M1.3	NRC	A UNIT 1 CONTROL ROOM CHILLER PUMP AND VALVE TEST MET TECHNICAL SPECIFICATIONS REQUIREMENTS. TEST INSTRUMENT WAS CALIBRATED. PROCEDURES WERE FOLLOWED AND INDEPENDENT VERIFICATIONS WERE CORRECTLY PERFORMED.	1 2 3 4 5 <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

DATE	TYPE(s)	SEC. SFA	SOURCE(s)	ID'd	ISSUE(s)	SMM CODES
12/1/97	Positive	MAINT	IR 97-09 O7.1	NRC	THE DEVIATION REPORT (DR) ASSIGNMENT REVIEW TEAM AIDS IN THE EFFECTIVE RESOLUTION OF DEVIATION REPORTS. REPEAT DRS AND MAINTENANCE RULE DRS WERE IDENTIFIED AND TASKED TO THE PROPER ORGANIZATIONS FOR ACTION.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
12/1/97	Positive	MAINT	IR 97-09 O1.5	NRC	THE LICENSEE PROPERLY IMPLEMENTED AND ADHERED TO THE COMPENSATORY ACTIONS DISCUSSED IN THE NOTICE OF ENFORCEMENT DISCRETION ISSUED ON OCTOBER 29.	1 2 3 4 5 A <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> D <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
11/24/97	Positive		IR 97-08 O4.1, M1.5	NRC	LICENSED OPERATORS, SHIFT TECHNICAL ADVISORS AND SCHEDULERS UNDERSTANDING OF THE RISK ASSESSMENT TOOLS FOR REMOVAL OF EQUIPMENT FROM SERVICE WAS GOOD.	1 2 3 4 5 A <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> D <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
11/24/97	Positive		IR 97-08 O4.1	NRC	LICENSED OPERATORS UNDERSTOOD THEIR SPECIFIC DUTIES AND RESPONSIBILITIES FOR IMPLEMENTING THE MAINTENANCE RULE.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> D <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
10/20/97	Positive	PLT SUP	IR 97-07 O2.1	NRC	THE OVERALL CONDITION OF THE AUXILIARY SHUTDOWN PANELS WAS GOOD. BIENNIAL TRAINING ON THE AUXILIARY SHUTDOWN PANELS WAS THOROUGH.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> D <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
10/20/97	Positive		IR 97-07 O1.3	NFC	UNIT 1 SAFEGUARDS OPERATOR SUCCESSFULLY COMPLETED SURVEILLANCE REQUIREMENT. THE OPERATOR WAS KNOWLEDGEABLE OF SAFEGUARD OPERATOR ROUND DUTIES AND PERFORMED ROUTINE ROUNDS PROPERLY.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> D <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
10/20/97	Positive	PLT SUP	IR 97-07 O1.2	SELF	LICENSEE AGGRESSIVELY PURSUED THE ORIGIN OF SMOKE DISCOVERED ON AUGUST 20 AND ESTABLISHED AN HOURLY FIRE WATCH UNTIL THE PROBABLE CAUSE FOR THE SMOKE WAS IDENTIFIED ON AUGUST 23.	1 2 3 4 5 A <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

MAINTENANCE

NORTH ANNA

DATE	TYPE(s)	SEC. SFA	SOURCE(s)	ID'd	ISSUE(s)	SMM CODES				
						1	2	3	4	5
8/10/98	Positive		IR 98-04 M1.2	NRC	Testing of the solid state protection system was carefully performed as evidenced by proper test coordination and communications, good self-checking and appropriate procedure usage.	A	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8/10/98	VIO	OPS	IR 98-04 M1.1	NRC	A VIO was identified for failure to properly verify backup weather tower wind direction indication was normal after the instrumentation was calibrated. Instrumentation and control technicians had improperly installed wind direction equipment such that the indicated wind direction was 180 degrees out of the actual wind direction. For several days when performing channel checks of the primary and backup wind direction indications, operators failed to recognize this problem.	B	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6/29/98	Positive		IR 98-03 M1.5	NRC	Work performed for various maintenance activities, including 2J emergency diesel generator fan blade/hub replacement, 2B residual heat removal pump seal repair, and valve VOTES testing was professional and thorough. Work was performed with the work package present and in use.	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6/29/98	Negative		IR 98-03 M1.4	LICENSEE	Maintenance was started on a bearing cooling pump prior to tagging and isolating the equipment. A fundamental verification in the work control process was not performed when the workers failed to verify the pump was tagged out prior to commencing work. A poor pre-job briefing contributed to this error.	A	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6/29/98	NCV		IR 98-03 M1.3	SELF	An NCV was identified for failure to implement work controls on a Unit 2 main steam bypass non-return valve. The valve was released for testing prior to reconnecting the motor leads. A supervisory review of the work package failed to recognize this condition.	B	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6/29/98	Positive	OPS	IR 98-03 M1.2	NRC	Periodic surveillance tests on reactor protection logic and 1C charging pump flow were carefully performed by knowledgeable workers. Applicable TS requirements for each test were satisfied. Previous testing was verified to satisfy TS surveillance interval requirements.	C	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6/29/98	Positive	OPS	IR 98-03 M1.1	NRC	TS surveillance requirements were satisfied during the 2H and 2J emergency diesel generator 24-hour runs. Diesel operation was carefully controlled by minimizing operator distractions during the tests and providing supervisory oversight as appropriate. Vibration data taken for the replaced cooling fan was acceptable.	A	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						C	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NORTH ANNA

22-Mar-99

DATE	TYPE(s)	SEC. SFA	SOURCE(s)	ID'd	ISSUE(s)	SMM CODES
3/18/98	Positive		IR 98002 M1.2	NRC	THE CHANNEL FUNTIONAL TEST FOR POWER RANGE INSTRUMENTS AND WAS AND N42 MET TECHNICAL SPECIFICATION REQUIREMENTS AND WAS CAREFULLY PERFORMED. THE TECHNICIANS UTILIZED SELF-CHECKING PRACTICES.	1 2 3 4 5 <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5/18/98	Positive	ENG	IR 98002 M1.1	NRC	WORK PERFORMED ON A UNIT 1 MAIN FEEDWATER PUMP, THE SOLID STATE PROTECTION SYSTEM, AND THE 2H EMERGENCY DIESEL GENERATOR (REPLACEMENT OF FAN BLADES) WAS PROFESSIONAL AND THOROUGH. WORK INSTRUCTIONS WERE PRESENT AND WERE USED. MAINTENANCE SUPERVISION AND ENGINEERING PERSONNEL MONITORED THE JOBS.	A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5/18/98	Negative	OPS	IR 98002 O1.3	SELF	A UNIT 2 REACTOR COOLANT SYSTEM DRAINDOWN PROBLEM RESULTED FROM A LACK OF ATTENTION TO DETAIL BY WORKERS WHO HAD LEFT A PIECE OF TAPE ON A VENT FLANGE. THIS TAPE BLOCKED A TEMPORARY VENT LINE PATHWAY DURING INSTALLATION OF THE VENT LINE. OPERATIONS DETERMINED THAT THE REACTOR VESSEL WAS NOT PROPERLY VENTING DURING INITIAL DRAINDOWN OPERATIONS. OPERATIONS ANALYSIS OF THE IMPROPER VENTING WAS APPROPRIATE.	A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4/3/98	Positive		IR 98001 M1.3	NRC	OVERALL UNIT 1 CHARGING AND MAINTENANCE ACTIVITIES WERE GOOD. ENHANCEMENTS IN MAINTENANCE WORK PRACTICES WERE IMPLEMENTED DURING PUMP SEAL REPAIR. THESE INCLUDED A DEDICATED PROCEDURE READER TO OVERSEE THE EVOLUTION AND PERFORMANCE OF THE SEAL REBUILD IN A BETTER WORK ENVIRONMENT, A DECON BUILDING ROOM VERSUS THE PUMP CUBICLE.	A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4/3/98	Positive		IR 98001 M1.2	NRC	THE OPERABILITY TEST FOR THE STEAM GENERATOR PORV'S WAS PROPERLY PERFORMED. TS AND OTHER TECHNICAL REQUIREMENTS WERE SATISFIED.	A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4/3/98	Positive	OPS	IR 98001 M1.1	NRC	COMMUNICATIONS, SELF-CHECKING PRACTICES, AND PROCEDURES ADHERENCE DURING THE UNIT 1 TRAIN B SOLID STATE PROTECTION SYSTEM TEST WERE GOOD.	A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2/23/98	Negative		IR 97012 E2.1	NRC	AUXILIARY FEEDWATER STEAM SUPPLY LINE STEAM TRAPS, WHICH REMOVE CONDENSATE DURING PUMP OPERATION, WERE NOT IN THE PREVENTIVE MAINTENANCE PROGRAM.	A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

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						1	2	3	4	5
2/23/98	Positive	OPS	IR 97012 M1.2	NRC	MAINTENANCE ASSOCIATED WITH THE N31 SOURCE RANGE INSTRUMENT WAS PROPERLY PERFORMED BY KNOWLEDGEABLE I&C TECHNICIANS.	A	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2/23/98	Weakness		IR 97012 M1.2	NRC	DURING TESTING OF DELTA-T/TAVIE CHANNEL, INSPECTORS NOTED COMMUNICATIONS BETWEEN TECHNICIANS AND SELF-CHECKING PRACTICES COULD BE IMPROVED. FORMAL APPROACHES NEEDED.	A	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2/23/98	Negative	OPS	IR 97012 M1.1	NRC	THE PRACTICE OF USING PRIMARY GRADE WATER WHEN INSTALLING AND REMOVING TEST GAUGES WAS AN EFFECTIVE MEANS FOR MINIMIZING THE POTENTIAL FOR SPREADING CONTAMINATION; HOWEVER, THE PRACTICE WAS NOT CONSISTENTLY IMPLEMENTED.	A	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1/12/98	NCV		IR 97-11 E1.1 LER 338/97-009-00	LICENSEE	A NON-CITED VIOLATION WAS IDENTIFIED FOR TWO MISSED TECHNICAL SPECIFICATION REQUIRED SOLID STATE PROTECTION SYSTEM LOGIC SURVEILLANCE TESTS. THE LICENSEE IDENTIFIED THE DEFICIENCY AND TOOK APPROPRIATE ACTIONS.	A	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12/1/97	Positive	OPS	IR 97-09 M1.1	NRC	REPAIR OF 1H EDG ENGINE COOLING FAN WAS EFFECTIVELY PERFORMED AS EVIDENCED BY THE ACCEPTABLY LOW FAN SHAFT VIBRATION MEASUREMENTS AND NO LEAKAGE FROM RADIATOR DURING POST MAINT TEST.	B	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11/24/97	Weakness	ENG	IR 97-08 M7.1	NRC	THE LICENSEE DID NOT HAVE A SYSTEMATIC APPROACH FOR CLOSING OUT ITEMS IN SELF-ASSESSMENTS. THIS FAILURE TO TRACK AND FOLLOW-UP ON SELF-ASSESSMENT ITEMS WAS AN INDICATED WEAKNESS.	C	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11/24/97	Strength	ENG	IR 97-08 M7.1	NRC	SELF-ASSESSMENTS OF THE MAINTENANCE RULE (MR) PROGRAM WERE THOROUGH AND A PROGRAMMATIC STRENGTH. THE ASSESSMENTS CONTINUED TO VALIDATE FAILURES TO ADEQUATELY IMPLEMENT THE MR. PROGRAM & PROGRAM THROUGH IDENTIFICATION OF NUMEROUS FINDING AND NEEDED ENHANCEMENTS TO THE PROGRAM.	A	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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						1	2	3	4	5
11/24/97	Positive	ENG	IR 97-08 M2.1	NRC	IN GENERAL, WALKDOWN OF SSCS DETERMINED THAT THEY WERE BEING APPROPRIATELY MAINTAINED.	A	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11/24/97	Strength	ENG	IR97-08 M1.7	NRC	THE STRUCTURES PROGRAM ESTABLISHED UNDER THE MAINTENANCE RULE WAS COMPREHENSIVE AND EFFECTIVELY IMPLEMENTED.	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11/24/97	Negative	ENG	IR 97-08 M1.7	NRC	ONE WEAKNESS CONCERNING THE APPROPRIATENESS OF THE RELIABILITY PERFORMANCE CRITERIA FOR THE POST ACCIDENT HYDROGEN REMOVAL SYSTEM WAS IDENTIFIED.	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11/24/97	Negative	ENG	IR 97-08 M1.6	NRC	ONE WEAKNESS CONCERNING THE LOGGING OF FAILURES AGAINST THE APPROPRIATE FEG FOR THE HIGH HEAD SAFETY INJECTION SYSTEM WAS IDENTIFIED.	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11/24/97	Positive	ENG	IR 97-08 M1.6, M1.7	NRC	IN THE MAINTENANCE RULE PROGRAM, EQUIPMENT RELIABILITY AND UNAVAILABILITY DATA WERE BEING PROPERLY CAPTURED FOR THE STRUCTURES, SYSTEM, AND COMPONENT REVIEW.	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11/24/97	Positive	ENG	IR 97-08 M1.4	NRC	THE APPROACH TO BALANCING RELIABILITY AND UNAVAILABILITY MET THE INTENT OF (a)(3) OF THE MAINTENANCE RULE.	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11/24/97	Positive	ENG	IR 97-08 M1.3	NRC	THE PERIODIC EVALUATION PERFORMED BY THE LICENSEE MET THE REQUIREMENTS OF SECTION (a)(3) OF THE MAINTENANCE RULE.	A	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
						C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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11/24/97	Negative	ENG	IR 97-08 M1.2.b.4	NRC	THE LICENSEE HAD NOT ESTABLISHED CONDITION MONITORING PERFORMANCE CRITERIA FOR SEVERAL SSC's FOR WHICH THE PERFORMANCE CRITERIA WAS ZERO FAILURES.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
11/24/97	Negative	ENG	IR 97-08 M1.1	NRC	REQUIRED STRUCTURES, SYS, AND COMPONENTS WERE INCLUDED WITHIN SCOPE OF THE MAINTENANCE RULE WITH THE EXCEPTION OF TWO STRUCTURES AND SEVERAL ANNUNCIATORS. ENFORCEMENT DISCRETION WAS USED REGARDING THESE DEFICIENCIES.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
10/20/97	Weakness	OPS	IR 97-07 M1.7	SELF	LICENSEE ADEQUATELY PERFORMED IMMEDIATE CORRECTIVE ACTIONS TO CLEAR UNIT 2 OUTSIDE RECIRCULATION SPRAY PUMP 2-RS-P-2A SEAL HEAD TANK ALARMS. CORRECTIVE ACTIONS TO PRECLUDE THESE ALARMS HAVE BEEN INEFFECTIVE AND THE FREQUENCY OF THESE ALARMS HAVE INCREASED.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
10/20/97	NCV		IR 97-07 M1.6	LICENSEE	LICENSEE ADEQUATELY PERFORMED NECESSARY CORRECTIVE ACTIONS TO RESOLVE THE INADEQUATE MOUNTING OF AN OUTSIDE RECIRCULATION SPRAY PUMP SEAL COOLER.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
10/20/97	Positive	OPS	IR 97-07 M1.4	NRC	OPERATOR ADEQUATELY MONITORED OPERATION OF THE SBO DIESEL DURING THE QUARTERLY OPERABILITY TESTING. EXTERNAL CONDITION OF THE DIESEL SBO BUILDING HOUSEKEEPING WAS SUPERIOR.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
10/20/97	Positive		IR 97-07 M1.3	NRC	REPLACEMENT OF THE N41 POWER RANGE DETECTOR GAIN ADJUSTMENT POTENTIOMETER AND POST MAINTENANCE OPERABILITY TESTING WERE EFFECTIVE.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
10/20/97	VIO		IR 97-07 M1.2 SL IV	NRC	THE TS 3.3.3.1 REQUIREMENTS WERE SATISFIED DURING THE CALIBRATION OF THE A VENT STACK RADIATION MONITOR. A VIOLATION WITH TWO EXAMPLES WAS IDENTIFIED FOR FAILURE TO FOLLOW APPROVED MAINTENANCE PROCEDURES.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>

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10/20/97	Positive	IR 97-07 M1.1	NRC		CONTROL ROOM AIR HANDLING MAINTENANCE WAS PERFORMED SATISFACTORILY. MAINTENANCE PRACTICES BY WORKERS AND SUPERVISION WAS IN KEEPING WITH CLOSE PROCEDURAL ADHERENCE.	A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
8/10/98	Negative	IR 98-04 E3.1	NRC		The licensee's statistically-based and engineering judgement operability determination for the main steam radiation monitors was weak. Issues such as instrument sensitivity and instrument drift were not thoroughly addressed.	A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
6/29/98	Positive	IR 98-03 E1.2	NRC		The licensee responded in a conservative manner to a recently discovered, potentially generic, reactor vessel head material problem.	A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
5/18/98	NCV	MAINT	IR 98002 E8.2	LICENSEE	THE SAFETY CONSEQUENCE OF AN INCOMPLETE P-8 SURVEILLANCE WAS LOW BECAUSE THE P-8 LOGIC WOULD HAVE PERFORMED AS REQUIRED. AN ASSOCIATED LICENSEE EVENT REPORT WAS ACCURATE AND TIMELY. CORRECTIVE ACTIONS TO PREVENT RECURRENTURE WERE REASONABLE. A NON-CITED VIOLATION WAS IDENTIFIED.	A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
5/18/98	Positive	IR 98002 E8.1	NRC	LICENSEE	THE LICENSEE'S 10 CFR PART 21 EVALUATION FOR DETERMINING POTENTIAL BINDING DUE TO OVERSIZED AUXILIARY FEEDWATER TERRY TURBINE GOV VALVE STEMS WAS THOROUGH. THEY ALSO APPROPRIATELY DEMONSTRATED THE ACCEPTABILITY OF THE INSTALLED VALVE STEMS FOR CONTINUED USE.	A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
5/18/98	NCV	MAINT	IR 98002 E1.1	LICENSEE	A NON-CITED VIOLATION WAS IDENTIFIED FOR INADEQUATE TEST PROCEDURES FOR UNIT 2 AND 2 "C" CHARGING PUMP UNDERVOLTAGE RELAY 27Z. A REQUIRED UNIT 1 TECHNICAL SPECIFICATION SURVEILLANCE WAS MISSED.	A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
2/23/98	Positive	IR 97012 E2.2	NRC		LICENSEE PERFORMANCE IN OBTAINING REQUIRED CORE OPERATING LIMITS REPORT INFORMATION FOR UNIT 2 WAS GOOD AND IN ACCORDANCE WITH APPROVED PROCEDURES. ENGINEERS WERE PROFICIENT WITH THE INCORE EQUIPMENT OPERATION AND FAMILAR WITH THE PROCEDURAL REQUIREMENTS.	A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>

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						A	B	C	D	E
1/12/98	Positive		IR 97-11 E8.1	NRC	RESULTS OF THE ROOT CAUSE EXAMINATION FOR THE 1H EMERGENCY DIESEL GENERATOR COOLING FAN FAILURE APPEARED REASONABLE. FOLLOWUP ACTIONS FOR THE FAILURE WERE ACCEPTABLE.	<input type="checkbox"/>				
1/12/98	Positive		IR 97-11 E2.5	NRC	INDEPENDENT SPENT FUEL STORAGE INSTALLATION CONCRETE PAD CONSTRUCTION RECORDS AND RELATED DOCUMENTS WERE ADEQUATE. CONCRETE TICKETS WERE WITHIN SPECIFICATION LIMITS. VENDOR SUBMITTALS FOR CONCRETE TRUCKS MET SPECIFICATION REQUIREMENT	<input type="checkbox"/>				
1/12/98	Positive		IR 97-11 E2.4	NRC	DURING INDEPENDENT SPENT FUEL STORAGE INSTALLATION CONSTRUCTION CONCRETE WAS PLACED BY SKILLED PERSONNEL WITH GOOD WORKMANSHIP. THE CONCRETE WAS PLACED AND TESTED IN ACCORDANCE WITH SPECIFICATIONS AND INDUSTRIAL PRACTICES AND CODES.	<input type="checkbox"/>				
1/12/98	Negative		IR 97-11 E2.3	NRC	INADEQUATE CONCRETE REBAR PLACEMENT WAS IDENTIFIED FOR THE INDEPENDENT SPENT FUEL STORAGE INSTALLATION. REBAR AROUND THE LIGHT BOXES AND IN THE TOP MAIN REBAR LAYER WERE IMPROPER. THE INSPECTORS WERE CONCERNED WITH THE CONSTRUCTION PRACTICES AND QUALITY CONTROLS THAT ALLOWED THESE DEFICIENCIES TO OCCUR.	<input type="checkbox"/>				
1/12/98	Positive		IR 97-11 O1.2	NRC	THE ENGINEERING EVALUATION TO ADDRESS HIGH WATER LEVELS IN THE HEATER DRAIN TANKS WHICH WAS LIMITING POWER TO 99% PROVIDED APPROPRIATE BASES FOR REDUCING THE NUMBER OF OPERATING CONDENSATE PUMPS FROM 3 TO 2. THE UNIT RETURNED TO 100% WITH SUFFICIENT FEEDWATER PRESSURE MARGINS TO PRECLUDE A FEEDWATER PUMP TRIP.	<input type="checkbox"/>				
12/1/97	Positive	Maint	IR 97-09 E4.1	NRC	LICENSEE ADEQUATELY PURSUED OFF-CENTERED BORING OF STAINLESS STEEL PIPING. NO PRIOR USE OF THE PIPING WAS FOUND DURING A HISTORICAL REVIEW OF 3/4 INCH SS PIPING PREFABRICATION.	<input type="checkbox"/>				
11/24/97	Negative		IR 97-08 E4.1	NRC	SYSTEM ENGINEER'S UNDERSTANDING OF MAINTENANCE RULE AND ITS IMPLEMENTATION WERE GENERALLY WEAK. VIRGINIA POWER MAINTENANCE RULE PROGRAM WAS CORPORATE DRIVEN WITH MINIMAL RELIANCE ON THE SYSTEM ENGINEERS FOR IMPLEMENTATION.	<input type="checkbox"/>				

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11/24/97	Positive		IR 97-06 E4.1	NRC	IN GENERAL, SYSTEM ENGINEERS' TECHNICAL KNOWLEDGE OF THEIR SYSTEMS WAS SOUND. RECENT REASSIGNMENTS CONTRIBUTED TO A LACK OF SYSTEM SPECIFIC KNOWLEDGE.	1 2 3 4 5 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
11/24/97	Negative	OPS	IR 97-08 M1.5	NRC	SOME MAINTENANCE RULE FUNCTIONAL EQUIPMENT GROUPS DID NOT RECEIVE A RISK INFORMED ASSESSMENT.	1 2 3 4 5 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
11/24/97	Positive	OPS	IR 97-08 M1.5	NRC	THE LICENSEE HAD EFFECTIVELY IMPLEMENTED A COMPREHENSIVE PROCESS FOR PERFORMING SAFETY ASSESSMENTS FOR ON-LINE MAINTENANCE ACTIVITIES	1 2 3 4 5 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
11/24/97	Weakness	Maint	IR97-08 M1.2.b.5	NRC	PRA KNOWLEDGE OF INTERVIEWED WORKING GROUP MEMBERS WAS WEAK. DUE TO A LACK OF UNDERSTANDING OF THE NAPORT PRA, THE MAINTENANCE RULE WORKING GROUP DID NOT APPEAR TO BE ABLE TO COMPENSATE FOR THE PRA'S LIMITATIONS. A PERMANENT PRA MEMBER WAS ASSIGNED TO THE WORKING GROUP DURING THE INSPECTION TO CORRECT THIS WEAKNESS.	1 2 3 4 5 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
11/24/97	Positive	Maint	IR97-08 M1.2.b.5	NRC	THE RIGOR AND DEPTH OF DISCUSSIONS DURING AN OBSERVED MAINTENANCE RULE WORKING GROUP MEETING WERE APPROPRIATE FOR THE MATTERS DISCUSSED.	1 2 3 4 5 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
11/24/97	Weakness	Maint	IR97-08 M1.2.b.2, M1.2.b.3, M1.2.b.4, M1.5	NRC	THE PLANT WAS BEING SAFELY OPERATED IN CONSIDERATION OF RISK. LICENSEE & NRC IDENTIFIED SIGNIFICANT PROBLEMS IN THE PRA. BECAUSE OF THIS, THE TEAM COULD NOT DETERMINE THE QUALITY OF MAINTENANCE RULE IMPLEMENTATION WITH REGARD TO RISK RANKING, GOAL SETTING AND PERFORMANCE CRITERIA, AND ADEQUACY OF THE LICENSEE'S RISK ASSESSMENT TOOLS.	1 2 3 4 5 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
10/20/97	Positive		IR 97-07 E2.4	NRC	INDEPENDENT SPENT FUEL STORAGE INSTALLATION (ISFSI) SOIL COMPACTION AND TEST RESULTS WERE ACCEPTABLE. THE PROCEDURES USED AND THE WORK PERFORMED FOR THE SOIL COMPACTION OF THE ISFSI WERE ADEQUATE. LAB TESTS FOR THE SOIL COMPACTION BY VIRGINIA POWER WERE RELIABLE.	1 2 3 4 5 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

DATE	TYPE(s)	SEC. SFA	SOURCE(s)	ID'd	ISSUE(s)	SMI CODES
10/20/97	Positive	IR 97-07 E2.2	NRC	LICENSEE HAS TAKEN THE NECESSARY ACTIONS TO REPAIR SUSPECTED MICROBIOLOGICALLY INDUCED CORROSION (MIC) SERVICE WATER SYSTEM PIPING. LICENSEE APPROPRIATELY ADDRESSES THE ON GOING MIC ISSUE AND THE PROGRAM PERFORMS REPAIRS IN ACCORDANCE WITH THE ASME CODE. WHEN MIC WAS FOUND IN INCONEL WELD REPAIRS, TWO INCONEL WELD REPAIRS WERE SELECTED FOR MORE FREQUENT MONITORING AND INSPECTIONS.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
10/20/97	Positive	IR 97-07 E2.1	NRC	LICENSEE TOOK POSITIVE STEPS TO ADDRESS AN INDUSTRY ISSUE INVOLVING SKID-MOUNTED EMERGENCY DIESEL GENERA, OR PIPING WELDS.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	
10/20/97	Positive	IR 97-07 E1.1	NRC	AUXILIARY FEEDWATER SYSTEM DESIGN BASIS DOCUMENT MADE A SIGNIFICANT CONTRIBUTION TO UNDERSTANDING THE DESIGN BASIS FOR THE SYSTEM AND IS A USEFUL TOOL FOR ENGINEERS AND OTHER ORGANIZATIONS.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
10/20/97	Positive	IR 98-07 P4.2.b.5	NRC	A thorough critique process was followed with a well-prepared presentation to site management that summarized the most significant emergency preparedness exercise observations.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
8/18/98	Positive	IR 98-07 P4.2.b.4	NRC	The local emergency operations facility Recovery Manager and staff were effective in providing timely emergency notifications, correct and timely protective area recommendations, and meaningful radiological reports to the state and counties.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
8/18/98	Positive	IR 98-07 P4.2.b	NRC	The operations support center was effective in providing repair teams as directed by the technical support center. Command and control of technical support center operations were proficient. The control room simulator crew properly analyzed plant conditions and responded with timely and correct actions.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	
PLANT SUPPORT						
8/18/98	Positive					

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DATE	TYPE(s)	SEC. SFA	SOURCE(s)	ID'd	ISSUE(s)	SMM CODES				
						1	2	3	4	5
8/18/98	Negative		IR 98-07 P4.2.b	NRC	Better intergroup communication within the technical support center would improve development of mitigation strategies.	A <input type="checkbox"/> B <input type="checkbox"/> C <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
8/18/98	Positive		IR 98-07 P4.1	NRC	The scenario developed for the exercise was effective for testing the integrated emergency response capability for the onsite and offsite emergency organizations.	A <input type="checkbox"/> B <input type="checkbox"/> C <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
8/10/98	Positive		IR 98-04 S4	NRC	The security force personnel possessed appropriate knowledge to carry out their assigned duties and responsibilities, including response procedures, use of deadly force, and armed response tactics	A <input type="checkbox"/> B <input type="checkbox"/> C <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
8/10/98	Positive		IR 98-04 S1	NRC	The licensee exhibited positive control of packages, personnel and vehicles entering the protected area.	A <input type="checkbox"/> B <input type="checkbox"/> C <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
8/10/98	Positive		IR 98-04 S6 S7	NRC	The licensee provided strong support for the Physical Security Program. The effectiveness of licensee management relative to the security program was adequate. The licensee's program analysis of documented security problems was adequate.	A <input type="checkbox"/> B <input type="checkbox"/> C <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
8/10/98	Positive	Maint	IR 98-04 S2	NRC	The licensee's security facilities and equipment were determined to be very well maintained and reliable. The excellent maintenance support was the major factor to continued operability of the detection and assessment equipment.	A <input type="checkbox"/> B <input type="checkbox"/> C <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
8/10/98	Positive		IR 98-04 R1.2	NRC	The licensee had established procedures for independent Spent Fuel Storage Installation related activities which were consistent with good radiological control practices and that those procedures were followed during preoperational testing.	A <input type="checkbox"/> B <input type="checkbox"/> C <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			

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22-Mar-99

DATE	TYPE(s)	SEC. SFA	SOURCE(s)	ID'd	ISSUE(s)	SMM CODES
8/10/98	Positive	IR 98-04 R1.1	NRC		The licensee developed and implemented a comprehensive action plan for reducing personnel exposure from the elevated dose rates in the plant following the Unit 2 refueling outage.	1 2 3 4 5 A <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8/10/98	Positive	IR 98-04 R1.1	NRC		Maximum individual radiation exposures were controlled to levels which were well within the licensee's administrative limits and the regulatory limits for occupational dose specified in 10 CFR 20.1201(a). There was an overall decreasing trend in the personnel exposures and the licensee was generally successful in meeting goals for ALARA.	1 2 3 5 A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6/29/98	Positive	IR 98-03 P2.1 P2.2	NRC		Site emergency response facilities, equipment and the off-site siren system were maintained satisfactorily	1 2 3 4 5 A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6/29/98	Positive	IR 98-03 P7.1 P7.2	NRC		Emergency Preparedness audits were comprehensive, organized, objective, and satisfied the requirements in 10 CFR 50.54(t). Emergency Preparedness drill comments were satisfactorily tracked and resolved in a timely manner.	1 2 3 4 5 A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6/29/98	Negative	IR 98-03 P5.1	NRC		Required Emergency Preparedness Shift Technical Advisor training and curriculum had been omitted from the program guide for emergency preparedness training. Actual training provided to the shift technical advisors was at an acceptable level. Emergency Response Organization lesson plans contained sufficient information for position training.	1 2 3 4 5 A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6/29/98	VIO	IR 98-03 R1.2	LICENSEE		The licensee had failed to perform an adequate radiological survey on a camera prior to releasing the camera from the radiological control area, in that, the survey failed to detect the presence of contamination on the camera. A violation was identified for failure to conduct an adequate contamination survey.	1 2 3 4 5 A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6/29/98	Negative	ENG	IR 98-03 R1.1	NRC	The licensee was generally successful in meeting established as low as is reasonably achievable goals but unexpected results from shutdown chemistry controls resulted in elevated dose rates from the reactor coolant system. The outage as low as is reasonably achievable goal was exceeded.	1 2 3 4 5 A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

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DATE	TYPE(s)	SIC. or A	SOURCE(s)	ID'd	ISSUE(s)	SMM CODES				
						1	2	3	4	5
6/29/98	Positive		IR 98-03 R1.1	NRC	Maximum individual radiation exposures were controlled to levels which were well within the licensee's administrative limits and the regulatory limits for occupational dose specified in 10 CFR 20.1201(a).	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6/29/98	Positive		IR 98-03 R1.1	NRC	The licensee properly monitored and controlled personnel radiation exposure during the Unit 2 refueling outage and posting of area radiological conditions were in accordance with 10 CFR 20.	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5/18/98	Positive	OPS	IR 98002 F1.1	NRC	THE FIRE TEAM PROPERLY RESPONDED TO A FIRE DRILL IN THE AUXILIARY BOILER ROOM. FIRE TEAM MEMBERS WERE KNOWLEDGEABLE AND FAMILIAR WITH THE FIRE FIGHTING EQUIPMENT. THERE WAS CONFUSION ABOUT THE PROPER RADIO CHANNEL TO USE. PROPER CONTINGENCY ACTIONS WERE PRESENTED DURING THE DRILL. THE COMMUNICATIONS PROBLEM WAS CORRECTED BY THE END OF THE INSPECTION PERIOD.	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5/18/98	Positive	MAINT	IR 98002 R1.4	NRC	THE LICENSEE PROPERLY MAINTAINED THE CONTROL ROOM EMERGENCY HABITABILITY SYSTEM AND PERFORMED REQUIRED SURVEILLANCES TO DEMONSTRATE SYSTEM OPERABILITY.	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5/18/98	Positive	MAINT	IR 98002 R1.3	NRC	THE ON-SITE METEOROLOGICAL SURVEILLANCE PROGRAM WAS IMPLEMENTED IN ACCORDANCE WITH UPATED FINAL SAFETY ANALYSIS REPORT COMMITMENTS AND TECHNICIAN IDENTIFICATION REQUIREMENTS.	A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4/3/98	Positive		IR 99001 S5.2	NRC	SECURITY FORCE WAS TRAINED IN AN EXCELLENT MANNER.	B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4/3/98	Positive		IR 98001 S3.2	NRC	RANDOM SAMPLE OF SECURITY PLAN IMPLEMENTING PROCEDURES AND SECURITY CONTINGENCY PLAN IMPLEMENTING PROCEDURES ADEQUATELY MET THE PHYSICAL SECURITY PLAN COMMITMENTS AND PRACTICES.	C	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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DATE	TYPE(s)	SEC. SFA	SOURCE(s)	ID'd	ISSUE(s)	SMM CODES
4/3/98	Positive	IR 98001 R1.1	NRC		POSTING AND CONTROL OF HIGH RADIATION AREAS WAS APPROPRIATE. SURVEY MAPS USED TO INFORM WORKERS OF RADIOLOGICAL CONDITIONS WERE ACCURATE AND WERE POSTED PROPERLY. SEVERAL EFFECTIVE PRACTICES SUCH AS THE USE OF COLOR CODED DOSE RATE MAPS AND LOW DOSE WAITING AREAS INFORMED WORKERS OF RADIOLOGICAL CONDITIONS.	1 2 3 4 5 A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
~7/3/98	Positive	IR 97012 R1.1	NRC		RADIOLOGICAL LIQUID CATCH CONTAINERS WERE MAINTAINED IN VERY GOOD CONDITION AND THEY WERE PROPERLY SUSPENDED AND SUPPORTED IN ACCORDANCE WITH APPROVED PROCEDURES.	1 2 3 4 5 A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1/12/98	Negative	OPS	IR 97-11 F4.1	NRC	FIRE DRILL WEAKNESSES WERE NOTED INVOLVING COMMUNICATIONS AND UNFAMILIARITY WITH DONNING TURN OUT GEAR. DURING A SUBSEQUENT FIRE DRILL, THE INSPECTORS NOTED THAT THESE WEAKNESSES HAD BEEN CORRECTED. PERSONNEL HAVE RECEIVED INCREASED TRAINING ON DONNING TURN OUT GEAR.	1 2 3 4 5 A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
1/12/98	Negative		IR 97-11 P4.1	LICENSEE	AN EMERGENCY PREPAREDNESS EXERCISE WAS ADEQUATE. ONE OBJECTIVE INVOLVING TREATMENT OF INJURED PERSONNEL WAS PARTIALLY MET. LICENSEE PLANS TO PROVIDE INCREASED COMMAND AND CONTROL TRAINING FOR FIRST AID TEAM SCENE LEADERS.	1 2 3 4 5 A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
12/1/97	NCV	Maint	IR 97-09 R4.1	LICENSEE	AN NCV WAS IDENTIFIED FOR PERFORMING INADEQUATE SURVEYS OF HYDROGEN RECOMBINER BLOWER 1-HC-HC-1. THIS RESULTED IN THE SPREAD OF LOW LEVELS OF RADIOACTIVE CONTAMINATION INTO A NON-RADIOLOGICALLY CONTROLLED WORK AREA. LICENSEE COUNSELED RP TECHNICIANS, PRESENTED LESSONS LEARNED TO THE HP STAFF AND NOTED THAT CAREFUL SURVEY OF POTENTIAL RAD ITEMS WAS VERY IMPORTANT.	1 2 3 4 5 A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
10/20/97	Negative	Maint	IR 97-07 S2.1	NRC	WHILE THERE WERE A NUMBER OF WORK REQUEST INVOLVING THE SECURITY DIESEL GENERATOR, PROBLEMS DID NOT AFFECT OPERABILITY. HOUSEKEEPING IN THE AREA WAS ACCEPTABLE.	1 2 3 4 5 A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
10/20/97	Positive		IR 97-07 R1.2	NRC	LICENSE HAS EFFECTIVELY IMPLEMENTED A PROGRAM FOR TRANSPORTATION OF RADIOACTIVE MATERIALS PURSUANT TO DOT AND NRC REQUIREMENTS.	1 2 3 4 5 A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> B <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> C <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

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DATE	TYPE(s)	SEC. SFA	SOURCE(s)	ID'd	ISSUE(s)	SMM CODES
10/20/97	Positive	ENG	IR 97-07 F1.1	NRC	SILICONE FIRE BARRIER PENETRATION SEALS INSTALLED AT NORTH ANNA MEET DESIGN REQUIREMENTS. COMPREHENSIVE ENGINEERING EVALUATIONS AND SURVEILLANCE INSPECTIONS HAD BEEN PERFORMED TO VERIFY INSTALLATIONS MET THE INTENT OF THE DESIGN REQUIREMENTS.	1 2 3 4 5 <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A
10/7/97	Strength		IR 97-10 S2.5.1	NRC	THE ENGINEERING STAFF HAS PERFORMED AN EXCELLENT ANALYSIS OF THE VEHICLE THREAT. A SUPERIOR VEHICLE BARRIER WAS INSTALLED TO COUNTER THE THREAT. THE BARRIER WAS AT A DISTANCE TO PRECLUDE AN EXPLOSION FROM A BOMB-LADEN VEHICLE. PLANS AND PROCEDURES WERE ACCEPTABLE FOR IMPLEMENTING THE VEHICLE BARRIER SYSTEM.	1 2 3 4 5 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> A B C <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

DATE	TYPE(s)	SEC. SFA	SOURCE(s)	ID'd	ISSUE(s)	SMM CODES
SMM Template Codes:						
1A	OPERATION PERFORMANCE - Normal Operations					
1B	OPERATION PERFORMANCE - Operations During Transients					
1C	OPERATION PERFORMANCE - Programs and Processes					
2A	MATERIAL CONDITION - Equipment Condition					
2B	MATERIAL CONDITION - Programs and Processes					
3A	HUMAN PERFORMANCE - Work Performance					
3B	HUMAN PERFORMANCE - KSA					
3C	HUMAN PERFORMANCE - Work Environment					
4A	ENGINEERING/DESIGN - Design					
4B	ENGINEERING/DESIGN - Engineering Support					
4C	ENGINEERING/DESIGN - Programs and Processes					
5A	PROBLEM IDENTIFICATION & SOLUTION - Identification					
5B	PROBLEM IDENTIFICATION & SOLUTION - Analysis					
5C	PROBLEM IDENTIFICATION & SOLUTION - Resolution					

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. Before the NRC makes its enforcement decision, the licensee will be provided with an opportunity to either (1) respond to the apparent violation or (2) request a predecisional enforcement conference.

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. 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.

ID Code:

LICENSEE	LICENSEE
NRC	NRC
SELF	SELF-REVEALED

SALP Functional Areas:

ENG	ENGINEERING
MAINT	MAINTENANCE
OPS	OPERATIONS
PLT SU	PLANT SUPPORT
SAQV	SAFETY ASSESSMENT & QV

Region II
NORTH ANNAPLANT ISSUE MATRIX
by Primary Functional Area

Date	Source	Functional Area	ID	Type	Template Codes	Item Description
01/30/1999	1998011	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: Ter:	Tag outs for battery chargers 1-III and 1-IV, instrument air compressor 1-1A-C-1, emergency diesel generator 2H, and component cooling water pump 2-CC-P-1A, were properly performed. The tag outs properly reflected the work scope and all equipment was appropriately tagged in the correct positions.
01/30/1999	1998011	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: 2A Ter: 5C	The decision-making process to initiate the extreme cold weather procedure was reasonable and the procedure was properly implemented. The licensee's actions to correct a frozen casing cooling tank level instrument were appropriate.
01/30/1999	1998011	Pri: OPS Sec:	NRC	POS	Pri: 2A Sec: 2B Ter:	The overall condition of risk significant portions of the instrument air system was good. Components were properly aligned, labeled, and maintained. The running air compressor operated within normal operating limits. The area around the air compressors was clean. The licensee properly implemented maintenance rule requirements.
01/30/1999	1998011	Pri: OPS Sec:	NRC	POS	Pri: 2A Sec: 2B Ter:	Housekeeping in the service water pump building was good and was a marked improvement when compared to conditions previously observed. The diesel-driven fire pump and its support equipment were also in good condition and properly aligned for automatic operation.
01/30/1999	1998011-01	Pri: OPS Sec:	Licensee	NCV	Pri: 1A Sec: 3A Ter:	A Non-Cited Violation was identified for failure to test the Unit 1 boron injection tank outlet valves in accordance with Technical Specification 4.0.5 requirements. The cause of the missed surveillance test was due to personnel error during a procedure change.
12/19/1998	1998010	Pri: OPS Sec: MAINT	NRC	POS	Pri: 1C Sec: Ter:	Technical Specifications were satisfied for a Station Nuclear Safety and Operating Committee meeting. The meeting was effective because there was sufficient detail presented and discussed to properly disposition the issues.
12/19/1998	1998010	Pri: OPS Sec: MAINT	NRC	POS	Pri: 1A Sec: 2A Ter: 3B	The component cooling system was properly aligned and in good condition. Selected risk significant system components were properly labeled and well maintained. System operation was consistent with the Updated Final Safety Analysis Report description and operator knowledge of the system was excellent. Maintenance rule requirements for system monitoring were satisfied.
12/19/1998	1998010	Pri: OPS Sec: MAINT	NRC	POS	Pri: 1A Sec: 2A Ter: 4B	Freeze protection procedures were comprehensive and effectively implemented. The overall condition of freeze protection systems was acceptable. Engineering had evaluated long standing heat trace system deficiencies and initiated efforts to improve system performance. A design change package had not yet been initiated.
12/19/1998	1998010	Pri: OPS Sec: MAINT	NRC	POS	Pri: 1C Sec: 2A Ter:	Equipment needed for establishing auxiliary building ventilation for a control room fire was in place, properly labeled, and in good condition.

Region II
NORTH ANNAPLANT ISSUE MATRIX
By Primary Functional Area

Date	Source	Functional Area	ID	Type	Template Codes	Item Description
12/19/1998	1998010	Pri: OPS Sec: MAINT	NRC	POS	Pri: 3B Sec: 2A Ter:	The operator conducted auxiliary building rounds in a thorough and professional manner and was knowledgeable of plant systems. Housekeeping conditions in the auxiliary and fuel handling buildings were good as evidenced by proper lighting, proper storage of equipment, proper control of foreign material, and general cleanliness.
11/07/1998	1998009	Pri: OPS Sec:	NRC	NEG	Pri: 4A Sec: Ter:	A negative observation was identified for including improper references as bases in Updated Final Safety Analysis Report (UF SAR) change packages. Recent UF SAR change packages have showed a noticeable improvement in this area.
11/07/1998	1998009	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: Ter:	The Unit 1 startup and ascension to full power were carefully controlled. The licensee continued to assign operators to specific tasks such as pulling rods, turbine roll and unit synchronization, and extra supervisors for these tasks. This operating practice continued to represent a sound operating philosophy towards safe plant operation.
11/07/1998	1998009	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: 2A Ter:	The Quench Spray System for Unit 2 was properly aligned in accordance with correct procedures and drawings. The emergency diesel generator (EDG); fuel oil transfer system was properly aligned and in good condition. The fire protection system for the EDG fuel transfer pump rooms was verified to be operable based on discussions with a fire protection specialist and a review of completed surveillance tests.
11/07/1998	1998009	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: 3A Ter: 3C	The Unit 1 transition from Mode 3 to Mode 4 was performed well. Numerous operations and maintenance activities were carefully controlled as evidenced by proper procedure usage, communications, and appropriate management oversight. Several Technical Specification requirements were verified by the inspectors and no problems were found.
11/07/1998	1998009-02	Pri: OPS Sec:	Licensee	NCV	Pri: 1A Sec: 5C Ter: 5B	A non-cited violation of Technical Specifications 3.0.4 and 3.6.2.2 was identified for failure to ensure that the casing cooling pump 1-RSP-3B was operable before Unit 1 entered Modes 4 and above and for operation in these modes longer than allowed by technical specification action 3.6.2.2(a). The licensee's reporting efforts, initial cause determination and corrective actions were comprehensive in that evaluations were well thought out and understood.
11/07/1998	1998009	Pri: OPS Sec: MAINT	NRC	POS	Pri: 1A Sec: 4B Ter:	The pre-job briefing for zero power physics testing was thorough. Special test exception requirements of TS 3.10.1 were satisfied. A good team effort by operators, engineers, and supervision contributed to zero power physics testing evolutions being satisfactorily completed.
11/07/1998	1998009-01	Pri: OPS Sec: MAINT	Licensee	NCV	Pri: 3A Sec: 2B Ter: 1A	A non-cited violation was identified for failure to perform testing of the Solid State Protection System in accordance with plant procedures. Because the evolution was performed out-of-sequence, an inadvertent engineered safety feature actuation occurred. The event was significant because there was a loss of test control.
10/03/1998	1998008	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: Ter:	Technical specification (TS) requirements for core alterations were satisfied during the upper internals removal from the reactor vessel. The core alterations checklist properly reflected TS requirements.

United States Nuclear Regulatory Commission

PLANT ISSUE MATRIX

By Primary Functional Area

Date	Source	Functional Area	ID	Type	Template Codes	Item Description
10/03/1998	1998008	Pri: OPS Sec:	NRC	POS	Pri: 1A Sec: 3B Ter:	The Unit 1 shutdown for refueling was carefully performed. Shutdown activities were performed in accordance with plant procedures. Operators had received special shutdown training which prepared them well.
10/03/1998	1998008-01	Pri: OPS Sec:	Licensee	NCV	Pri: 3A Sec: 1A Ter:	A non-cited violation was identified for failure to properly position two isolation valves associated with the reactor coolant system (RCS) level standpipe. The valves were closed when they should have been open which caused RCS standpipe level to be faulty. Although the licensee had not begun the drain down evolution when the problem was identified and corrected, the inspectors were concerned with the event because two operators had signed the procedure as completed when the action to ensure the valves were open was not performed.
10/03/1998	1998008	Pri: OPS Sec: MAINT	NRC	POS	Pri: 1A Sec: Ter:	The Unit 1 residual heat removal system was properly aligned and in good condition. System components reflected plant drawings and operating procedures and were properly labeled.
10/03/1998	1998008	Pri: OPS Sec: MAINT	NRC	POS	Pri: 1B Sec: 2A Ter:	The Unit 2 reactor trip and subsequent startup activities were carefully controlled. The operating crew was well-prepared for the unit restart. All systems and components operated as designed.
10/03/1998	1998008	Pri: OPS Sec: MAINT	NRC	POS	Pri: 1B Sec: 2B Ter:	Operator response to erratic automatic operation of the B steam generator main feedwater regulating valve (MFRV) was prompt and effectively stabilized feedwater flow. Subsequent troubleshooting and repair activities were effective as evidenced by continued satisfactory automatic operation of the MFRV for the remainder of the inspection period.
10/03/1998	1998008	Pri: OPS Sec: MAINT	NRC	POS	Pri: 2A Sec: Ter:	At the beginning of the Unit 1 refuelling outage, containment conditions were good in that containment coatings were intact, boron deposits were minimal and areas were typically free of dirt and debris.
09/26/1998	1998005	Pri: OPS Sec: ENG	NRC	NEG	Pri: 4C Sec: 5B Ter:	A weakness was identified in the licensee's process for completion of operability evaluations. The final operability evaluation evaluation which determined the effect of missing pipe supports on the operability of the AFW system was not completed until more than six weeks after the initial missing support was identified.
09/04/1998	1998301	Pri: OPS Sec:	NRC	NEG	Pri: 3B Sec: Ter:	During the initial license examination operating tests, weaknesses were noted in the areas of determining tail pipe temperature with a leaking PORV, identification of radiological posting requirements, reluctance of ROs to take manual action without SRO prior approval, and the willingness of two of the four crews to enter Technical Specification 3.0.3 when it was preventable.
09/04/1998	1998301	Pri: OPS Sec:	NRC	POS	Pri: 3A Sec: 1A Ter:	Control room activities were observed during the examination validation and examination weeks. The operators were found to be attentive and professional in their duties.

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Date	Source	Functional Area	ID	Type	Template Codes	Item Description
05/04/1998	1998301	Prt: OPS Sec:	NRC	POS	Prt: 3B Sec: 3A Ter:	Fourteen of fifteen candidates passed the initial license examination. Overall performance on the operating test was satisfactory with strengths noted in the areas of 3-way communication, crew briefs and annunciator response procedure usage.
09/04/1998	1998301	Prt: OPS Sec:	NRC	POS	Prt: 3B Sec: 5C Ter:	In general, the examiners found the as-submitted written license initial examination and operating tests met the requirements of NUREG-1021 with one exception in the area of JPM follow-up questions which was noted to need improvement. The examination quality was improved as compared to the 1996 examination submittal.
01/30/1999	1998011	Prt: MAINT Sec:	NRC	POS	Prt: 2B Sec: 3A Ter: 3B	Planned maintenance on the Unit 1 instrument air compressor cooling water heat exchangers. 2H stub bus relays, and 1A process vent blc- expansion joint was properly performed. Workers were knowledgeable and followed work package instructions. The work was properly approved and risk significant activities were properly evaluated for their impact on the plant's core damage frequency.
01/30/1999	1998011	Prt: MAINT Sec:	NRC	POS	Prt: 2B Sec: 3A Ter: 3B	Periodic tests associated with Unit 1 control rods, Unit 2 solid state protection system, and the Unit 2 quench spray system were properly performed. The tests satisfied TS requirements and were performed by knowledgeable individuals who properly followed their procedures. Systems and components were properly returned to their normal plant configuration.
12/19/1998	1998010	Prt: MAINT Sec:	NRC	POS	Prt: 3A Sec: 3B Ter:	Maintenance work activities observed on Service Water Pump 1-SW-P-1A, Charging Pump 1-CH-P-1B, the Unit 2 Train A solid state protection system and a casing cooling tank recirculation spray temperature element were conducted in a thorough manner by skillful technicians.
11/07/1998	1998009	Prt: MAINT Sec:	NRC	POS	Prt: 2A Sec: 3A Ter:	Maintenance work activities observed on Service Water Pump 1-SW-P-1A, Charging Pump 1-CH-P-1B, the Unit 2 Train A solid state protection system and a casing cooling tank recirculation spray temperature element were conducted in a thorough manner by skillful technicians.
11/07/1998	1998009	Prt: MAINT Sec:	NRC	POS	Prt: 2B Sec: 2A Ter: 3B	Miscellaneous preplanned maintenance activities were properly performed. The activities were approved by station management and operations personnel. Risk significant structures, systems, and components were zero maintenance preventable functional failures for the recombiner which indicated to the inspectors their assignments and followed work package instructions.
11/07/1998	1998009	Prt: MAINT Sec:	NRC	POS	Prt: 2B Sec: 2A Ter: 3B	The Unit 2 hydrogen recombiner quarterly flow test to verify operability of system check valves was properly performed. Test instruments were properly configured and procedure execution was appropriate. There were zero maintenance preventable functional failures for the recombiner which indicated to the inspectors their assignments and followed work package instructions.
10/03/1998	1998008	Prt: MAINT Sec:	NRC	POS	Prt: 2A Sec: 2B Ter:	A slow start test surveillance of the 2H emergency shutdown diesel generator met procedural and technical specification requirements. Overall testing of the fuel oil day tank switch was appropriately performed. A work request to repair a

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Date	Source	Functional Area	ID	Type	Template Codes	Item Description
10/03/1998	1998008	Pt: MAINT	NRC	POS	Pt: 2B Sec: 3A Ter:	Observation of the new 1J EDG fan/hub assembly and review of the completed work package and associated test results indicated that the fan/hub replacement was properly performed.
10/03/1998	1998008	Pt: MAINT	NRC	POS	Pt: 2B Sec: 3A Ter:	Inservice examination activities were performed in a skillful manner. Discontinuities were properly recorded and evaluated by knowledgeable examiners using approved procedures. Records for the C steam generator tube eddy current examinations and piping component flow accelerated corrosion ultrasonic examinations were complete, and evaluations/acceptance of examination results were conducted in accordance with applicable procedures, technical specifications and industry standards.
10/03/1998	1998008	Pt: MAINT	NRC	POS	Pt: 4B Sec: 5B Ter: 2A	The licensee performed walkdown inspections of service water system stainless steel piping as required to identify through-wall leakage caused by microbiological induced corrosion (MIC). Radiographs were taken as required to monitor MIC growth in the system. Improvements in chemical addition were being investigated and four four-inch diameter 316L stainless steel lines on both units were planned to be replaced with improved materials in late 1998 and during 1999.
09/26/1998	1998005	Pt: MAINT	NRC	NEG	Pt: 2B Sec: Ter:	AFW pump surveillance test procedures permitted operation of the pump in excess of the piping design pressure and relief valve setpoint during surveillance testing.
09/26/1998	1998005	Pt: MAINT	NRC	POS	Pt: 2A Sec: Ter:	The material condition of AFW equipment and components examined was good as well as housekeeping in the general areas around equipment and components in the AFW pump houses and main steam valve houses.
09/26/1998	1998005	Pt: MAINT	NRC	POS	Pt: 2A Sec: 2B Ter:	The maintenance of the auxiliary feedwater system components has been good. The AFW system has performed reliably. Maintenance practices have been adequate.
09/26/1998	1998005	Pt: MAINT	NRC	STR	Pt: 2A Sec: 2B Ter:	The maintenance program for the 4 kV circuit breakers was considered a strength. This conclusion was based on good procedures, refurbishment of breakers at ten-year maximum intervals, and the excellent practice of periodic functional testing of all control circuit devices.
01/30/1999	1998011	Pt: ENG	NRC	POS	Pt: 5A Sec: 5C Ter:	The licensee has been proactive in identifying and repairing service water system (SWS) microbiologically induced corrosion (MIC) pinhole leaks and has followed the NRC-approved generic relief request for resolving these SWS leaks. Development of long-term plans to correct the MIC leaks has been ongoing yet the licensee has not determined the overall scope of these plants.
01/30/1999	1998011-02	Pt: ENG	Licensee	NCV	Pt: 4A Sec: 5A Ter: 5C	A non-cited violation was identified for design deficiencies of the auxiliary building ventilation system which involved seismic qualifications of the control air supply and electrical power supply qualifications. Initial corrective actions, which included a justification for continued operation that placed strict limits on the emergency core cooling system leakage operational limits and planned actions to satisfy the design requirements were commensurate with safety.

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Date	Source	Functional Area	ID	Type	Template Codes	Item Description
12/19/1998	1998010	Prt: ENG Sec:	NRC	POS	Prt: 4A Sec: 4C Ter:	Modifications of the outside recirculation pump (2-RS-P-2A) seal water head tank vent pathway met design change package requirements. Actions taken were appropriate in response to recurring high head tank level alarm conditions. Head tank level alarm frequency since performance of the modifications had significantly decreased.
12/19/1998	1998010	Prt: ENG Sec: MAINT	NRC	POS	Prt: 4A Sec: 4C Ter:	A modification of the North Anna reservoir spillway diesel generator control panel met design change package requirements.
12/19/1998	1998010	Prt: ENG Sec: OPS	NRC	POS	Prt: 4C Sec: Ter:	The system engineer training program met 10 CFR 50.120 requirements. The program included the necessary elements of a systems approach to training. Periodic evaluations and revisions and management review of training effectiveness were being performed.
11/07/1998	1998009	Prt: ENG Sec:	NRC	POS	Prt: 2B Sec: 4B Ter:	The Unit 1 first stage turbine impulse pressure rescaling/normalization efforts were satisfactorily performed. Implementation of the design change was successful as evidenced by satisfactory performance of affected control/protection circuitry.
11/07/1998	1998009	Prt: ENG Sec:	NRC	POS	Prt: 4B Sec: 3A Ter:	Safety-related material receipt inspections on schedule 80 piping were performed in a thorough and acceptable manner and in accordance with approved procedures. The piping was properly tracked, inspected, and tagged.
10/03/1998	1998008	Prt: ENG Sec:	NRC	NEG	Prt: 4C Sec: 5C Ter:	In the Maintenance Rule recovery plan, the limited discussions of condition monitoring of select systems, the omission of certain components in the PRA model and, the poor technical justification of the recirculation system's success criteria were negative observations.
10/03/1998	1998008	Prt: ENG Sec:	NRC	POS	Prt: 5C Sec: 2B Ter:	Radiant energy shields in the Unit 1 containment were properly modified to address the Thermo-Lag combustibility issue.
10/03/1998	1998008	Prt: ENG Sec:	NRC	STR	Prt: 4C Sec: 5C Ter:	The licensee accomplished sufficient corrective actions under the Maintenance Rule recovery plan to conclude that the Maintenance Rule goal setting and performance criteria for the systems in the probabilistic risk assessment (PRA) model were consistent with their safety significance. The risk ranking methodology was a strength.
10/03/1998	1998008-02	Prt: ENG Sec:	Licensee	NCV	Prt: 2B Sec: Ter:	A non-cited violation was identified for Unit 1, Train A reactor vessel level indication system (RV LIS) dynamic flow range indication not being properly normalized.

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Date	Source	Functional Area	ID	Type	Template Codes	Item Description
09/26/1998	1998005	Pri: ENG Sec:	NRC	NEG	Pri: 4C Sec:	The licensee's process for screening potential changes to determine if a 10 CFR 50.59 safety evaluation was required does not include an independent review of the initial safety screening.
09/26/1998	1998005	Pri: ENG Sec:	NRC	NEG	Pri: 5A Sec: 5C	A weakness in the licensee's self-assessment was identified due to lack of consistency in the methodology. reporting of results, documenting identified deficiencies, and tracking corrective actions.
09/26/1998	1998005	Pri: ENG Sec:	NRC	NOED	Pri: 4A Sec:	Two examples of failure to update the UFW AR were identified. Discretion was exercised for this violation of 10 CFR 50.71(e) and was not cited (EA 98-500).
09/26/1998	1998005	Pri: ENG Sec:	NRC	POS	Pri: 4A Sec:	Design and installation of AFW electrical equipment was in accordance with good industry practices. NRC requirements, and the licensing basis. The AFW system meets the single failure criterion.
09/26/1998	1998005	Pri: ENG Sec:	NRC	POS	Pri: 4A Sec:	The electrical calculations reviewed were found to be accurate and consistent with licensing commitments. The electrical calculation quality was good.
09/26/1998	1998005	Pri: ENG Sec:	NRC	POS	Pri: 4A Sec:	Instrument setpoint calculations used an approved methodology and considered appropriate sources of instrumentation inaccuracies.
09/26/1998	1998005	Pri: ENG Sec:	NRC	POS	Pri: 4C Sec:	The design control procedures complied with the requirements of 10 CFR 50.59 and 10 CFR 50. Appendix B, Criterion III. The instructions/checklist for preparation of 10 CFR 50.59 safety evaluations were indepth and thorough. The design control program/procedures are good.
09/26/1998	1998005	Pri: ENG Sec:	NRC	WK	Pri: 4A Sec:	The quality of AFW mechanical design calculations was poor. Numerous discrepancies were identified between various design calculations and design documents. Calculation quality was identified as 'weakness'.
09/26/1998	1998005-01	Pri: ENG Sec:	NRC	VIO IV	Pri: 4C Sec:	A violation was identified for failure to construct the Unit 1 AFW pipe supports in accordance with the design drawing requirements.

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09/26/1998	1998005-02	Pri: ENG Sec: MAINT	NRC	VIO IV	Pri: 2A Sec: 5C Ter:	The material condition of piping and housekeeping in the AFW pipe tunnels was very poor. A violation was identified for failure to take effective corrective action to address corrosion problems in the Unit 2 AFW pipe tunnel identified previously in September, 1996.
09/26/1998	1998005-03	Pri: ENG Sec: MAINT	NRC	VIO IV	Pri: 2B Sec: Ter:	A violation of 10 CFR 50.55(a) was identified for failure to include safety-related AFW pipe supports installed in the AFW pipe tunnels in the ISI program.
01/30/1999	1998011	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: 2A Ter:	The licensee's surveys accurately measured radiation and high radiation areas and all areas were properly posted. All locked high radiation areas were properly secured. Good use of posted radiation dose rate information in the auxiliary building was observed. Overall, housekeeping within the auxiliary building was good with some exceptions.
01/30/1999	1998011	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: 2A Ter:	In general, radiation detection and measurement instrumentation was found in good operating condition. Periodic source checks and instrument calibrations were being performed. Calibration records documented appropriate calibration methods and were in satisfactory order.
01/30/1999	1998011	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: 2A Ter:	Security posts were properly manned, lighting conditions were appropriate, security personnel were attentive and the perimeter material condition was properly maintained.
01/30/1999	1998011	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: 3A Ter:	The removal of a reactor coolant system letdown filter was carefully performed. Workers adhered to their radiation work permit requirements and appropriately followed their procedures. Health Physics personnel were effective in supporting the workers by ensuring radiation exposure was kept to a minimum.
12/19/1998	1998010	Pri: PLTSUP Sec: OPS	NRC	NEG	Pri: 1C Sec: 4C Ter:	Portions of Revisions 19, 20, and 22 to the site emergency plan lacked specificity and were subject to interpretation. Following discussions with the licensee, the inspectors concluded that the changes did not have an adverse impact on the site emergency response program. The licensee plans to revise the parts discussed.
12/19/1998	1998010	Pri: PLTSUP Sec: OPS	NRC	POS	Pri: 3A Sec: 3B Ter:	The fire team properly responded to an unannounced fire drill in the fuel oil pump house. Fire team members responded quickly to the fire scene, were generally familiar with fire fighting equipment, and knowledgeable of standard fire fighting tactics. Support personnel were effective in assisting the fire team.
11/07/1998	1998009	Pri: PLTSUP Sec:	NRC	POS	Pri: 1C Sec: Ter:	The licensee's procedure for implementing the requirements of 10 CFR 19.11 was comprehensive. Posting locations were of sufficient number and conspicuously located to ensure workers were properly advised of required notices. All required postings were in place.

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Date	Source	Functional Area	ID	Type	Template Codes	Item Description
11/07/1998	1998009	Pt: PLTSUP Sec:	NRC	POS	Pt: 1C Sec: Ter:	The security compensatory measures program effectively compensated for failed or degraded security equipment and was in accordance with Physical Security Plan commitments and regulatory requirements.
11/07/1998	1998009	Pt: PLTSUP Sec:	NRC	POS	Pt: 1C Sec: Ter:	Alarm stations were equipped, manned, and operated according to Physical Security Plan commitments and regulatory requirement. Alarm station personnel were capable of maintaining continuous onsite and offsite communications according to Physical Security Plan commitments and regulatory requirement.
11/07/1998	1998009	Pt: PLTSUP Sec:	NRC	POS	Pt: 1C Sec: 3B Ter:	The Physical Security Plan and Training and Qualification: Plan changes did not decrease the effectiveness of the respective plans and had been reported according to regulatory requirements.
11/07/1998	1998009	Pt: PLTSUP Sec:	NRC	POS	Pt: 1C Sec: 4C Ter: 1A	Protected area intrusion detection systems were functional, effective, and in accordance with the Physical Security Plan commitments and regulatory requirements. Protected area assessment aids were functional and effective for both covert and overt penetration attempts.
11/07/1998	1998009	Pt: PLTSUP Sec:	NRC	POS	Pt: 2A Sec: 1C Ter:	The testing and maintenance program for security equipment was concise, efficient, effective, thorough and timely. This area was considered a strength in the security program.
10/03/1998	1998008	Pt: PLTSUP Sec:	NRC	POS	Pt: 1C Sec: Ter:	The licensee maintained an effective program for the control of liquid and gaseous radioactive effluents from the plant. The amount of activity released from the plant in liquid and gaseous effluents has remained stable over the last several years and the radiation doses resulting from those releases were a small percent of regulatory limits.
10/03/1998	1998008	Pt: PLTSUP Sec:	NRC	POS	Pt: 1C Sec: Ter:	The licensee had complied with the sampling, analytical and reporting requirements for the radiological environmental monitoring program, the environmental sampling equipment was being well maintained, and the monitoring program was effectively implemented.
10/03/1998	1998008	Pt: PLTSUP Sec:	NRC	POS	Pt: 1C Sec: 5C Ter:	The licensee's water chemistry control program for monitoring primary and secondary water quality had been implemented in accordance with technical specification requirements and the Electrical Power Research Institute guidelines for pressurized water reactor water chemistry. The licensee responded well to unexpected elevated dose rates during the April 1998 refueling outage by developing and implementing an effective program to reduce personnel exposure.

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Type Codes:

BU	Bulletin
CDR	Construction
DEV	Deviation
EEI	Escalated Enforcement Item
IFI	Inspector follow-up item
LER	Licensee Event Report
LC	Licensing Issue
MISC	Miscellaneous
MV	Minor Violation
NCY	NonCited Violation
NEG	Negative
NOED	Notice of Enforcement Discretion
NON	Notice of Non-Conformance
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

Functional Areas:

OPS	Operations
MAINT	Maintenance
ENG	Engineering
PLTSUP	Plant Support
OTHER	Other

Legend**Functional Areas:**

NRC	NRC
Self	Self-Revealed
Licensee	Licensee
Part 21	
POS	
SGI	
STR	
URI	
VIO	
WK	

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.

**NORTH ANNA
INSPECTION PLAN**

INSPECTION PROCEDURE/ TEMPORARY INSTRUCTION	TITLE/PROGRAM AREA	NUMBER OF INSPECTORS	PLANNED INSPECTION DATES	TYPE OF INSPECTION - COMMENTS
IP 81700	Physical Security Program for Power Reactors	1	April 1999	Core Inspection
IP 60855	Operation of an Independent Spent Fuel Storage Installation (ISFSI)	1	May 1999	Core Inspection: Focus on fuel loading, welding and heavy lifts
IP 84750	Radioactive Waste Treatment and Effluent and Environmental Monitoring.	1	June 1999	Core Inspection
IP 86750	Solid Radioactive Waste Management and Transportation of Radioactive Materials.			
IP 81700	Physical Security Program for Power Reactors	1	August 1999	Core Inspection
IP 92903	Followup - Engineering	2	September 1999	Regional Initiative - SSEI violation followup
IP 73753	Inservice inspection	1	September 1999	Core Inspection: Focus on MIC activities and augmented inservice inspection program
IP 83750	Occupation Radiation Exposure	1	September 1999	Core Inspection
IP 40500	Effectiveness of Licensee Controls in Identifying, Resolving, and Preventing Problems	3	TBD	Core Inspection: Focus on Engineering activities including corrective actions for self-assessment issues.