UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW SUITE 23T85
ATLANTA, GEORGIA 30303-8931

January 2, 2004

Virginia Electric and Power Company
ATTN: Mr. David A. Christian
Sr. Vice President and
Chief Nuclear Officer
Innsbrook Technical Center - 2SW
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: SURRY POWER STATION - NRC PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT 05000280/2003009 AND 05000281/2003009

Dear Mr. Christian:

On December 5, 2003, the U. S. Nuclear Regulatory Commission (NRC) completed a team inspection at the Surry Power Station, Units 1 and 2. The enclosed report documents the inspection findings which were discussed on December 5, 2003, with Mr. Blount and other members of your staff.

This inspection was an examination of activities conducted under your license as they relate to the identification and resolution of problems, and compliance with the Commission's rules and regulations, and with the conditions of your license. Within these areas, the inspection involved examination of selected procedures and representative records, observation of activities, and interviews with personnel.

On the basis of the sample selected for review, the team concluded that in general, problems were properly identified, evaluated and corrected. There was one green finding identified during the inspection regarding failure to properly translate design basis for the Unit 1 turbine driven auxiliary feedwater pump into procedures. This finding was determined to be a violation of NRC requirements. However, because of its very low safety significance and because it was entered into your corrective action program, the NRC is treating this finding as a non-cited violation in accordance with Section VI.A.1 of the NRC's Enforcement Policy. If you deny this non-cited violation, you should provide a response with the basis for your denial within 30 days of the date of this inspection report, to the U. S. Nuclear Regulatory Commission, ATTN. Document Control Desk, Washington DC 20555-0001, with copies to the Regional Administrator, Region II; the Director, Office of Enforcement, U. S. Nuclear Regulatory Commission, Washington DC 20555-0001; and the NRC Resident Inspector at the Surry Power Station.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document

Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA by Joel T. Munday Acting For/

Kerry D. Landis, Chief
Reactor Projects Branch 5
Division of Reactor Projects

Docket Nos.: 50-280, 50-281
License Nos.: DPR-32, DPR-37

Enclosure: NRC Inspection Report No. 05000280, 281/2003009
w/Attachment: Supplemental Information

cc w/encl:
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U.S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos.: 50-280, 50-281

License Nos.: DPR-32, DPR-37

Report Nos.: 05000280/2003009, 05000281/2003009

Licensee: Virginia Electric and Power Company (VEPCO)

Facility: Surry Power Station, Units 1 & 2

Location: 5850 Hog Island Road
Surry, VA 23883

Dates: November 17 - 21, 2003
December 1 - 5, 2003

Inspectors: M. Gray, Senior Resident Inspector - Hope Creek, (Lead Inspector)
D. Arnett, Reactor Inspector - Region II
B. Bearden, Senior Resident Inspector - Browns Ferry
P. Fillion, Reactor Inspector - Region II
J. Lenahan, Senior Reactor Inspector - Region II

Approved by: K. Landis, Chief, Reactor Projects Branch 5
Division of Reactor Projects

Enclosure

SUMMARY OF FINDINGS

IR 05000280/2003009, IR 05000281/2003009; 11/17/2003 - 12/5/2003; Surry Power Station, Units 1 & 2, biennial baseline inspection of the identification and resolution of problems. A violation was identified in the area of Prioritization and Evaluation of Issues.

The inspection was conducted by three regional inspectors and two senior resident inspectors from other sites. One green finding of very low risk significance was identified during this inspection and was classified as a non-cited violation. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

Identification and Resolution of Problems

The team concluded that Surry personnel were properly identifying problems and entering them into the corrective action program at a threshold that supported safe plant operation. The team did not identify instances where conditions adverse to quality were handled outside the corrective action process. The team further concluded that evaluations were prioritized and completed in a timely fashion consistent with the safety significance of the issue. Cause evaluations generally were found to address technical issues to a depth necessary to identify likely causes. The team identified one finding regarding a less than adequate procedure change evaluation that impacted the reliability of the Unit 1 turbine driven auxiliary feedwater pump. The team found that corrective actions were adequately tracked and completed in a time frame commensurate with their safety significance.

Cornerstone: Mitigating Systems

- Green. The inspectors identified a non-cited violation of 10 CFR 50 Appendix B, Criteria III (Design Control), in that, a design basis requirement for the Unit 1 auxiliary feedwater pump turbine governor oil viscosity was not correctly translated into a March 2001 procedure revision. The procedure revision failed to require the main steam valve house room temperature to be above that required for minimum vendor specified governor oil viscosity. This non-cited violation contributed to the pump's failure to continue to operate after starting in response to a reactor trip on January 25, 2003.

  This finding is greater than minor because it affected the reliability of the Unit 1 turbine driven auxiliary feedwater pump. However, the finding was determined to be of very low safety significance since (1) except for January 25, 2003, conditions after the procedure change in March 2001 would not have been expected to lower main steam valve house room temperatures below acceptable temperatures, and (2) on January 25, 2003, the two motor driven auxiliary feedwater pumps were operable and performed as expected. Surry personnel tracked corrective actions for this issue under plant issue S-2003-5822. (Section 4OA2.b)

Report Details

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution

a. Effectiveness of Problem Identification

(1) Inspection Scope

The inspectors reviewed the Surry Power Station corrective action program procedures to become familiar with the process and threshold for identifying problems. Surry Station personnel identified and documented problems electronically in plant issue (PI) reports. These PIs were tracked and controlled in the corrective action program database. To better understand the threshold for problem identification, the inspectors interviewed personnel responsible for daily monitoring of PIs and observed routine management meetings where recently initiated PIs were screened for significance, priority and assignment.

The inspectors selected a sample of PIs, listed in the attachment to this report, for review to determine whether Surry personnel were identifying problems at the proper threshold. The sample selection process was risk informed by focusing on PIs that documented problems in the top ten risk significant systems identified in the most recent Surry Probabilistic Risk Assessment (PRA). Additionally, component level risk information from Surry maintenance rule program documents was reviewed to help ensure the sample of PIs focused on risk significant component functions. These systems and components included the auxiliary feedwater (AFW), 4160 volt distribution and service water systems and the emergency diesel generators.

The inspectors supplemented their review of PIs with a review of database sorts from other plant administrative processes to determine whether problems identified through these other processes were appropriately entered into the corrective action process. In the operations area, the inspectors reviewed operator work around lists and control room indication and alarm problems. Maintenance work request and work order database sorts were also reviewed to determine whether more than minor equipment problems, that required an evaluation, were being entered into the corrective action process. The inspectors reviewed engineering database lists and documents such as system health reports, maintenance rule reports, evaluations of deferred preventive maintenance tasks, operational experience type PIs, and lists of deferred or canceled modifications to determine whether problems identified in these engineering processes were appropriately being entered into the corrective action process. The inspectors also reviewed the potential problem report (PPR) database maintained by design engineering to determine whether problems described in this database were entered into the corrective action program when appropriate.

Additionally, the inspectors reviewed a sample of self assessments and nuclear oversight reports to determine whether problems identified in these evaluations were entered into the corrective action process at a proper threshold. Finally, the inspectors walked down selected plant areas to determine whether visual indications of equipment

problems were identified and addressed appropriately in the maintenance work process and the corrective action program. During the walkdowns, a sample of equipment deficiency tags were reviewed to verify that an associated work request and PI, when appropriate, were initiated.

(2) Assessment

The inspectors concluded that Surry personnel were identifying problems at an appropriate threshold necessary to support safe plant operation. The inspectors did not identify instances where conditions adverse to quality were handled outside the corrective action process. PIs generally described the problems in appropriate detail to understand the scope and significance of the issues and described the initial actions taken. PIs also consistently referenced prior or similar instances of the issue at Surry such that the problem history was available at the daily screening meeting.

The inspectors determined that problems identified in operations and maintenance administrative processes were entered into the corrective action program at a threshold consistent with procedural requirements. Maintenance work requests were found to consistently cross-reference a PI when the issue required more than a “broke-fix” response. Additionally equipment deficiency tags, reviewed in the plant, were found to be entered into the maintenance work order system and typically associated with a PI.

Similarly the inspectors did not identify issues described in engineering maintenance rule reports, system health reports, the potential problem report database or proposed modification lists that were not also appropriately entered into the corrective action process. The inspectors further determined problems identified in self assessment reports and nuclear oversight audit documents were consistently entered into the corrective action program. Finally, the inspectors concluded that equipment problems were being identified at a proper threshold based on only finding a few minor previously unidentified equipment issues during plant walkdowns.

b. Prioritization and Evaluation of Issues

(1) Inspection Scope

The inspectors reviewed the PIs listed in the Attachment to determine whether Surry personnel adequately prioritized and evaluated problems to prevent their recurrence. Surry corrective action process procedures required a detailed root cause evaluation be completed for significant problems. Potentially significant problems generally received an apparent cause evaluation and routine problems were trended and closed to a work order or other specific action.

The inspectors reviewed a sample of root cause evaluations to determine whether Surry personnel evaluated significant problems in adequate technical depth to ensure the scope of the problem was addressed and the likely causal factors were identified. Operability and reportability assessments in these PIs were reviewed to determine whether applicable technical specification action and reportability requirements were

met. The inspectors also evaluated Surry personnel's consideration of prior equipment operating trends and industry operating experience.

The inspectors selected a sample of apparent cause evaluations with an emphasis on problems in the more risk significant systems as identified in the Surry probabilistic risk assessment report. The apparent cause evaluations were reviewed to determine whether the problems were evaluated in adequate detail to identify reasonable causes and correct the condition. The inspectors reviewed operability and reportability assessments to ensure applicable requirements were met.

The inspectors further reviewed a sample of routine problem reports to verify the problems were minor in nature and did not require a detailed evaluation to prevent their recurrence. The inspectors reviewed the corrective action database for a sample of these routine PIs to verify they were not repetitive or more significant than described.

A sample of PIs addressing the following specific types of issues were also reviewed. PIs for a sample of previous non-cited violations were reviewed to ensure the problems were adequately addressed to maintain regulatory compliance. PIs regarding operating experience were reviewed to ensure their applicability to Surry was adequately assessed. The inspectors searched the PI database by keyword to determine whether there were unaddressed problems related to previous NRC generic communications on the potential for AFW steam binding. Finally, a sample of PIs regarding boric acid problems for the last five years were reviewed to ensure there were no longstanding uncorrected problems whose safety significance might be age dependent.

(2) Assessment

The inspectors determined that, in general, Surry personnel prioritized and completed evaluations of plant problems in a timely fashion consistent with the safety significance of the issue. Root cause evaluations were found to address programmatic and technical issues to a depth necessary to identify problem causes and prevent recurrence of the issue. These evaluations appropriately investigated whether there were previous occurrences of the problem and considered industry operating experience to help validate problem causes. The inspectors further determined these evaluations adequately investigated the potential scope of issues to ensure the extent of the problems were addressed. Operability and reportability assessments reviewed met applicable technical specification and reporting requirements.

The inspectors identified a finding of very low safety significance associated with a procedure change that lowered the minimum allowable temperature in the Unit 1 and 2 main steam valve houses. The evaluation for the change was not technically sufficient to support the lower temperature limit. This contributed to an overspeed condition on the Unit 1 turbine driven AFW pump that occurred after a plant trip on January 25, 2003. (See Main Steam Valve House Temperature Evaluation section).

The inspectors determined that Surry personnel completed apparent cause evaluations for less safety significant plant issues that, in general, adequately identified the extent of the issues and corrected the problem. While less detailed than root cause evaluations,

these assessments were found be sufficient to evaluate the problems and identify the scope of the issues. The inspectors did identify two ventilation problem evaluations regarding an auxiliary building damper position (PI S-2001-2157) and a low flow condition in a reactor water storage tank vent (PI S-2003-1251) where the evaluations were not of sufficient detail to ensure the problems were adequately addressed. Additional information was provided during the inspection to determine these issues were minor and did not impact the safety function of the affected ventilation systems.

In regard to problem evaluations of low significance, the inspectors found that lower level problems were adequately trended to ensure the problems were not repetitive or safety significant. Additionally these issues were consistently closed and tracked to completion in other processes such as the work control process. The inspectors did not identify evaluation issues in regard to non-cited violations, boric acid related evaluations, or previous generic NRC communications.

Main Steam Valve House Temperature Evaluation

Introduction

Green. A non-cited violation of 10 CFR 50 Appendix B, Criteria III (Design Control) was identified for failure to ensure that a design basis requirement for the Unit 1 AFW pump turbine governor oil viscosity was correctly translated into procedures.

Description

The inspectors reviewed PI S-2003-0329, concerning an overspeed condition on the Unit 1 turbine driven AFW pump turbine that occurred on January 25, 2003. At the time the plant was starting up when the reactor tripped at 27% reactor power due to an unrelated problem. The turbine and motor driven pumps automatically started on low steam generator level; however the turbine driven AFW pump tripped on overspeed after approximately one and a half minutes of run time. Surry personnel performed a root cause evaluation and determined the most probable causes of the overspeed condition were reduced design margin in the overspeed setpoint, (2) sluggish governor operation due to low room temperatures, (3) increased steam supply line condensation that challenged the governor control system, and (4) less than optimum procedure tolerance setup for the governor linkage. These root causes were also described in LER 280/2003-002-01 dated November 25, 2003.

The inspectors confirmed that corrective actions were identified and being implemented to address these causal factors. These corrective actions included changing the turbine overspeed setpoint to increase margin to that generally accepted in the industry, enhancing procedures to ensure better draining of the turbine steam supply lines, increasing the procedurally required minimum room temperature, repairing the Unit 1 room louver and enhancing the associated louver preventive maintenance task instructions, changing the turbine governor oil type to improve performance over the expected temperature range and improving procedures for governor linkage adjustment.

The Unit 1 turbine driven AFW pump is located in the main steam valve house. During plant walkdowns the inspectors determined this room was normally well above ambient temperatures because feedwater and steam supply lines to the turbine provided significant heating. A thermostat and louvered wall opening to the outside provided further temperature control. The root cause determination concluded this room is normally very warm; however on January 25, 2003, the room was about 40°F due to very low outside temperatures, minimal feedwater and steam line warming due to plant start-up, and a less than adequate louver seal. Consequently the turbine driven AFW pump was started at a lower temperature than normal when it tripped on overspeed. Testing of the turbine governor at this temperature confirmed the response was sluggish. Based on requirements in the turbine governor vendor manual for governor oil viscosity, the root cause evaluation determined the oil in the turbine governor was qualified to a minimum of 43°F.

The inspectors reviewed the operations log procedure that periodically checked room temperatures and found that it had been revised in March 2001 to lower the minimum allowable temperature in the main steam valve house from 60°F to 40°F. The procedure change was made based on a memo from the turbine vendor which indicated the turbine was qualified to start and operate at 40°F. However, the inspectors concluded the evaluation had inadequate technical detail to support the lower temperature because it did not identify the governor oil viscosity at this lower temperature would be outside the range recommended in the governor vendor manual. Additionally the evaluation did not address the potential for increased condensation in the turbine steam supply lines due to the allowed lower room temperature and its impact on the pump's operation. The inspectors noted the steam system was not designed by the turbine vendor and therefore not covered under the vendor memo. The inspectors found that this casual factor was not well developed in the root cause evaluation of this issue. In response to the inspectors observations, Surry personnel initiated PI S-2003-5822.

The Unit 1 turbine driven AFW pump was unreliable on January 25 during plant start-up from approximately 0100 hours, when it was required to be operable, to 0700 hours, when the overspeed condition occurred. Consequently the Unit 1 turbine driven AFW pump was unavailable for approximately 6 hours which is less than the technical specification allowed outage time of 72 hours. Also, there was no additional unavailability time due to this performance issue because, since the applicable procedure was changed in March 2001 to the event in January 2003, there were no other instances where there was a combination of very low ambient temperatures, plant startup conditions and an inadequately sealed louver existed that could have likely lowered main steam valve house temperatures to approximately 40°F.

Analysis

The turbine driven AFW pump is part of a redundant train in a mitigating system designed to remove core decay heat. Therefore, the inspectors concluded this finding was associated with the equipment performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone objective of equipment reliability. The finding

contributed to the pump's failure to continue to operate after starting in response to a reactor trip on January 25, 2003. Thus, this finding is greater than minor.

However, the risk associated with this finding was determined to be of very low safety significance (green) using the NRC Phase 1 significance determination process (SDP) for mitigating systems since the technical specification allowed outage time for the pump was not exceeded and there was no actual loss of system safety function as demonstrated by: (1) except for January 25, 2003, conditions after the procedure change in March 2001 would not have been expected to lower main steam valve house room temperatures below acceptable temperatures and (2) on January 25, 2003, the two motor driven auxiliary feedwater pumps were operable and performed as expected.

Enforcement

10 CFR 50 Appendix B, Criteria III Design Control, requires, in part, that measures be established to assure the applicable design basis for safety related structures, systems and components are correctly translated into specifications, drawings, procedures and instructions. Contrary to the above, in March 2001, Surry personnel did not ensure that the procedural main steam valve house minimum temperature ensured the AFW turbine governor oil viscosity would be maintained within the range required for reliable governor operation. However, because the finding was of very low safety significance (Green) and Surry personnel entered the violation into their corrective action program under PI S-2003-5822, this violation is being treated as a non-cited violation, consistent with Section VI.A.1 of the Enforcement Policy. The NCV is identified as NCV 05000280/2003009-01, Failure to Adequately Evaluate Main Steam Valve House Minimum Temperature Requirements.

c. Effectiveness of Corrective Actions

(1) Inspection Scope

The inspectors reviewed corrective actions identified in the PIs listed in the Attachment to determine whether they addressed the identified causal factors. The inspectors also reviewed the corrective actions to verify these actions were completed on a schedule commensurate with the safety significance of the issue. Furthermore, PI and open work request lists for risk significant systems were reviewed to verify there were not corrective actions in the backlog that individually or collectively were of risk significance to plant safety. Finally, the inspectors reviewed a listing of PIs that were initiated prior to the last problem identification and resolution inspection, but remained open to determine whether the corrective actions associated with these PIs had been implemented in a manner sufficient to prevent the problems from recurring.

(2) Assessment

The inspectors determined that Surry personnel adequately tracked and completed corrective actions in a time frame commensurate with the safety significance of the problem. Corrective actions were completed at the initial stages for problems that affected equipment operability in accordance with technical specification or licensing

basis requirements. Longer term corrective actions were tracked to completion in a timely manner. The inspectors noted that Surry management monitored internal performance indicators of corrective action extensions and timeliness to ensure the program was being adequately implemented.

d. Assessment of Safety-Conscious Work Environment

(1) Inspection Scope

During the course of the inspection, the inspectors interviewed Surry plant staff to determine if conditions existed that would result in personnel being hesitant to raise safety concerns to their management and/or the NRC. The inspectors also reviewed the most recent Surry Employee Concerns Program trend report and case listing to determine whether trends in this program indicated there were barriers to raising safety concerns.

(2) Assessment

The inspectors determined that conditions at Surry Station were conducive to identifying issues. During the inspection plant personnel indicated they were encouraged and expected to identify problems in the course of their work. The inspectors review of the employee concern program trends was consistent with this conclusion.

4OA6 Meetings, Including Exit

The inspectors presented the inspection results to Mr. Blount and other members of his staff at the conclusion of the inspection on December 5, 2003. Surry management acknowledged the results presented. No proprietary information was identified during the inspection.

SUPPLEMENTAL INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

Licensee

R. Blount	Site Vice President
L. Curfman	Employee Concerns Program Coordinate
B. Foster	Director of Nuclear Engineering Programs
M. Gaffney	Director, Safety and Licensing
B. Garber	Acting Supervisor, Licensing
D. Green	System Engineer
E. Haddad	Component Engineer
D. Hart	Staff Engineer
M. Myers	System Engineer
J. Rosenberger	System Engineer
J. Talley	System Engineer
E. Turko	Supervisor, Station Nuclear Safety

NRC

G. McCoy	Senior Resident Inspector
K. Landis	Chief, Reactor Projects Branch 5

ITEMS OPENED, CLOSED AND DISCUSSED

Opened and Closed

05000280/2003009-01	NCV	Failure to Adequately Evaluate Main Steam Valve House Minimum Temperature Requirements (4OA2.b)

Discussed

None

LIST OF DOCUMENTS REVIEWED

Procedures

VPAP-1501, Deviations, Rev. 16
VPAP-1601, Corrective Action, Rev. 18
VPAP-1604, Cause Evaluation Program, Rev. 6
DNAP-1604, Cause Evaluation Program, Rev. 0
VPAP-3002, Operating Experience Program, Rev. 11
DNAP-2000, Work Management Process, Rev. 2
VPAP-1408, System Operability, Rev. 3
VPAP-2401, Fire Protection Program, Rev. 21

0-EPM-0701-01, Electrical Preventive Maintenance - EDG Service and Inspection, Rev. 1
0-OPT-FP-008, Operations Periodic Test Fire Pump Flow Rate Test, Rev 9, Sections relating to NCV 03-07-04 and PI S-2003-0629
Periodic Test Procedure, 0-OPT-FP-008, Fire Pump Rate Test, Rev. 9
VPAP-0808, Emergency Diesel Generator Reliability Program, Rev. 9

Audits and Self-Assessments

Nuclear Oversight Audit Report 02-05, Operations
Nuclear Oversight Audit Report 02-06, Design Control and Engineering Programs
Nuclear Oversight Audit Report 02-11, Maintenance
Operations Self Assessment SPS-SA-03-06, "Plant Status Control and Conduct of Operations"
Operations Assessment OPS-02-07, WANO 2001 Corrective Action Effectiveness Review
Engineering Self Assessment ENGSA-01-010, "Safety and Relief Valve Program"
Maintenance Self Assessment MA-02-04, "Procedure Quality/Usage in Maintenance Process"
Site Services Self Assessment, Painting and Coatings, dated 2/19/02

Non-Cited Violations

NCV 280/03-02-02 (S-2003-1052, S-2003-1525)

NCV 280 and 281/03-02-01 (S-2003-0786, S-2003-1198, S-2003-1522)

NCV 280 and 281/03-07-04 (S-2003-0629)

Plant Issues

S-1998-0122	S-2001-3378	S-2002-0887	S-2002-2770
S-1998-0805	S-2001-3453	S-2002-0957	S-2002-2856
S-1998-1287	S-2001-3460	S-2002-0977	S-2002-3186
S-1998-1541	S-2001-3461	S-2002-1157	S-2002-3200
S-1999-2063	S-2001-3470	S-2002-1306	S-2002-3319
S-2000-0050	S-2001-3534	S-2002-1351	S-2002-3408
S-2000-0716	S-2001-3594	S-2002-1581	S-2002-3420
S-2000-0984	S-2001-3761	S-2002-1792	S-2002-3441
S-2000-2129	S-2001-3764	S-2002-1799	S-2002-3521
S-2000-2579	S-2001-3788	S-2002-1916	S-2002-3678
S-2001-0214	S-2001-3798	S-2002-1941	S-2002-3889
S-2001-1462	S-2001-3850	S-2002-1948	S-2002-4036
S-2001-1478	S-2002-0051	S-2002-2072	S-2003-0060
S-2001-1573	S-2002-0060	S-2002-2082	S-2003-0133
S-2001-1885	S-2002-0075	S-2002-2352	S-2003-0144
S-2001-1940	S-2002-0086	S-2002-2509	S-2003-0145
S-2001-2157	S-2002-0124	S-2002-2616	S-2003-0151
S-2001-2167	S-2002-0137	S-2002-2624	S-2003-0201
S-2001-2904	S-2002-0219	S-2002-2642	S-2003-0203
S-2001-3224	S-2002-0321	S-2002-2642	S-2003-0211
S-2001-3268	S-2002-0487	S-2002-2659	S-2003-0329

S-2003-0372	S-2003-1442	S-2003-2429	S-2003-4275
S-2003-0603	S-2003-1462	S-2003-2731	S-2003-4655
S-2003-0629	S-2003-1506	S-2003-3090	S-2003-4871
S-2003-0652	S-2003-1522	S-2003-3191	S-2003-4885
S-2003-0660	S-2003-1525	S-2003-3378	S-2003-4987
S-2003-0786	S-2003-1533	S-2003-3449	S-2003-4996
S-2003-0831	S-2003-2044	S-2003-3515	S-2003-5236
S-2003-0976	S-2003-2082	S-2003-3748	S-2003-5335
S-2003-1013	S-2003-2096	S-2003-3756	S-2003-5382
S-2003-1052	S-2003-2206	S-2003-3760	S-2003-5492
S-2003-1173	S-2003-2210	S-2003-3927	S-2003-5495
S-2003-1198	S-2003-2213	S-2003-4022	S-2003-5580
S-2003-1251	S-2003-2235	S-2003-4031	S-2003-5584
S-2003-1334	S-2003-2344	S-2003-4072	S-2003-5609
S-2003-1358	S-2003-2374	S-2003-4083	S-2003-5795
S-2003-1382	S-2003-2375	S-2003-4161	
S-2003-1402	S-2003-2379	S-2003-4251	

Work Orders

349870-01	470274-01	479871-01	491555-01
369932-01	470463-01	480388	491644-01
369933-01	474099-01	481101-01	495889-01 to12
420794-08	474162-01	481729-01	496203
439369-01	475535-01	482906-01	496490-01
460481	475578-01	483902-01	496612
460483	475850-02	486741-01	496685
461062	476585	488426-01	498830-01
464200-01	476619-01	488891-01	499354-01
468432-01	477225-01	488892-01	499354-02
468513-01	477581-01	490150-01	499738-01
469024-03	4798000	491413-01	
469084-01			

Miscellaneous

INPO OE 12972 (Bailey AV1 positioner)
Request for Engineering Assistance 03-0094, Auxiliary Building to Turbine Building Pipe Tunnel, dated 10/21/03
Engineering Report - Turbine Building to Auxiliary Building Pipe Tunnel, dated 10/8/03
Operator Distraction, 2002-ODD-001, Auxiliary Building Piping Tunnel In Leakage
Potential Problem Reports for 2002 and 2003
Open Generic Letter 91-18 Items
Work Orders Issued to Resolve Plant Issues With Canceled Status - Last Two Years
Outstanding Preventive Maintenance Deferrals Summary Report
Listing of Plant Modifications Not-Worked or Canceled

EDG System Heath Report 2003-02
EDG System Heath Report 2003-03
Engine Services Inc. (ESI) 97343-R1 Failure Analysis for EDG Air Start Solenoid Valve
PM S-PMTE-2002-0226
1999-ODD-004 Normal SWGR Room Ventilation
2002-ODD-001 Auxiliary Building Piping Tunnel Inleakage
Procedure Action Request for Change to Procedure 0-LOG-SBNY-001 dated 3/15/01
Vendor Technical Manual 38-W971-00001, Woodward PG-PL Governor
System Health Report for Electrical Power Greater Than or Equal to 4160 V
System Health Report for Electrical Power 480 V & 120 V Lighting
System Health Report for Electrical Power DC Buses & Vital Bus AC
Operator Log 0-LOG-SBNY-001
Engineering Transmittal S 03-0089, Rev. 0
Design Change 03-077, Turbine Driven AFW Pump Overspeed Trip Setpoint Modification
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