VIRGINIA ELECTRIC AND POWER COMPANY Richmond, Virginia 23261

August 10, 1993

U. S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, D. C. 20555 Serial No. 93-503 NO/RPC:vlh Docket Nos. 50-280 50-281 License Nos. DPR-32 DPR-37

Gentlemen:

VIRGINIA ELECTRIC AND POWER COMPANY SURRY POWER STATION UNITS 1 AND 2 MONTHLY OPERATING REPORT

Enclosed is the Monthly Operating Report for Surry Power Station Units 1 and 2 for the month of July 1993.

Very truly yours,

ML Burling

M. L. Bowling, Manager Nuclear Licensing & Programs

Enclosure

cc: U. S. Nuclear Regulatory Commission Region II 101 Marietta Street, N. W. Suite 2900 Atlanta, Georgia 30323

> Mr. M. W. Branch NRC Senior Resident Inspector Surry Power Station

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VIRGINIA ELECTRIC AND POWER COMPANY SURRY POWER STATION MONTHLY OPERATING REPORT REPORT NO. 93-07

Approved: m tion Manager Date



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OPERATING DATA REPORT

781

 Docket No.:
 50-280

 Date:
 08-03-93

 Completed By:
 D. Mason

 Telephone:
 (804) 365-2459

1.	Unit Name:	Surry Unit 1
2.	Reporting Period:	July, 1993
3.	Licensed Thermal Power (MWt):	2441
4.	Nameplate Rating (Gross MWe)	847.5
5.	Design Electrical Rating (Net MWe):	788
6.	Maximum Dependable Capacity (Gross MWe):	820

7. Maximum Dependable Capacity (Net MWe):.....

8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:

9. Power Level To Which Restricted, If Any (Net MWe):

10. Reasons For Restrictions, If Any:

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		This Month	YTD	Cumulative
11.	Hours in Reporting Period	744.0	5087.0	180647.0
12.	Number of Hours Reactor Was Critical	744.0	4980.4	120355.4
13.	Reactor Reserve Shutdown Hours	0.0	0.0	3774.5
14.	Hours Generator On-Line	744.0	4962.0	118237.4
15.	Unit Reserve Shutdown Hours	0.0	0.0	3736.2
16.	Gross Thermal Energy Generated (MWH)	1804269.0	11851252.5	275470531.6
17.	Gross Electrical Energy Generated (MWH)	575755.0	3954675.0	89972928.0
18.	Net Electrical Energy Generated (MWH)	550188.0	3773106.0	85370966.0
19.	Unit Service Factor	100.0%	97.5%	65.5%
20.	Unit Availability Factor	100.0%	97.5%	67.5%
21.	Unit Capacity Factor (Using MDC Net)	94.7%	95.0%	60.9%
22.	Unit Capacity Factor (Using DER Net)	93.8%	94.1%	60.0%
23.	Unit Forced Outage Rate	0.0%	2.5%	17.9%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each):

None

25. If Shut Down at End of Report Period, Estimated Date of Start-up:

26. Unit In Test Status (Prior to Commercial Operation):

FORECAST	ACI

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INITIAL CRITICALITY INITIAL ELECTRICITY COMMERCIAL OPERATION



OPERATING DATA REPORT

Docket No.: 50-281 08-03-93 Date: Completed By: D. Mason Telephone: (804) 365-2459

1	Unit Name:	Surry Unit 2
2.	Reporting Period:	July, 1993
3.	Licensed Thermal Power (MWt):	2441
4.	Nameplate Rating (Gross MWe):	847.5
5.	Design Electrical Rating (Net MWe):	788
6.	Maximum Dependable Capacity (Gross MWe):	820
7.	Maximum Dependable Capacity (Net MWe):	781

8. If Changes Occur in Capacity Ratings (Items Number 3 Through 7) Since Last Report, Give Reasons:

9. Power Level To Which Restricted, If Any (Net MWe):

10. Reasons For Restrictions, If Any:

		This Month	YTD	Cumulative
11.	Hours In Reporting Period	744.0	5087.0	177527.0
12.	Number of Hours Reactor Was Critical	744.4	3640.1	117327.0
13.	Reactor Reserve Shutdown Hours	0.0	0.0	328.1
14.	Hours Generator On-Line	744.0	3575.1	115506.1
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.	Gross Thermal Energy Generated (MWH)	1681009.3	7983828.0	269314901.8
17.	Gross Electrical Energy Generated (MWH)	542580.0	2638635.0	87834539.0
18.	Net Electrical Energy Generated (MWH)	518650.0	2511880.0	83302293.0
19.	Unit Service Factor	100.0%	70.3%	65.1%
20.	Unit Availability Factor	100.0%	70.3%	65.1%
21.	Unit Capacity Factor (Using MDC Net)	89.3%	63.2%	60.2%
22.	Unit Capacity Factor (Using DER Net)	88.5%	62.7%	59.5%
23.	Unit Forced Outage Rate	0.0%	1.3%	14.0%

24. Shutdowns Scheduled Over Next 6 Months (Type, Date, and Duration of Each): None

25. If Shut Down at End of Report Period, Estimated Date of Start-up:

26. Unit In Test Status (Prior to Commercial Operation):

	FORECAST	ACHIEVED
INITIAL CRITICALITY INITIAL ELECTRICITY COMMERCIAL OPERATION		



Surry Monthly Operating Report No. 93-07 Page 5 of 21

UNIT SHUTDOWN AND POWER REDUCTION (EQUAL TO OR GREATER THAN 20%)

REPORT MONTH: July, 1993

							Co	Docket No.: Unit Name: Date: mpleted by: Telephone:	50-280 Surry Unit 1 08-01-93 Anthony Xenakis (804) 365-2145
	(1)		(2)	(3) Method		(4)	(5)		· · ·
Date	Туре	Duration Hours	Reason	of Shutting Down Rx	LER No.	System Code	Component Code	Cause & Co Prevent Re	prrective Action to currence
930715	S	0	В	4	N/A	SG	НХ	Unit power to maintain while cleani	was reduced to 78% condenser vacuum ng water boxes.

(1) F: Forced S: Scheduled

(2) REASON:

- A -B -C -
 - Equipment Failure (Explain) Maintenance or Test
 - Refueling
 - -Regulatory Restriction
 - D E F -**Operator Training & Licensing Examination**
 - Administrative
 - G-**Operational Error (Explain)**

(3) METHOD:

1 -Manual

-Manual Scram.

- 2 3 -Automatic Scram.
- 4 Other (Explain)

(5) Exhibit 1 - Same Source.

(4)

Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG 0161)



UNIT SHUTDOWN AND POWER REDUCTION (EQUAL TO OR GREATER THAN 20%)

REPORT MONTH: July, 1993

							Co	Docket No.: Unit Name: Date: mpleted by:	50-281 Surry Unit 2 08-01-93 Anthony Xenakis
								relephone.	(804) 305-2145
	(1)		(2)	(3) Method		(4)	(5)		
		Duration		of	I FR	System	Component	Cause & Co	prrective Action to
Date	Туре	Hours	Reason	Shutting Down Rx	No.	Code	Code	Prevent Re	currence

None during this reporting period.

(1)

Forced F:

S: Scheduled (2) REASON:

- Equipment Failure (Explain)
- Maintenance or Test Refueling

- Regulatory Restriction Operator Training & Licensing Examination
- Administrative
- A -B -C -D -E -F -G -**Operational Error (Explain)**

(3) METHOD:

Manual 1 -

2 -Manual Scram.

- 3 -Automatic Scram.
- 4 Other (Explain)

(5) Exhibit 1 - Same Source.

(4)

Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG 0161)



AVERAGE DAILY UNIT POWER LEVEL

Docket No.:	50-280
Unit Name:	Surry Unit 1
Date:	08-03-93
Completed by:	Pat Kessler
Telephone:	365-2790

Month: July, 1993

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Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	761	17	706
2	761	18	745
3	759	19	751
4	753	20	745
5	747	21	744
6	743	22	751
7	745	23	752
8	737	24	751
9	735	25	747
10	731	26	753
11	734	27	754
12	732	28	749
13	733	29	745
14	729	30	747
15	721	31	675
16	688		

INSTRUCTIONS

On this format, list the average daily unit power level in MWe - Net for each day in the reporting month. Compute to the nearest whole megawatt.



AVERAGE DAILY UNIT POWER LEVEL

Docket No.:	50-281
Unit Name:	Surry Unit 2
Date:	08-03-93
Completed by:	Pat Kessler
Telephone:	365-2790
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Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	470	17	747
2	471	18	752
3	465	19	753
4	466	20	750
5	465	21	745
6	571	22	748
7	752	23	748
8	754	24	749
9	751	25	747
10	746	26	749
11	753	27	752
12	753	28	749
13	749	29	744
14	747	30	743
15	750	31	742
16	730		

Month: July, 1993

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INSTRUCTIONS

On this format, list the average daily unit power level in MWe - Net for each day in the reporting month. Compute to the nearest whole megawatt.



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SUMMARY OF OPERATING EXPERIENCE

MONTH/YEAR: July, 1993

The following chronological sequence by unit is a summary of operating experiences for this month which required load reductions or resulted in significant non-load related incidents.

UNIT ONE:

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07/01/93	0000	This reporting period began with the Unit operating at 100% power, 790 MWe.
07/15/93	2122	Started power reduction to maintain condenser vacuum while cleaning water boxes; 100% power, 755 MWe.
	2256	Stopped power reduction; 78% power, 550 MWe.
07/16/93	0130	Reduced power as necessary to maintain condenser vacuum.
	0302	Started ramp up; 74% power, 515 MWe.
	0711	Stopped ramp at 99.5% power, 770 MWe; adjusted IRPIs and increased power to 100%.
07/17/93	0453	Started ramp down to maintain condenser vacuum while cleaning water boxes; 100% power, 765 MWe.
	0549	Stopped ramp; 84% power, 620 MWe.
	0719	Reduced power as necessary to maintain condenser vacuum.
	0930	Started ramp up; 81% power, 695 MWe.
	1100	Stopped ramp; 100% power, 780 MWe.
07/30/93	2226	Started ramp down to maintain condenser vacuum while "B" water box was removed from service for cleaning, leak detection, and repair; 100% power, 780 MWe.
	2309	Stopped ramp; 92% power, 700 MWe.
07/31/93	2400	This reporting period ended with the Unit operating at 92% power, 700 MWe with the "B" water box out of service for maintenance.



SUMMARY OF OPERATING EXPERIENCE

MONTH/YEAR: July, 1993

UNIT TWO:

07/01/93	0000	This reporting period began with the Unit operating at 66.5% power, 505 MWe with the "A" Main Feedwater Pump out of service for maintenance.
07/06/93	1120	Started ramp up; 66% power, 500 MWe.
	1824	Stopped ramp; 100% power, 795 MWe.
	1841	Started power reduction due to "C" Main Feedwater Regulating Valve oscillations; 100% power, 795 MWe.
	1850	Stopped power reduction; 97.2% power.
	1900	Increased power; 97.2% power.
	2014	Unit at 100% power, 785 MWe.
	2035	Reduced power to 99% due to "C" Main Feedwater Regulating Valve oscillations.
07/31/93	2400	This reporting period ended with the Unit operating at 98% power, 780 MWe due to "C" Main Feedwater Regulating Valve oscillations.



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MONTH/YEAR: July, 1993

EWR 89-152	Engineering Work Request	06-03-93
	Engineering Work Request 89-152 installed flow sensing elements in & 2 service water (SW) inlet side of the component cooling heat e (CCHX) in order to determine SW flow. Differential pressure gauges installed across the CCHX's tubes to measure the degree of tube pluge	the Units 1 exchangers were also ging.
	The new instrumentation did not alter the function of the SW syste improved the ability to monitor CCHX performance. The instrument installed in accordance with previously approved codes and Therefore, an unreviewed safety question does not exist.	em while it Itation was standards.
DCP 91-50	Design Change Package (Safety Evaluation No. 92-107)	06-04-93
	Design Change Package 91-50 installed a vent valve in the instrument leading to ventilation dampers 1-VSP-AOD-107A, 1-VSP-AOD- 1-VSP-AOD-108. The vent valve was installed to provide another mea these dampers to the auxiliary building category I filtration ventilation fa F-58A and 1-VSP-F-58B, during a 10 CFR 50 Appendix "R" event.	air system 107B, and ans to align ns, 1-VSP-
	The ventilation dampers are designed to fail to a safe position. interruption of instrument air, the dampers align themselves to the filtration fans to ensure that airborne contamination is filtered o exhausting through a vent stack. Furthermore, should the modified of fail, they can be easily isolated and repaired without affecting servic equipment. Therefore, an unreviewed safety question does not exist.	Upon an category I ut prior to omponents ce to other
EWR 88-484	Engineering Work Request	06-04-93
	Engineering Work Request 88-484 installed gauge valves on the L auxiliary feedwater (AFW) lube oil system in order to isolate the lube of gauge and to provide ports for calibration connections.	Inits 1 & 2 vil pressure
	This modification did not affect the AFW lube oil system since the ga were installed off the main lube oil line for the AFW pumps. The unreviewed safety question does not exist.	uge valves erefore, an
EWR 88-081	Engineering Work Request	06-10-93
	Engineering Work Request (EWR) 88-081 installed a vacuum adjust on the inlet piping of the Unit 1 gland steam exhauster in order to mini leakage. The EWR also installed bracing on the gland steam exhau base to stabilize the motor.	ment valve mize water Ister motor
	The gland steam exhauster is not safety-related and is not used to n consequences of accidents described in the UFSAR. Therefore, an u safety question does not exist.	nitigate the Inreviewed





MONTH/YEAR: July, 1993

DCP 93-27 **Design Change Package** (Safety Evaluation No. 93-067) Design Change Package 93-27 deleted the automatic transfer scheme between 34.5 KV switchyard buses 5 and 6 and between each of these buses and transformer number 4. This modification maintained two independent off-site power sources and a third that is available with manual action. It did not negatively impact the operation of safety-related systems or components and eliminated the potential for damage to equipment caused by transferring loads out of phase. Therefore, an unreviewed safety question does not exist. DCP 89-17 **Design Change Package** 06-16-93 (Safety Evaluation No. 90-144) Design Change Package (DCP) 89-17 installed a permanent charging system to the control room bottled air system to increase the charging capacity, enabling one compressed air bottle bank to be recharged within 8 hours. The existing charging system required approximately 100 hours to recharge one fully discharged bottled air bank. This DCP provides a permanent, larger capacity system which reduces the charging time significantly. The control room bottled air system is not safety-related, not powered from a safety-related power source, and not required for safety-related functions. Therefore, an unreviewed safety question does not exist. EWR 89-352 **Engineering Work Request** 06-24-93 (Safety Evaluation No. 90-086) Engineering Work Request 89-352 replaced the Units 1 & 2 waste gas decay tank (WGDT) oxygen and hydrogen analyzers to improve the reliability and accuracy of gas concentration measurement in the WGDT. This modification did not adversely affect the performance or design basis of the WGDT analyzers and did not impact other systems. The equipment and

mounting were evaluated for seismic integrity. Therefore, an unreviewed safety question does not exist.

06-11-93



07-09-93

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: July, 1993

SE 93-146	Safety Evaluation	07-09-93
	Safety Evaluation 93-146 was performed, as a result of a review of la Notice 91-40, to evaluate the potential for unmonitored, uncontrolled rareleases to the environment from the auxiliary steam system drains auxiliary building).	nformation adioactivity (from the
	The evaluation concluded that contamination from a leaking pipe or floor drains would be required for a release to the discharge canal to oc event of such a leak or spill, minimal circulating/service water system dilute contamination levels to well below the maximum release levels sampling is performed to monitor system contamination levels to ensure can be adequately diluted. Therefore, an unreviewed safety question exist.	spill to the cur. In the flow would . Periodic e a release n does not
SE 93-147	Safety Evaluation	07-09-93
	Safety Evaluation 93-147 was performed, as a result of a review of la Notice 91-40, to evaluate the potential for unmonitored, uncontrolled ra releases to the environment from the component cooling (CC) system.	nformation adioactivity
	The evaluation concluded that a CC system heat exchanger tube leservice water system would be required for a release to the discharge occur. In the event of such a leak, minimal service water system flow we contamination levels to well below the maximum release levels. Periodic is performed to monitor system contamination levels to ensure a release adequately diluted. System gases are also monitored at the CC system water and are vented to the process vent system. Therefore, an usafety question does not exist.	eak to the le canal to vould dilute c sampling ase can be tem surge nreviewed

SE 93-148 Safety Evaluation

Safety Evaluation 93-148 was performed, as a result of a review of Information Notice 91-40, to evaluate the potential for unmonitored, uncontrolled radioactivity releases to the environment from the chilled water system.

The evaluation concluded that a chiller heat exchanger tube leak to the service water system would be required for a release to the discharge canal to occur. In the event of such a leak, minimal service water system flow would dilute contamination levels to well below the maximum release levels. Periodic sampling is performed to monitor system contamination levels to ensure a release can be adequately diluted. Therefore, an unreviewed safety question does not exist.



MONTH/YEAR: July, 1993

SE 93-149	Safety Evaluation	07-09-93
	Safety Evaluation 93-149 was performed, as a result of a review of Int Notice 91-40, to evaluate the potential for unmonitored, uncontrolled rac releases to the environment from the containment subsurface drain system	formation dioactivity em.
	The evaluation concluded that existing contamination levels (undiluted) than that permitted by 10 CFR 20 for release to the environment. T contamination levels are further diluted by the circulating and servi systems prior to release. The system is also sampled daily to ensure co with Technical Specifications. Therefore, an unreviewed safety ques not exist.	are less hese low ce water mpliance tion does
TSR 93-055	Temporary Shielding Request (Safety Evaluation 93-145)	07-09-93
	Temporary Shielding Request 93-055 installed temporary lead shield pressurizer spray and pressurizer safety valve piping in the Unit 1 conta reduce the radiation dose received by personnel while performing wo area.	elding on inment to ork in the
	Installation of the shielding while the subject lines remain "operal determined to be acceptable through the performance of seis deadweight piping analyses, provided the pressure and temperatur exceed 385 psi and 140° F. The shielding will not adversely affect th functions of the affected system and will be removed prior to exceed specified operating conditions. Therefore, an unreviewed safety quest not exist.	ble" was mic and e do not e design eding the tion does
TM S1-93-08	Temporary Modification (Safety Evaluation No. 93-152)	07-10-93
	Temporary Modification S1-93-08 temporarily lined up the fire suppress supply to the Unit 1 exterior containment spray ring to provide an eva cooling medium. This measure was taken to help reduce the containment ambient temperature.	ion water aporative nt interior

This modification did not decrease the effectiveness of the fire suppression system or affect the emergency plan or Fire Contingency Action procedures. Therefore, an unreviewed safety question does not exist.



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MONTH/YEAR: July, 1993

TM S1-93-09	Temporary Modification (Safety Evaluation No. 93-151)	07-10-93
	Temporary Modification S1-93-09 installed elect Water Refrigeration Unit 1-CD-REF-1A from trippi bearing oil pressure or high temperature indication pump run permissive relay was being replaced.	rical jumpers to prevent Chilled ing (as a result of a spurious low n) while the chiller's defective oil
	1-CD-REF-1A is not safety-related and is not use of accidents described in the UFSAR. Automati operable during this activity. Double verification and post maintenance testing were performed. T question does not exist.	ed to mitigate the consequences c chiller trip functions remained n of jumper installation/removal Therefore, an unreviewed safety
TM S2-93-40	Temporary Modification (Safety Evaluation No. 93-150)	07-10-93
	Temporary Modification S2-93-40 installed elect Water Refrigeration Unit 2-CD-REF-1 from trippin bearing temperature indication) until the chiller's sensor can be replaced.	rical jumpers to prevent Chilled g (as a result of a spurious high defective bearing temperature
	2-CD-REF-1 is not safety-related and is not used accidents described in the UFSAR. The bearin monitored routinely by operators and the other remained operable during this activity. D installation/removal and post maintenance testing unreviewed safety question does not exist.	to mitigate the consequences of ng oil header temperature was automatic chiller trip functions ouble verification of jumper were performed. Therefore, an
DCP 88-13	Design Change Package (Safety Evaluation No. 90-177)	07-12-93
	Design Change Package 88-13 modified the Unit oil collection enclosures to facilitate maintenance	1 reactor coolant pumps' (RCP) on the pumps.
	The modification changed the method of attaching while maintaining the seismic integrity and installation. The oil enclosures are passive device or function of a safety-related system. Therefore does not exist.	g the oil enclosure to each RCP leak-tightness of the original ces that do not affect the design , an unreviewed safety question
EWR 90-280	Engineering Work Request (Safety Evaluation No. 90-241)	07-12-93
	Engineering Work Request 90-280 isolated the au Unit 1 flash evaporator (which was no longer in potential sources of air in-leakage to the main stea	uxiliary steam supply lines to the n service) in order to eliminate am condenser.
	The modification did not affect the operation or fu and will help to minimize air in-leakage to the n	nction of safety-related systems nain condenser. Therefore, an

unreviewed safety question does not exist.



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MONTH/YEAR: July, 1993

TM S1-93-10	Temporary Modification (Safety Evaluation No. 93-153)	07-15-93
	Temporary Modification S1-93-10 temporarily installed a tele Unit 1 containment, associated cables, and a television m room to enable operators to monitor a leak from Steam Gener	vision camera in the onitor in the control ator 1-RC-E-1B.
	This modification did not impact on plant control or protect camera was mounted in a manner that ensured that equip damaged if it fell. Therefore, an unreviewed safety question of	ction systems. The oment would not be does not exist.
EWR 90-375	Engineering Work Request (Safety Evaluation No. 91-187)	07-21-93
	Engineering Work Request 90-375 replaced various pressu Rosemount transmitters throughout Units 1 and 2. Rosemou selected due to their ready availability of replacement and rep	ure transmitters with unt transmitters were air parts.
	The transmitter replacements were made on a one-for-on exceeded the respective system design criteria. The oper safety-related systems were not affected. Therefore, an question does not exist.	le basis and met or ration or function of unreviewed safety
TSI-014C	Technical Specification Interpretation (Safety Evaluation No. 93-155)	07-16-93
	Technical Specification Interpretation TSI-014C was develor actions that need to be taken if a main feedwater regulating va placed on its jack. (Re: Technical Specifications 3.7, Table 3.	pped to describe the alve (MFRV) must be 7-3).
	The TSI directed controls permit no more than one MFRV or and for a period not to exceed 72 hours. The TSI also requi motor operated valve (MOV) associated with the affected ma stroked partially closed to ensure it can be manually close addition, the controls require a dedicated control room op isolation MOV on a safety injection signal or a steam genera and a dedicated operator (located at the MFRV) to close the These measures do not affect other accident mitigation syste feedwater isolation is achieved within the main steam line bre assumptions. Accident probability and consequences are proposed limited duration and controls to provide alternative the probability of equipment malfunction has not increased. is assured by the diverse and redundant isolation control ma an unreviewed safety question does not exist.	n its jack at one time ires that the isolation ain feedwater line be sed, if required. In perator to close the tor Hi-Hi level signal e MFRV as required. ems and ensure that pak accident analysis not increased. The isolation assure that The margin of safety easures. Therefore,



PROCEDURE OR METHOD OF OPERATION CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: July 1993

1/2-OPT-ZZ-001Operations Periodic Test Procedures1/2-OPT-ZZ-002(Safety Evaluation No. 93-143)

07-02-93

Operations Periodic Test Procedures 1/2-OPT-ZZ-001, "ESF Actuation with Undervoltage and Degraded Voltage - 1H [2H] Bus" and 1/2-OPT-ZZ-002, "ESF Actuation with Undervoltage and Degraded Voltage - 1J [2J] Bus" were revised to permit the test set-up to be performed when the pressure and temperature are less than 450 psi and 350° F, respectively (instead of cold shutdown).

This change involves only the initial conditions for test set-up and does not affect the requirements for performing the tests or the acceptance criteria. Therefore, an unreviewed safety question does not exist.

1-OPT-SI-005Operations Periodic Test Procedures07-20-932-OPT-SI-005(Safety Evaluation No. 93-156)07-20-93

Operations Periodic Test Procedures 1-OPT-SI-005 and 2-OPT-SI-005, "LHSI Pump Test" were temporarily revised to permit the use of temporary transmitters to enable the measurement of low head safety injection pump pressure during the few seconds following pump start.

The use of the temporary safety-related transmitters does not affect the operation of the subject pumps or the ability of the safety injection system to perform its required safety function. Therefore, an unreviewed safety question does not exist.

1-OSP-TM-001	Operations Surveillance Procedures	07-30-93
2-OSP-TM-001	(Safety Evaluation No. 93-161)	

Operations Surveillance Procedures 1-OSP-TM-001 and 2-OSP-TM-001, "Turbine Inlet Valve Freedom Test" were revised to allow the turbine inlet valve testing to be performed on a quarterly (instead of monthly) basis.

An independent evaluation, performed by Westinghouse (also used in the Owners Group Study, WCAP-11525, "Probabilistic Evaluation of Reduction in Turbine Valve Test Frequency"), determined that the probability of a turbine missile ejection event will not increase above the probability assumed in the UFSAR or the acceptance criteria developed by the NRC. This analysis demonstrates that it is acceptable to perform the subject test on a quarterly basis. Therefore, an unreviewed safety question does not exist.



TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

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MONTH/YEAR: July, 1993

None during this reporting period.



CHEMISTRY REPORT

MONTH/YEAR: July, 1993

		Unit No. 1			Unit No. 2	
Primary Coolant Analysis	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioactivity, μCi/ml	3.97E-1	2.79E-1	3.49E-1	1.90E-1	8.79E-2	1.43E-1
Suspended Solids, ppm	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1
Gross Tritium, μCi/ml	1.90E-1	1.36E-1	1.64E-1	5.21E-1	3.85E-1	4.43E-1
1 ¹³¹ . uCi/ml	1.50E-3	6.90E-4	9.31E-4	1.59E-4	3.60E-5	8.04E-5
131 _{//} 133	0.11	0.07	0.09	0.20	0.06	0.12
Hydrogen cc/kg	38.3	25.5	32.9	36.1	24.2	33.5
Lithium, ppm	2.27	1.92	2.12	2.39	2.07	2.20
Boron - 10, ppm*	68.0	50.6	59.2	278.1	249.7	257.7
Oxygen (DO) ppm	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chloride pom	0.005	<0.001	0.002	0.016	0.006	0.012
pH at 25 degree Celsius	7.17	6.99	7.12	6.35	6.20	6.26

* Boron - 10 = Total Boron x 0.196

Comments:

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None



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FUEL HANDLING UNITS 1 & 2

MONTH/YEAR: July,1993

New or Spent		Number of				New or Spent
Fuel Shipment	Date Stored or	Assemblies	Assembly	ANSI	Initial	Fuel Shipping
Number	Received	per Shipment	Number	Number	Enrichment	Cask Activity

No fuel received or stored during this reporting period.



DESCRIPTION OF PERIODIC TEST(S) WHICH WERE NOT COMPLETED WITHIN THE TIME LIMITS SPECIFIED IN TECHNICAL SPECIFICATIONS

MONTH/YEAR: July, 1993

None during this reporting period.