VIRGINIA ELECTRIC AND POWER COMPANY
RICHMOND, VIRGINIA 23261

April 14, 1993

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555

Serial No. 93-212
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 March 1993.

Very truly yours,

M. L. Bowling, Manager
Nuclear Licensing & Programs

Enclosure

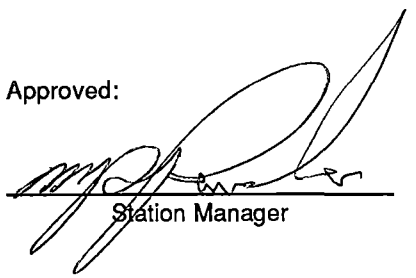
cc: U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, N. W.
Suite 2900
Atlanta, Georgia 30323

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

IE24

VIRGINIA ELECTRIC AND POWER COMPANY
SURRY POWER STATION
MONTHLY OPERATING REPORT
REPORT NO. 93-03

Approved:



Station Manager

4/8/93

Date

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OPERATING DATA REPORT

Docket No.: 50-280
Date: 04-07-93
Completed By: D. Mason
Telephone: (804) 365-2459

1. Unit Name:..... Surry Unit 1
2. Reporting Period:..... March 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	2160.0	177720.0
12.	Number of Hours Reactor Was Critical	744.0	2053.4	117428.4
13.	Reactor Reserve Shutdown Hours	0.0	0.0	3774.5
14.	Hours Generator On-Line	744.0	2035.0	115310.4
15.	Unit Reserve Shutdown Hours	0.0	0.0	3736.2
16.	Gross Thermal Energy Generated (MWH)	1604791.0	4733122.5	268352401.6
17.	Gross Electrical Energy Generated (MWH)	541650.0	1598920.0	87617173.0
18.	Net Electrical Energy Generated (MWH)	514163.0	1519781.0	83117641.0
19.	Unit Service Factor	100.0%	94.2%	64.9%
20.	Unit Availability Factor	100.0%	94.2%	67.0%
21.	Unit Capacity Factor (Using MDC Net)	88.5%	90.1%	60.3%
22.	Unit Capacity Factor (Using DER Net)	87.7%	89.3%	59.4%
23.	Unit Forced Outage Rate	0.0%	5.8%	18.2%

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

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		

OPERATING DATA REPORT

Docket No.: 50-281
Date: 04-07-93
Completed By: D. Mason
Telephone: (804) 365-2459

1. Unit Name:..... Surry Unit 2
2. Reporting Period:..... March 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	2160.0	174600.0
12.	Number of Hours Reactor Was Critical	123.3	1539.3	115226.2
13.	Reactor Reserve Shutdown Hours	0.0	0.0	328.1
14.	Hours Generator On-Line	123.0	1539.0	113470.0
15.	Unit Reserve Shutdown Hours	0.0	0.0	0.0
16.	Gross Thermal Energy Generated (MWH)	235566.3	3529334.5	264860408.3
17.	Gross Electrical Energy Generated (MWH)	79665.0	1183135.0	86379039.0
18.	Net Electrical Energy Generated (MWH)	75035.0	1122728.0	81913141.0
19.	Unit Service Factor	16.5%	71.3%	65.0%
20.	Unit Availability Factor	16.5%	71.3%	65.0%
21.	Unit Capacity Factor (Using MDC Net)	12.9%	66.6%	60.2%
22.	Unit Capacity Factor (Using DER Net)	12.8%	66.0%	59.5%
23.	Unit Forced Outage Rate	0.0%	0.0%	14.2%

24. Shutdowns Schedule Over Next 6 Months (Type, Date, and Duration of Each):
Refueling - March 6, 1993, 60 days

25. If Shut Down at End of Report Period Estimated Date of Start-up: May 5, 1993

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

	FORECAST	ACHIEVED
INITIAL CRITICALITY		
INITIAL ELECTRICITY		
COMMERCIAL OPERATION		

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

REPORT MONTH: March 1993

Docket No.: 50-280
Unit Name: Surry Unit 1
Date: 04-07-93
Completed by: Anthony Xenakis
Telephone: (804) 365-2145

Date	(1) Type	Duration Hours	(2) Reason	(3) Method of Shutting Down Rx	LER No.	(4) System Code	(5) Component Code	Cause & Corrective Action to Prevent Recurrence
930303	S	0	B	4	N/A	SJ	P	Unit power was reduced to 61% to remove 1-FW-P-1B from service to perform maintenance on one of its two motors.
930324	S	0	B	4	N/A	SJ	P	Unit power was reduced to 60% to remove 1-FW-P-1B from service to perform maintenance on one of its two motors.

(1)
F: Forced
S: Scheduled

(2)
REASON:
A - Equipment Failure (Explain)
B - Maintenance or Test
C - Refueling
D - Regulatory Restriction
E - Operator Training & Licensing Examination
F - Administrative
G - Operational Error (Explain)

(3)
METHOD:
1 - Manual
2 - Manual Scram.
3 - Automatic Scram.
4 - Other (Explain)

(4)
Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG 0161)

(5)
Exhibit 1 - Same Source.

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

REPORT MONTH: March 1993

Docket No.: 50-281
Unit Name: Surry Unit 2
Date: 04-07-93
Completed by: Anthony Xenakis
Telephone: (804) 365-2145

Date	(1) Type	Duration Hours	(2) Reason	(3) Method of Shutting Down Rx	LER No.	(4) System Code	(5) Component Code	Cause & Corrective Action to Prevent Recurrence
930306	S	621	C	1	N/A	N/A	N/A	Unit shutdown for 60 day refueling outage.

(1)
F: Forced
S: Scheduled

(2)
REASON:
A - Equipment Failure (Explain)
B - Maintenance or Test
C - Refueling
D - Regulatory Restriction
E - Operator Training & Licensing Examination
F - Administrative
G - Operational Error (Explain)

(3)
METHOD:
1 - Manual
2 - Manual Scram.
3 - Automatic Scram.
4 - Other (Explain)

(4)
Exhibit G - Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File (NUREG 0161)

(5)
Exhibit 1 - Same Source.

AVERAGE DAILY UNIT POWER LEVEL

Docket No.: 50-280
Unit Name: Surry Unit 1
Date: 04-07-93
Completed by: P. M. Kessler
Telephone: (804) 365-2790

Month: March 1993

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	785	17	788
2	785	18	786
3	682	19	787
4	443	20	788
5	443	21	788
6	438	22	787
7	441	23	788
8	444	24	493
9	443	25	489
10	593	26	785
11	785	27	785
12	785	28	785
13	787	29	785
14	787	30	787
15	788	31	786
16	787		

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: 04-07-93
Completed by: P. M. Kessler
Telephone: (804) 365-2790

Month: March 1993

Day	Average Daily Power Level (MWe - Net)	Day	Average Daily Power Level (MWe - Net)
1	634	17	0
2	626	18	0
3	622	19	0
4	617	20	0
5	607	21	0
6	21	22	0
7	0	23	0
8	0	24	0
9	0	25	0
10	0	26	0
11	0	27	0
12	0	28	0
13	0	29	0
14	0	30	0
15	0	31	0
16	0		

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.

SUMMARY OF OPERATING EXPERIENCE

MONTH/YEAR: March 1993

Listed below in 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

03-01-93	0000	This reporting period began with the Unit operating at 100% power, 820 MWe.
03-03-93	1508	Commenced ramp down to remove 1-FW-P-1B from service for motor maintenance; 100% power, 825 MWe.
	1737	Stopped ramp; 61% power, 500 MWe.
03-10-93	1204	Started ramp up; 58% power, 475 MWe.
	1635	Stopped ramp; 100% power, 820 MWe.
03-24-93	0042	Started ramp down for 1-FW-P-1B motor maintenance; 100% power, 825 MWe.
	0311	Stopped ramp; 60% power, 480 MWe.
03-25-93	2132	Started ramp up; 61% power, 500 MWe.
03-26-93	0024	Stopped ramp; 100% power, 825 MWe.
03-31-93	2400	This reporting period ended with the Unit operating at 100% power, 825 MWe.

UNIT TWO

03-01-93	0000	This reporting period began with the Unit in a coastdown due to fuel depletion at 78.5% power, 655 MWe.
03-05-93	2207	Commenced Unit shutdown for scheduled refueling outage; 78.5% power, 655 MWe.
03-06-93	0302	Unit off line.
	0317	Reactor manually tripped in accordance with applicable Unit shut down procedure.
03-31-93	2400	This reporting period ended with the Unit in day 25 of a scheduled 60 day refueling outage.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: March 1993

SE 93-031 **Safety Evaluation** 02-23-93

Safety Evaluation 93-031 was performed to evaluate the 1993 Unit 2 refueling outage schedule.

The evaluation concluded that the refueling outage schedule is acceptable based on a review of the planning, procedures, policies, shutdown risk, and monitoring management that are performed for the outage. Therefore, an unreviewed safety question does not exist.

EWR 91-133 **Engineering Work Request** 03-03-93
(Safety Evaluation No. 91-174)

Engineering Work Request 91-133 removed the internals from Unit 2 condensate polishing (CP) system valve 2-CP-PCV-221 to allow air flow from air compressor 2-CP-C-1 to the CP air system.

This modification does not affect any safety-related equipment or design basis accident analyses. Therefore, an unreviewed safety question does not exist.

SE 93-038 **Safety Evaluation** 03-04-93

Safety Evaluation 93-038 was performed to assess the procedural requirements for the use of ladders, scaffolds, and manlifts provided in administrative procedure VPAP-1903, "Ladders, Scaffolds, and Manlifts." The evaluation also considered the causes and effects of potential ladder and scaffolding failures on plant personnel, systems and components.

It was concluded that temporary scaffolding erected in accordance with VPAP-1903 should not fail while in use, including during a design basis earthquake. The procedure also provides requirements for the review and control of scaffolding erected in the vicinity of safe shutdown equipment to further minimize the potential risk associated with an earthquake. Therefore, an unreviewed safety question does not exist.

EWR 90-178 **Engineering Work Request** 03-05-93

Engineering Work Request 90-178 installed backflow preventers in the floor drains in each of the Unit 1 and 2 charging pump cubicles to prevent potential flooding of the areas through the floor drain system.

This modification affected only the floor drains which are not addressed by the Technical Specifications or the Safety Analysis Report. The change will help to assure charging pump operability in the event of internal flooding. Therefore, an unreviewed safety question does not exist.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: March 1993

SE 93-041 **Safety Evaluation** 03-05-93

Safety Evaluation 93-041 was performed to evaluate the use of nonsafety-related Unit 2 charging system flow transmitter 2-CH-FT-2160 to support operation of the alternate charging header during the 1993 Unit 2 refueling outage.

The evaluation concluded that it is acceptable to use a nonsafety-related transmitter while the Unit is at cold shutdown (CSD). The transmitter is seismically installed and is capable of withstanding charging pump discharge pressure. A failure of the subject transmitter while the Unit is at CSD is not applicable to any of the design basis accidents described in the UFSAR. The transmitter will be replaced or removed from service prior to the Unit leaving CSD. Therefore, an unreviewed safety question does not exist.

TSR 93-041 **Temporary Shielding Request** 03-05-93
(Safety Evaluation 93-040)

Temporary Shielding Request 93-041 installed temporary lead shielding on Unit 2 safety injection and containment spray (CS) system piping to reduce the radiation dose received by personnel while performing work in the Unit 2 CS Pumphouse.

Installation of the shielding while the subject lines remain operable was determined to be acceptable through the performance of seismic piping analyses, provided the pressure and temperature do not exceed 350 psi and 450° F. The shielding will not adversely affect the design functions of the affected systems and will be removed prior to exceeding the specified operating conditions. Therefore, an unreviewed safety question does not exist.

TSR 93-008 **Temporary Shielding Request** 03-08-98
(Safety Evaluation 93-042)

Temporary Shielding Request 93-008 installed temporary lead shielding on aerated drains and reactor cavity purification system piping in the Unit 2 containment basement to reduce the radiation dose received by personnel while performing work in the area.

Installation of the shielding while the subject lines remain operable was determined to be acceptable through the performance of seismic piping analyses. The shielding will not adversely affect the design functions of the affected systems and will be removed prior to the Unit leaving cold shutdown. Therefore, an unreviewed safety question does not exist.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: March 1993

TSR 93-018 **Temporary Shielding Request** 03-08-93
(Safety Evaluation 93-043)

Temporary Shielding Request 93-018 installed temporary lead shielding to the elbows of three safety injection (SI) system accumulator discharge lines in the Unit 2 containment to reduce the radiation dose received by personnel while performing work in the area.

Installation of the shielding while the subject lines remain operable was determined to be acceptable through the performance of seismic and deadweight piping analyses. The shielding will be removed prior to Unit start-up. Therefore, an unreviewed safety question does not exist.

SE 93-044 **Safety Evaluation** 03-09-93

Safety Evaluation 93-044 was performed to evaluate the Unit 2 Cycle 12 reload core, including the use of fresh fuel assemblies that incorporate new anti-snag features in the fuel assembly Inconel grid.

Parameters affected by the reload were calculated and compared to the existing safety analysis assumptions. These parameters were shown to be either 1) explicitly bounded, or 2) accommodated by existing safety analysis margins and/or conservatism. Operation of the reload core in accordance with the Technical Specifications will not violate the design basis of plant safety equipment. Thus, the probabilities and consequences of analyzed accidents and equipment malfunctions are not changed by the reload. Therefore, an unreviewed safety question does not exist.

TM S2-93-02 **Temporary Modification** 03-10-93
(Safety Evaluation No. 93-045)

Temporary Modification (TM) S2-93-02 installed four temporary telephone lines into the Unit 2 Containment using spare conductors in electrical penetration 9C.

This TM provides communications capability between personnel inside and those outside the containment during the 1993 Unit 2 refueling outage. The modification will not affect the ability of the electrical penetration to perform its design function or that of systems and components supplied by the penetration. The TM will be removed prior to the Unit exceeding 200 °F. Therefore, an unreviewed safety question does not exist.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: March 1993

TSR 93-029
TSR 93-030
TSR 93-031

Temporary Shielding Request 03-10-93
(Safety Evaluation 93-047)

Temporary Shielding Requests 93-029, 93-030, and 93-031 installed temporary lead shielding on the Unit 2 reactor coolant loop piping and valves (including the loop stop valve by-pass line and valve) to reduce the radiation dose received by personnel while removing the resistance temperature device by-pass lines and performing other work in the area.

Installation of the shielding while the subject lines remain operable was determined to be acceptable through the performance of seismic piping analyses, provided the pressure and temperature do not exceed 385 psi and 400° F. The shielding will not adversely affect the design functions of the affected system and will be removed prior to exceeding the specified operating conditions. Therefore, an unreviewed safety question does not exist.

TSR 93-011
TSR 93-012
TSR 93-043

Temporary Shielding Request 03-12-93
(Safety Evaluation 93-049)

Temporary Shielding Requests 93-011, 93-012, and 93-043 installed temporary lead shielding on Unit 2 residual heat removal (RHR) system piping in the vicinity of the RHR pumps to reduce the radiation dose received by personnel while performing work in the area.

Installation of the shielding (in accordance with TSR 93-011) while the subject piping remains operable was determined to be acceptable through the performance of a seismic piping analysis. Installation of additional shielding (in accordance with TSRs 93-012 and 93-043) while the RHR system is not in service was determined to be acceptable through the performance of a deadweight analysis. The additional shielding will be removed prior to returning the RHR system to service. The remaining shielding will be removed prior to leaving cold shutdown. Therefore, an unreviewed safety question does not exist.

TM S2-93-03

Temporary Modification 03-17-93
(Safety Evaluation No. 93-051)

Temporary Modification (TM) S2-93-03 installed an electrical jumper around the seal-in contacts for Unit 2 safety injection (SI) system valves 2-SI-MOV-2869A and 2-SI-MOV-2869B to allow the valves to be throttled in order to control reactor coolant system flow from the volume control tank through the idle charging pumps.

This change maintains the full operating capability of the subject valves and will not impact the operation of the residual heat removal system. The TM will be in place only when the Unit is at less than 350°F and 450 psig to ensure the SI system is fully operable when required by Technical Specifications. Therefore, an unreviewed safety question does not exist.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: March 1993

DCP 91-41-3 **Design Change Package** 03-18-93
(Safety Evaluation No. 92-020)

Design Change Package (DCP) 91-41-3 installed dedicated steam generator pressure recorders (2 per Unit) to satisfy the requirements for Category I, Type A variables, defined in Regulatory Guide 1.97.

This modification provides control room operators with additional information to use during the performance of emergency operating procedures when determining the existence of a failed steam generator and/or tube rupture. The installation will not adversely affect any related systems or components. Therefore, an unreviewed safety question does not exist.

DCP 90-20-02 **Design Change Package** 03-19-93
(Safety Evaluation No. 91-011)

Design Change Package (DCP) 90-20-02 added four Unit 2 reactor water storage tank (RWST) level channel trip annunciators to allow control room monitoring of RWST level channel tripping. Corresponding test points were also installed to provide local test capabilities of the process equipment in the emergency switchgear relay room.

This nonsafety-related modification was implemented to comply with the requirements of IEEE 279-1971, Section 4.19. No plant performance characteristics or parameters were altered by this modification. Therefore, an unreviewed safety question does not exist.

TSI-016 **Technical Specification Interpretation** 03-19-93
(Safety Evaluation No. 93-055)

Technical Specification Interpretation TSI-016 was developed to describe the actions that need to be taken if the manipulator crane area or airborne radiation monitors become inoperable prior to or during refueling operations (Re: Technical Specifications 3.10.A.2, 3.10.A.4).

The TSI-directed actions secure the containment ventilation purge system when the automatic isolation functions are not operable. This action places the system in its designed "safe" condition and serves the purpose of the automatic isolation design functions. This is an accident mitigation action that reduces the potential consequences of a fuel handling accident in the containment. It does not affect the initiating factors of a fuel handling accident in the containment or any other type of accident. The TSI-directed actions are consistent with Standard Technical Specifications for Westinghouse Pressurized Water Reactors, NUREG-0452, Revision 4, Section 3.9.9. Therefore, an unreviewed safety question does not exist. Furthermore, this TSI has been discussed with and concurred with by the NRC (Surry's Senior Resident Inspector and NRR Project Manager).

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: March 1993

EWR 90-336

Engineering Work Request 03-22-93
(Safety Evaluation No. 90-265)

Engineering Work Request 90-336 replaced the Fischer Porter Unit 2 safety injection system flow transmitter 2-SI-FT-932 and number 3 reactor coolant pump seal pressure transmitter 2-SI-PT-154 with similar Rosemount transmitters.

This modification will improve the reliability of the subject transmitters and will not affect the operation of safety-related systems. Therefore, an unreviewed safety question does not exist.

TSR 93-001
TSR 93-002
TSR 93-003
TSR 93-004
TSR 93-022
TSR 93-026
TSR 93-027

Temporary Shielding Requests 03-23-93
(Safety Evaluation 93-046)

Temporary Shielding Requests 93-001, 93-002, 93-003, 93-004, 93-022, 93-026, and 93-027 installed temporary lead shielding on pressurizer spray and pressurizer safety valve piping in the Unit 2 containment to reduce the radiation dose received by personnel while performing work in the area.

Installation of the shielding while the subject lines remain operable was determined to be acceptable through the performance of seismic and deadweight piping analyses, provided the pressure and temperature do not exceed 385 psi and 400°F. The shielding will not adversely affect the design functions of the affected system and will be removed prior to exceeding the specified operating conditions. Therefore, an unreviewed safety question does not exist.

TSR 93-010

Temporary Shielding Request 03-23-93
(Safety Evaluation 93-057)

Temporary Shielding Request 93-010 installed temporary lead shielding on the Unit 2 reactor cavity purification system piping (3"-RL-101-152) to reduce the radiation dose received by personnel while performing work in this area of the Unit 2 Auxiliary Building.

Installation of the shielding while the subject line remains operable was determined to be acceptable through the performance of a seismic piping analysis. The shielding will not adversely affect the design functions of the affected system and will be removed prior to the Unit leaving cold shutdown. Therefore, an unreviewed safety question does not exist.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: March 1993

DCP 90-26-01 **Design Change Package** 03-25-93
(Safety Evaluation No. 90-230)

Design Change Package (DCP) 90-26-01 provided for the inspection, cleaning, and recoating of the service water (SW) supply piping for the bearing cooling water heat exchangers, recirculating spray heat exchangers (RSHX), and the SW return piping from the component cooling water heat exchangers. The DCP also installed pressure taps on the SW supply and return piping for the B and C RSHXs.

This DCP reconditioned the subject SW piping and did not modify the system function. Therefore, an unreviewed safety question does not exist.

TSR 93-028 **Temporary Shielding Request** 03-26-93
(Safety Evaluation 93-061)

Temporary Shielding Request 93-028 installed temporary lead shielding on the Unit 2 reactor coolant (RC) and safety injection system piping to reduce the radiation dose received by personnel while performing work in the Unit 2 C Loop Room on safety injection system valves 2-SI-85 and 2-SI-243.

Installation of the shielding while the subject lines remain operable was determined to be acceptable through the performance of seismic and deadweight piping analyses. The shielding will not adversely affect the design functions of the affected systems and will be removed prior to pressurizing the RC system or exceeding 140°F. Therefore, an unreviewed safety question does not exist.

AC S1-93-0329 **Administrative Control** 03-29-93
(Safety Evaluation No. 93-031A)

Administrative control of Unit 1 auxiliary feedwater (AFW) system valve 1-FW-MOV-160B will be implemented to ensure AFW cross-tie capability from Unit 2 to Unit 1 is maintained during the period in which Unit 1 AFW system valve 1-FW-MOV-160A is tagged out as part of a 480V 2J bus outage.

Unit 1 will be at power and Unit 2 will be at refueling shutdown (with no fuel in the vessel) during this condition. Administrative control of the subject valve will not disable an automatic function (the valve is manipulated through remote manual control) and enables the cross-tie to be established within the time period assumed by the accident analyses. Therefore, an unreviewed safety question does not exist.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: March 1993

EWR 91-062 **Engineering Work Request** 03-30-93
(Safety Evaluation No. 91-130)

Engineering Work Request 91-062 replaced the pin joint with a welded joint on a valve extension coupling for Unit 2 recirculating spray (RS) system valves 2-RS-MOV-256A and 2-RS-MOV-256B.

This modification did not alter the function or operation of the subject valves or the RS system. Therefore, an unreviewed safety question does not exist.

FS 89-040 **UFSAR Change** 03-30-93
(Safety Evaluation 93-063)

Updated Final Safety Analysis Report (UFSAR) Sections 2.3 "Hydrology," 9.4 "Component Cooling System," 9.9 "Service Water System," and 10.3 "System Design and Operation" were revised to incorporate the results of the revised Probable Maximum Hurricane (PMH) analysis, coincident with the loss of offsite power.

The subject analysis and applicable abnormal operating procedure require both Units be placed in a safe condition (intermediate shutdown or lower) prior to the arrival of a PMH to eliminate design basis accident mitigation concerns. With the Units in a safe condition, no new malfunction of equipment related to safety need to be evaluated and the margins of safety as reflected in the Technical Specifications are assured. Therefore, an unreviewed safety question does not exist.

FS 92-124 **UFSAR Change** 03-30-93
(Safety Evaluation 93-066)

Updated Final Safety Analysis Report (UFSAR) Section 10.3.7.2, "[Lubricating Oil System] Description" was revised to correctly reflect the location of the main turbine lube oil cooler.

The change is administrative in nature and was made to be consistent with the as-built configuration. No procedures or plant equipment are affected and no physical modifications are involved. Therefore, an unreviewed safety question does not exist.

FS 92-152 **UFSAR Change** 03-30-93
(Safety Evaluation 93-065)

Updated Final Safety Analysis Report (UFSAR) Section 9.4.3.2, "Chilled Water System Description" was revised to eliminate the implication that the chilled water system is intentionally chromated.

The change is administrative in nature and provides clarification only. No procedures or plant equipment are affected and no physical modifications are involved. Therefore, an unreviewed safety question does not exist.

FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: March 1993

SE 93-066 **Safety Evaluation** 03-30-93

Safety Evaluation 93-066 was performed to evaluate the effects on the Unit 1, Cycle 12 departure from nucleate boiling ratio (DNBR) resulting from a dropped control rod(s) using WCAP-11294-P-A, "Methodology for the Analysis of the Dropped Rod Event."

It was concluded that the DNBR design limit will not be exceeded for the remainder of Unit 1, Cycle 12. Therefore, an unreviewed safety question does not exist.

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

MONTH/YEAR: March 1993

1-OPT-CT-201
2-OPT-CT-201

Operations Periodic Test Procedures 03-02-93
(Safety Evaluation No. 93-036)

Operations Periodic Test Procedures 1/2-OPT-CT-201, "Containment Isolation Valve Local Leak Rate Testing (Type C Containment Testing)" were revised to provide instructions for implementing temporary modifications to prevent the automatic actuation of emergency safeguards systems during the Type C local leak rate test on the leakage monitoring system.

The procedures will be implemented with the respective Unit at cold shutdown when the emergency safeguards systems are not required to be operable. Double verification will be used to verify that lifted electrical leads are properly landed and pulled fuses are replaced following the completion of the procedures. Therefore, an unreviewed safety question does not exist.

9058-IP-1

Vendor Procedure 03-04-93
(Safety Evaluation No. 93-039)

Vendor procedure 9058-IP-1, "Fuel Oil Modification Installation," provides instructions for replacing the existing emergency diesel generator canister type fuel oil filter assemblies and piping/tubing with new spin on filter assemblies and tubing.

This modification will increase the availability and reliability of the EDG fuel oil system and will not change its functional requirements or performance. Therefore, an unreviewed safety question does not exist.

1/2-IPT-CC-RC-ICCM-001
1/2-IPT-CC-RC-ICCM-002
1/2-IPT-CC-RC-ICCM-003
1/2-IPT-CC-RC-ICCM-004

Instrument Periodic Test Procedures 03-16-93
(Safety Evaluation No. 93-050)

Instrument Periodic Test Procedures 1/2-IPT-CC-RC-ICCM-001 "Inadequate Core Cooling Monitor Train A Calibration," 1/2-IPT-CC-RC-ICCM-002 "Inadequate Core Cooling Monitor Train B Calibration," 1/2-IPT-CC-RC-ICCM-003 "Inadequate Core Cooling Monitor Train A RVLIS Sensor Calibration," and 1/2-IPT-CC-RC-ICCM-004 "Inadequate Core Cooling Monitor Train B RVLIS Sensor Calibration" were developed to perform a calibration of the Inadequate Core Cooling Monitor and Reactor Vessel Level Indication systems.

These procedures will be performed when the affected Unit is at cold shutdown when the affected systems are not required to be operable. Therefore, an unreviewed safety question does not exist.

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

MONTH/YEAR: March 1993

2-TOP-4028 **Temporary Operating Procedure** 03-17-93
(Safety Evaluation No. 93-052)

Temporary Operating Procedure 2-TOP-4028, "Lineup #2 PDTT to Pump to #2 VCT," was developed to provide instructions for establishing a valve lineup that allows the Unit 2 primary drains transfer tank (PDTT) to be pumped directly to the volume control tank (VCT). This lineup will recycle loop stop valve leakage to the VCT to conserve reactor coolant system (RCS) inventory and boron while the RCS loops are isolated.

This procedure will be performed while the Unit is at cold shutdown and will not adversely impact the chemical and volume control system. Furthermore, sources of primary grade water to the PDTT will be isolated to prevent inadvertent dilution of the RCS. Therefore, an unreviewed safety question does not exist.

1-PT-17.7 **Periodic Test Procedure** 03-18-93
(Safety Evaluation No. 93-053)

Periodic Test Procedure 1-PT-17.7, "Recirculating Spray HX Service Water Radiation Monitor Pump Test," was temporarily changed to install electrical jumpers to allow the consequence limiting safeguards (CLS) automatic start features of Unit 1 recirculating spray heat exchanger service water radiation monitor sample pumps 1-SW-P-5A, 1-SW-P-5B, 1-SW-P-5C, and 1-SW-P-5D to be tested.

Installation of the electrical jumpers will not affect other systems or components. The applicable Emergency Operating Procedures (EOP) will be revised to require verification that the subject pumps have automatically started upon receipt of a Hi Hi CLS signal. The EOPs will also direct appropriate actions to minimize the potential for a radioactive release in the event the pumps do not start. Therefore, an unreviewed safety question does not exist.

2-ECM-2403-02 **Electrical Corrective Maintenance Procedure** 03-25-93
2-TMOP-EPH-001 **Temporary Maintenance Operating Procedure**
(Safety Evaluation No. 93-059)

Electrical Corrective Maintenance Procedure 2-ECM-2403-02, "RSS Transformer B Outage with Backfeed of Transfer Bus E," was developed and Temporary Maintenance Operating Procedure 2-TMOP-EPH-001, "Unit 2 34.5 KV Bus 5 and RSS Transformer B Outage," was revised to provide instructions for conducting an outage of 34.5 KV Bus Number 5.

These procedures were performed with Unit 2 defueled on backfeed supplying the D and E transfer buses. Unit 1 was at power with safety systems and emergency diesel generators available. Therefore, an unreviewed safety question does not exist.

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

MONTH/YEAR: March 1993

2-OP-FH-001	**Operating Procedure**	03-27-93
2-OSP-ZZ-004	**Operations Surveillance Procedure** (Safety Evaluation No. 93-062)	

Operating Procedure 2-OP-FH-001 "Refueling Operations" and Operations Surveillance Procedure 2-OSP-ZZ-004 "Unit 2 Safety Systems Status List for Cold Shutdown/Refueling Conditions" were changed to allow operation of the auxiliary building ventilation system with one Category I filtered exhaust fan secured.

Both trains of the auxiliary building ventilation system will remain operable and capable of performing their design function during this mode of operation. The requirements of Technical Specifications 3.10 and 3.22 will be adhered to. Therefore, an unreviewed safety question does not exist.

TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

MONTH/YEAR: March 1993

2-ST-299 **Special Test** 03-31-93
(Safety Evaluation No. 93-003)

Special Test 2-ST-299, "Recirculation Spray Heat Exchanger Service Water Flow Test," was performed satisfactorily on March 22, 1993. The test verified that the Unit 2 B and C recirculating spray heat exchanger (RSHX) service water (SW) system will deliver design basis flow to reject design basis heat loads from the containment. In addition, the test verified the satisfactory performance of new V-cone flow elements and modified radiation monitor pump suction piping.

The test was performed with the Unit at refueling shutdown during which the RS system was not required. Therefore, an unreviewed safety question does not exist.

CHEMISTRY REPORT

MONTH/YEAR: March 1993

Primary Coolant Analysis	Unit No. 1			Unit No. 2		
	Max.	Min.	Avg.	Max.	Min.	Avg.
Gross Radioact., µCi/ml	4.41E-1	1.73E-1	3.23E-1	2.10E-1	1.03E-5	2.31E-2
Suspended Solids, ppm	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1
Gross Tritium, µCi/ml	1.99E-1	1.78E-1	1.89E-1	8.22E-2	8.22E-2	8.22E-2
I^{131}, µCi/ml	1.21E-3	4.12E-4	7.34E-4	4.15E-4	1.67E-4	2.76E-4
I^{131}/I^{133}	0.13	0.07	0.10	0.12	0.08	0.10
Hydrogen, cc/kg	44.9	25.4	35.7	46.3	3.5	18.1
Lithium, ppm	2.34	2.05	2.20	0.89	0.72	0.75
Boron - 10, ppm*	153.8	117.8	132.9	178.9	0.2	63.1
Oxygen, (DO), ppm	≤ 0.005	≤ 0.005	≤ 0.005	6.0	≤ 0.005	2.3
Chloride, ppm	0.005	≤0.001	0.003	0.526	≤ 0.001	0.099
pH at 25 degree Celsius	6.92	6.52	6.73	8.75	4.62	5.11

* Boron - 10 = Total Boron x 0.196

Comments:

Unit 2 shut down for refueling on 3/6/93.

FUEL HANDLING
UNITS 1 & 2

MONTH/YEAR: March 1993

New or Spent Fuel Shipment Number	Date Stored or Received	Number of Assemblies per Shipment	Assembly Number	ANSI Number	Initial Enrichment	New or Spent Fuel Shipping Cask Activity
NAC-I28.2	02/25/93	28	F09	LM00W9	1.86	N/A
			F11	LM00W6	1.86	
			L06		1.86	
			L07		1.86	
			L09		1.86	
			L13		1.86	
			L17		1.86	
			L19		1.86	
			L20		1.86	
			L21		1.86	
			L23		1.86	
			L24		1.86	
			L26		1.86	
			L27		1.86	
			L28		1.86	
			L29		1.86	
			L33		1.86	
			L34		1.86	
			L35		1.86	
			L38		1.86	
			L39		1.86	
			L43		1.86	
			L45		1.86	
			L46		1.86	

FUEL HANDLING
UNITS 1 & 2

MONTH/YEAR: March 1993

New or Spent Fuel Shipment Number	Date Stored or Received	Number of Assemblies per Shipment	Assembly Number	ANSI Number	Initial Enrichment	New or Spent Fuel Shipping Cask Activity
			L48		1.86	
			L49		1.86	
			L51		1.86	
			L53		1.86	

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

MONTH/YEAR: March 1993

None During This Reporting Period.