# VIRGINIA ELECTRIC AND POWER COMPANY (1) RICHMOND, VIRGINIA 23261

June 13, 1978

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Mr. R. A. Hartfield, Acting Director Office of Management Information and Program Control U. S. Nuclear Regulatory Commission Washington, D. C. 20555

Serial No. 339 PO&M/DLB:das

Docket Nos. 50-280

50-281

License Nos. DPR-32

DPR-37 ·

Dear Mr. Hartfield:

Enclosed are the following reports for Surry Power Station Unit Nos. 1 and 2.

Attachment 1:

Refueling and Spent Fuel Storage Information,

Surry Unit No. 1

Attachment 2:

Refueling and Spent Fuel Storage Information,

Surry Unit. No. 2

Attachment 3:

Monthly Operating Report, Surry Power Station,

Unit Nos. 1 and 2; for May 1978.

Very truly yours,

20. M. Stallings

Vice President - Power Supply and Production Operations

Enclosures (3 copies)

cc: Dr. Ernst Volgenau, Director (10 copies)
Office of Inspection and Enforcement

Mr. James P. O'Reilly, Director (1 copy) Office of Inspection and Enforcement

781660041

#### ATTACHMENT 1

- 1. Name: SURRY UNIT NO. 1
- 2. Next scheduled date for refueling shutdown: 11/1/79
- 3. Scheduled date for restart following refueling: 5/1/80 (refueling outage extended for steam generator replacement).
- 4. Technical Specifications Changes: No changes are forseen due to the reload core design (The review by both the station and system safety committees will take place prior to submittal of the reload license to NRC.)
- 5. Scheduled date for reload licensing submittal: 2/1/80
- 6. Important licensing considerations: None
- 7. Number of fuel assemblies (as of 6/1/78):
  - a. In the core: 157
  - b. In the spent fuel storage pool:\* 436
- 8. Licensed spent fuel pool storage capacity:\*
  - a. Current: 1044
- 9. Projected date of last refueling that can be discharged to the spent fuel storage pool assuming currently licensed capacity: October, 1984.

<sup>\*</sup>Surry Units No. 1 and 2 share a common spent fuel storage pool.

#### ATTACHMENT 2

- 1. Name: SURRY UNIT NO. 2
- 2. Next scheduled date for refueling shutdown: 10/8/78
- 3. Scheduled date for restart following refueling: 4/15/79 (refueling outage extended for steam generator replacement)
- 4. Technical Specifications Changes: No changes are forseen due to the reload core design (The review by both the station and system safety committees will take place prior to submittal of the reload license to the NRC).
- 5. Scheduled date for reload licensing submittal: 1/1/79
- 6. Important licensing considerations: None
- 7. Number of fuel assemblies (as of 6/1/78)
  - a. In the core: 157
  - b. In the spent fuel storage pool: \* 436
- 8. Licensed spent fuel pool storage capacity:\*
  - a. Current: 1044
- 9. Projected date of last refueling that can be discharged to the spent fuel storage pool assuming currently licensed capacity: April, 1985.

<sup>\*</sup>Surry Units No. 1 and 2 share a common spent fuel storage pool.

### VIRGINIA ELECTRIC AND POWER COMPANY

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SURRY POWER STATION

### MONTHLY OPERATING REPORT

REPORT NO. 78-05

MAY, 1978

Superintendent - Station Operations

APPROVED:

MANAGER

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# OPERATING DATA REPORT

DOCKET NO. DATE 6-1-78

COMPLETED BY 0.J. Costello 804-357-3184

OPEN ATTAIC OF ATTIE	•	·	
OPERATING STATUS		. <del></del>	<del> </del>
1. Unit Name: Surry 1	•	Notes	. :
2. Reporting Period: 0001 780501 - 2	400 780531		•
3. Licensed Thermal Power (MWt):	2441		
4. Nameplate Rating (Gross MWe):	847.5		og i Si <b>vi</b> graden i s
5. Design Electrical Rating (Net MWe):	822		
6. Maximum Dependable Capacity (Gross MWe):	811		•
7. Maximum Dependable Capacity (Net MWe):	775		
8. If Changes Occur in Capacity Ratings (Items N	umber 3 Through 7) Sir	nce Last Report, Give Reas	ons.
o. in changes occur in Capacity Turings (Tionis 1)	N/A	nee Bast Report, Give Real	
		· · · · · · · · · · · · · · · · · · ·	
<del></del>	<del></del>		
9. Power Level To Which Restricted, If Any (Net	MWe):N/A	<u> </u>	
10. Reasons For Restrictions, If Any:	N/A		<u> </u>
•			
	This Month	Yrto-Date	Cumulative
Commence of the Commence of th	•	•	
11. Hours In Reporting Period	744	3,623	47 687
12. Number Of Hours Reactor Was Critical	0	2,667	31983.9
13. Reactor Reserve Shutdown Hours	0	0	49.00
14. Hours Generator On-Line	. 0 .	2666.5	31231.7
15. Unit Reserve Shutdown Hours	. 0	0	0
16. Gross Thermal Energy Generated (MWH)	0	6,486,752	.71,:627,748
17. Gross Electrical Energy Generated (MWH)	0	2,160,910	23,520,753
18. Net Electrical Energy Generated (MWH)	<u> </u>	2,057,327	22,324,891
19. Unit Service Factor	00	73.6%	65.5
20. Unit Availability Factor	. 0 .	73.6%	65.5
21. Unit Capacity Factor (Using MDC Net)	•0	73.3%	60.49
22. Unit Capacity Factor (Using DER Net)	0	69.1%.	575
23. Unit Forced Outage Rate	0	0	16.89
24. Shutdowns Scheduled Over Next 6 Months (T)	ype, Date, and Duration	of Each):	
•	None		
		<del></del>	
25. If Shut Down At End Of Report Period, Estim	rated Date of Startum:	6/30/78	<del></del>
26. Units In Test Status (Prior to Commercial Ope	· · · · · · · · · · · · · · · · · · ·	Forecast	Achieved
ope			Person Len
INITIAL CRITICALITY	•	·	e e e gray
		•	

COMMERCIAL OPERATION

# OPERATING DATA REPORT

DOCKET NO. DATE 6-1-78

COMPLETED BY 7ELEPHONE 804-357-3184

		LELER	HOME
OPERATING STATUS		<del></del>	: · · · ·
1. Unit Name: Surry 2		Notes	
2. Reporting Period: 0001 780501 - 240	00 780531		
3. Licensed Thermal Power (MWt):	2441		
4. Nameplate Rating (Gross MWe):	847.5		
5. Design Electrical Rating (Net MWe):	822		
6. Maximum Dependable Capacity (Gross MWe):	811		**
• • • •	775		F
7. Maximum Dependable Capacity (Net MWe):	when 2 Theoret 7) Ci-	and Donard Circ D	
8. If Changes Occur in Capacity Ratings (Items No	N/A	ice Last Report, Give K	: .
9. Power Level To Which Restricted, If Any (Net	MWe): N/A		
10. Reasons For Restrictions, If Any:	N/A	· · · · · · · · · · · · · · · · · · ·	
<del></del>		· · · · · · · · · · · · · · · · · · ·	
en and the state of the state o	This Month	Yrto-Date	Cumulative
11. Hours in Reporting Period	744	3,623	44.567
12. Number Of Hours Reactor Was Critical	616.9	2,993.8	29,406.6
13. Reactor Reserve Shutdown Hours	0	. 0	0
14. Hours Generator On-Line	614.9	2,988.2	<u>28,917.1</u>
15. Unit Reserve Shutdown Hours	0	00	0
16. Gross Thermal Energy Generated (MWH)	1,493,577	7,267,966	66,978,200
17. Gross Electrical Energy Generated (MWH)	482,750	2,371,315	21,938,709
18. Net Electrical Energy Generated (MWH)	459,395	2,253,597	20,806,714
19. Unit Service Factor	82.6%	82.5%	64.9%
20. Unit Availability Factor	82.6%	82.5%	64.9%
21. Unit Capacity Factor (Using MDC Net)	79.7%	80.3%	. 60.2%
22. Unit Capacity Factor (Using DER Net)	75.1%	75.7%	. 56.8%
23. Unit Forced Outage Rate	17.4%	4.1%	23.8%
24. Shutdowns Scheduled Over Next 6 Months (T)	vne. Date, and Duration	of Each):	
Refueling and Steam Generator Ins	•		•
Reideling and Steam Generator Ins	bection = Oct. 1	). 19/6. ) weeks.	<del></del>
	<del>,</del>	27/4	
25. If Shut Down At End Of Report Period, Estim	ated Date of Startup:	N/A	
26. Units In Test Status (Prior to Commercial Ope	ration):	Forecast	Achieved
	•	•	•
INITIAL CRITICALITY		<del></del>	· · · <u>· · · · · · · · · · · · · · · · </u>
INITIAL ELECTRICITY	•	<u> </u>	. <u> </u>

COMMERCIAL OPERATION

#### UNIT SHUTDOWNS AND POWER REDUCTIONS

May, 1978 REPORT MONTH\_

50-280 DOCKET NO. Surry UNIT NAME 6-1-78 · DATE G, Kane **COMPLETED BY** 804-357-3184 TELEI HONE

No.	Date	Type1	Duration (Hours)	Reason-	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Code <sup>4</sup>	Component Code <sup>5</sup>	Cause & Corrective Action to Prevent Recurrence
78-1	780501	S	744	C .	1				. Unit shutdown for the entire month. Refueling completed, turbine repairs in progress, steam generator maintenance in progress.
•				•					maintenance in progress.
•				•					

F: Forced S: Scheduled Reason:

A-Equipment Failure (Explain)
B-Maintenance of Test
C-Refueling

D.Regulatory Restriction
E-Operator Training & License Examination
F-Administrative

G-Operational Error (Explain)

H-Other (Explain)

Method:

I-Manual

2-Manual Scram.

3-Automatic Scram.

4-Other (Explain)

Exhibit 1 - Same Source

Exhibit G - Instructions for Preparation of Data

Entry Sheets for Licensee

Event Report (LER) File (NUREG-

0161)

(9/77)

May, 1978 REPORT MONTH

50-281 DOCKET NO. Surry 2 **UNIT NAME** 6-1-78 DATE G. Kane **COMPLETED BY** 804-357-3184 TELEI HONE

-	No.	Date	Type <sup>1</sup>	Duration (Hours)	Reason -	Method of Shutting Down Reactor <sup>3</sup>	Licensee Event Report #	System Cude <sup>4</sup>	Component CodeS	Cause & Corrective Action to Prevent Recurrence •
	78 <del>-</del> 2	780524	F	129.1	Н	1	LER 78-019/03L	zz	Suport	Snubber Inspection
	· <u>-</u>	•								
	•		•							
	•			•						

F: Forced S: Scheduled

Reason:

A-Equipment Failure (Explain)
B-Maintenance of Test

C-Refueling

D-Regulatory Restriction

E-Operator Training & License Examination

F-Administrative

2-Manual Scrain.

3-Automatic Scram.

4-Other (Explain)

Exhibit 1 - Same Source

0161)

Exhibit G - Instructions for Preparation of Data

Entry Sheets for Licensee Event Report (LER) File (NUREG

Method:

I-Manual

G-Operational Error (Explain) 11-Other (Explain)

(9/77)

## LOAD REDUCTIONS DUE TO ENVIRONMENTAL RESTRICTIONS

UNIT NO. 1

MONTH: MAY, 1978

DATE	TIME	HOURS	LOAD, MW	REDUCTIONS, MW	MWH	REASON
	·				·	
			(None	during this report	ing peric	d)
		,				
			,	•	,	
						·
			·			
	·					

MONTHLY TOTAL

0

## LOAD REDUCTIONS DUE TO ENVIRONMENTAL RESTRICTIONS

UNIT NO. 2

MONTH: MAY, 1978

DATE	TIME	HOURS	LOAD, MW	REDUCTIONS, MW	MWH	REASON
			(None	during this report	ng period	).
	·					
						·
			٠.			·
				<u>-</u>		
					•	
			·			

MONTHLY TOTAL

DOCKET NO.	50-280
UNIT _	I
DATE _	May, 1978
COMPLETED BY _	O.J. Costello

#### AVERAGE DAILY UNIT POWER LEVEL

MONTH_	May, 1978		·
DAY AV	ERAGE DAILY POWER LEVEL (MWe-net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-net)
1	0	17	0
2	0	18	0
3	0	19	0
4	0	20	0
5	0	21	O
6	0	22	<u> </u>
7	0	23	<u> </u>
8	0	24	o
9	0	25	0
10	0	. 26	0
11	0	27	o
12	0	28	O
13	0	29	O
14		30	0
15	0	31	0
16	0		·
	· ·		

### DAILY UNIT POWER LEVEL FORM INSTRUCTIONS

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

These figures will be used to plot a graph for each reporting month. Note that by using maximum dependable capacity for the net electrical rating of the unit, there may be occasions when the daily average power level exceeds the 100% line (or the restricted power level line). In such cases, the average daily unit power output sheet should be footnoted to explain the apparent anomaly.

DOCKET NO. 50-281

UNIT II

DATE May, 1978

COMPLETED BY 0.J. Costello

#### AVERAGE DAILY UNIT POWER LEVEL

MONTH	May, 1978		
DAY	ERAGE DAILY POWER LEVEL (MWe-net)	DAY	AVERAGE DAILY POWER LEVEL (MWe-net)
1	756.0	17	753.9
2	756.8	18	753.3
3	752.3	19	753.3
4	751.6	20	753.5
5	748.8	21	753.8
6	750.0	22	752.3
7	750.1	23	_751.5
8	749.8	24	452.5
9	745.6	25	0
10	753.1	26	<u> </u>
11	752.3	27	
12	752.0	28	0 .
13	758.1	29	0
14	757.1	30	624.7
15	757.9	31	748.0
16	753.1		

### DAILY UNIT POWER LEVEL FORM INSTRUCTIONS

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

These figures will be used to plot a graph for each reporting month. Note that by using maximum dependable capacity for the net electrical rating of the unit, there may be occasions when the daily average power level exceeds the 100% line (or the restricted power level line). In such cases, the average daily unit power output sheet should be footnoted to explain the apparent anomaly.

#### SUMMARY OF OPERATING EXPERIENCE

#### MAY, 1978

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 1

- May 1 This report begins with the unit in a refueling outage with head bolt detensioning in progress.
- May 2 Part length control rod unlatching operation completed at 1830.
- May 3 Lifted reactor vessel head at 1030. Full length control rod unlatching operation completed at 1500. Commenced fuel movement at 2340.
- May 4 Fuel movement stopped due to high airborne activity in the containment.
- May 6 Fuel movement restarted at 1538.
- May 12 Fuel movement completed at 1105. Surveillance capsule  $\underline{W}$  was removed for evaluation.
- May 13 Full length control rod latching operation completed at 1000.
- May 15 Lower reactor vessel head in place at 1055. Part length control rod latching operation completed at 2200.
- May 31 This report ends with the unit still in a maintenance outage with the reactor vessel head bolts tensioned. There is still primary maintenance underway and major turbine maintenance underway.

#### UNIT 2

- May 1 This report begins with the unit at 100% power.
- May 5 At 0910 load was reduced to 94% to clear a delta-T runback alarm. At 1100 the unit was returned to 100%.
- May 9 At 1540 load was reduced to 96% to allow removal of both Lo Pressure Drain Pumps for cooling line maintenance. At 1927 the unit was returned to 100% power.
- May 24 At 1200 a rampdown was started for snubber inspection. At 1645 the generator output breakers were opened, the turbine tripped, and the reactor manually shutdown. A unit cooldown was commenced. At 2330 the unit was <350°F/450 PSIG. The plant temperature was to be maintained at approximately 340°F. The snubber inspection was begun.
- May 29 At 1430 the RCS was heated up to  $>350^{\circ}F/450$  PSIG as per normal plant recovery. The snubber inspection & repair having been completed. At 2350 the reactor was taken critical and at 2400 was at 2 x  $10^{-5}$  amps in the intermediate range of nuclear instrumentation.

### SUMMARY OF OPERATING EXPERIENCE

#### (CONTINUED)

### UNIT 2

- May 30 At 0149 the turbine was synchronized to the system and a load increase begun. At 0700 the unit reached 100% power.
- May 31 This report ends with the unit at 100% power.

#### AMENDMENTS TO FACILITY LICENSE OR TECHNICAL SPECIFICATIONS

#### MAY, 1978

On May 10, 1978, the Nuclear Regulatory Commission issued Amendment Nos. 41 and 40 to the Operating License for the Surry Power Station Unit Nos. 1 and 2, respectively, which are designated as Technical Specification Change No. 53. This change is the result of an NRC request to add surveillance requirements for the emergency diesel batteries. Of significance are the following changes:

- 1. Addition of limiting condition for operation of emergency diesel batteries.
- 2. Addition of tests, test frequencies and acceptance criteria for emergency diesel batteries.

The Nuclear Regulatory Commission issued an order April 28, 1978, which modifies Surry Unit No. 2 Operating License. The order results from the NRC Staff's review of an error in the Westinghouse Electric Corporation LOCA-ECCS analysis. The error discovered was in the fuel rod heat balance equation involving the incorrect use of only half of the volumetric heat generation due to metal-water reaction in calculating the cladding temperature. Of significance, the order has the following provisions:

- 1. As soon as possible, the licensee shall submit a re-evaluation of ECCS cooling performance calculated in accordance with the Westinghouse Evaluation Model, approved by the NRC Staff and corrected for the errors described herein.
- 2. Until further authorization by the Commission, the Technical Specification limit for total nuclear peaking factor  $(F_Q)$  for the Surry Power Station, Unit No. 2 shall be limited to 1.81 for a steam generator tube plugging level of 20.8% or less and 1.79 for a steam generator tube plugging level of greater than 20.8% but less than 25%.
- 3. Until further authorization by the Commission, the licensee shall conduct the operating surveillance program described in its letter of April 17, 1978 where APDM surveillance will be performed above 85% for Unit No. 2.

# FACILITY CHANGES REQUIRING NRC APPROVAL

There were none during this reporting period.

# FACILITY CHANGES THAT DID NOT REQUIRE NRC APPROVAL

#### MAY, 1978

The following facility changes were implemented during the month of May. None of the changes constituted an unreviewed safety question per 10CFR50.59.

#### Design Change

Unit

1

1. DC-76-29 - Flow Shutoff of Low Pressure Heater Drain Pump Miniflow Description - This design change incorporates the addition of a solenoid valve in the recirculation line which will eliminate cavitation through the miniflow line when flow through the pump is greater than 400 gpm.

#### Summary of Safety Evaluation

This system is not addressed in either the FSAR or Technical Specifications since it is not safety related and does not affect any safety related system.

#### Conclusion

There are no safety implications for this design change which effect the health and safety of the public.

2. DC-76-36 - Manipulator Crane Load Cell Readout

Description - This modification is to mount an auxiliary readout for
the Manipulator Crane load cell to enable the crane operator to monitor the load and evaluation continuously.

#### Summary of Safety Evaluation

The probability of occurrence or the consequence of an accident or malfunction of equipment important to safety and previously evaluated in the safety analysis report is not increased because no protective circuits will be altered. A possibility for an accident or malfunction of a different type than any evaluated in the safety analysis report is not created because the proposed Design Change does not alter the function of the original equipment. The margin of safety as defined in the basis for any Technical Specification is not reduced because no protective functions have been altered.

#### Conclusion

This Design Change does not constitute an unreviewed safety question or change the basis of any Technical Specification.

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# DID NOT REQUIRE NRC APPROVAL (CONTINUED)

<u>Design Change</u> <u>Unit</u>

Description - Modifications have been initiated to eliminate the possibility of dropping a fuel assembly. A control circuit was inserted to prevent lifting a hung up assembly and the designed gripper guidepins were installed.

#### Summary of Safety Evaluation

The possibility of an occurrence or the consequence of an accident or malfunction of equipment important to safety and previously evaluated in the Safety Analysis Report is not increased because the addition of the interlock circuit does not bypass any existing safety interlock circuits and the installation of the new guidepins will not alter their function or performance of the gripper. A possibility for an accident or malfunction of a different type than any previously evaluated in the Safety Analysis Report is not created because the failure of the new interlock system will either render the system to its original configuration or prevent the withdrawal of a fuel assembly. This will not create a possibility for a different type of accident. The new guide pins will function as the previous ones have and thus will not create a possibility for a different type of accident. The margin of safety as defined in the basis for any Technical Specification is not reduced because the proposed Design Change will add two safety features which will increase the margin of safety as discussed in Section 3.10.

#### Conclusion

This design change does not constitute an unreviewed safety question or change the basis of any Technical Specification.

4. DC-77-07 - Manipulator Crane Gripper Modification

Description - Modify the manipulator crane gripper to provide power assistance with the engage stroke. Previous configuration included power stroke only while disengaging.

#### Summary of Safety Evaluation

The probability of occurrence or the consequences of an accident or malfunction of equipment important to safety and previously evaluated in the Safety Analysis Report is not increased because this change does not modify any existing safety features or interlocks. A possibility for an accident or malfunction of a different type than any evaluated previously, in the Safety Analysis Report is not created because the gripper and its interlocks will function as they were designed. The margin of safety as defined in the basis for any Technical Specification is not reduced because no margin of safety for the manipulator crane is addressed in Technical Specification.

1

1

### 4. DC-77-07 - Manipulator Crane Gripper Modification

#### Conclusion

The design change neither constitutes an unreviewed safety question nor changes the basis for any Technical Specification.

DC-77-18 - Modification to Manipulator Crane Gripper Fingers

Description - Due to redesigned fuel assemblies from Westinghouse,
the interface of the gripper fingers and fuel assemblies must be
modified to provide proper latching. This was accomplished by
machining the fingers to provide more secure latching.

#### Summary of Safety Evaluation

The probability of occurrence or the consequences of an accident or malfunction of equipment important to safety and previously evaluated in the safety analysis is decreased because, after the elimination of the point of interference, the reliability of the gripper will be assured, and, also the handling tools used in the fuel handling operation are conservatively designed initially, and operate on a fail-safe basis. A possibility for an accident or malfunction of a different type than any evaluated previously in the Safety Analysis Report is not created because the removed metal will be on the thickest part of the finger and will not compromise the strength of the thinner part of the finger where no relief is required. Also, the thinner part of the finger, where the surface is vertical, is where the maximum static movement stresses are located. The margin of safety as defined in the basis for any Technical Specification is not reduced because no margin of safety for the Manipulator Crane Gripper Fingers is addressed in the Technical Specifications.

#### Conclusion

This design change does not constitute an unreviewed Safety Question per 10CFR50.59 or change the basis for any Technical Specification.

DC-78-02 - Chemistry Hot Lab Gas Bottle Storage

Description - The storage and piping configuration for bottled gasses used in the Hot Lab presented potential safety hazards. which were eliminated with the relocation of the storage area outside the building adjacent to the other bottled gases (N2, H2).

#### Summary of Safety Evaluation

This design change does not modify safety related equipment, involve any postulation addressed in the FSAR, or reflect on any margin of safety defined in Technical Specification.

#### Conclusion

This design change presents no implications which should effect the health and safety of the public. Unit 1

1,2

# TEST AND EXPERIMENTS REQUIRING NRC APPROVAL

#### MAY, 1978

There were none during this reporting period.

# TESTS AND EXPERIMENTS THAT DID NOT REQUIRE NRC APPROVAL

# MAY, 1978

ST-54	Terminal Block Verification	Unit
	This test was conducted May 11, 1978, to obtain information to formulate a response to IE Bulletin 78-02. Results of the test will be reported in a specific response letter.	1
ST-56	Limit Switch Verification	
	This test was conducted May 11, 1978, to obtain information to formulate a response to IE Bulletin 78-04. Results of the test will be reported in a specific response letter.	1

MAY, 1978

There were none during this reporting period.

# SURRY POWER STATION

# CHEMISTRY REPORT

MAY , 1978

T.S.6.6.A.11

PRIMARY COOLANT		UNIT NO	). 1		UNIT NO. 2	
ANALYSIS	MAXIMUM	MINIMUM	AVERAGE	MAXIMUM	MINIMUM	AVERAGE
Gross Radioact., μCi/ml	1.19E-2	1.02E-3	4.18E-3	1.52E-1	2.38E-3	8.67E-2
Suspended Solids, ppm	2.0	0.2	0.7	0.7	0.0	0.3
Gross Tritium, µCi/ml	3.56E-2	2.07Ē <sup>-2</sup>	2.40E <sup>-2</sup>	2.14E <sup>-1</sup>	8.09E <sup>-2</sup>	1.60E <sup>-1</sup>
Iodine-131, μCi/ml	2.45E-3	1.17E-4	5.68E-4	5.69E-4	1.37E-4	3.46E-4
I-131/I-133	*	*	*	.2527	.0643	.1142
Hydrogen, cc/kg	0.0	0.0	0.0	44.7	29.4	36.2
Lithium, ppm	0.35	0.00	0.15	1.95	0.96	1.57
Boron-10, ppm +	538.6	445.7	499.0	233.8	82.7	111.7
Oxygen-16, ppm	6.0	0.6	1.5	0.000	0.000	0.000
Chloride, ppm	0.07	0.05	0.05	0.07	0.05	0.05
рН @ 25°C	5.38	4.56	4.97	7.06	6.39	6.88

<sup>+</sup> Boron-10 = Total Boron  $\times$  0.196

# NON-RADIOACTIVE CHEMICAL RELEASES, POUNDS T.S. 4.13.A.8

	Phosphate	19	Boron	754	<del></del>	
	Sulfate	580	Chromate	5.0		
•	50% NaOH	702	Chlorine	0.0	·	
Remarks:	* Unit #1 R	Refueling shutdown	during entire month.			
	Unit #2 S	Shutdown 5-24-78 to	5-30-78			
		<del></del>				

# DESCRIPTION OF ALL INSTANCES WHERE THERMAL DISCHARGE LIMITS WERE EXCEEDED

#### MAY, 1978

On May 30, 1978, a thermal excursion was experienced during startup of Unit II with maintenance in progress on circulating water fish screens and condenser waterboxes. The excursion was reported in accordance with Technical Specification 4.14.C.l.

May 30, 1978 - Exceeded 3°F/Hr Rate of change

There were no reported instances of significant adverse environmental impact.

### -19-FUEL HANDLING

### MAY, 1978

During this month Unit 1 was refueled. There were 64 new fuel assemblies inserted into Unit 1 and 64 discharged to the spent fuel pool. No new fuel was received or spent fuel shipped.



FUEL HANDLING

-20-MAY, 1978

UNIT NO. 1 DATE NO OF ANSI NO. NEW OR SPENT FUEL TPPED/RECEIVED ASSEMBLIES PER SHIPMENT INITIAL ENRICHMENT SHIPPING CASK ACTIVITY LEVEL NONE DURING THIS PERIOD.

FUEL HANDLING

-21-

MAY, 1978 UNIT NO. 2 DATE : NO OF ANSI NO. NEW OR SPENT FUEL IPPED/RECEIVED ASSEMBLIES PER SHIPMENT INITIAL ENRICHMENT SHIPPING CASK ACTIVITY LEVEL NONE DURING THIS PERIOD.

# PROCEDURE REVISIONS THAT CHANGED THE OPERATING MODE DESCRIBED IN THE FSAR

MAY, 1978

There were none during this reporting period.

# DESCRIPTION OF PERIODIC TESTS WHICH WERE NOT COMPLETED WITHIN THE TIME LIMITS SPECIFIED IN TECHNICAL SPECIFICATIONS

MAY, 1978

There were none during this reporting period.

#### INSERVICE INSPECTION

#### MAY, 1978

An eddy current, gaging inspection was performed in Unit #1 A,B and C Steam Generators in accordance with VEPCO NDT Procedure 14.1. The Reg. Guide 1.83 inspection revealed 2 tubes in "A" S/G having defects >40%. "B" S/G had no tubes with >40% defect. "C" S/G had 6 tubes with >40% defect. Greater than 12% of the tubes were inspected in all three S/G's in accordance with Reg. Guide 1.83. The number of tubes scheduled to be plugged are as follows:

	<u>A</u>	<u>B</u>	<u>C</u>
Gaging	18	31	40
Reg. Guide	2	_	6

Approved  $\underline{W}$  Procedures were used in the repair of the 10 leaking plugs in "A" Steam Generator.

Westinghouse performed inservice inspections on the Unit #1 applicable safety related items detailed in Technical Specifications, Section 4.2-1 through 4.2-35.

This inspection included a visual on the reactor vessel interior surfaces, ultrasonic testing of the reactor coolant pump flywheel, visual and liquid penetrant on sensitized piping. The detailed inspection program along with results will be published by Westinghouse and transferred to the site for records purposes. The rough data is available on site for review.

No reportable indications were found in the above mentioned inspections.

Ultrasonic inspection was conducted on 20 welds in the low points of the C.S. and R.S. Systems in accordance with VEPCO letter serial number 345/112476, dated January 11, 1977.

No reportable indications were found in this inspection.

UNIT 1-MAY 1978

V AINTENANCE OF SAFETY RELATED SYSTEMS DURING OUTAGE OF REDUCED POWER FERIOUS)

KETSEKVOT	SYS	COMP	MARK" )	SURMARY	WKPERF	U	KK	TOTEVATM
05/14/78	КC	RX VESS		PERFORA HOT ON RX VESS COMPONENTS	INSPECTION SATISFACTORY	1	804201057	358
05/16/78	RC	PILLING	1.5-h0-105	INVESTIGATE SURFACE GRIND INDICAT	INDICATION CLEANED	1	865151024	27
05/16/78	RC .	PLEING	1.5~/0-141	INVESTIGATE SURFACE GRIND INDICAT	INDICATIONS CLEARED	1	805151025	5
05/17/78	81	PI PI NG	6-51-157	GRIND WELD FLUSH RE EXAM IT	RT ACCEPTABLE	1	805151023	48
			1"-Rh-18-602	INVESTIGATE SURFACE GRIND INDICAT	INDICATIONS BUFFED OUT RE PTD	1	805151026	ធម
05/17/78	M	PIPING		INVESTIGATE SURFACE GRIND INDICAT	INDICATIONS BUFFED OUT HE FT'D	· 1	805161920	43
05/18/78	RC BC	PIPING	6-RC-19	INVESTIGATE SURFACE GRIAD INDICAT	INDICATIONS BUFFED OUT REJ-PT V	1	805161425	માવ
05/18/78	RC	PIPING	6- <i>KC</i> -18		INDICATIONS BUFFED OUT RE-PT'D	1	805161436	11.3
05/18/78	CH	PIPING	?-Cil- )	INVESTIGATE SURFACE GRIND INDICAT	INDICATION BUFFED OUT RE PT'D	1	865191000	22
05/20/78	CH	PIPING	3- <i>Cli</i> -61	PUFF OUT INDICATION KC PI		•	805191001	22
05/20/78	CH	PIPING	3- <i>CII-</i> -1	PUFF OUT INDICATION RE PT	INDICATION BUFFED OUT PT'D OK	1		
05/20/78	SI	PIFING	2- <i>51-7</i> 4	BUFF OUT INDICATION RE PT	_ INDICATIONS BUFFED OUT RE PT'D	1	805191002	72
05/20/78	SI	PIFING	2-51-71	PUFF OUT INDICATION RE PT	INDICATION BUFFED OUT PT'D OK	1	805191007	22
05/20/78	SI	PIPING	G- $SI$ - $50$	GRIND OUT INDICATIONS RE LT	INDICATIONS BUFFED OUT PT'D OK	1	805191004	22
05/23/78	FC	PMP MTR	1-RC-2-1A	UT/VT FLYWHEEL	NUT COMPLETE SATISFACTORY	1	804201058	636
05/23/78	RC	PMP NTR	1-EC-19-1B	UT/VT FLYNHEEL	NDT COMPLETE SATISFACTORY	1	804201059	676
05/23/78	RC	PMP MTR	1-EC-P-1C	UT/VT FLYVIEEL	NDT COMPLETED SATISFACTORY	1	80#201100	676
05/26/78	RC	PIPING	- 110 - 40	UT KS+CS WELDS	UT 10 WELDS ON RS AND CS SYS EACH	1	804201101	715
05/30/78	RC	PZR		PERFORM NOT ON FER COMPONENTS	NOT COMPLETE SATISFACTORY	<b>1</b>	804201056	864
05/31/78	RC	PIPING		PERFORM NOT ON PRIMARY PIPING SYSTEM	NDT COMPLETE SATISFACTORY	1	804201055	888
03/11/10	11G	C 1 C 1 W C		Thursday has on the man the control				
DEPT TOTAL	,							5100

# REPORTABLE OCCURRENCES PERTAINING TO ANY OUTAGE OR POWER REDUCTIONS

### MAY, 1978

Unit #2 Outage occurred on May 24-30, 1978 because of a requirement for re-inspection of hydraulic seismic supports (snubbers). The details of this inspection and results are contained in LER 78-09/03-L-0 (050-0281).

## MAY, 1978

# MONTHLY OPERATING SUPPLEMENT SHEET MECHANICAL MAINTENANCE

## UNIT 1

PT-16.4

1.	MAINTENANCE ORDERS COMPLETED S	AFETY RELATED ITEMS		114
2.	.  DESIGN CHANGES BEING WORKED DO	G-76-29 <b>,</b> 76-36 <b>,</b> 77-	02, 77-07, 77-	18, 77-29, 78-01,
·	76-30, 77-08, 78-10, 76-14,	77–19, 75–55		
3.	PERIODIC TESTS PERFORMED	·		6
	PT-39 PT-12		•	
	PT-22.4A PT-22.4C			
	PT-46			

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UNIT 1-MAY 1978

CHAINTENANCE OF SAFETY MILLATED SYSTEMS DURING OUTAGE OR REDUCED POWER PERIODS)

RETSERVOT	SYS	COMF	HARKNO	SUMMARY	WRPERF	U	48	TOTOVSTM
65/02/78	S1	MOV	//OV-1866B	PACKING LEAK	ADJUSTED PACKING	1	101a5330	2
05/02/78	si	MOV	MOV-1866C	PACKING LEAK	ADJUSTED PACKING	1	101a5940	2
05/02/78	SI	VIOV	<i>MOV-</i> 1866 <i>D</i>	PACKING LEAK	ADJUSTED PACKING	1	10165350	2
05/02/78	5 <b>1</b>	MOV	#OV~1866B	PACKING LEAK	ADJUSTED PACKING	1	10185366	2
05/02/78	SI	HOV	HOV-1866F	PACKING LEAK	ADJUSTED PACKING	1	101:5370	2
05/02/78	51	MOV	<i>∖10V</i> -1866 <i>A</i>	PACKING LEAK	AUJUSTED PACKING	1	10165380	2
05/02/78	CII	VALVE	1-Cu-100	LEAKS DY	STOPPED LEAK	1	863366466	4
05/07/78	DG	VALVE	1-177-50	REPLACE DIAPARAM	KEPLACED DI AFARAGN	1	10164530	7
05/01/78	DG	VALVE	1- <i>DG</i> -49	REPLICE DI APURAGI	REPLACED DI APHRAGM	1	10164640	· 7
65/03/78	RH	MOV	MOV1701	INSPECT PACKING GLAND STUDS AND	INSPECTED GLAND STUDS-SAT	1	801250829	4
05/03/78	RH	NOV	<i>MOV-</i> 1700	INSPECT PACKING GLAND STUDS AID		1	801250630	4
65/63/78	EE	VALVE	TK-4	REFIEF VALVE ON AIR TANK 4 NEEDS	INSTALLED NEW VALVE	1	804191540	. 9
05/03/78	RC	SG	1-EC-E-1A	INSPECT 6 IN HAND HOLES	COMPLETED	1	804260937	45
65/63/78	RC	SG	1-RC-E-1B	INSPECT 6 IN HAND HOLES	COMPLETED	1	804260938	144
05/03/78	RC	SG	1- <i>kC-E-1C</i>	INSPECT 6 IN HAND HOLES	COMPLETED	1	804260939	199
05/04/78	Си	VALVE	1-Cii-210	DI APHRAM LEAKS	REPLACED DI APHKAGM	1	10186220	12
65/04/78	ilSS	SNUBBEK		PT 39	COMPLETED PT 39 SAT	1	804240625	113
05/05/78	cs	PUHP	1-CS-P-2B	BEARING NOISE	NOISE IN CK VLV NOT PUMP	1	101 i. ö700	1
05/05/78	SI .	PIPING	FE1943	FLANGES LEAK BORIC ACID	KEPLACED GASKETS	1	864361328	27
05/06/78·	Cli	VALVE	1- <i>CH</i> -392		REPLACED DIAPHRAGM	1	10101400	5
65/06/78	СИ	VALVE	1- <i>CH</i> -168	REPLACE DIALHRAM (GRINNELL)	REPLACED DI APHRAGM	1	101 <i>6</i> 1570	5
05/06/78	CH	VALVE	1- <i>CH</i> -171	REPLACE DI APUKAM (GRINNELL)	REPLACED DI APRRAGN	1	10181580	5
05/06/78	ĪΛ	PIFING	P1-1A-104	REINSTALL AIR LINE TO LEAK OFF POT		1	804221606	33
65/06/78	CII	VALVE	1-CH~96	REPLACE DI APHRAGA	CHANGED DIAPHRAGM	1	805001352	7
05/06/78	СИ	VALVE	1-CH-106	REPLACE DI APHRAGA	CHANGED DIAPHRAGA	1	805001356	5
05/06/78	CII	VALVE	1-CH-107	REPLACE DI APHRAGM	CHANGED DI APARAGM	1	805001358	. 5
05/08/78	Cli	VALVE	1-CH-208	DI APHRAM LEAKS	VOID	1	1016u210	0
05/08/78	<i>S1</i>	MOV	MOV1890A	NO MANUAL ENGAGE LEVER-INSTALL	VOID	1	804240830	0
05/08/78	Cil	PULIP	1-CH-P-2D	BROKEN COULLING	MADE NEW SHAFT SLEEVE+PMP SIDE CPLIN	1	805052330	61
05/09/78	SI	4OV	MOV-1865A	BODY TO BONNET LEAK	COMPLETED	1	804261307	10
05/09/78	UR	VALVE	1-88-1	REPLACE DIAPHRAGM	CHANGED DI APHRAGM	1	805061045	4 2
05/09/78	BR	VALVE	1-Bh-234	REPLACE DI APIRAGM	REPLACED DI APIRAGII	1	805052100 805051105	2 8
05/10/78	CS	VALVE	1-CS-77	REPLACE DI AFHRAGM	REPLACED DIAPHRAGA	1	8050a1105	8
05/10/78	cs	VALVE	1-05-76	REPLACE DI APHRACH	REPLACED DI APHRAGM REPLACED DI APHRAGM	1	805001107	ង
65/16/78	CS	VALVS	1-03-73	REPLACE DI APHRAGM	REPLACED DI APURAGA REPLACED DI APURAGA	1	805071107	8
65/16/78 65/11/78	CS KS	V ALVE itX	1-CS-72 1-RS-E-1C	REPLICE DIAPHRAGM REMOVE SW SUPPLY ELBOW FOR HX INSP	INSPECTED SW SIDE	1	802171110	188
05/11/78	no blt	VALVE	1-13-2-10 1-131-2	DIAPHRAM LEAK (LEAKS OUT OF STEM)	VOID	1	803100510	0
05/11/78	RC RC	SG SG	1-8C-E-1C	REMOVE/INSTALL SEC MANNAYS	CONPLETED	1	804200936	302
05/11/78	CK	CKANS	1-RC-8-10 1-CR-1	CHECK OUT POLAR CRANE	COMPLETED NOT WORK	1	864261305	336
05/11/78	Eil Eil	MOV	MOVEH100	BODY TO BONNET LEAK REPAIR FOR PT16.	REPLACED BORNET GASKET	1	804221604	120
05/11/78	un CS	HOV	MOV-CS-101C	EXCESSIVE LEAKAGE ON PT 16.4(VLV PIT	REPAIRED VALVE	1	805630915	198
05/11/78	CS CS	HOV HOV	MOV-CS-1010 MOV-CS-101D	EXCESSIVE DEAKAGE ON PT 16.4(VDV PIT	REPAIRED VALVE	1		222
05/11/78	CS	HOV :	MOV-CS-101D MOV-CS-101A	EXCESSIVE LEAKAGE ON PT 16.4(VLV PIT	REPAIRED VALVE	1		198
05/11/78	CS CS	HOV	MOV-CS-101N MOV-CS-101B	EXCESSIVE LEARAGE ON PT 16.4(VLV PIT	REPAIRED VALVE	1	805030921	199
05/11/78	BK	VALVE	1-Bk-2	REPLACE DIAPHRAGE	CHANGED DI APURAGN	1	805001046	54
05/11/78	CS	V ALV S V ALV S	1-06-48	REFLACE DI APHRAGA	REPLACED DI APHRAGM	1	805051109	6
05/11/18	GO	V /16V 3	1 CU-10	HOLDING DIATHRADI	HOLDHOOD DINGHMANA	-	GOSOUTIOS	U

UNIT 1-WAY 1978

CHAINTENANCE OF CAPETY RELATED SYSTEMS DURING OUTAGE OF REDUCED FOMER PERIODS)

OS   12   78   CS	BLANKS BLANKS IG BOX 	1 804200820 1 805111430 1 80511141 1 80501130 1 80511101 1 80511083 1 80201144 1 80201144 1 80420130	1 21 27 5 49 27 6 27 6 27 6 6 8 6 1 2 5 66 6 16 6 484 4 484 4 272 20 6 0 149 6 305 7 305
OS/12/78   CV   VALVE   1-CS-36   REPLACE DIAPHRAGH   REPLACED DIAPHRAGH	BLANKS BLANKS IG BOX  SKET	1 8040/415 1 8050/050 1 8050/411 1 8050/411 1 8050/411 1 8050/411 1 8050/411 1 8050/41 1 8050/41 1 8050/41 1 8050/41 1 8050/41 1 8051/41 1 8051/41 1 8051/41 1 8051/41 1 8051/41 1 8051/41 1 8051/41 1 8051/41 1 8051/41 1 8051/41 1 8051/41 1 8051/41 1 8051/41 1 8051/41 1 8051/41 1 8051/41	1
OS/12/78   CV   VALVE   1-CS-36   REPLACE DIAPHRAGH   REPLACED DIAPHRAGH	BLANKS BLANKS IG BOX SKET	1 8050 0592 1 8050-111 1 8050-111 1 8050-111 1 8050-111 1 8050-112 1 8050-112 1 8050-112 1 8051/110 1 8021/110 1 8021/110 1 8051/114 1 8051/110 1 8051/110 1 8051/14 1 8051/14 1 8050-14 1 8050-14 1 8050-14 1 8042-130	19 27 27 27 26 38 66 3 16 484 484 4272 20 30 149 30 57 305
OS/12/78   CV   VALVE   1-CS-36   REPLACE DIAPHRAGH   REPLACED DIAPHRAGH	BLANKS BLANKS IG BOX SKET	1 8050.111 1 8050.111 1 8050.111 1 8050.111 1 8050.111 1 8050.112 1 8050.112 1 8050.112 1 8050.112 1 80217110 1 8042.0822 1 80511143 1 80511101 1 80511101 1 80511101 1 80511101 1 80510144 1 8020.144 1 8042.130	27 3 27 4 2 5 66 6 2 6 66 5 16 484 484 484 4 272 0 20 0 149 5 30 6 305 7 305
05/12/78 CS VALVE 1-CS-35 REPLACE DIAPHRAGM REPLACED DIAPHRAGM 05/12/78 CS VALVE 1-CS-33 REPLACE DIAPHRAGM REPLACED DIAPHRAGM 05/12/78 CS VALVE 1-CS-19 REPLACE DIAPHRAGM REPLACED DIAPHRAGM 05/12/78 CS VALVE 1-CS-19 REPLACE DIAPHRAGM REPLACED DIAPHRAGM 05/12/78 CS VALVE 1-CS-30 REPLACE DIAPHRAGM REPLACED DIAPHRAGM 05/12/78 CS VALVE 1-CS-31 REPLACE DIAPHRAGM REPLACED DIAPHRAGM 05/12/78 CS VALVE 1-CS-18 REPLACE DIAPHRAGM REPLACED DIAPHRAGM 05/12/78 CS VALVE 1-CS-18 REPLACE DIAPHRAGM REPLACED DIAPHRAGM 05/12/78 RS HX 1-RS-E-1B INSTALL BLANKS ON RS INLET+OUTLETS INSTALLED BLANKS×REMOVED B 05/13/78 RS HX 1-RS-E-1A INSTALL BLANKS ON RS INLET+OUTLETS INSTALLED BLANKS×REMOVED B 05/14/78 RS SNUBBER 1-SHP-HSS-9+ REPLACE SEALS REPLACED SEALS 05/14/78 RS PIPING 1-RS-K-1D REMOVE SN SUPPLY ELBOA FOR HX INSP 05/15/78 SI TAUK 1-SI-TK-2 REMOVE COUPLINGS FOR HX INSP 05/15/78 SI TAUK 1-SI-TK-2 REMOVE COUPLINGS FOR INSPECTION+ REMOVED COUPLINGS 05/15/78 CH VALVE 1-CH-309 BODY TO BONNET LEAK 16.4 LAPPED VALVE+REPLACED GASK 05/16/78 SI VALVE 1-SI-86 PACKING LEAK COMPLETED 05/16/78 SI VALVE 1-SI-86 PACKING LEAK 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY REPAIRED LEAK 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY REPAIRED LEAK	BLANKS BLANKS IG BOX SKET	1 8042-082( 1 8051114-3( 1 8051114-3( 1 8050-130( 1 80511101( 1 80511083 1 8020-144( 1 8020-144( 1 8042-130(	27 2 2 5 56 6 6 1 2 6 65 1 65 1 484 4 484 4 272 0 20 0 149 0 305 7 305
05/12/78 CS VALVE 1-CS-35 REPLACE DIAPHRAGM REPLACED DIAPHRAGM 05/12/78 CS VALVE 1-CS-33 REPLACE DIAPHRAGM REPLACED DIAPHRAGM 05/12/78 CS VALVE 1-CS-19 REPLACE DIAPHRAGM REPLACED DIAPHRAGM 05/12/78 CS VALVE 1-CS-19 REPLACE DIAPHRAGM REPLACED DIAPHRAGM 05/12/78 CS VALVE 1-CS-30 REPLACE DIAPHRAGM REPLACED DIAPHRAGM 05/12/78 CS VALVE 1-CS-31 REPLACE DIAPHRAGM REPLACED DIAPHRAGM 05/12/78 CS VALVE 1-CS-18 REPLACE DIAPHRAGM REPLACED DIAPHRAGM 05/12/78 CS VALVE 1-CS-18 REPLACE DIAPHRAGM REPLACED DIAPHRAGM 05/12/78 RS HX 1-RS-E-1B INSTALL BLANKS ON RS INLET+OUTLETS INSTALLED BLANKS×REMOVED B 05/13/78 RS HX 1-RS-E-1A INSTALL BLANKS ON RS INLET+OUTLETS INSTALLED BLANKS×REMOVED B 05/14/78 RS SNUBBER 1-SHP-HSS-9+ REPLACE SEALS REPLACED SEALS 05/14/78 RS PIPING 1-RS-K-1D REMOVE SN SUPPLY ELBOA FOR HX INSP 05/15/78 SI TAUK 1-SI-TK-2 REMOVE COUPLINGS FOR HX INSP 05/15/78 SI TAUK 1-SI-TK-2 REMOVE COUPLINGS FOR INSPECTION+ REMOVED COUPLINGS 05/15/78 CH VALVE 1-CH-309 BODY TO BONNET LEAK 16.4 LAPPED VALVE+REPLACED GASK 05/16/78 SI VALVE 1-SI-86 PACKING LEAK COMPLETED 05/16/78 SI VALVE 1-SI-86 PACKING LEAK 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY REPAIRED LEAK 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY REPAIRED LEAK	BLANKS BLANKS IG BOX SKET	1 8042-082( 1 8051114-3( 1 8051114-3( 1 8050-130( 1 80511101( 1 80511083 1 8020-144( 1 8020-144( 1 8042-130(	2 5 66 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
05/14/78 HSS SNUBBER 1-SHP-HSS-9+ REPLACE SEALS REPLACED SEALS 05/14/78 KH VALVE MOV1760 REPACK AND REPLACE GLAND STUDS REPACKED+REPLACED STUFFING 05/15/78 KS PIFING 1-KS-E-1D REMOVE SW SUPPLY ELBOW FOR HX INSP VOIU 05/15/78 SI TANK 1-SI-TK-2 REMOVE COUPLINGS FOR INSPECTION+ REMOVED COUPLINGS 05/15/78 CH VALVE 1-CH-309 BODY TO BONNET LEAK 16.4 LAPPED VALVE+REPLACED GASK 05/15/78 CH VALVE 1-CH-309 EXCESSIVE LEAKAGE ON PT 16.4 VOID 05/15/78 SI VALVE 1-SI-86 PACKING LEAK 05/15/78 SI VALVE 1-SI-87 PACKING LEAK 05/16/78 SI VALVE 1-SI-87 PACKING LEAK 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY LAPPED SEATS 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY REPAIRED LEAK	IG BOX	1 8042-082( 1 8051114-3( 1 8051114-3( 1 8050-130( 1 80511101( 1 80511083 1 8020-144( 1 8020-144( 1 8042-130(	5 66 6 7 6 1 2 6 5 16 5 16 6 18 6 272 7 20 8 0 149 5 30 6 305 7 305
05/14/78 HSS SNUBBER 1-SHP-HSS-9+ REPLACE SEALS REPLACED SEALS 05/14/78 KH VALVE MOV1760 REPACK AND REPLACE GLAND STUDS REPACKED+REPLACED STUFFING 05/15/78 KS PIFING 1-KS-E-1D REMOVE SW SUPPLY ELBOW FOR HX INSP VOIU 05/15/78 SI TANK 1-SI-TK-2 REMOVE COUPLINGS FOR INSPECTION+ REMOVED COUPLINGS 05/15/78 CH VALVE 1-CH-309 BODY TO BONNET LEAK 16.4 LAPPED VALVE+REPLACED GASK 05/15/78 CH VALVE 1-CH-309 EXCESSIVE LEAKAGE ON PT 16.4 VOID 05/15/78 SI VALVE 1-SI-86 PACKING LEAK 05/15/78 SI VALVE 1-SI-87 PACKING LEAK 05/16/78 SI VALVE 1-SI-87 PACKING LEAK 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY LAPPED SEATS 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY REPAIRED LEAK	IG BOX	1 8042-082( 1 8051114-3( 1 8051114-3( 1 8050-130( 1 80511101( 1 80511083 1 8020-144( 1 8020-144( 1 8042-130(	6
05/14/78 HSS SNUBBER 1-SHP-HSS-9+ REPLACE SEALS REPLACED SEALS 05/14/78 KH VALVE MOV1760 REPACK AND REPLACE GLAND STUDS REPACKED+REPLACED STUFFING 05/15/78 KS PIFING 1-KS-E-1D REMOVE SW SUPPLY ELBOW FOR HX INSP VOIU 05/15/78 SI TANK 1-SI-TK-2 REMOVE COUPLINGS FOR INSPECTION+ REMOVED COUPLINGS 05/15/78 CH VALVE 1-CH-309 BODY TO BONNET LEAK 16.4 LAPPED VALVE+REPLACED GASK 05/15/78 CH VALVE 1-CH-309 EXCESSIVE LEAKAGE ON PT 16.4 VOID 05/15/78 SI VALVE 1-SI-86 PACKING LEAK 05/15/78 SI VALVE 1-SI-87 PACKING LEAK 05/16/78 SI VALVE 1-SI-87 PACKING LEAK 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY LAPPED SEATS 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY REPAIRED LEAK	IG BOX	1 8042-082( 1 8051114-3( 1 8051114-3( 1 8050-130( 1 80511101( 1 80511083 1 8020-144( 1 8020-144( 1 8042-130(	1 2 5 66 6 16 1 484 4 484 0 272 0 20 1 0 1 149 5 30 1 0 5 305 7 305
05/14/78 HSS SNUBBER 1-SHP-HSS-9+ REPLACE SEALS REPLACED SEALS 05/14/78 KH VALVE MOV1760 REPACK AND REPLACE GLAND STUDS REPACKED+REPLACED STUFFING 05/15/78 KS PIFING 1-KS-E-1D REMOVE SW SUPPLY ELBOW FOR HX INSP VOIU 05/15/78 SI TANK 1-SI-TK-2 REMOVE COUPLINGS FOR INSPECTION+ REMOVED COUPLINGS 05/15/78 CH VALVE 1-CH-309 BODY TO BONNET LEAK 16.4 LAPPED VALVE+REPLACED GASK 05/15/78 CH VALVE 1-CH-309 EXCESSIVE LEAKAGE ON PT 16.4 VOID 05/15/78 SI VALVE 1-SI-86 PACKING LEAK 05/15/78 SI VALVE 1-SI-87 PACKING LEAK 05/16/78 SI VALVE 1-SI-87 PACKING LEAK 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY LAPPED SEATS 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY REPAIRED LEAK	IG BOX	1 8042-082( 1 8051114-3( 1 8051114-3( 1 8050-130( 1 80511101( 1 80511083 1 8020-144( 1 8020-144( 1 8042-130(	5 66 5 16 1 484 4 484 6 272 0 20 0 0 1 0 5 30 5 30 7 30 5
05/14/78 HSS SNUBBER 1-SHP-HSS-9+ REPLACE SEALS REPLACED SEALS 05/14/78 KH VALVE MOV1760 REPACK AND REPLACE GLAND STUDS REPACKED+REPLACED STUFFING 05/15/78 KS PIFING 1-KS-E-1D REMOVE SW SUPPLY ELBOW FOR HX INSP VOIU 05/15/78 SI TANK 1-SI-TK-2 REMOVE COUPLINGS FOR INSPECTION+ REMOVED COUPLINGS 05/15/78 CH VALVE 1-CH-309 BODY TO BONNET LEAK 16.4 LAPPED VALVE+REPLACED GASK 05/15/78 CH VALVE 1-CH-309 EXCESSIVE LEAKAGE ON PT 16.4 VOID 05/15/78 SI VALVE 1-SI-86 PACKING LEAK 05/15/78 SI VALVE 1-SI-87 PACKING LEAK 05/16/78 SI VALVE 1-SI-87 PACKING LEAK 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY LAPPED SEATS 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY REPAIRED LEAK	IG BOX	1 8042-082( 1 8051114-3( 1 8051114-3( 1 8050-130( 1 80511101( 1 80511083 1 8020-144( 1 8020-144( 1 8042-130(	5 16 1 484 4 484 0 272 0 20 0 149 5 30 1 0 5 305 7 305
05/14/78 HSS SNUBBER 1-SHP-HSS-9+ REPLACE SEALS REPLACED SEALS 05/14/78 KH VALVE MOV1760 REPACK AND REPLACE GLAND STUDS REPACKED+REPLACED STUFFING 05/15/78 KS PIFING 1-KS-E-1D REMOVE SW SUPPLY ELBOW FOR HX INSP VOIU 05/15/78 SI TANK 1-SI-TK-2 REMOVE COUPLINGS FOR INSPECTION+ REMOVED COUPLINGS 05/15/78 CH VALVE 1-CH-309 BODY TO BONNET LEAK 16.4 LAPPED VALVE+REPLACED GASK 05/15/78 CH VALVE 1-CH-309 EXCESSIVE LEAKAGE ON PT 16.4 VOID 05/15/78 SI VALVE 1-SI-86 PACKING LEAK 05/15/78 SI VALVE 1-SI-87 PACKING LEAK 05/16/78 SI VALVE 1-SI-87 PACKING LEAK 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY LAPPED SEATS 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY REPAIRED LEAK	IG BOX	1 8042-082( 1 8051114-3( 1 8051114-3( 1 8050-130( 1 80511101( 1 80511083 1 8020-144( 1 8020-144( 1 8042-130(	1 484 4 484 272 0 20 1 0 1 149 5 30 1 0 5 305 7 305
05/14/78 HSS SNUBBER 1-SHP-HSS-9+ REPLACE SEALS REPLACED SEALS 05/14/78 KH VALVE MOV1760 REPACK AND REPLACE GLAND STUDS REPACKED+REPLACED STUFFING 05/15/78 KS PIFING 1-KS-E-1D REMOVE SW SUPPLY ELBOW FOR HX INSP VOIU 05/15/78 SI TANK 1-SI-TK-2 REMOVE COUPLINGS FOR INSPECTION+ REMOVED COUPLINGS 05/15/78 CH VALVE 1-CH-309 BODY TO BONNET LEAK 16.4 LAPPED VALVE+REPLACED GASK 05/15/78 CH VALVE 1-CH-309 EXCESSIVE LEAKAGE ON PT 16.4 VOID 05/15/78 SI VALVE 1-SI-86 PACKING LEAK 05/15/78 SI VALVE 1-SI-87 PACKING LEAK 05/16/78 SI VALVE 1-SI-87 PACKING LEAK 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY LAPPED SEATS 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY REPAIRED LEAK	IG BOX	1 8042-082( 1 8051114-3( 1 8051114-3( 1 8050-130( 1 80511101( 1 80511083 1 8020-144( 1 8020-144( 1 8042-130(	4 484 272 2 20 3 0 149 5 30 1 0 5 305 7 305
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05/14/78 RH VALVE MOV1760 REPACK AND REPLACE GLAND STUDS REPACKED+REPLACED STUFFING 05/15/78 RS PIFING 1-RS-E-1D REMOVE SW SUPPLY ELBOW FOR HX INSP VOIU 05/15/78 SI TANK 1-5I-TK-2 REMOVE COUPLINGS FOR INSPECTION+ REMOVED COUPLINGS 05/15/78 CH VALVE 1-CH-309 BODY TO BONNET LEAK 16.4 LAPPED VALVE+REPLACED GASK 05/15/78 SI VALVE 1-CH-309 EXCESSIVE LEAK AGE ON PT 16.4 VOID 05/16/78 SI VALVE 1-SI-86 PACKING LEAK COMPLETED REPACKED VALVE 05/16/78 SI VALVE 1-SI-87 PACKING LEAK REPACKED VALVE REPACKED VALVE RETRACTELINSERT FLUX MAPPING THIMBLES RETRACTED/REINSERTED FLUX 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY LAPPED SEATS REPAIRED LEAK	IG BOX	1 80511143 1 80217111 1 80504130 1 80514101 1 80512083 1 80206144 1 80206144 1 80426130	20 3 0 149 5 30 1 0 5 305 7 305
05/15/78   RS	SKET	1 80217111 1 805001300 1 80511101 1 80511083 1 802001440 1 802001447 1 80420130	0 149 5 30 1 0 5 305 7 305
O5/15/78   S1   TANK   1-SI-TK-2   REMOVE COUPLINGS FOR INSPECTION+   REMOVED COUPLINGS	SKET	1 8050+130( 1 8051+101: 1 8051+083 1 8020+144: 1 8020+144: 1 8042+130:	149 5 30 1 0 5 305 7 305
O5/15/78   S1   TANK   1-SI-TK-2   REMOVE COUPLINGS FOR INSPECTION+   REMOVED COUPLINGS	SKET	1 8050+130( 1 8051+101: 1 8051+083 1 8020+144: 1 8020+144: 1 8042+130:	5 30 1 0 5 305 7 305
05/15/78 CH VALVE 1-CH-309 EXCESSIVE LEAKAGE ON PT 16.4 VOID 05/16/78 SI VALVE 1-SI-86 PACKING LEAK 05/16/78 SI VALVE 1-SI-87 PACKING LEAK 05/16/78 IC THIVBLES RETRACTELINSERT FLUX MAPPING THIMBLES RETRACTED/REINSERTED FLUX 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY LAPPED SEATS 05/16/78 RC VALVE PCV-1455C LEAKS THRU BADLY REPAIRED LEAK		1 80510083 1 80200144 1 80200144 1 80420130	0 3 305 7 305
05/16/78 SI VALVE 1-51-86 PACKING LEAK COMPLETED 05/16/78 SI VALVE 1-51-87 PACKING LEAK REPACKED VALVE 05/16/78 IC THIVBLES RETRACTEINSERT FLUX MAPPING THIMBLES RETRACTED/REINSERTED FLUX 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY LAPPED SEATS 05/16/78 RC VALVE PCV-1455C LEAKS THRU BADLY REPAIRED LEAK		1 8020±144 1 8020±144 1 8042±130	305 7 305
05/16/78 SI VALVE 1-51-86 PACKING LEAK COMPLETED 05/16/78 SI VALVE 1-51-87 PACKING LEAK REPACKED VALVE 05/16/78 IC THIVBLES RETRACTEINSERT FLUX MAPPING THIMBLES RETRACTED/REINSERTED FLUX 05/16/78 RC VALVE PCV-1456 LEAKS THRU BADLY LAPPED SEATS 05/16/78 RC VALVE PCV-1455C LEAKS THRU BADLY REPAIRED LEAK		1 80209144 1 80429130	7 305
05/16/7# 1C THIVBLES RETRACTLINSERT FLUX MAPPING THIMBLES RETRACTED/REINSERTED FLUX 05/16/7# RC VALVE PCV-1456 LEAKS THRU BADLY LAPPED SEATS REPAIRED LEAK		1 80420130	
05/16/78 RC VALVE PCV-1456 LEAKE THRU BADLY LAPPED SEATS 05/16/78 RC VALVE PCV-1455C LEAKS TURU BADLY REPAIRED LEAK	C. REALL BUILTINGS		1 528
05/16/78 RC VALVE PCV-1455C LEAKS TURU DADLY REPAIRED LEAK			
deline a series of the series		1 80421142	
05/16/78 RC VALVE PERFORM PT 12 ON PZR RELIEF VALVES TEST SATISFACTORY 05/17/78 RS PIPING MOV-RS-155 INSTALL+REMOVE TEST FLANGES(PT16.4) INSTALLED BLANKS+REMOVED B 05/17/78 SI REL VLV 1-SI-RV-1893 VALVE LEAKS THROUGH REPLACED DISC+SPRING		1 80421142	
05/17/78 RS PLEING MOV-RS-155 INSTALL+REMOVE TEST FLANGES(PT16.4) INSTALLED BLANKS+REMOVED B 05/17/78 SI KEL VLV 1-SI-KV-1893 VALVE LEAKS THROUGH REPLACED DISC+SPRING		1 80511023	
65/47/78 SI KEL VLV 1-SI-KV-1893 VALVE LEAKS THROUGH REPLACED DISC+SPRING	BLANKS	1 800170	
AND LOOK BELLEVILLE TO A STATE OF THE PARTY		1 101: 331	0
05/17/78 BR VALVE PCV-BR-131 STEM AND BODY LEAKS REPACKED VALVE		1 8030 1020	) AÚ
05/17/78 SI MOV MOV1869B EXCESSIVE LEAKAGE ON PT 10.4 VALVE BEYOND REPAIR		1 804290859	556
05/17/78 SI FIFING REMOVE OLD MOV1862 GLAND LEAKOFF REMOVED FIFE		1 805100030	) 19
55/17/78 CH PIPING CH-81-1503 DISCHANGE FLANGE LEAK NOT LEAKING		1 80515151	5 ·
05/18/78 RC VALVE 1-RC-79 PACKING LEAK C LOOP VOID		1 1015396	) 0
05/1a/78 ks PIPING 1-RS-E-19 REMOVE SV SUPPLY ELBOV FOR HX INSPEC VOID		1 802171111	0
05/10/78 KS PIFING 1-KS-E-1A REMOVE SW SUPPLY ELBOY FOR INSP. VOID	U THOUATTEN	1 80217111	
05/18/T8 BR VALVE 1-BR-3 REPLACE DIAPHKAGN KEPLACED DIAPHRAGN		1 8050a104	
05/18/78 BR VAINE 1-BR-4 REPLACE DIAPHRAGN REPLACED DIAPHRAGN		1 8050104	
05/18/78 CS VALVE 1-CS-79 BODY BOLT MISSING REPLACED MISSING BOLT		1 80500154	
OS/18/78 CH PRHP 1-CH-P-2B PUMP COUPLING LOOSE MADE NEW SLEEVE FOR SHAFT+	'+1NSTALLED	1 80517014	5 6
05/19/78 RC VALVE 1-RC-102 REPACK COMPLETED		1 10135220	
05/19/76 CS PURP 1-CS-P-3 LUBE OIL SEAL+PUMP SEAL LEAKS REPLACED MECHANICAL SEAL		1 80510082	) 6
05/19/78 CC VALVE 1-05-P-3 LUBE OIL SEAL+PUMP SEAL LEAKS REPLACED MECHANICAL SEAL 05/19/78 CH MOV MOV-1287B PACKING LEAK ADJUSTED PACKING COMPLETED PACKING LEAK REPACKED REPACKED REPACKED REPACKED REPACKED FOR PACKING LEAK COMPLETED LEAK REPAIRED LEAK REPAIRED LEAK REPAIRED LEAK REPAIRED LEAK REPAIRED LEAK		1 80517060	1
05/20/78 HS MORK RX CAVITY SEALS FOR REFUELING COMPLETED		1 804261256	0 (
05/20/7B RS VALVE 1-RS-17 PACKING LEAK REPACKED		1 80564605	5 394
05/20/78 VG VALVE TV-VG-109B EXCESSIVE LEAKAGE ON PT 16.4 REPAIRED LEAK		1 86514080	
05/20/78 VG VALVE TV-VG-109A EXCESSIVE LEAKAGE ON PT 16.4 REPAIRED LEAK		1 80\$15080	
05/20/78 SS VALVE TV-SS-163 EXCESSIVE LEAKAGE OF PT 16.4 REPAIRED VALVE		1 80515686	1 76

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UNIT 1-3/AY 1978 VEALUTENANCE OF SAFETY RELATED SYSTEMS DURING OUTAGE OR REDUCED POWER PERTODS)

RETSERVOT	SYS	COMP	MARKNO	SUNMARY	WKPERF	U	ak	TOTDAATA
05/20/78	СИ	PIFFRG	1-cu-375	KENEW FLEX AND LOT FLAUGE BACK ON	REPLACED FLEX GASKET	1	805150730	33
05/21/78	SI	VALVE	1-81-234	EXCESSIVE LEAKAGE PT 16.4		1	805150801	G
05/22/78	CH	$FUM^*$	1 · CII · P - 1B	VARIOUS LUBE OIL LEARS-BEARING CAP	TIGHTENED BEAKING CAP	1	10185110	ь24
05/22/78	SI	MOV	@OV1890C	PACKING LEAK REPAIR FOR PT 16.4	CLEAN PACKING GLAND + ADJUSTED	1	804221601	175
05/22/78	SI	10V	MOV1862B	LEAKS THEU	ADJUSTED PLUG VALVE	1	800201602	166
05/22/78	51	tiov	MOV1862A	LEAKS THEU	ADJUSTED PLUG VALVE	1	804221603	168
05/22/78	SI	MOV	HOV 1885C	BAD PACKING LEAK	ADJUSTED PACKING	1	804201605	210
05/22/78	$\overline{SI}$	tioV	MOV1864A	BODY TO BONNET LEAK+PACKING LEAK	ADJUSTED PACKING+TIGHTENED PACKING	1	864246800	166
05/22/78	SI	HOV	MOV-1864B	VALVE HAS BODY TO BONNET +PACEING	ADJUSTED PACKING +TIGHTENED PIPING	1	805071301	166
65/23/76	KC	KX VESS		REMOVE/REINSTALL VESS HD FOR REFUEL	VESSEL HEAD REMOVE+REINSTALLED	1	804191455	690
05/23/78	51	MOV	MOV1860B	BODY TO BONNET AND PACKING LEAK	REPAIRED VALVE	1	805051608	161
65/23/78	CH	V ALV &	1-CH-365	PACKING LEAK	REPACKED VALVE	1	805211440	24
05/24/78	UK	VALVE	SOV-BIG-101C	VENTS CONTINOUSLY	REBUTET VALVE	1	803166511	201
05/20/78	CII	VALVE	HCV-1310A	PACKING LEAK	REPACKED	1	805211441	36
65/26/78	КC	VALVE	1-1c-21	PACKING LEAK A LOOP	MADE NEW SPLIT RINGS+REPACKED	1	101a5410	249
65/26/78	BD	SMUBBER	1-80-885-03	FUNCTIONAL TEST	REPLACED SNOBBER	1	805250805	24
05/30/78	VS	NOV	110V-VS-100	INSTALL TESTING FLANGES FOR PT 16.4	INSTALLED/REMOVED BLANK FLANGE	1	803166423	888
05/10/78	KC	VALVE	PCV-1455C	LEAK AROUND EDGE OF DIAPHRAM	REPLACED DI APHRAGM	1	805191355	3
05/30/78	88	VALVE	TV-SS-103	LEAKS THRU-UNSAT FOR PT 16.4	VOID	1	805221496	o o
05/31/78	KC	SG	1-RC-E-1A	REMOVE/REPALCE 6 IN. HAND HOLE	REMOVED/REPLACED HANDHOLE COVERS	1	805251345	127
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DEPT TOTAL								*****

DEPT TOTAL

### MAY, 1978

### MONTHLY OPERATING SUPPLEMENT SHEET MECHANICAL MAINTENANCE

### UNIT 2

DESIGN CHANGES BEING WORKED DC-77-19, 74-44, 78-10, 76-30, 77-29.	DESIGN CHANGES BEING WORKED DC-77-19, 74-44, 78-10, 76-30, 77-29.  PERIODIC TESTS PERFORMED 2	MAINTENANCE OR	DERS COMPLETE	D SAFETY RELATED 1	ITEMS	<del></del>	10
					*		
				•			
DEDICATE SWEETE DEDICATED	PERIODIC TESTS PERFORMED 2	DESIGN CHANGES	BEING WORKED	DC-77-19, 74-44,	78-10, 76-30,	77-29.	
DEPTODIC SWEETS DEPENDING	PERIODIC TESTS PERFORMED 2						
DEPLODED THE THE PROPERTY OF T	PERIODIC TESTS PERFORMED 2			<u> </u>		<del></del>	<del></del>
	PERIODIC TESTS PERFORMED 2	DEDICATE MICHA	DHN10DIWD	•			

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CONTINUENABLE OF SAFETY HELATED STREETS OUTLAND OUTLAND OF REDUCED POWER PELLOUS).

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96	#025°190#	5	CURVARD+UVBBED SEVLS	INSECCE (\$1205 H20 FRS)	MON-SO-NOW	AOB	·so	87/29/78
£6 ·	802521059	5	INSLVEERD/REMONED REVIKE REVINCES	INSERTE BEVRIK REVROE BOK 18 M LEST	V102-SD-10F	AOi:1	SO	91/62/50
£6	802501052	7	CTEVNED+TVALED SEVES	JORASNI + NRAO	V107-SO-10R	AON	so	92/57/38
96	802527909	7	INSLVETED/KENOARD REVUK BEVUGES	TSAT 4.31 TY 104 ANALO	9102-50-AOE	ΛΟi i	so	97/29/78
95	949In2SOR	3	INSERCAFD AVEAR	INSERCE-INSERT SERCEVOLE ELVINGE	8997-84-AON	AO!∙l	SH	82/53/38
91	802511402	ż	LICHLENED EVCKING	ONTAÇA JEORGY	54-04-6	NALVE	อฯ	8 <i>L</i> /93/50
15	10619290R	7	LICHLENED EVCKING	OMINON JENEAV	5-NC-21	<i>ን ለገዩ ለ</i>	ЭH	87/40/30
6	90511400	5	LICHLED EVCKING	VIDA BUCKING	5- <i>CH-41</i> 8	3 V J F V	нэ	87/36/38
9	802511322	5	LICHLED BYCKING	FACKING LEAK (ADJOST)	iles-adi!	AMNA	11.)	nt/95/50
8	088113808	5	LICHER EVEKING	EVCKLAG LEAK (ADJUST)	MCV-2310A	ANTAR	чэ	87/35/30
SANPGIOI	Mi.	n	анпани	XUVIMS	ONYHVIY	1800	SXS	<b>ग्रम्भक्ष्यंभ</b>

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# MONTHLY OPERATING SUPPLEMENT SHEET ELECTRICAL MAINTENANCE MAY, 1978

MAINTENANCE ORDERS COMPLETED SAFI	ETY RELATED ITEMS	4S
	•	
DESIGN CHANGES BEING WORKED DC	-77-08, DC-76-14A	4A, DC-76-36, DC-77-02, DC-78-01, DC-74-73, DC-76-29,
DC-76-30.		
PERIODIC TEST PERFORMED		24
PT-34 (5) PT-23.1A (5) PT-23.6 (5)		
PT-24.4B PT-23.3 PT-31.3 PT-24.6	i.	
PT-31.2 PT-27 PT-23.1		
PT-23.2 PT-24.5A		

UNIT 1-MAY 1978

VMAINTENANCE OF SAFETY RELATED SYSTEMS DUKING OUTAIN ON NEDUCED POWER PERIODS)

Syliff   No.	EAST SETALOT	SYS	cow	MARKAO	SUPBARY	AKPERE	U	MR	TOTOMIT'S
Soft	05/01/78	VS	EAN SITE	1-V3-F-60A	INSPECT MOTOR	TESTED+1NSPECTED	1	304171203	216
	05/01/78	VS				TESTED+INSPECTED	1	804171205	21ú
OS/107/716   VS   FAM MTH   1-VS F-1C   INSPECT SOTON   CIBCRED SAT   1   8001-10112   160   OS/107/718   OV   ACCOUNT   NECONIT   1   OS   OS   OS   OS   OS   OS   OS							1	804171261	155
160   167							1	8041/1202	131
65/19/719   61							1	8041/0812	160
65/19/719   61				R		CLEANED+CHECKED UNIT			104
C5/50/T/18   R					- · · · -		1	8641.0813	166
55/10/T18							1	805056455	15
OS-JOAT   ACT   WT   PILLUCKT26   CHECK OUF ALAKOL THERMOSTAT   REPLACED THERMOSTAT   1 805-0711-0   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							1	805645810	· 9.
C.   Go   To   GR ARER   FIS   CLEARED   TRUSCOTED   1   804 1.00 L   302							· 1	8050/1130	ΰ
05/06/78   RICK   BEBARER   FIS   CLEMBED INSPECTED/TESTED   1   8041-0817   30-2				11/200111.0					
STOCK   STOC									
05/04/78   EPCR   BREARR							_		3υ2
05/10/718   CH   HOV   MOV-1287A   DISCONRECT FORER SUPPLY FOR MECHANIC   VOID   1   8050*1310   0   0   0   0   0   0   0   0   0						and the state of t	-		
05/08/78				₩W-12864	- · · · · ·		1	805001310	0
05/09/78							1	805051315	0
05/99/78   RS   MOV   MOV-RN-101C   CLEAF + INSPECT   CLEAMED+INSPECTED   1   804°-0731   312						REPLACED TOROUS SMITCH			7
1						CLEANED+THSPECTED	ì	8042.5731	
05/10/78							1		
05/10/78							_		
05/10/78   RP   RELAY   XB1590   REPLACE RELAY RX TRIP BREAKER   REPLACED RELAY   1 805661200   24   65/11/78   VS   PAN STR   1-VS-F-3B   PAS   PAS   CHECKED SAT   1 8041.0607   18   65/11/78   CS   MOV   MOV-CS-101B   CLEAN+INSPECT   CHECKED   1 805040821   35   65/11/78   CS   MOV   MOV-CS-101A   CLEAN+INSPECT   CHECKED   1 805640821   35   65/11/78   VS   FAN MTR   1-VS-F-3A   PAS   VOID   1 8041.0668   0   65/11/78   CS   MOV   ROV-CS-102B   CLEAN+INSPECT   CLEANED AND INSPECTED SET LIGHTS   1 80564021   33   65/15/78   CS   MOV   ROV-CS-102B   CLEAN+INSPECT   CLEANED AND INSPECTED SET LIGHTS   1 80564021   33   65/15/78   CS   MOV   ROV-CS-102B   CLEAN+INSPECT   INSPECTED+TESTED   1 80564021   34   65/15/78   CS   MOV   ROV-CS-102B   CLEAN+INSPECT   TRESTED   1 80564021   34   65/15/78   CS   MOV   ROV-CS-102B   CLEAN+INSPECT   TRESTED   1 80564021   34   65/15/78   CS   MOV   ROV-CS-102B   CLEAN+INSPECT   TRESTED   1 80564021   34   65/15/737   240   65/15/78   CS   MOV   ROV-CS-102B   CLEAN+INSPECT   TRESTED   1 80564021   34   65/15/737   240   65/15/78   CS   MOV   ROV-CS-102B   CLEAN+INSPECT   TRESTED   TOOK RESISTANCE READINGS   1 8041:0025   148   65/16/737   240   65/16/78   RC   FAR MTR   1-RIF-1B   TRESPECTANCE READING   TOOK RESISTANCE READING   1 8041:0025   148   65/16/737   240   65/16/78   RC   FAR MTR   1-VS-F-60C   TRESPECT   FROM CONTROL ROOM   CHECKED VALVE SATISFACTORY   1 8051:1411   23   65/26/78   RC   FAR MTR   1-VS-F-60C   TRESPECT MOTOR   REPLACED BEARINGS-CONNECTED-TESTED   8041/1204   718   65/22/78   RS   FAR MTR   1-VS-F-60C   TRESPECT MOTOR   REPLACED BEARINGS-CONNECTED-TESTED   8041/1204   718   65/22/78   RS   ROOV   MOV-CS-1010   CLEAN+INSPECT   CLEANED+INSPECTED+SET TORQUE SAT   8050/0019   300   65/22/78   REPLACED BEARINGS-CONNECTED-TESTED   1 8051/1406   65/22/78   REPLACED BEARINGS-CONNECTED-TESTED   1 8051/1406   65/22/78   REPLACED BEARINGS-CONNECTED-TESTED   1 8051/1406   65/22/78   REPLACED BEARINGS-CONNECTED-TESTED   1 8050/0019   300   65/22/78   REPLACED BEA					· · · · · · · · · · · · · · · · · · ·				
G5/11/78	*. *.								
G5/11/78						CHECKED SAT			
05/11/78   CS   NOV   MOV-CS-101A   CLEAR+INSPECT   CHECKED   1 8056-0821   35   05/12/78   VS   FAN MTR   1-VS-F-3A   PMS   VOID   1 8041-0868   0   05/13/76   RS   MOV   RS-156B   CLEAR+INSPECT   CLEARED AND INSPECTED SET LIMITS   1 8056-0026   33   05/15/78   CS   MOV   HOV-CS-102B   CLEAR+INSPECT   INSPECTED SET LIMITS   1 8056-00817   190   05/15/78   CS   MOV   HOV-CS-102A   CLEAR+INSPECT   TESTED+INSPECTED   1 8056-00817   190   05/15/78   CS   MOV   HOV-CS-101C   ADJUST LIMIT TORQUE   HO PROBLEM FOUND   1 8056-0737   240   05/16/78   RI   PMF MTR   1-KH-F-1B   INSPECTANCE READING   TOOK RESISTANCE READINGS   1 8041-0807   577   65/16/78   RI   PMF MTR   1-KH-F-1B   INSPECTANCE READING   TOOK RESISTANCE READINGS   1 8041-0802   148   05/20/78   RC   PER MTR   DOES HOT OPERATE FROM CONTEOL ROOM   CHECKED VALVE SATISFACTORY   1 8051-1411   23   05/20/78   VS   PAN MTR   1-VS-F-60C   INSPECT MOTOR   REPLACED DEARTINGS-CONNECTED-TESTED   1 8041/1264   718   05/22/78   VS   PAN MTR   1-VS-F-60F   INSPECT MOTOR   REPLACED DEARTINGS-CONNECTED-TESTED   1 8041/1264   718   05/22/78   US   PAN MTR   1-VS-F-60F   INSPECT MOTOR   REPLACED DEARTINGS-CONNECTED-TESTED   1 8041/1265   718   05/22/78   CS   MOV   MOV-CS-101C   CLEAR+INSPECT   CLEARED+INSPECTED+SET TORQUE SJ   1 8050-00819   300   05/22/78   CS   MOV   MOV-CS-101C   CLEAR+INSPECT   CLEARED+INSPECTED-SET TORQUE SJ   1 8050-00819   300   05/22/78   EPH   BREAKER   1-CH-P-2D   REPLACE SOLDER FOTS IN BREAKER   VOID   1 8051-1036   05/22/78   EPH   BREAKER   1-CH-P-2D   REPLACE SOLDER FOTS IN BREAKER   VOID   1 8051-1036   05/22/78   MOV   MOV-CS-101C   CLEAR+INSPECT   CLEARED+INSPECTED+SET TORQUE SJ   1 8050-00819   300					CTF at a viv. Executive with	CHECKED		805090820	-
OS/16/78   REF   CRP4   DISC PL RODS+TARE RESISTANCE READING   TOOK					CLEAN+INCLECT		_		
OS/16/78   REF   CRP4   DISC PL RODS+TARE RESISTANCE READING   TOOK					Disc.		_		
OS/16/78   REF   CRP4   DISC PL RODS+TARE RESISTANCE READING   TOOK					CIEARLTHQUEY®				
OS/16/78   REF   CRP4   DISC PL RODS+TARE RESISTANCE READING   TOOK					CLEAN THOUGHOU				
OS/16/78   REF   CRP4   DISC PL RODS+TARE RESISTANCE READING   TOOK					CENNIT INTEGI		_		
OS/16/78   REF   CRP4   DISC PL RODS+TARE RESISTANCE READING   TOOK					ACHIER LINTE WAR ARE				
G5/16/78   RI   PMP NTR   1-RI-P-1B   IRSP+CHANGE OIL   PERFORMED EMP-P-LU-28   1 8041:0622   148				WOV -C3 1010	- DISC OF LODS+TARE RESISTANCE READING		_		
05/18/78   SS   VALVE   TV-SS-104A   DOES HOT OPERATE FROM CONTROL ROOM   CHECKED VALVE SATISFACTORY   1 8051*1411   23   05/20/78   RC   PER HTR   PAIS   CLEANED+INSPECTED SAT   1 8041:6811   72   72   73   74   74   74   74   74   74   74				1-1/6-1-176			_		
05/20/78   RC   PER HTR   PAS   CLEANED+INSPECTED SAT   1 8041:0811   72   05/20/78   VS   FAH MTR   1-VS-F-60C   IRSPECT MOTOR   REPLACED BEARINGS-CONNECTED-TESTED   1 8041/1204   718   05/20/78   VS   FAH MTR   1-VS-F-60F   INSPECT MOTOR   REPLACED BEARINGS-CONNECTED-TESTED   1 8041/1206   718   05/20/78   BS   EMER HATCH LIMIT SW BROKE   FOUND NO PROBLEM   1 8042:01539   216   05/20/78   CS   MOV   MOV-CS-101D   CLEAN+INSPECT   CLEANED+INSPECTED+SET TORQUE SA   1 8050:00829   300   05/20/78   EPH   BREAKER   1-CH-P-2D   REPLACE SOLDER FOTS IN BREAKER   VOID   1 8051:1136   0							-		
05/22/78   VS   FAH   MTR   1-VS-F-60C   INSPECT MOTOR   REPLACED DEARINGS-CONNECTED-TESTED   1   8041/1204   718   15/22/78   VS   FAH   MTR   1-VS-F-60F   INSPECT MOTOR   REPLACED BEARINGS-CONNECTED-TESTED   1   8041/1206   718   15/22/78   BS   EMER   HATCH   LIMIT SW   BROKE   FOUND   NO PROBLEM   1   8042/1539   216   25/22/78   CS   MOV   MOV-CS-101C   CLEAN+INSPECT   CLEANED+INSPECTED+SET   TORQUE SV   1   805040819   300   25/22/78   EPH   BREAKER   1-CH-P-2D   REPLACE SOLDER FOTS IN BREAKER   VOID   1   8051/1636   0				17 55 10 17					
05/22/78   VS   FAH MPR   1-VS-F-60F   INSPECT MOTOR   REPLACED BEARINGS-CONNECTED-TESTED   1   8641/1266   718   05/22/78   BS   EMER HATCH LIMIT SW BROKE   FOUND NO PROBLEM   1   8642/1539   216   05/22/78   CS   MOV   MOV-CS-161P   CLEAN+INSPECT   CLEANED+INSPECTED+SET TORQUE SV   1   805640819   360   05/22/78   EPH   BREAKER   1-CH-P-2D   REPLACE SOLDER FOTS IN BREAKER   VOID   1   8051/1636   0				1-1/9-8-60/2					
05/22/78 BS EMER HATCH LIMIT SW BROKE FOUND NO PROBLEM 1 804201539 216 05/22/78 CS NOV MOV-CS-101D CLEAN+INSPECT CLEAUED+INSPECTED+SET TORQUE SV 1 805040819 300 05/22/78 CS NOV MOV-CS-101C CLEAN+INSPECT CLEANED+INSPECTED+SET TORQUE SV 1 805040824 300 05/22/78 EPH BREAKER 1-CH-P-2D REPLACE SOLDER FOTS IN BREAKER VOID 1 805121636 0		-							
05/22/78 CS MOV MOV-CS-101D CLEAN+INSPECT CLEANEHINSPECT TORQUE S4 1 805040819 300 05/22/78 CS MOV MOV-CS-101C CLEAN+INSPECT CLEANEHINSPECTED+SET TORQUE S4 1 805040824 300 05/22/78 EPH BREAKER 1-CH-P-2D REPLACE SOLDER FOTS IN BREAKER VOID 1 805121630 0			CHH PHI	1 10 6 001			1		
05/22/78 CS 20V MOV-CS-101C CLEAN+HUSECT CLEAN+HUSECT CLEAN+HUSECT CLEAN+HUSECT CLEAN+HUSECTED+SET TORQUE SW 1 8050m062m 300 05/22/78 EPH BREAKER 1-CH-P-2D REPLACE SOLDER FOTS IN BREAKER VOID 1 8051:1630 0			11/01/	900-09-1610					
05/22/78 EPH BREAKER 1-CH-P-2D REPLACE SOLDER FORS IN BREAKER VOID 1 805111636 0									
day and the property of the total to the transfer to the substitute to the substitut						• = •	-		
05/25/78		-		. 011 2 -17			1	8041.:0608	720
05/25/78				80V~1286A	CLEAN+INSPECT		1	805040832	456
05/25/78   CH   FEW   MOV = 1275C   CLEAN+INSPECT   CLEARED-INSPECTED   TESTED   1 805000831   389   05/27/78   FW   MOV   MOV = FW = 151C   CLEAR+INSPECT   DISCORRECTED RECORRECTED   TESTED   1 805011123   576   05/27/78   FW   MOV   MOV = FW = 151C   CLEAR+INSPECT   DISCORRECTED - RECORRECTED + FESTED   1 805011125   576   05/27/78   FW   MOV   MOV = FW = 151C   CLEAR+INSPECT   DISCORRECTED - RECORRECTED + FESTED   1 805011126   576   05/27/78   FW   MOV   MOV = FW = 151C   CLEAR+INSPECT   DISCORRECTED RECORRECTED + FESTED   1 805011126   576   05/27/78   FW   MOV   MOV = FW = 151C   CLEAR+INSPECT   DISCORRECTED RECORRECTED + FESTED   1 805011126   576   05/27/78   FW   MOV   MOV = FW = 151C   CLEAR+INSPECT   DISCORRECTED RECORRECTED + FESTED   1 805011125   576   05/27/78   FW   MOV   MOV = FW = 151C   CLEAR+INSPECT   DISCORRECTED RECORRECTED + FESTED   1 805011125   576   05/27/78   FW   MOV   MOV = FW = 151C   CLEAR+INSPECT   DISCORRECTED RECORRECTED + FESTED   1 805011125   576   05/27/78   FW   MOV   MOV = FW = 151C   CLEAR+INSPECT   DISCORRECTED RECORRECTED + FESTED   1 805011125   576   05/27/78   FW   MOV   MOV = FW = 151C   CLEAR+INSPECT   DISCORRECTED RECORRECTED + FESTED   1 805011125   576   05/27/78   FW   MOV   MOV = FW = 151C   CLEAR+INSPECT   DISCORRECTED RECORRECTED + FESTED   1 805011125   576   05/27/78   FW   MOV   MOV = FW = 151C   MOV = 151C   MOV = FW = 151C   MOV = 15					CLEAGE INSPECT				
05/27/78   PV   MOV   MOV - FV-151E   CLEAF+INSUSCT   DISCORRECTED RECORRECTED+TESTED   1 805011123   576   05/27/78   FV   MOV   MOV-FV-151C   CLEAR+INSUSCT   DISCORRECTED-RECORRECTED+TESTED   1 805011125   576   05/27/78   FV   MOV   MOV-FV-151B   CLEAR+INSUSCT   DISCORRECTED RECORRECTED+TESTED   1 805011126   576   05/27/78   FV   MOV   MOV-FV-151B   CLEAR+INSUSCT   DISCORRECTED RECORRECTED+TESTED   1 805011126   576   05/27/78   FV   MOV   MOV-FV-151B   CLEAR+INSUSCT   DISCORRECTED RECORRECTED+TESTED   1 805011126   576   05/27/78   FV   MOV   MOV-FV-151B   CLEAR+INSUSCT   DISCORRECTED RECORRECTED+TESTED   1 805011126   576   05/27/78   FV   MOV   MOV-FV-151B   CLEAR+INSUSCT   DISCORRECTED RECORRECTED+TESTED   1 805011123   576   05/27/78   FV   MOV   MOV-FV-151B   CLEAR+INSUSCT   DISCORRECTED-RECORRECTED+TESTED   1 805011125   576   05/27/78   FV   MOV   MOV-FV-151B   CLEAR+INSUSCT   DISCORRECTED-RECORRECTED+TESTED   1 805011125   576   05/27/78   FV   MOV   MOV-FV-151B   CLEAR+INSUSCT   DISCORRECTED RECORRECTED+TESTED   1 805011125   576   05/27/78   FV   MOV   MOV-FV-151B   CLEAR+INSUSCT   DISCORRECTED RECORRECTED+TESTED   1 805011126   576   05/27/78   FV   MOV   MOV-FV-151B   CLEAR+INSUSCT   DISCORRECTED RECORRECTED+TESTED   1 805011126   576   05/27/78   1 805011126   1 8					CLEAN+1NGPLCT				
05/27/78   EN   MOV   MOV-EN-151C   CLEAR+INSTECT   DISCONNECTED-RECONNECTED+TESTED   1   805011125   576     05/27/78   EJ   ROV   MOV-EN-151B   CLEAR+INSTECT   DISCONNECTED-RECONNECTED+TESTED   1   805011126   576					CLEAT + INSPECT		1		576
G5/27/78 EA ROY SOV-EA-151B CLEAR INSPECT DISCORRECTED RECORDETED **TESTED 1 8650:1126 576		-			CLEAR+INSPECT		1	805v11125	576
					CLEAN INSPECT		1	8650!1126	576

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UNIT 1-MAY 1978 CMAINTENANCE OF SAFETY RELATED SYSTEMS DURING OUTAGE OR REDUCED POWER PSATODS)

LETSERVDT	SYS	сонр	MARKNO	SULTARRY		WKPERE	U	Hic	TOTUWATA
05/27/78	СИ	HOV	HOV-1270A	CLEAN+INSEECT		CLEANED+INSPECTED	1	805040812	476
05/27/78	Сн	GOY	MOV-1269D	CLEAN+1NSPECT		CLEANED+INSPECTED .	1	865040813	47ò
05/27/78	Cit	MOV	HOV-1269A	CLEAN+INSPECT		CLEANED INSPECTED	1	605040814	476
05/27/78	CII	∌iOV	- MOV-1267B	CLEAN+INSPECT		CLEANED INSPECTED+TESTED	1	8 <b>0</b> 50408 <b>1</b> 5	432
05/27/78	CH	JOV	MOV-1267A	CLEAN+1 NSPECT		CLEARED INSPECTED+TESTED	1	805540816	432
05/27/78	CH	HOV	MOV-1270B	CLEAF+INSPECT		CLEANED-TESTED+INSPECTED	1	805540828	413
05/27/78	CH	HOV	MOV-1246C	CLEAN+INSPECT		CLEANED TESTED+1 NSPECTED	1	<b>ช</b> 05J40ช34	413
05/27/78	Cli	MOV	MOV-1287B	CLEAN+INSPECT		CLEARED INSPECTED+TESTED	. 1	805040876	417
05/27/78	Cil	1100	NOV-1289B	CLEAN+INSPECT		CLEAMED+TESTED	1	805640839	413
05/27/78	3I	MOV	1860 <i>b</i>	CLEAN+INSPECT	,	DISCONNECTED+CONNECTED+INSPECTED	1	805091014	240
05/28/78	51	SIOV	1890C	CLEAN+INSPECT		CLEARED LISPECTED+TESTED	1.	805091005	11
05/29/78	SI	MOV	1869 <i>B</i>	CLEAN+INSPECT		PERFORMED UNP-P-MOV-45	1	805091011	135
05/29/78	RS	HOV	MOV-45-156B	SET LIMIT SHITCH		SET LIMITS	1	805:141460	88
05/30/78	KC	HOV	MOV-1536	CLEAN+INSFECT		CLEANED INSPECTED+TESTED	1	805::11115	384
0.730778 05/36/78	NS VS	HÖV	VS-101	CLEAN+INSPECT		CLEARED INSPECTED+TESTED	1	805091002	59
• •			18906	CLEAN+INSPECT		CLEANED INSPECTED+TESTED	1	805091007	59
05/10/78	ST	HOV		CLEAN+INSPECT			1	865091008	59
05/30/78	<i>S1</i>	HOV HOV	1885 <i>C</i> 1869 <i>A</i>	CLEAN+INSPECT		CLEANED INSPECTED+TESTED	1	865091012	48
05/36/78	SI SI	MOV	1885 <i>K</i>	CLEAN+INSPECT		CLEANED INSPECTED+TESTED	1	805091300	59
65/36/78 65/31/78	51 Cu	HOV	MOV~LCV-1115	CLEAN+INSPECT		CLEANED INSPECTED+TESTED	. 1	805 091030	77
05/31/78	Cli	HOV	MOV-LCV-1115	CLEAN+INSPECT		CLEARED INSPECTED+TESTED	1	805591031	77
05/31/78	CH	HOV	NOV-LCV-1115	CLEAN+INSTECT		CLEAHED INSPECTED+TESTED	1	805091032	77
	CH	:40V	LOV-LCV-1115	CLEAN+INSPECT		CLEANED INSPECTED+TESTED	1	805091415	77
u5/31/78	CH	TOV	POV DOV-IIII	CDDA. THOUSOI		<b>V</b>			
1 1 1 1 M M M M									****

DEPT TOTAL

### MONTHLY OPERATING SUPPLEMENT SHEET ELECTRICAL MAINTENANCE

### MAY, 1978

MAINTENANCE ORDERS COMPLETED	SAFETY RELATED ITEMS		5		
				•	
DESIGN CHANGES BEING WORKED	DC-76-30		,		•
PERIODIC TEST PERFORMED		6			
PT-34 (4) PT-23.1 PT-27		;			

UNIT 2-MAY 1978 CHAIRTERANCE OF CAPETY RELATED SYSTEMS DURING OUTAGE OR REDUCED POWER PERIODS)

, KAPSERVDI	SYS	COMP	MARKNO	SULLIARY	WKPERU	ν	iih	TOTUANTA	
05/26/78 05/26/78 05/27/78 05/29/78 05/29/78	EPU EPU KS BD CS	BREAKER BREAKER UOV V ALV E NOV	25#4 25J4 MOV-RS-256B TV-RD-260A MOV-CS-261B	SET AGASTAT TO \$0+10 G SECONDS SET AGASTAT TO \$0 + 10 G SECONDS CHANGE OFFRATOR TO LIMIT CLOSED	TESTED+ADJUSTED TESTED+ADJUSTED REMOVED JUMPER FROM LSB ADJUSTED LIMIT SAFTCH SET LIMIT SWITCHES+CYCLED	2 2 2	805051605 805051606 80556920 805569906 805561605	14 14 24 71 49	
PEFT TOTAL	,							172	

### MONTHLY OPERATING SUPPLEMENT SHEET INSTRUMENT MAINTENANCE

### MAY, 1978

•	MAINTENANCE ORDERS COMPLETED	SAFETY RELATED	ITEMS	7
•	DESIGN CHANGES BEING WORKED	DC-77-08		
•	PERIODIC TEST PERFORMED			34

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UNIT 1-MAY 1978 CHAÎNTERANCE OF SAFETY RELATED SYSTEMS DUKING OUTAGE OR REDUCED FOMER PECS)

ESTS SEVET	SYS	come	MARKNO	SUTEIARY	WKPERF	Ų	<i>tik</i>	. POPDAKTM
05/04/78 05/04/78 05/09/78 05/09/78 05/09/78 05/09/78 05/31/78	CV EPCR RM GM BR BR SS	INST CONT ROTOSTR INST CONT CONT VALVE	P1-CV-101B(? K1-UV-101/10 KC-GV-101 L-1-BK-104A PCV-AS-110A DCV8-01	NEEDS CALIBRATING POSSIBLE FAILURE RODS STEP OUT BEFORE NECESSARY WITH ROTO METER BROKEN FLOW METER BROKE FAILED HIGH FAILS OPEN SLOWLY REPLACE TRIP VALVES-SEE LIST	REFUELING CAL COMPLETED REALIGNED SYSTEM REBUILT ROTONETER REBUILT ROTOMETER REPLACED ET-BK-164A REPAIRED OPEN INPUT TO CONTROLLER REPLACED SOLENOID VALVES+TUBED UP	1 1 1 1 1 1	864216930 864216645 864270746 864370536 865672245 865672330 864170854	272 248 193 198 9 9 1146

### MONTHLY OPERATING SUPPLEMENT SHEET INSTRUMENT MAINTENANCE

### MAY, 1978

L.	MAINTENANCE ORDERS COMPLETED	SAFETY	RELATED	ITEMS		0	
•	•				,		•
2.	DESIGN CHANGES BEING WORKED			,	<del></del>	<del></del>	
					<del></del>	· · · · · · · · · · · · · · · · · · ·	
3.	PERIODIC TEST PERFORMED	•				4	

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### HEALTH PHYSICS

### MAY, 1978

There was no single release of radioactivity specifically associated with an outage that accounted for more than 10% of the allowable annual values in 10CFR20.

There were 3 individuals who received single radiation exposures specifically associated with Unit #1 Steam Generator work which accounted for more than 10% of the allowable annual values in 10CFR20.101.

REPORT OF RADIOACTIVE EFFLUENTS

PAGE 1

Facility: Surry Power Station

DOCKET: 50-280 and 50-281

YEAK, 1978

Gross Radioactivity (Fr)	Ι.	LIQUID RELEASES	1				COLORED CONTRACTOR AS ASSESSED			Ī		
(a) Total Release (Diring 2, 148-9 2, 418-10 2, 178-10 4, 298-10 4			UNITS	JANUARY	FEBRUARY	MARCH	APRII.	MAY	1.1.1.1.2.			
(b) Avg. Concentration Released (CI/MI 5, 14F-9 2, 4.1E-10 2.17E-10 5.67E-10 4.92E-10 (C) Maximum Concentration Released (CI/MI 5, 14F-9 3.47E-10 2.17E-10 5.67E-10 4.92E-10 (C) Maximum Concentration Released (CI/MI 5, 14F-9 3.47E-10 2.71E-10 5.67E-10 4.92E-10 (C) Maximum Concentration Released (CI/MI 3.54E-7 1.10E-7 1.10E-7 5.12E-7 3.63E-7 1.61E-7 (C) Maximum Concentration Released (CI/MI 3.54E-7 1.10E-7 5.12E-7 3.63E-7 1.61E-7 (C) Maximum Concentration Released (CI/MI 3.54E-7 1.10E-7 5.12E-7 3.63E-7 1.61E-7 (C) Maximum Concentration Released (CI/MI 9.08E-10 5.55E-9 1.69E-9 4.21E-9 6.25E-10 (C) Maximum Concentration Released (CI/MI 9.08E-10 5.55E-9 1.69E-9 4.21E-9 6.25E-10 (C) Maximum Concentration Released (CI/MI 9.08E-10 5.55E-9 1.69E-9 4.21E-9 6.25E-10 (C) Maximum Concentration Released (CI/MI 9.08E-10 5.55E-9 1.69E-9 4.21E-9 6.25E-10 (C) Maximum Concentration Released (CI/MI 9.08E-10 5.55E-9 1.69E-9 4.21E-9 6.25E-10 (C) Maximum Concentration Released (CI/MI 9.08E-10 5.55E-9 1.69E-9 4.21E-9 6.25E-10 (C) Maximum Concentration Released (CI/MI 9.08E-10 5.37E-7 1.86E-6 1.92E-5 1.62E-5 (C) Maximum Concentration Released (CI/MI 9.43E-10 5.37E-7 1.86E-6 1.92E-5 1.62E-5 (C) Maximum Concentration Released (CI/MI 9.43E-10 5.37E-7 1.7E-7 1.86E-6 1.92E-5 1.62E-5 (C) Maximum Concentration Released (CI/MI 9.43E-10 5.7E-7 1.7E-7 1.86E-6 1.92E-5 1.62E-5 (C) Maximum Concentration Released (CI/MI 9.43E-10 5.7E-7 1.7E-7 1.86E-6 1.92E-5 1.62E-5 (C) Maximum Concentration Released (CI/MI 9.43E-10 5.7E-7 1.7E-7 1.86E-6 1.92E-5 1.62E-5 (C) Maximum Concentration Released (CI/MI 9.43E-10 5.7E-7 1.7E-7 1.86E-6 1.92E-5 1.7E-7 1.7E	1.	Gross Radioactivity (βγ)										
Co   Maximum Concentration Released   DCI/ml   S,14E-9   3.47E-10   2.71E-10   5.67E-10   4.92E-10				6,12E-1			1.63E-1	8.38E-2		l		
(c) Maximus Concentration Released     CL/m        S,14R-9        3,47R-10        2,71R-10        5,67R-10        4,92E-10		(h) Avg. Concentration Released		2.34E-9			6.86E-10					
(a) Total Released (iGI/ml 3.54E-7 1.10E-7 5.12E-7 3.43E-7 1.61E-7 1.61E-7 1.60E-1 1.6		(c) Maximum Concentration Released	μCi/ml	5,14E-9	3.47E-10	2.71E-10	5,67E-10	4.92E-10				
(a) Total Released (iGI/ml 3.54E-7 1.10E-7 5.12E-7 3.43E-7 1.61E-7 1.61E-7 1.60E-1 1.6												
(b) Avg. Concentration Released   1627ml   3.54E-7   1.10E-7   5.12E-7   3.44E-7   1.61E-7    3. Dissolved Noble Cases   (a) Total Release   (b) Avg. Concentration Released   1.10E-7   5.55E-9   1.69E-9   4.21E-9   6.25E-10    4. Cross Alpha Radioactivity   (a) Total Released   1.16E-5   3.70E-7   1.86E-6   1.92E-5   1.62E-5   (b) Avg. Concentration Released   1.16E-5   3.70E-7   1.86E-6   1.92E-5   1.62E-5   (c) Avg. Concentration Released   1.10E-7   1.74E-15   8.58E-15   8.10E-14   1.62E-5   (d) Avg. Concentration Released   1.10E-7   1.74E-15   8.58E-15   8.10E-14   1.62E-5   (e) Avg. Concentration Released   1.10E-7   1.74E-15   8.58E-15   8.10E-14   1.62E-5   (f) Avg. Concentration Released   1.10E-7   1.74E-15   8.58E-15   8.10E-14   1.62E-5   (g) Avg. Concentration Released   1.10E-7   1.74E-15   8.58E-15   8.10E-14   1.62E-5   (h) Avg. Concentration Released   1.10E-7   1.74E-15   8.58E-15   8.10E-14   1.62E-5   (h) Avg. Concentration Released   1.10E-7   1.74E-15   8.58E-15   8.10E-14   1.62E-5   (h) Avg. Concentration Released   1.10E-7   1.74E-15   8.58E-15   8.10E-14   1.62E-5   (h) Avg. Concentration Released   1.10E-7   1.74E-1   1.74E-15   1.7	2.											
1.   Dissolved Noble Cases	1	(a) Total Released		9.27E+1	2.35E+1		8.13E+1			•		_
(a) Total Release (b) Avg. Concentration Released pCI/ml 9.08E-10 5.55E-9 1.69E-9 4.21E-9 6.25E-10  4. Cross Alpha Radioactivity (a) Total Released pCI/ml 4.43E-16 1.74E-15 8.58E-15 1.62E-5 (b) Avg. Concentration Released pCI/ml 4.43E-16 1.74E-15 8.58E-15 8.10E-16 9.60E-16 1.92E-5 1.62E-5 (b) Avg. Concentration Released pCI/ml 4.43E-16 1.74E-15 8.58E-15 8.10E-16 9.60E-16 1.92E-5 1.62E-5 (b) Avg. Concentration Released pCI/ml 4.43E-16 1.74E-15 8.58E-15 8.10E-16 9.60E-16 1.92E-5 1.62E-5 (b) Avg. Concentration Released pCI/ml 4.43E-16 1.74E-15 8.58E-15 8.10E-16 9.60E-16 1.92E-5 1.62E-5 (c) CI/ml 4.43E-16 1.74E-15 8.58E-15 8.10E-16 1.92E-5 1.62E-5 (c) CI/ml 5. Vol. of Liquid to Disch. Canal 1.11Eers 1.37E+7 7.17E+7 3.39E+7 5.01E+7 1.169E+11 1.10E-17 1.1		(b) Avg. Concentration Released	µG1/ml	3.54E-7	1.10E-7	5.12E-7	3.43E-7	1.61E-7	1			
(a) Total Release (b) Avg. Concentration Released pCI/ml 9.08E-10 5.55E-9 1.69E-9 4.21E-9 6.25E-10  4. Cross Alpha Radioactivity (a) Total Released pCI/ml 4.43E-16 1.74E-15 8.58E-15 1.62E-5 (b) Avg. Concentration Released pCI/ml 4.43E-16 1.74E-15 8.58E-15 8.10E-16 9.60E-16 1.92E-5 1.62E-5 (b) Avg. Concentration Released pCI/ml 4.43E-16 1.74E-15 8.58E-15 8.10E-16 9.60E-16 1.92E-5 1.62E-5 (b) Avg. Concentration Released pCI/ml 4.43E-16 1.74E-15 8.58E-15 8.10E-16 9.60E-16 1.92E-5 1.62E-5 (b) Avg. Concentration Released pCI/ml 4.43E-16 1.74E-15 8.58E-15 8.10E-16 9.60E-16 1.92E-5 1.62E-5 (c) CI/ml 4.43E-16 1.74E-15 8.58E-15 8.10E-16 1.92E-5 1.62E-5 (c) CI/ml 5. Vol. of Liquid to Disch. Canal 1.11Eers 1.37E+7 7.17E+7 3.39E+7 5.01E+7 1.169E+11 1.10E-17 1.1												
(b) Avg. Concentration Released	3.	Dissolved Noble Gases										
Gross Alpha Radioactivity												
(a) Total Released (b) Avg. Concentration Released pici/ml 4.43E-14 1.74E-15 8.58E-15 8.10E-14 9.60E-14    5. Vol. of Liquid to Disch. Canal Liters 3.37E+7 7.17E+7 3.39E+7 2.83E+7 5.01E+7    6. Vol. of Filiution Water Liters 2.62E+11 2.13E+11 2.17E+11 1.69E+11    7. Isotopes Released MPC pici/ml Curies    1-131 3 x 10 <sup>-7</sup>	1	(b) Avg. Concentration Released	µC1/ml	9.08E-10	5,55E-9	1.69E-9	4,21E-9	6.25E-10			J	
(a) Total Released (b) Avg. Concentration Released pici/ml 4.43E-14 1.74E-15 8.58E-15 8.10E-14 9.60E-14    5. Vol. of Liquid to Disch. Canal Liters 3.37E+7 7.17E+7 3.39E+7 2.83E+7 5.01E+7    6. Vol. of Filiution Water Liters 2.62E+11 2.13E+11 2.17E+11 1.69E+11    7. Isotopes Released MPC pici/ml Curies    1-131 3 x 10 <sup>-7</sup>	<b>.</b>			11								
(b) Avg. Concentration Released	4.				l							
5. Vol. of Liquid to Disch. Canal 6. Vol. of Dilution Water 7. Isotopes Released MPC µCl/ml 8. I-131 3 x 10 <sup>-7</sup> 8. yol. of Dilution Water 1.42E-2 8.96E-3 1.02E-2 2.08E-2 4.52E-3 1-132 8 x 10 <sup>-6</sup> 1.71E-4 8.96E-4 4.20E-2 5.49E-4 1.88E-4 1-133 1 x 10 <sup>-6</sup> 3.72E-4 6.06E-4 4.99E-2 5.07E-3 * 1-134 2 x 10 <sup>-5</sup> 5.15E-4 5.38E-4 6.70E-4 5.19E-2 5.16E-4 * 1-135 4 x 10 <sup>-6</sup> 1.38E-4 6.70E-4 5.19E-2 5.16E-4 * 6.3-134 9 x 10 <sup>-6</sup> 1.73E-2 2.22E-2 1.76E-2 1.14E-2 8.47E-3  Ca-134 9 x 10 <sup>-5</sup> 1.73E-2 2.22E-2 1.76E-2 1.14E-2 8.47E-3  Ca-136 6 x 10 <sup>-5</sup> Ca-137 2 x 10 <sup>-5</sup> 3.39E-2 4.65E-2 3.82E-2 2.14E-2 2.90E-2  Ca-57 4 x 10 <sup>-4</sup> 1.54E-4 1.56E-4 1.66E-2 1.35E-4 7.60E-4  Ca-58 9 x 10 <sup>-5</sup> 1.14E-1 2.54E-2 1.03E-1 1.40E-1 3.00E-1  Ca-60 3 x 10 <sup>-5</sup> 1.14E-1 2.54E-2 1.03E-1 1.40E-1 3.00E-1  Ca-60 3 x 10 <sup>-5</sup> 1.03E-1 6.06E-2 8.13E-2 9.19E-2 2.33E-1  Ma-54 1 x 10 <sup>-4</sup> 1.59E-2 1.56E-4 5.21E-3 2.25E-2  Na-24 3 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 10 <sup>-5</sup> 1.59E-2 2.54E-2 5.51E-1 4.70E-4 9.47E-5  Ca-59 5 x 1						1.86E-6	1.92E-5	1.62E-5				
6. Vol. of Dilution Water       Liters       2.62E+11       2.13E+11       2.17E+11       2.37E+11       1.69E+11         7. Isotopes Released MPC μCI/ml       1.42E-2       8.96E-3       1.02E-2       2.08E-2       4.52E-3         1-131       3 x 10 <sup>-6</sup> 1.71E-4       8.96E-3       1.02E-2       2.08E-2       4.52E-3         1-132       8 x 10 <sup>-6</sup> 1.71E-4       8.96E-4       4.20E-2       5.49E-4       1.88E-4         1-133       1 x 10 <sup>-6</sup> 3.72E-4       6.06E-4       4.99E-2       5.07E-3       *         1-134       2 x 10 <sup>-5</sup> 5.15E-4       5.33E-4       4.20E-2       *       *         1-135       4 x 10 <sup>-6</sup> 1.38E-4       6.70E-4       5.19E-2       5.16E-4       *         Cs-134       9 x 10 <sup>-6</sup> 1.73E-2       2.22E-2       1.76E-2       1.14E-2       8.47E-3         Cs-136       6 x 10 <sup>-5</sup> 3.39E-2       2.12E-2       1.14E-2       8.47E-3         Cs-137       2 x 10 <sup>-5</sup> 3.39E-2       4.5E-2       3.82E-2       2.14E-2       2.90E-2         Cs-138       -       2.22E-4       *       1.56E-2       1.33E-4       7.60E-4       *         Co-58       9 x 10 <sup>-5</sup> <		(b) Avg. Concentration Released	µC1/m1	4.43E-14	1.74E-15	8.58E-15	8.10E-14	9.60E-14				
6. Vol. of Dilution Water       Liters       2.62E+11       2.13E+11       2.17E+11       2.37E+11       1.69E+11         7. Isotopes Released MPC μCI/ml       1.42E-2       8.96E-3       1.02E-2       2.08E-2       4.52E-3         1-131       3 x 10 <sup>-6</sup> 1.71E-4       8.96E-3       1.02E-2       2.08E-2       4.52E-3         1-132       8 x 10 <sup>-6</sup> 1.71E-4       8.96E-4       4.20E-2       5.49E-4       1.88E-4         1-133       1 x 10 <sup>-6</sup> 3.72E-4       6.06E-4       4.99E-2       5.07E-3       *         1-134       2 x 10 <sup>-5</sup> 5.15E-4       5.33E-4       4.20E-2       *       *         1-135       4 x 10 <sup>-6</sup> 1.38E-4       6.70E-4       5.19E-2       5.16E-4       *         Cs-134       9 x 10 <sup>-6</sup> 1.73E-2       2.22E-2       1.76E-2       1.14E-2       8.47E-3         Cs-136       6 x 10 <sup>-5</sup> 3.39E-2       2.12E-2       1.14E-2       8.47E-3         Cs-137       2 x 10 <sup>-5</sup> 3.39E-2       4.5E-2       3.82E-2       2.14E-2       2.90E-2         Cs-138       -       2.22E-4       *       1.56E-2       1.33E-4       7.60E-4       *         Co-58       9 x 10 <sup>-5</sup> <	:							1			,	
7. Isotopes Released MPC µCl/ml	5.	Vol. of Liquid to Disch. Canal	Liters		7.17E+7	3.39E+7	2.83E+7	5.01E+7				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	6.			2.62E+11	2.13E+11	2.17E+11	2.37E+11	1,69E+11				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7.	Isotopes Released MPC µC1/ml	Curies					1				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				1.42E-2	8.96E-3	1.02E-2	2.08E-2	4.52E-3				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$				1.71E-4	8.96E-4	4.20E-2	5.49E-4	1.88E-4				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				3.72E-4	6.06E-4	4.39E-2	5.07E-3	*				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		I-134 2 x 10 <sup>-5</sup>		5.15E-4	5,33E-4	4.20E-2	*	*				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1	I-135 4 x 10 <sup>-6</sup>		1.38E-4	6.70E-4	5.19E-2	5.16E-4	*			1	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$				1.73E-2	2.22E-2	1.76E-2		8.47E-3				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		Cs-136 6 x 10 <sup>-5</sup>		*		9.27E-5				}		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		Cs-137 2 x 10 <sup>-5</sup>		3.39E-2	4.65E-2	3.82E-2	2.14E-2	2.90E-2				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1			2.22E-4	*							
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		Co-57 4 x 10 <sup>-4</sup>	I		1.56E-4		1.33E-4	7.60E-4	1	1		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			1	*	2.54E-2							
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	}								<del></del>	·[		
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	<b></b>		t									
Ba-La-140 2 x 10 <sup>-5</sup> 1.81E-3 7.83E-4 9.25E-5 * 2.48E-5	1		ļ				. l		<del> </del>	1	-	$\neg$
Rb-88 -			I						1	· · · · · · · · · · · · · · · · · · ·		
	1	Rb-88 -	ļ	*	1.36E-3	2.10E-3	*		1	1		

42-

DAGYIT	TY; Lurry Power Station		REPORT	OF RADIOACTI	VE EFFLUENTS			PAGE 2		ı
PACILI	It; Surry rower station	1	DOCK	ET 1 50-280 and	1 50-281	Y	EAR; 19	78		•
I.	LIQUID RELEASES (CON!T)			<del></del>	<del> </del>	<del></del>	7		[	
#. 11 - 17 The street 4.4		UNITS	JANUARY	PERRUARY	HARCH	APRIL	MAY		TOTAL	t Error
7.	Isotopes Released µMPC C1/ml.	Curles					1			
<u> </u>	Cc-141 9 x 10 <sup>-5</sup>		ij (* ) i	2.37E-4	1.97E-5	k	1.53E-4		· · · · · · · · · · · · · · · · · · ·	
Ì	Ce-144 1 x 10-5		1 *****	1 * (1	, k	*	5.36E-4	<u> </u>		
ļ	Xe-133 3 x 10 <sup>-6</sup>		2.01E-1	1.002-1	3.08E-1	9.49E-1	'2,28E-2	_l <u></u>		
l	Xe-135 3 x 10 <sup>-6</sup>		3.62P-2	2.05E-2	3.24E-2	2.91E-2	1.66E-3			
	$Ar-41$ 3 x $10^{-6}$		3.81E-5	9.31E-6	*	k'	3.59E-4			·
	Sr-89 3 x 10 <sup>-6</sup>			İ						
	Sr-90 3 x 10 <sup>-7</sup>									
	C-14 8 x 10 <sup>-4</sup>									
8	Percent of 10CFR20	Percent	5;19E-2	3.71E-2	1.10E-1	1.72E-1	_2.22E-2		<del></del>	·}
II.	ATRBORNE RELEASES									
1.	Total Noble Gases	Curtes	9.47E+1	4.80E+2	1.95E+2	1.24E+3	9.61E+1			ļ
2.	Total Halogens	Curies	1.23E-4	2.90E-5	1.36E-4	5.34E-3	5.37E-2			
3.	Total Particulate Gross Radio-							1		
	activity (βγ)	Curies	1.93E-5	1.47E-6	1.61E-5	7.13E-5	1.291-4	j j		
4.	Total Tritium	Curies	4.46E+0	4.33E+0	1,23E+2	6.79E+0	3.64E+0	1	· · · · · · · · · · · · · · · · · · ·	
5.	Total Particulate Gross Alpha				3 3 1 2 2 3					
	Radioactivity	Curtes	1.04E-6	7.69E-7	5.62E-7	1.57E-6	.1.11E-5			į
.,										
6.	Maximum Noble Gas Release Rate	HC1/sec	6.37E+2	9.40E+2	1.50E+3	1.44E+4	6.51E+2			
7.	Percent of Applicable Limit for Technical Specifications			,				1 . 1		l
	(a) Noble Gases	Percent	5.90E-2	3.46E-1	1.27E-1	8.21E-1	5.98E-2			
	(b) Halogens	Percent	8.29E-5	73.38E-4	1.51E-3	5.65E-2	6.02E-1			i
	(c) Particulates	Percent	1.19E-3	2.30E-4	3.01E-4	9,96E-4	1.68E-3	li		
	7									
8.	Tsotopes Released: (a) Particulates	Curies	·				<del></del>			<del></del>
		-∤	2.04E-5	0.543.7	- <del></del>	<del>-</del>	2.27E-6	{		
	Cs-134 Cs-135		7 2.04E-3	9.54E-7	_7.20E-9	*	2.2/E-0	II		
	Cs-137	-[[	1.53E-8			1.37E-6	7.41E-6	[	<del></del>	
			7.775-0	1.42E-6 2.17E-3	2.14E-6	1.3/E-0 *	7.41E-6 *	[		
	Cs-138		3.05E-5		3.26E-3		4.72E-5	<u> </u> ]-		
	Co~58		5.21E-5	2.60E-6	_1.33E=5	7.97E-5	9.05E-5		<del></del>	J
	Co-60	∦∦-		1.36E-5	1-14E-5	4.87E-6		ļ		l
	Mn-54		3.34E-6	5.75E-9 *	<u>k</u>	*	2,49E-6	[		
	Fe-59	_{			*	*	*	-		- <del>-</del>
	Rb-88		8 <sup>1</sup> 1E-5	1.27E-5	_1.57E=4	*	* ************************************			<u> </u>

		1. 12 11	REPORT	OF RADIOACTIV	S EFFLUENTS			PAGE 3	$\left\{ \left[ -\frac{1}{2}\left( 2\pi i \right) \right] -\frac{1}{2}\left( 2\pi i \right) \right\}$	4
FACILIT	TY: Larry Power Station					Y (1)	AR: 8			
			DOCKE	T; 50-280 an	1 50-281	AMPLANT.				
				J	<del></del>	ALTERNATION OF THE SECTION OF THE SE	,			
Π.	AIRBORNE RELEASES (CON'T)	i	محمد المام المحمد							
	Isotopes Released (con't)	UNITS Curles	JANUARY	FEBRUARY	MARCII	APRIL	MAY			
8.		Curies	1 .11			<del></del>	· · · · · · · ·		<del></del>	<del> </del>
	(b) llalogens			-141			5 100 0	<del></del>		- <u> </u>
	I-131		7,39B-6,	2.72E-5	_1.34E-4	4.88E-3	5.13E-2		[	-[
	I-132		1.040-6	*.	_ *	2.93E-4	2.64E-7	<del></del>		
	T-133		2.75E-6.	1.81E-6	1.34E-7	1.68E-4	9.06E-9		<b> </b>	
	I-134		*	*	*	*	*		· · · · · · · · · · · · · · · · · · ·	- <b>}</b> -
	I-135		*, . ,	<u> </u>	_1.78E-7	*	*		<b></b>	
	(c) Gases			- (70)					<b></b>	
	Xe-133		9.43E+1	4.67E+2	1.90E+2	1.20E+3	7.02E+1		<u> </u>	
	Xe-133m		*	4.76E-1	7.38E-1	1.18E+1	7.30E-2			·1
	Xe-135		3.94E-1	1,13E+1	2.46E+0	2.16E+1	6.06E-3	·		-l
	Kr-85m		2.41E-4	4.27E-3	3.42E-2	*	*			
	Kr-85		*	7.07E-1	*	*	2.59E+1			
	Kr-87		*	* .	3.95E-2	*	*		l	ļ
	Kr-88		*	5.42E-3	6.67E-2	*	*	<del></del>		
	Ar-41		*	9,87E-3	6.40E-1	*	*		L	
	SOLID RADIOACTIVE WASTE DISPOSAL					<u></u>	l		L	<u> </u>
1.	(a) Total Amount Solid Waste			i i		1	1 i		•	i
	Packaged	FT <sup>3</sup>	60 ft. 3	7.76E+2	7.21E+2	2.12E+3	3.89E+3		<u></u>	J
	(b) Estimated Total Activity	Curles	1.625	1.12E+1	9.20E+1	1.32E+2	65.5		l	
	(c) Date of Shipment and		Barnwell,	Barnwell,	Barnwell,	Barnwell,	Barnwell,	. 1 6: 1 - 1		
	Disposition		s.c.	S.c.	S.C.	S,C,	s.c.			<u> </u>
										1
			01-23-78	2-2-78	3-1-78	04-10-78	05-02-78	•		
	,	į.	01-23-76	2-21-78	3-10-78		05-03-78			
		arian da	120027	2-21-78   2-22-78	3-10-78	04-12-78				
				12-122-110	3-10-78	04-26-78	05-05-78			
				7 to (		04-27-78	05~10~78	_		
		- 1		1 1			05-11-78	•	•	
	1 , .	1	011 1	1 000, 1757			05-16-78			<b>)</b>
				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			05-17-78			
							05-18-78			
		•		une quality talking the file. The control of the file of the control of the file			05-19-78			
	`		4	<b>以注:"说道</b>	Man Well	1,850	05-24-78 05-25-78			

#### SENSITIVITY DATA

### 1. Minimum Detectable Activity

- a. Gross Alpha; 5.27E-9 µCi/ml
- b. Tritium; 4.0E-6 μCi/ml
- c. Strontium-89; less than 3.0E+1 oCi per total filter composite.
- d. Strontium-90; less than 2.0E+0 oCi per total filter composite.
- e.  $CO_2$ -14; less than 7.0E-10  $\mu$ Ci/ $\hat{m}$ l.
- f. Strontium-89; less than 9.0E-9 μCi/ml.
- g. Strontium-90; less than 8.0E-10 μCi/ml.

### 2. Multichannel Analyzer - GeLi

### a. Liquid and/or Radiogases - 100cc

Ba-La-140		2.0E-7
I-131		5.1E-8
Xe-133	,	5.4E-8
Xe-135		2.9E-8
Cs-137		9.2E-8
Cs-134		7.2E-8
Co-60		1.5E-7
Co-58		9.8E-8
Cr-51		3.8E-7
Mn-54		1.0E-7
Fe-59		2.4E-7
Ar-41	·	1.6E-7
I-134		1.1E-7
I-132.		1.0E-7
Na-24	•	1.7E-7
I-133		6.9E-8
I-135		4.5E-7
Kr-85		1.36E-5
Kr-88		5.5E-8
Kr-87		5.3E-8
Kr-85m		2.3E-7
Xe-138	-	4.7E-9
Xe-135m		5.8E-8
Xe-133m		1.7E-7
Rb-88		8.5E-7
•		

### b. Radioiodines

2.3E-6
3.1E-6
4.7E-6
4.8E-6
2.0E-5

## PROCEDURE DEVIATIONS REVIEWED BY STATION NUCLEAR SAFETY AND OPERATING COMMITTEE AFTER TIME LIMIT SPECIFIED IN TECHNICAL SPECIFICATIONS

### MAY, 1978

Number	Unit	<u>Title</u>	Deviation
PT-26.4	1	Radiation Monitoring Equipment Test During	Step 5.2.4-Unable to verify alarm 1G1.
	•	Fuel Handling Operations	Step 5.2.5-Unable to verify alarm 1G9.
			Step 5.3.4-Unable to verify alarm 1G1.
			Step 5.3.5-Unable to verify alarm 1G9.
			Step 5.4.4-Unable to verify alarm 1G1.
	·		Step 5.4.5-Unable to verify alarm 1G9.

This procedure was deviated 05-01-78 and reviewed by the Station Nuclear Safety and Operating Committee 05-18-78.

PT-24.1 1 Fire Protection Water Steps 5.12 through 5.17 and 6.1.2, not performed.

This procedure was deviated 05-09-78 and reviewed by the Station Nuclear Safety and Operating Committee 05-24-78.