

GCT-92-01

January 3, 1992

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

SUBJECT: Quad Cities Nuclear Station Units 1 and 2  
Monthly Performance Report  
NRC Docket Nos. 50-254 and 50-265

Enclosed for your information is the Monthly Performance Report covering the operation of Quad-Cities Nuclear Power Station, Units One and Two, during the month of December 1991.

Respectfully,

COMMONWEALTH EDISON COMPANY  
QUAD-CITIES NUCLEAR POWER STATION

*G.C. Tietz*  
G. C. Tietz  
Technical Superintendent

GCT/CALS/dak

Enclosure

cc: A. B. Davis, Regional Administrator  
T. Taylor, Senior Resident Inspector

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QUAD-CITIES NUCLEAR POWER STATION

UNITS 1 AND 2

MONTHLY PERFORMANCE REPORT

DECEMBER 1991

COMMONWEALTH EDISON COMPANY

AND

IOWA-ILLINOIS GAS & ELECTRIC COMPANY

NRC DOCKET NOS. 50-254 AND 50-265

LICENSE NOS. DPR-29 AND DPR-30

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## I. INTRODUCTION

Quad-Cities Nuclear Power Station is composed of two Boiling Water Reactors, each with a Maximum Dependable Capacity of 769 MWe Net, located in Cordova, Illinois. The Station is jointly owned by Commonwealth Edison Company and Iowa-Illinois Gas & Electric Company. The Nuclear Steam Supply Systems are General Electric Company Boiling Water Reactors. The Architect/Engineer was Sargent & Lundy, Incorporated, and the primary construction contractor was United Engineers & Constructors. The Mississippi River is the condenser cooling water source. The plant is subject to license numbers DPR-29 and DPR-30, issued October 1, 1971, and March 21, 1972, respectively; pursuant to Docket Numbers 50-254 and 50-265. The date of initial Reactor criticalities for Units One and Two, respectively were October 18, 1971, and April 26, 1972. Commercial generation of power began on February 18, 1973 for Unit One and March 10, 1973 for unit Two.

This report was compiled by Scott Woodruff and Debra Kelley, telephone number 309-654-2241, extensions 2936 and 2240.

## II. SUMMARY OF OPERATING EXPERIENCE

### A. Unit One

Unit One began the month of December in shutdown for continuing work on the 250 Volt batteries. The unit went critical at 1045 hours on December 1st. The unit was shutdown on the 11th due to a scram on a high water level turbine trip. On the 13th at 1713 the unit went critical and on the 14th was synchronized to the grid. On December 17th the unit was shutdown to de-energized Bus 14-1. The unit was started up and synchronized to the grid on December 18th at 0400. Load drops occurred on December 8th and 15th for scram timing testing and turbine testing, respectively. All other load drops that occurred through the month were issued by Chicago Load Dispatch.

### B. Unit Two

Unit Two continued its coastdown in preparation for its refuel outage. The reactor was scrammed at 12 midnight on December 31 for the start of refuel outage Q2R11.

III. PLANT OR PROCEDURE CHANGES, TESTS, EXPERIMENTS,  
AND SAFETY RELATED MAINTENANCE

A. Amendments to Facility License or Technical Specifications

There were no Amendments to the Facility License or Technical Specifications for the reporting period.

B. Facility or Procedure Changes Requiring NRC Approval

There were no Facility or Procedure changes requiring NRC approval for the reporting period.

C. Tests and Experiments Requiring NRC Approval

There were no Tests or Experiments requiring NRC approval for the reporting period.

D. Corrective Maintenance of Safety Related Equipment

The following represents a tabular summary of the major safety related maintenance performed on Units One and Two during the reporting period. This summary includes the following: Work Request Numbers, Licensee Event Report Numbers, Components, Cause of Malfunctions, Results and Effects on Safe Operation, and Action Taken to Prevent Repetition.

UNIT 1 MAINTENANCE SUMMARY

<u>WORK REQUEST</u>	<u>SYSTEM</u>	<u>EID DESCRIPTION</u>	<u>WORK PERFORMED</u>
Q96624	52C9	Repair fuel line leak at a thread on the engine driven fuel pump.	As Found: Fuel pump discharge pipe nipple was cracked between threads at the surface of the fuel pump. As Left: Replaced the fuel pump discharge pipe nipple with new brass 1/2" X 3 1/2" schedule 40 nipple drawn from stores.

UNIT 2 MAINTENANCE SUMMARY

<u>WORK REQUEST</u>	<u>SYSTEM</u>	<u>EID DESCRIPTION</u>	<u>WORK PERFORMED</u>
Q95790	1001	Repair leak inboard seal cooling line fitting on U2 2B RHR SW pipe.	As Found: Fitting was leaking where it threaded into the pump casing. As Left: Removed old fitting, cleaned threads, and installed new fittings.



#### IV. LICENSEE EVENT REPORTS

The following is a tabular summary of all licensee event reports for Quad-Cities Units One and Two occurring during the reporting period, pursuant to the reportable occurrence reporting requirements as set forth in sections 6.6.B.1 and 6.6.B.2 of the Technical Specifications.

##### UNIT 1

<u>Licensee Event Report Number</u>	<u>Date</u>	<u>Title of Occurrence</u>
91-024	12/03/91	CO <sub>2</sub> Systems for the D.G.'s do not meet the required flow rate.
91-025	12/11/91	Rx Scram from F.W. Reg. Valve failure.
91-026	12/10/91	Breach of Secondary Containment thru DW/Torus Purge Fans.
91-027	12-16-91	S/D due to Heating Steam Deluging Bus 14-1.
91-028	12-20-91	Loss of power to 1A RPS Bus

##### UNIT 2

91-014	12/18/91	2A RHR Ht Ex Outside Design Basis.
91-015	12-24-91	RB Vent Isolation during a R/S.
91-016	12-27-91	Design discrepancy between FSAR & as built for tip ball valves.

## V. DATA TABULATIONS

The following data tabulations are presented in this report:

- A. Operating Data Report
- B. Average Daily Unit Power Level
- C. Unit Shutdowns and Power Reductions

APPENDIX C  
OPERATING DATA REPORT

DOCKET NO 50-254  
UNIT One  
DATE January 6, 1992  
COMPLETED BY Scott Woodruff  
TELEPHONE (309) 654-2241

OPERATING STATUS

- 0000 120191
1. REPORTING PERIOD: 2400 123191 GROSS HOURS IN REPORTING PERIOD: 744
2. CURRENTLY AUTHORIZED POWER LEVEL (Mwt): 2511 MAX. DEPEND. CAPACITY: 769  
DESIGN ELECTRICAL RATING (MWe-Net): 789
3. POWER LEVEL TO WHICH RESTRICTED (IF ANY) (MWe-Net): N/A
4. REASONS FOR RESTRICTION (IF ANY):
- |   | THIS MONTH | YR TO DATE | CUMULATIVE  |
|---|------------|------------|-------------|
| 5. NUMBER OF HOURS REACTOR WAS CRITICAL .....     | 648.5      | 5031.2     | 136513.1    |
| 6. REACTOR RESERVE SHUTDOWN HOURS .....           | 0.0        | 0.0        | 3421.9      |
| 7. HOURS GENERATOR ON LINE .....                  | 627.1      | 4874.8     | 132244.1    |
| 8. UNIT RESERVE SHUTDOWN HOURS .....              | 0.0        | 0.0        | 909.2       |
| 9. GROSS THERMAL ENERGY GENERATED (MWH).....      | 1404497.0  | 11335583.0 | 284067623.0 |
| 10. GROSS ELECTRICAL ENERGY GENERATED (MWH).....  | 457366.0   | 3680482.0  | 92074336.0  |
| 11. NET ELECTRICAL ENFRGY GENERATED (MWH).....    | 440554.0   | 3535317.0  | 86709558.0  |
| 12. REACTOR SERVICE FACTOR.....                   | 87.2       | 57.4       | 79.0        |
| 13. REACTOR AVAILABILITY FACTOR.....              | 87.2       | 57.4       | 80.9        |
| 14. UNIT SERVICE FACTOR .....                     | 84.3       | 55.6       | 76.5        |
| 15. UNIT AVAILABILITY FACTOR .....                | 84.3       | 55.6       | 77.0        |
| 16. UNIT CAPACITY FACTOR (Using MDC) .....        | 77.0       | 52.5       | 65.2        |
| 17. UNIT CAPACITY FACTOR (Using Design MWe) ..... | 75.0       | 51.1       | 63.6        |
| 18. UNIT FORCED OUTAGE RATE .....                 | 2.6        | 14.9       | 5.6         |
19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):
20. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: \_\_\_\_\_
21. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION):

	FORECAST	ACHIEVED
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

APPENDIX C  
OPERATING DATA REPORT

DOCKET NO 50-265  
UNIT Two  
DATE January 6, 1992  
COMPLETED BY Scott Woodruff  
TELEPHONE (309) 654-2241

OPERATING STATUS

- 0000 1201  
1. REPORTING PERIOD: 2400 123191 GROSS HOURS IN REPORTING PERIOD: 744
2. CURRENTLY AUTHORIZED POWER LEVEL (MWt): 2511 MAX. DEPEND. CAPACITY: 769  
DESIGN ELECTRICAL RATING (MWe-Net): 789
3. POWER LEVEL TO WHICH RESTRICTED (IF ANY) (MWe-Net): N/A
4. REASONS FOR RESTRICTION (IF ANY):
- |   | THIS MONTH | YR TO DATE  | CUMULATIVE  |
|---|------------|-------------|-------------|
| 5. NUMBER OF HOURS REACTOR WAS CRITICAL .....     | 744.0      | 7795.0      | 133484.0    |
| 6. REACTOR RESERVE SHUTDOWN HOURS .....           | 0.0        | 0.0         | 2985.8      |
| 7. HOURS GENERATION ON LINE .....                 | 744.0      | 7732.0      | 130017.0    |
| 8. UNIT RESERVE SHUTDOWN HOURS .....              | 0          | 0.0         | 732.9       |
| 9. GROSS THERMAL ENERGY GENERATED (MWH).....      | 1213142.0  | 16852565.0  | 280083886.0 |
| 10. GROSS ELECTRICAL ENERGY GENERATED (MWH).....  | 396465.0   | 4,200,000.0 | 89930190.0  |
| 11. NET ELECTRICAL ENERGY GENERATED (MWH).....    | 301810.0   | 5285715.0   | 85116267.0  |
| 12. REACTOR SERVICE FACTOR.....                   | 100.0      | 89.0        | 77.9        |
| 13. REACTOR AVAILABILITY FACTOR.....              | 100.0      | 89.0        | 79.7        |
| 14. UNIT SERVICE FACTOR .....                     | 100.0      | 88.3        | 75.9        |
| 15. UNIT AVAILABILITY FACTOR .....                | 100.0      | 88.3        | 76.3        |
| 16. UNIT CAPACITY FACTOR (Using MDC) .....        | 66.7       | 78.5        | 64.6        |
| 17. UNIT CAPACITY FACTOR (Using Design MWe) ..... | 65.0       | 76.5        | 63.0        |
| 18. UNIT FORCED OUTAGE RATE .....                 | 0.0        | 9.8         | 9.0         |
19. SHUTDOWNS SCHEDULED OVER NEXT 6 MONTHS (TYPE, DATE, AND DURATION OF EACH):
20. IF SHUTDOWN AT END OF REPORT PERIOD, ESTIMATED DATE OF STARTUP: \_\_\_\_\_
21. UNITS IN TEST STATUS (PRIOR TO COMMERCIAL OPERATION):

	FORECAST	ACHIEVED
INITIAL CRITICALITY	_____	_____
INITIAL ELECTRICITY	_____	_____
COMMERCIAL OPERATION	_____	_____

NOTE: CORRECTIONS

In an effort to accurately reflect the operation of Quad-Cities Units 1 and 2, the following corrections for NET ELECTRICAL ENERGY GENERATED (MWh) have been submitted.

NET ELECTRICAL ENERGY GENERATED (MWh) UNIT 1

	This month	Year to Date	Cumulative
1/91	-5717	-5717	83168524
2/91	-5360	-11077	93163164
3/91	-5917	-16994	83157247
4/91	-1726	-18720	83155521
5/91	340064	321344	83495585
6/91	80310	401654	83575895
7/91	528371	930025	84104266
8/91	545230	1475255	84649496
9/91	557444	2032699	85206940
10/91	51091	2605218	85780459
11/91	4815	3094573	86268814

NET ELECTRICAL ENERGY GENERATED (MWh) UNIT 2

	This Month	Year to Date	Cumulative
1/91	475292	475292	80305844
2/91	505998	981290	80811842
3/91	560834	1542124	81372676
4/91	231484	1773608	81604160
5/91	554986	2328594	82159146
6/91	513892	2842486	82673038
7/91	467183	3309669	83140221
8/91	540719	3850388	83680940
9/91	297128	4147516	83978068
10/91	358528	4506044	84336596
11/91	416309	4922353	84752905

NOTE: CORRECTIONS

The following is a listing of the corrected UNIT CAPACITY FACTORS for both Units 1 and 2.

UNIT CAPACITY FACTORS UNIT 1

Unit Capacity Factor

8/91	95.3
9/91	100.7
10/91	100.1
11/91	88.2

UNIT CAPACITY FACTORS UNIT 2

Unit Capacity Factor

5/91	100.2
9/91	53.7
10/91	62.6
11/91	75.2

APPENDIX B  
AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO 50-254  
UNIT One  
DATE January 3, 1992  
COMPLETED BY Scott Woodruff  
TELEPHONE (309) 654-2241

MONTH December 1991

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

1.	<u>-8</u>
2.	<u>429</u>
3.	<u>767</u>
4.	<u>797</u>
5.	<u>795</u>
6.	<u>799</u>
7.	<u>792</u>
8.	<u>497</u>
9.	<u>701</u>
10.	<u>792</u>
11.	<u>109</u>
12.	<u>-8</u>
13.	<u>-8</u>
14.	<u>525</u>
15.	<u>734</u>
16.	<u>610</u>

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

17.	<u>-3</u>
18.	<u>378</u>
19.	<u>787</u>
20.	<u>735</u>
21.	<u>764</u>
22.	<u>755</u>
23.	<u>711</u>
24.	<u>751</u>
25.	<u>590</u>
26.	<u>788</u>
27.	<u>768</u>
28.	<u>792</u>
29.	<u>689</u>
30.	<u>725</u>
31.	<u>793</u>

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 when maximum dependable capacity is used 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.

APPENDIX B  
AVERAGE DAILY UNIT POWER LEVEL

DOCKET NO 50-265  
 UNIT Two  
 DATE January 3, 1992  
 COMPLETED BY Scott Woodruff  
 TELEPHONE (309) 654-2241

MONTH November 1991

DAY AVERAGE DAILY POWER LEVEL (MWe-Net)	DAY AVERAGE DAILY POWER LEVEL (MWe-Net)
1. <u>518</u>	17. <u>529</u>
2. <u>552</u>	18. <u>521</u>
3. <u>548</u>	19. <u>520</u>
4. <u>542</u>	20. <u>515</u>
5. <u>540</u>	21. <u>514</u>
6. <u>505</u>	22. <u>510</u>
7. <u>484</u>	23. <u>508</u>
8. <u>488</u>	24. <u>505</u>
9. <u>483</u>	25. <u>502</u>
10. <u>475</u>	26. <u>500</u>
11. <u>549</u>	27. <u>498</u>
12. <u>536</u>	28. <u>495</u>
13. <u>532</u>	29. <u>492</u>
14. <u>529</u>	30. <u>490</u>
15. <u>528</u>	31. <u>463</u>
16. <u>525</u>	

**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 when maximum dependable capacity is used 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.



APPENDIX D  
UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-254

UNIT NAME Unit 1

DATE January 3, 1992

REPORT MONTH December, 1991

COMPLETED BY Cynthia A. Losek-Short

TELEPHONE 309-654-2241

NO.	DATE	TYPE F OR S	DURATION (HOURS)	REASON	METHOD OF SHUTTING DOWN REACTOR	LICENSEE EVENT REPORT NO.	SYSTEM CODE	COMPONENT CODE	CORRECTIVE ACTIONS/COMMENTS
91-19	12-1-91	F	10.7	B	2	-	-	-	Continuation of 250V Battery Work from previous month.
91-20	12-11-91	F	64.3	H	2	-	-	-	Turbine Trip on High Water Level - RX Scrammed
91-21	12-17-91	F	76.5	B	2	-	-	-	Unit Shutdown for Bus 14-1 to be de-energized.

APPENDIX D  
UNIT SHUTDOWNS AND POWER REDUCTIONS

DOCKET NO. 50-265

UNIT NAME Unit Two

DATE January 3, 1992

REPORT MONTH December, 1991

COMPLETED BY Cynthia A. Losek-Short

TELEPHONE 309-654-2241

NO.	DATE	TYPE F C R S	DURATION (HOURS)	REASON	METHOD OF SHUTTING DOWN REACTOR	LICENSEE EVENT REPORT NO.	SYSTEM CODE	COMPONENT CODE	CORRECTIVE ACTIONS/COMMENTS
									No Shutdowns or Significant Power Reductions for Unit 2

## VI. UNIQUE REPORTING REQUIREMENTS

The following items are included in this report based on prior commitments to the commission:

### A. Main Steam Relief Valve Operations

There were no Main Steam Relief Valve Operations for the reporting period.

### B. Control Rod Drive Scram Timing Data for Units One and Two

The basis for reporting this data to the Nuclear Regulatory Commission are specified in the surveillance requirements of Technical Specifications 4.3.C.1 and 4.3.C.2.

The following table is a complete summary of Units One and Two Control Rod Drive Scram Timing for the reporting period. All scram timing was performed with reactor pressure greater than 800 PSIG.

RESULTS OF SCRAM TIMING MEASUREMENTS  
 PERFORMED ON UNIT 1 & 2 CONTROL  
 ROD DRIVES, FROM 1-1-91 TO 12/31/91

DATE	NUMBER OF RODS	AVERAGE TIME IN SECONDS AT % INSERTED FROM FULLY WITHDRAWN				MAX. TIME FOR 90% INSERTION	DESCRIPTION
		5 0.375	20 0.900	50 2.00	90 3.5		
1-30-91	1	0.28	0.63	1.37	2.45	H-7 (2.45)	U2 scram timing for accumulator replacement on H-7
1-30-91	1	0.30	0.72	1.53	2.67	F-6 (2.67)	U2 scram timing for accumulator replacement on F-6
4-30-91	22/177	0.29	0.67	1.46	2.57	H-11 (3.0)	U1, Hot Scram Timing during Start Up Sequence A&B, Cycle 12 (Paritial)
5-2-91	177	0.29	0.67	1.44	2.55	R-10 (3.27)	U1 Start Up Scram Timing Begin Cycle 12
5-5-91	89	0.31	0.68	1.43	2.51	B-4 (2.84)	U2 Scram Timing For Sequence A
5-6-91	1	0.26	0.62	1.40	2.52	E-12 (2.52)	U1 Scram Timing for WR on Scram Light
7-12-91	4	0.27	0.62	1.35	2.38	N-12 (2.42)	U1 Work Requests for Accumulator Replacement
7-17-91	1	0.28	0.62	1.32	2.32	R-6 (2.32)	U2 Scram Outlet Failure
10-8-91	2	0.32	0.70	1.5	2.72	E-10 (2.89)	U2 for WR Accumulator/Scram Valve
12-8-91	1	0.28	0.64	1.41	2.49	H-5 (2.49)	U1 for Scram Solenoid
12-5-91	88	0.31	0.66	1.39	2.44	E-10 (2.75)	U2 SEQ B

scrmtim

RESULTS OF SCRAM TIMING MEASUREMENTS  
 PERFORMED ON UNIT 1 & 2 CONTROL  
 ROD DRIVES, FROM 1-1-91 TO 12-13-91

DATE	NUMBER OF RODS	AVERAGE TIME IN SECONDS AT % INSERTED FROM FULLY WITHDRAWN				MAX. TIME FOR 90% INSERTION	DESCRIPTION
		5	20	50	90		
		0.375	0.900	2.00	3.5	7 sec.	Technical Specification 3.3.C.1 & 3.3.C.2 (Average Scram Insertion Time)
12-8-91	89	0.28	0.66	1.42	2.49	H-10 5.02	U1 SEQ A
12-10-91	1	0.27	0.63	1.37	2.41	J-15 2.41	U1 for Work Request Accumulator

## VII. REFUELING INFORMATION

The following information about future reloads at Quad-Cities Station was requested in a January 26, 1978, licensing memorandum (78-24) from D. E. O'Brien to C. Reed, et al., titled "Dresden, Quad-Cities and Zion Station--NRC Request for Refueling Information", dated January 18, 1978.

QUAD CITIES REFUELING  
INFORMATION REQUEST

QTP 300-532  
Revision 2  
October 1989

1. Unit: Q1 Reload: 11 Cycle: 12
2. Scheduled date for next refueling shutdown: 9-5-92
3. Scheduled date for restart following refueling: 12-5-92
4. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment:  
NOT AS YET DETERMINED.
5. Scheduled date(s) for submitting proposed licensing action and supporting information:  
NOT AS YET DETERMINED.
6. Important licensing considerations associated with refueling, e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures:  
NONE AT PRESENT TIME.
7. The number of fuel assemblies.
- a. Number of assemblies in core: 724
- b. Number of assemblies in spent fuel pool: 1405
8. The present licensed spent fuel pool storage capacity and the size of any increase in licensed storage capacity that has been requested or is planned in number of fuel assemblies:
- a. Licensed storage capacity for spent fuel: 3657
- b. Planned increase in licensed storage: 0
9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity: 2009

QUAD CITIES REFUELING  
INFORMATION REQUEST

QTP 300-S32  
Revision 2  
October 1989

1. Unit: Q2 Reload: 10 Cycle: 11
2. Scheduled date for next refueling shutdown: 01/01/92
3. Scheduled date for restart following refueling: 03/11/92
4. Will refueling or resumption of operation thereafter require a Technical Specification change or other license amendment: Yes, as listed below:
  1. Remove Table 3.7-2
  2. Modification to turbine control valve fast acting solenoid valve.
  3. Modification to HPCI turbine exhaust steam line.
  4. HPCI/RCIC 24-hour shutdown action provision.
5. Scheduled date(s) for submitting proposed licensing action and supporting information:
  1. 01/15/92
  2. 04/18/91
  3. 06/28/91
  4. 12/31/91
6. Important licensing considerations associated with refueling, e.g., new or different fuel design or supplier, unreviewed design or performance analysis methods, significant changes in fuel design, new operating procedures:

NONE AT PRESENT TIME.
7. The number of fuel assemblies.
  - a. Number of assemblies in core: 724
  - b. Number of assemblies in spent fuel pool: 2287\*
8. The present licensed spent fuel pool storage capacity and the size of any increase in licensed storage capacity that has been requested or is planned in number of fuel assemblies:
  - a. Licensed storage capacity for spent fuel: 3897
  - b. Planned increase in licensed storage: 0
9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity: 2009

\* 152 new fuel assemblies in new fuel vault.



## VIII. GLOSSARY

The following abbreviations which may have been used in the Monthly Report, are defined below:

ACAD/CAM	- Atmospheric Containment Atmospheric Dilution/Containment Atmospheric Monitoring
ANSI	- American National Standards Institute
APRM	- Average Power Range Monitor
ATWS	- Anticipated Transient Without Scram
BWR	- Boiling Water Reactor
CRD	- Control Rod Drive
EHC	- Electro-Hydraulic Control System
EOF	- Emergency Operations Facility
GSEP	- Generating Stations Emergency Plan
HEPA	- High-Efficiency Particulate Filter
HPCI	- High Pressure Coolant Injection System
HRSS	- High Radiation Sampling System
IPCLRT	- Integrated Primary Containment Leak Rate Test
IRM	- Intermediate Range Monitor
ISI	- Inservice Inspection
LER	- Licensee Event Report
LLRT	- Local Leak Rate Test
LPCI	- Low Pressure Coolant Injection Mode of RHRs
LPRM	- Local Power Range Monitor
MAPLHGR	- Maximum Average Planar Linear Heat Generation Rate
MCPR	- Minimum Critical Power Ratio
MFLCPR	- Maximum Fraction Limiting Critical Power Ratio
MPC	- Maximum Permissible Concentration
MSIV	- Main Steam Isolation Valve
NIOSH	- National Institute for Occupational Safety and Health
PCI	- Primary Containment Isolation
PCIOMR	- Preconditioning Interim Operating Management Recommendations
RBCCW	- Reactor Building Closed Cooling Water System
RBM	- Rod Block Monitor
RCIC	- Reactor Core Isolation Cooling System
RHRS	- Residual Heat Removal System
RPS	- Reactor Protection System
RWM	- Rod Worth Minimizer
SBGTS	- Standby Gas Treatment System
SBLC	- Standby Liquid Control
SDC	- Shutdown Cooling Mode of RHRS
SDV	- Scram Discharge Volume
SRM	- Source Range Monitor
TBCCW	- Turbine Building Closed Cooling Water System
TIP	- Traversing Incore Probe
TSC	- Technical Support Center