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11/30/78

QUAD-CITIES NUCLEAR POWER STATION  
UNITS 1 AND 2  
MONTHLY PERFORMANCE REPORT  
NOVEMBER 1978  
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, Inc. and the primary construction contractor was United Engineers & Constructors. The condenser cooling method is a closed-cycle spray canal, and 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 1 and 2 respectively were October 18, 1971 and April 26, 1972. Commercial generation of power began on February 18, 1973 for Unit 1 and March 10, 1973 for Unit 2.

This report was compiled by David Hannum. Telephone number 309-654-2241, Ext. 252.

## II. SUMMARY OF OPERATING EXPERIENCE

### A. Unit One

November 1: Unit One began the reporting period operating at an electrical load of 411 MWe.

November 2 - 10: Unit One held an average electrical load of 346 MWe due to spray canal load limitations.

November 11 - 25: Load was increased to 612 MWe and then held an average electrical load of 558 MWe.

November 26: Load was reduced to 400 MWe for main condenser flow reversal, and subsequently increased at 50 MWe/hr to 550 MWe.

November 27 - 30: Unit One held an average electrical load of 550 MWe throughout the remainder of the reporting period.

## B. Unit Two

November 1: Unit Two began the reporting period operating at an electrical load of 509 MWe.

November 2 - 3: Unit Two held an average electrical load of 525 MWe.

November 4: Load was reduced to 500 MWe for the weekly turbine test.

November 5 - 10: Load was steadily increased to 687 MWe.

November 11: Unit Two load was dropped to 407 MWe for control rod pattern adjustment.

November 12 - 22: Unit Two increased load on a preconditioning ramp of 3 MWe/hr until November 15 then held an average electrical load of 766 MWe through November 22.

November 23: Load was reduced to 400 MWe for control rod pattern adjustment.

November 24 - 26: Unit Two steadily increased load on a preconditioning ramp of 3 MWe/hr.

November 27 - 30: Unit Two held an average electrical load of 783 MWe for the remainder of the reporting period.

### III. Plant or Procedure Changes, Tests, Experiments, and Safety Related Maintenance

- A. Amendments to Technical Specification during the reporting period include the revision Amendment No. 48 to DPR-29. The amendment revises Technical Specification to provide operating temperature and pressure limits in accordance with Appendix G, 10 CFR Part 50.
- B. Facility or Procedure Changes Requiring NRC Approval
  - 1. There were no facility modifications or procedure changes which took place during the reporting period requiring approval of the NRC.
- C. Tests and Experiments Requiring NRC Approval
  - 1. There were no tests or experiments performed during the reporting period requiring NRC approval.
- D. Other Changes, Tests, and Experiments
  - 1. There were no facility modifications requiring reporting to the NRC which were completed this month.
  - 2. On November 29, 1978 the Calgon CL-144 injection functional test was completed. The injection point was moved from the spray canal to the Unit One intake bay.
- E. Corrective Maintenance of Safety-Related Equipment
  - 1. The following represents a tabular summary of the safety-related maintenance performed on Units 1 and 2 during the reporting period. The headings indicated in this summary include Nature of Maintenance and Work Request numbers, LER numbers, components, cause of malfunctions, results and effects on safe operation, and actions taken to prevent repetition.

## UNIT

1

### MAINTENANCE SUMMARY

W.R. NUMBER	LER NUMBER	COMPONENT	CAUSE OF MALFUNCTION	RESULTS & EFFECTS ON SAFE OPERATION	ACTION TAKEN TO PREVENT REPETITION
Corrective 5065-78		CRD 30-03 Pressure Switch (PSI-305-130)	The pressure switch set point was out of calibration.	The alarm signal would not clear. Scram capa- bility not affected.	The switch was recalibrate
Corrective 5690-77		Diesel Generator 1/2-6601	The air regulator diaphragm was worn.	The diaphragm was leaking air. Diesel was operable.	The diaphragm was replaced.
Corrective 5695-77		Diesel Generator 1/2-6601	The solenoid valve was defective.	The solenoid valve was holding the air motor engaged for starting the diesel. Diesel was oper- able.	The valve was replaced.

UNIT 2 MAINTENANCE SUMMARY

W.R. NUMBER	LER NUMBER	COMPONENT	CAUSE OF MALFUNCTION	RESULTS & EFFECTS ON SAFE OPERATION	ACTION TAKEN TO PREVENT REPETITION
Corrective 4967-78		Diesel Generator Cooling Wtr Pump (2-6601)	The cooling wtr run light was broken off in the socket.	The indicating light was inoperable. Diesel was operable.	The light was removed and replaced.
Corrective 5064-78		HPCI Steam Supply Vlv (2-2301-5)	The valve limits were out of calibration.	The valve was torqued out, just off the closed seat position. HPCI was still operable.	The limits were reset and the vlv was stroked 3 times.
Corrective 5209-78		Refuel Bridge (2-834)	The tach drive generator coupling set screw was worn.	Power was off while moving and lowering. Travel was at fast speed only.	The set screw was replaced.
Corrective 5276-78	RO-78-37/03L-0	Rx Bldg. to Suppression Chamber Vacuum Bkr. (2-1601-20A)	The solenoid valve was worn.	The vacuum bkr. valve would not open from the control room. The redundent 2-1601-20B valve was operable.	The solenoid valve was replaced.



#### IV. LICENSEE EVENT REPORTS

The following is a tabular summary of all license event reports for Quad-Cities Units One and Two during the reporting period which were submitted to the commission 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.

<u>Licensee Event Report Number</u>	<u>Unit One</u>  <u>Date of Occurrence</u>	<u>Title of Deviation</u>
RO-78-31/03L	11-22-78	EHC Fluid Pressure Switch Drift

<u>Licensee Event Report Number</u>	<u>Unit Two</u>  <u>Date of Occurrence</u>	<u>Title of Deviation</u>
RO-78-37/03L	11-16-78	Reactor Building to Suppression Chamber Vacuum Breaker AO 2-1601-20A
RO-78-38/03L	11-25-78	Drywell Vent Valve Fail- ure AO 2-1601-23

## 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.

## OPERATING DATA REPORT

DOCKET NO. 050-254  
 UNIT One  
 DATE 12-5-78  
 COMPLETED BY D. Hannun  
 TELEPHONE (309) 654-2241

OPERATING STATUS 0001-781101

2400-781130

1. Reporting period: \_\_\_\_\_ Gross hours in reporting period: 720  
 2. Currently authorized power level (MWt): 2511 Max. depend. capacity (MWe-Net): 7698 Design electrical rating (MWe-Net): 789  
 3. Power level to which restricted (if any) (MWe-Net): NA  
 4. Reasons for restriction (if any): \_\_\_\_\_

	This Month	Yr. to Date	Cumulative
5. Number of hours reactor was critical	<u>720</u>	<u>7717</u>	<u>46588.9</u>
6. Reactor reserve shutdown hours	<u>0</u>	<u>0</u>	<u>3329.6</u>
7. Hours generator on line	<u>720</u>	<u>7573.1</u>	<u>44198.9</u>
8. Unit reserve shutdown hours	<u>0</u>	<u>45.2</u>	<u>889.4</u>
9. Gross thermal energy generated (MMBtu)	<u>1166192</u>	<u>15334974</u>	<u>87612049</u>
10. Gross electrical energy generated (MMBtu)	<u>349519</u>	<u>4785253</u>	<u>28208969</u>
11. Net electrical Energy Generated	<u>310398</u>	<u>4399591</u>	<u>26311109</u>
12. Reactor service factor	<u>100.0</u>	<u>96.3</u>	<u>80.1</u>
13. Reactor availability factor	<u>100.0</u>	<u>96.3</u>	<u>85.8</u>
14. Unit service factor	<u>100.0</u>	<u>94.5</u>	<u>76.0</u>
15. Unit availability factor	<u>100.0</u>	<u>95.0</u>	<u>77.5</u>
16. Unit capacity factor (Using MDC)	<u>56.1</u>	<u>71.4</u>	<u>58.8</u>
17. Unit capacity factor (Using Des. MWe)	<u>54.6</u>	<u>69.6</u>	<u>57.3</u>
18. Unit forced outage rate	<u>0.0</u>	<u>2.9</u>	<u>8.3</u>
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:		<u>NA</u>	

\* The MDC may be lower than 76% MWe during periods of high ambient temperature due to the thermal performance of the spray cond.

## OPERATING DATA REPORT

DOCKET NO. 050-265UNIT TwoDATE 12-5-78COMPLETED BY D. HannumTELEPHONE (309) 654-2241

OPERATING STATUS 0001 781101

2400 781130

1. Reporting period: \_\_\_\_\_ Gross hours in reporting period: 7202. Currently authorized power level (MWt): 2511 Max. depend. capacity  
(MWe-Net): 7698 Design electrical rating (MWe-Net): 7893. Power level to which restricted (if any) (MWe-Net): NA

4. Reasons for restriction (if any): \_\_\_\_\_

	This Month	Yr. to Date	Cumulative
5. Number of hours reactor was critical	<u>720</u>	<u>6427.7</u>	<u>44632.4</u>
6. Reactor reserve shutdown hours	<u>0.0</u>	<u>113.1</u>	<u>2985.0</u>
7. Hours generator on line	<u>720.0</u>	<u>6281.1</u>	<u>42358.0</u>
8. Unit reserve shutdown hours.	<u>0.0</u>	<u>128.2</u>	<u>702.0</u>
9. Gross thermal energy generated (MMBtu)	<u>1507661</u>	<u>13190712</u>	<u>87054905</u>
10. Gross electrical energy generated (MMBtu)	<u>467115</u>	<u>4122984</u>	<u>27954499</u>
11. Net electrical Energy Generated	<u>445196</u>	<u>3917902</u>	<u>26252850</u>
12. Reactor service factor	<u>100.0</u>	<u>80.2</u>	<u>78.0</u>
13. Reactor availability factor	<u>100.0</u>	<u>81.6</u>	<u>83.2</u>
14. Unit service factor	<u>100.0</u>	<u>78.4</u>	<u>74.0</u>
15. Unit availability factor	<u>100.0</u>	<u>80.0</u>	<u>75.2</u>
16. Unit capacity factor (Using MDC)	<u>80.4</u>	<u>63.6</u>	<u>59.6</u>
17. Unit capacity factor (Using Des. MWe)	<u>78.4</u>	<u>61.9</u>	<u>58.1</u>
18. Unit forced outage rate	<u>0.0</u>	<u>1.9</u>	<u>10.8</u>
19. Shutdowns scheduled over next 6 months (Type, date, and duration of each):			
20. If shutdown at end of report period, estimated date of starting:		<u>NA</u>	

\* The MDC may be lower than 769 MWe during periods of high ambient temperature due to the thermal performance of the array cond.

## AVERAGE DAILY UNIT-POWER LEVEL

June 1976

Docket No. 050-254Unit OneDate 12-7-78Completed by D. HannumTelephone (309) 654-2241MONTH NovemberDAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

1.	<u>351</u>
2.	<u>322</u>
3.	<u>296</u>
4.	<u>286</u>
5.	<u>297</u>
6.	<u>297</u>
7.	<u>305</u>
8.	<u>302</u>
9.	<u>290</u>
10.	<u>295</u>
11.	<u>478</u>
12.	<u>478</u>
13.	<u>478</u>
14.	<u>494</u>
15.	<u>499</u>
16.	<u>492</u>

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

17.	<u>490</u>
18.	<u>488</u>
19.	<u>491</u>
20.	<u>509</u>
21.	<u>540</u>
22.	<u>493</u>
23.	<u>490</u>
24.	<u>491</u>
25.	<u>485</u>
26.	<u>471</u>
27.	<u>492</u>
28.	<u>532</u>
29.	<u>519</u>
30.	<u>471</u>
31.	<u>          </u>

APPROVED

JUN 28 1978

## INSTRUCTIONS

On this form, list the average daily unit power level in MWe-Net for each day in the reporting month. Round off 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.

1 (final)

APPENDIX B  
AVERAGE DAILY UNIT-POWER LEVEL

Revision 4  
June 1976

Docket No. 050-265

Unit Two

Date 12-7-78

Completed by D. Hannum

Telephone (309) 654-2241

MONTH November

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

1.	<u>527</u>
2.	<u>498</u>
3.	<u>513</u>
4.	<u>457</u>
5.	<u>394</u>
6.	<u>532</u>
7.	<u>621</u>
8.	<u>623</u>
9.	<u>733</u>
10.	<u>551</u>
11.	<u>403</u>
12.	<u>467</u>
13.	<u>546</u>
14.	<u>612</u>
15.	<u>691</u>
16.	<u>725</u>

DAY AVERAGE DAILY POWER LEVEL  
(MWe-Net)

17.	<u>721</u>
18.	<u>711</u>
19.	<u>712</u>
20.	<u>735</u>
21.	<u>761</u>
22.	<u>730</u>
23.	<u>454</u>
24.	<u>544</u>
25.	<u>610</u>
26.	<u>688</u>
27.	<u>730</u>
28.	<u>757</u>
29.	<u>769</u>
30.	<u>736</u>
31.	<u>          </u>

APPROVED

JUN 28 1976

INSTRUCTIONS

On this form, list the average daily unit power level in MWe-Net for each day in the reporting month. Compare 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

QTP 300-S13  
Revision 5  
March 1978

COMPLETED BY D. Hannum

TELEPHONE (309) 654-2241

050-254

Quad Cities One

12-5-78

REPORT MONTH November 1978

DOCKET NO.

UNIT NAME

DATE

NO.	DATE	TYPE T OR S	DURATION (HOURS)	REASON	METHOD OF SHUTTING DOWN REACTOR	LICENSEE EVENT REPORT NO.	SYSTEM CODE	COMPONENT CODE	CORRECTIVE ACTIONS/COMMENTS
									None

# APPENDIX D UNIT SHUTDOWNS AND POWER REDUCTIONS

QTP 300-S13  
Revision 5  
March 1973

COMPLETED BY D. Hamm

TELEPHONE (309) 654-2241

REPORT MONTH November 1978

DOCKET NO. 050-265 DPR-30

UNIT NAME Quad Cities Two

DATE 12-5-78

22

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
27	11-4-78								Load was reduced to 500 MWe for the weekly turbine test.
28	11-11-78								Load was reduced to 407 MWe for a rod pattern adjustment.
29	11-23-78								Load was reduced to 400 MWe for a rod pattern adjustment.



## 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.
- B. Control Rod Drive Scram Timing Data.

### A. Main Steam Relief Valve Operations

- 1. There were no main steam relief valve operations performed during the reporting period.

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

- 1. The basis for reporting this data to the Nuclear Regulatory Commission is 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.

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	
11-3-78	89	0.29	0.66	1.43	2.53	N-9 5.95	Hot Scram Time Seq. B.

## 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-S32  
Revision 1  
March 1978

- \*  
1. Unit: 1 Reload: 4 Cycle: 5
2. Scheduled date for next refueling shutdown: January 12, 1979 (Shutdown EOC4)
3. Scheduled date for restart following refueling: April 12, 1979 (Startup BOC)
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment: Yes; See attached checklist for Tech. Spec. and License Amendment.
5. Scheduled date(s) for submitting proposed licensing action and supporting information: The QCI R4 licensing submittal is scheduled for Nov. 11, 1978.
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:
- New fuel designs: Retrofit 8 x 8 fuel (192)
- a) nat. U at bundle top and bottom,
  - b) two larger water rods,
  - c) new enrichment distribution.
- Last Test Assemblies (4)
- for GE PCI-resistant design development program.
7. The number of fuel assemblies.
- a. Number of assemblies in core: 724
  - b. Number of assemblies in spent fuel pool: 151
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: 1460
  - b. Planned increase in licensed storage: None
9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity: Last refueling date with present capacity: March, 85. (and of batch discharge capability)

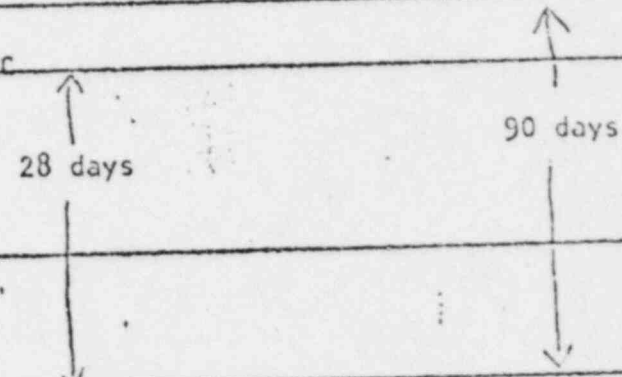
# RELOAD LICENSING PACKAGE PREPARATION SCHEDULE

QTP 300-533  
Revision 1  
March 1973

UNIT 01  
RELOAD 4  
CYCLE 5

DATE RESPONSIBILITY CENTER ACTIVITY

1/15/78	GE NFS	NFS receives draft Licensing Submittal from GE Transmit copy of draft to Station for Comments
1/29/78	NFS NFS	Transmit NFS and Site comments/questions to GE <del>Begin Tech. Spec. changes, Safety Evaluation and Cover Letter</del>
2/30/78	GE NFS	NFS receives final Licensing Submittal and answers to CECO questions from GE <del>Complete final NFS review of Licensing Submittal and answers to CECO questions</del>
1/1/78	NFS	Transmit complete package for on/off site review
1/3/78	Station	On-site review completed
1/6/78	PSA	Off-site review completed
1/11/78	NLA	Completed licensing package received by NRC
1/12/79	-	Anticipated unit shutdown
2/9/79	-	Receipt of operating License
3/9/79	-	Anticipated Unit Startup - Assumes $\frac{56}{8}$ day outage weeks



Prepared by MC NFS/BWR  
Date 12/23/77

# PRELIMINARY CHECKLIST FOR RELOAD LICENSE AMENDMENTS

UNIT: Quad-Cities 1 |  
 RELOAD: 4 |  
 CYCLE: 5 |

	Item	Page	Require Changes
X	Scram Reactivity	4	Generalize wording and reference the submit. NEDO-XXXXX
NA	Safety Valve Setpoints LSSS	1.2/2.2-1	None. Adequate pressure margin.
NA	Bases	1.2/2.2-2.3	None, if the peak vessel pressure is 1325 psig. during S.V. sizing trans.
X	RBM Setpoints LCO	3.2/4.2-14 3.2/4.2-7	Change to (.65w+XX) as regid. Change operability to XX%
X	Bases	3.2/4.2-8	Change Reference 1 to NEDO-XXXXX.
NA	Auto Flow Control LCO	3.3/4.3-5	None. Stability analysis not limiting.
NA	Bases	3.3/4.3-11	None.
X	HAPLHCR LCO	Fig. 3.5.1 (shts. 1 to 3)	*Revise curves to reflect new analyses.
X	Bases	3.5/4.5-14	*Change references to reflect new analyses of NEDO-24046.
X	MCPR LCO	3.5/4.5-10	New values: **1.XX (7 x 7) 1.XX (8 x 8)
B	Bases	3.5/4.5-14	Generalize description of limiting transient(s).

\* HAPLHCR changes are being handled under separate cover.  
 \*\* Includes additional 0.XX CPR penalty for Fuel Loading Error Accident (NRC interim licensing position).

... are indicated as "XX..."

QUAD-CITIES REFUELING  
INFORMATION REQUEST

QTP 300-S32  
Revision 1  
March 1978

1. Unit: 2 Reload: 4 Cycle: 5 (next outage)
2. Scheduled date for next refueling shutdown: September 30, 1979 (shutdown EOC4)
3. Scheduled date for restart following refueling: January 20, 1980 (Startup BOC5)
4. Will refueling or resumption of operation thereafter require a technical specification change or other license amendment: Similar Tech. Spec. changes to Reload 3 Cycle 4.
5. Scheduled date(s) for submitting proposed licensing action and supporting information: Reload Submittal to be provided approximately 90 days prior to shutdown.
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:  
  
New fuel designs: Retrofit 8 x 8 fuel (approximately 196).
7. The number of fuel assemblies.
  - a. Number of assemblies in core: 724
  - b. Number of assemblies in spent fuel pool: 745
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: 1450
  - b. Planned increase in licensed storage: None.
9. The projected date of the last refueling that can be discharged to the spent fuel pool assuming the present licensed capacity: Last refueling date with present capacity: September, 85.

RELOAD LICENSING PACKAGE  
PREPARATION SCHEDULE

QTP 300-S33  
Revision 1  
March 1978

UNIT      OC 2  
RELOAD      3  
CYCLE      4

DATE	RESPONSIBILITY CENTER	ACTIVITY
10/6/77	GE NFS	NFS receives draft Licensing Submittal from GE Transmit copy of draft to Station for comments.
10/20/77	NFS NFS	Transmit NFS and Site comments/questions to GE Begin Tech. Spec. changes, Safety Evaluation and Cover Letter.
11/3/77	GE NFS	NFS receives final Licensing Submittal and answers to CECOs questions from GE. Complete final NFS review of Licensing Submittal and answers to CECOs question.
11/8/77	NFS	Transmit complete package for on/off site review
11/16/77	Station	On-site review completed
11/18/77	PSA	Off/site review completed
12/1/77	NLA	Completed Licensing package received by NRC
1/16/78	-	Anticipated unit shutdown 28 days
3/5/78	-	Receipt of operating License
3/15/78	-	Anticipated Unit Startup - Assumes 8 Weeks Day outage

Prepared by JAS NFS/BWR

D: 2/23/78



# PRELIMINARY CHECKLIST FOR RELOAD LICENSE AMENDMENTS

UNIT: Quad-Cities 2  
RELOAD: 3  
CYCLE: 4

	Item	Page	Require Changes
X	Scram Reactivity	4	Generalize wording and reference the submit, NEDO-24063.
NA	Safety Valve Setpoints LSSS	1.2/2.2-1	None. Adequate pressure margin.
X	Bases	1.2/2.2-2,3	Clarify and add bounding peak pressure.
X	RBM Setpoints LCO	3.2/4.2-14 3.2/4.2-7	Change to $(.65w+42)$ Change operability to 30%. Change Reference 1 to NEDO-24063.
X	Bases	3.2/4.2-8	
NA	Auto Flow Control LCO	3.3/4.3-5	None. Stability analysis not limiting.
NA	Bases	3.3/4.3-11	None.
X	HAPLHGR LCO	Fig. 3.5.1 (shfts. 1 to 3)	*Revise curves to reflect new analyses.
X	Bases	3.5/4.5-14	*Change references to reflect new analyses of NEDO-24046.
X	MCPR LCO	3.5/4.5-10	New values: *1.33 (7 x 7) 1.35 (8 x 8)
	Bases	3.5/4.5-14	Generalize description of limiting transient(s).

\* HAPLHGR changes are being handled under separate cover.

\*\* Includes additional 0.XX CPR penalty for Fuel Loading Error Accident (NRC interim licensing position).



## VIII GLOSSARY

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

CRD	-	Control Rod Drive System
SBLC	-	Standby Liquid Control System
MSIV	-	Main Steam Isolation Valve
RHRS	-	Residual Heat Removal System
RCIC	-	Reactor Core Isolation Cooling System
HPCI	-	High Pressure Coolant Injection System
SRM	-	Source Range Monitor
IRM	-	Intermediate Range Monitor
LPRM	-	Local Power Range Monitor
APRM	-	Average Power Range Monitor
TIP	-	Traveling Incore Probe
RBCCW	-	Reactor Building Closed Cooling Water System
TBCCW	-	Turbine Building Closed Cooling Water System
RWM	-	Rod Worth Minimizer
SBGTS	-	Standby Gas Treatment System
HEPA	-	High-Efficiency Particulate Filter
RPS	-	Reactor Protection System
IPCLRT	-	Integrated Primary Containment Leak Rate Test
LPCI	-	Low Pressure Coolant Injection Mode of RHRS
RBM	-	Rod Block Monitor
BWR	-	Boiling Water Reactor
ISI	-	In-Service Inspection
MPC	-	Maximum Permissible Concentration

PCI	-	Primary Containment Isolation
SDC	-	Shutdown Cooling Mode of RHRS
LLRT	-	Local Leak Rate Testing
MAPLHGR	-	Maximum Average Planar Linear Heat Generation Rate
R.O.	-	Reportable Occurrence
DW	-	Drywell
RX	-	Reactor
EHC	-	Electro-Hydraulic Control System
MCPR	-	Minimum Critical Power Ratio
PCIOMR	-	Preconditioning Interim Operating Management Recommendations
LER	-	Licensee Event Report
ANSI	-	American National Standards Institute
NIOSH	-	National Institute for Occupational Safety and Health
ACAD/CAM	-	Atmospheric Containment Atmospheric Dilution/Containment Atmospheric Monitoring