

October 17, 2001  
NG-01-1198

Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Mail Station 0-P1-17  
Washington, DC 20555-0001

Subject: Duane Arnold Energy Center  
Docket No: 50-331  
Op. License No: DPR-49  
Final Typed Pages for Technical Specification Change Request TSCR-042  
– Extended Power Uprate. (TAC # MB0543)

References: 1. NG-00-1900, “Technical Specification Change Request (TSCR-042):  
‘Extended Power Uprate’,” dated November 16, 2000.  
2. NG-01-0764, “Response to Request for Additional Information (RAI)  
to Technical Specification Change Request TSCR-042 – Extended  
Power Uprate. (TAC # MB0543),” dated June 11, 2001.

File: A-117, SPF-189

Dear Sir(s):

In the Reference 1 license amendment request, proposed changes to the Duane Arnold Energy Center Operating License and Technical Specification pages were provided in a “pen & ink” format. As the Staff has completed their review of our application, with no revision to those changes, the Attachment to this letter contains the final, typed version of the changed pages.

In addition, in Reference 2, we made a formal commitment to perform certain transient testing during power ascension to the new licensed power level. The Staff has subsequently determined that this commitment should be incorporated within our Operating License. Consequently, we have rewritten that formal commitment in the format of a new license condition, 2.C.(2)(b), which is also included on the typed pages in the Attachment to this letter. Therefore, with this requirement now incorporated as a condition in our Operating License, our previous commitment made in Reference 2 is no longer required, and thus, is hereby formally withdrawn.

No additional commitments are being made or revised in this letter.

Please contact this office should you require additional information regarding this matter.

A001

This letter is true and accurate to the best of my knowledge and belief.

NUCLEAR MANAGEMENT COMPANY, LLC

By Rob Anderson for  
Gary Van Middlesworth  
DAEC Site Vice-President

State of Iowa  
(County) of Linn

Signed and sworn to before me on this 17 day of October, 2001,

by Rob Anderson.

Lila Hancock  
Notary Public in and for the State of Iowa



May 14, 2002  
Commission Expires

Attachment: Final Typed Pages for Technical Specification Amendment Request -  
Extended Power Uprate (TSCR-042)

cc: T. Browning  
R. Anderson (NMC) (w/o attachment)  
B. Mozafari (NRC-NRR)  
J. Dyer (Region III)  
D. McGhee (State of Iowa)  
NRC Resident Office  
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**Final Typed Pages  
for Technical Specification Amendment Request -  
Extended Power Uprate (TSCR-042)**

- 2.B.(2) NMC, pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Updated Final Safety Analysis Report, as supplemented and amended as of June 1992 and as supplemented by letters dated March 26, 1993, and November 17, 2000.
- 2.B.(3) NMC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- 2.B.(4) NMC, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated radioactive apparatus components;
- 2.B.(5) NMC, pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not to separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I; Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

Maximum Power Level

2.C.(1) NMC is authorized to operate the Duane Arnold Energy Center at steady state reactor core power levels not in excess of 1912 megawatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. , are hereby incorporated in the license. NMC shall operate the facility in accordance with the Technical Specifications.

- (a) For Surveillance Requirements (SRs) whose acceptance criteria are modified, either directly or indirectly, by the increase in authorized maximum power level in 2.C.(1) above, in accordance with Amendment to Final Operating License DPR-49, those SRs are not required to be performed until their next scheduled performance, which is due at the end of first surveillance interval that begins on the date the Surveillance was last performed prior to implementation of Amendment
- (b) The licensee will perform the generator load reject and full main steamline isolation valve closure transients tests required by the General Electric Licensing Topical Report for Extended Power Uprate (NEDC-32424P-A) - ELTR-1, including the allowances described in Section L.2.4 (2) of ELTR-1 regarding credit for unplanned plant transient events. The testing shall be performed at an initiating power level greater than the highest previously-recorded power level for each respective transient test or qualifying event, but prior to steady-state operation exceeding its respective ELTR-1 power level limit.

(3) Fire Protection

NMC shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the Duane Arnold Energy Center and as approved in the SER dated June 1, 1978, and Supplement dated February 10, 1981, subject to the following provision:

NMC may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- (4) The licensee is authorized to operate the Duane Arnold Energy Center following installation of modified safe-ends on the eight primary recirculation system inlet lines which are described in the licensee letter dated July 31, 1978, and supplemented by letter dated December 8, 1978.

(5) Physical Protection

NMC shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Duane Arnold Energy Center Security Plan," with revisions submitted through December 17, 1987; "Duane Arnold Energy Center Guard Training and Qualification Plan," with revisions submitted through October 18, 1985; and "Duane Arnold Energy Center Safeguards Contingency Plan," with revisions submitted through December 5, 1986. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

1.1 Definitions (continued)

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MINIMUM CRITICAL POWER RATIO (MCPR) (continued)	film boiling occur intermittently with neither type being completely stable.
MODE	A MODE shall correspond to any one inclusive combination of mode switch position, average reactor coolant temperature, and reactor vessel head closure bolt tensioning specified in Table 1.1-1 with fuel in the reactor vessel.
OPERABLE – OPERABILITY	A system, subsystem, division, component, or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified safety function(s) and when all necessary attendant instrumentation, controls, normal or emergency electrical power, cooling and seal water, lubrication, and other auxiliary equipment that are required for the system, subsystem, division, component, or device to perform its specified safety function(s) are also capable of performing their related support function(s).
RATED THERMAL POWER (RTP)	RTP shall be a total reactor core heat transfer rate to the reactor coolant of 1912 Mwt.
REACTOR PROTECTION SYSTEM (RPS) RESPONSE TIME	The RPS RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its RPS trip setpoint at the channel sensor until de-energization of the scram pilot valve solenoids. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.

## 2.0 SAFETY LIMITS (SLs)

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### 2.1 SLs

#### 2.1.1 Reactor Core SLs

2.1.1.1 Fuel Cladding Integrity - With the reactor steam dome pressure < 785 psig or core flow < 10% rated core flow:

THERMAL POWER shall be  $\leq 21.7\%$  RTP.

2.1.1.2 MCPR - With the reactor steam dome pressure  $\geq 785$  psig and core flow  $\geq 10\%$  rated core flow:

MCPR shall be  $\geq 1.10$  for two recirculation loop operation or  $\geq 1.12$  for single recirculation loop operation.

2.1.1.3 Reactor Vessel Water Level - Reactor vessel water level shall be greater than 15 inches above the top of active irradiated fuel.

#### 2.1.2 Reactor Coolant System Pressure SL

Reactor steam dome pressure shall be  $\leq 1335$  psig.

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### 2.2 SL Violations

With any SL violation, the following actions shall be completed within 2 hours:

2.2.1 Restore compliance with all SLs; and

2.2.2 Fully insert all insertable rods.

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3.2 POWER DISTRIBUTION LIMITS

3.2.1 AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)

LCO 3.2.1 All APLHGRs shall be less than or equal to the limits specified in the COLR.

APPLICABILITY: THERMAL POWER  $\geq$  21.7% RTP.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Any APLHGR not within limits.	A.1 Restore APLHGR(s) to within limits.	2 hours
B. Required Action and associated Completion Time not met.	B.1 Reduce THERMAL POWER to $<$ 21.7% RTP.	4 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.2.1.1 Verify all APLHGRs are less than or equal to the limits specified in the COLR.	Once within 12 hours after $\geq$ 21.7% RTP  <u>AND</u>  24 hours thereafter



3.2 POWER DISTRIBUTION LIMITS

3.2.2 MINIMUM CRITICAL POWER RATIO (M CPR)

LCO 3.2.2 All M CPRs shall be greater than or equal to the M CPR operating limits specified in the COLR.

APPLICABILITY: THERMAL POWER  $\geq$  21.7% RTP.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Any M CPR not within limits.	A.1 Restore M CPR(s) to within limits.	2 hours
B. Required Action and associated Completion Time not met.	B.1 Reduce THERMAL POWER to < 21.7% RTP.	4 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.2.2.1 Verify all M CPRs are greater than or equal to the limits specified in the COLR.	Once within 12 hours after $\geq$ 21.7% RTP  <u>AND</u>  24 hours thereafter

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. One or more Functions with RPS trip capability not maintained.	C.1 Restore RPS trip capability.	1 hour
D. Required Action and associated Completion Time of Condition A, B, or C not met.	D.1 Enter the Condition referenced in Table 3.3.1.1-1 for the channel.	Immediately
E. As required by Required Action D.1 and referenced in Table 3.3.1.1-1.	E.1 Reduce THERMAL POWER to < 26% RTP.	4 hours
F. As required by Required Action D.1 and referenced in Table 3.3.1.1-1.	F.1 Be in MODE 2.	8 hours
G. As required by Required Action D.1 and referenced in Table 3.3.1.1-1.	G.1 Be in MODE 3.	12 hours
H. As required by Required Action D.1 and referenced in Table 3.3.1.1-1.	H.1 Initiate action to fully insert all insertable control rods in core cells containing one or more fuel assemblies.	Immediately

SURVEILLANCE REQUIREMENTS

-----NOTES-----

1. Refer to Table 3.3.1.1-1 to determine which SRs apply for each RPS Function.
  2. When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours provided the associated Function maintains RPS trip capability.
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SURVEILLANCE		FREQUENCY
SR 3.3.1.1.1	Perform CHANNEL CHECK.	12 hours
SR 3.3.1.1.2	<p>-----NOTE----- Not required to be performed until 12 hours after THERMAL POWER <math>\geq</math> 21.7% RTP. -----</p> <p>Verify the absolute difference between the Average Power Range Monitor (APRM) channels and the calculated power is <math>\leq</math> 2% RTP plus any gain adjustment required by LCO 3.4.1, "Recirculation Loops Operating," while operating at <math>\geq</math> 21.7% RTP.</p>	24 hours
SR 3.3.1.1.3	Perform a functional test of each automatic scram contactor.	7 days
SR 3.3.1.1.4	<p>-----NOTE----- Not required to be performed when entering MODE 2 from MODE 1 until 12 hours after entering MODE 2. -----</p> <p>Perform CHANNEL FUNCTIONAL TEST.</p>	7 days

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
SR 3.3.1.1.12 -----NOTES----- 1. Neutron detectors are excluded.  2. For Function 2.a, not required to be performed when entering MODE 2 from MODE 1 until 12 hours after entering MODE 2. -----  Perform CHANNEL CALIBRATION.	184 days
SR 3.3.1.1.13 Perform CHANNEL FUNCTIONAL TEST.	24 months
SR 3.3.1.1.14 -----NOTES----- 1. Neutron detectors are excluded.  2. For Function 1, not required to be performed when entering MODE 2 from MODE 1 until 12 hours after entering MODE 2. -----  Perform CHANNEL CALIBRATION.	24 months
SR 3.3.1.1.15 Perform LOGIC SYSTEM FUNCTIONAL TEST.	24 months
SR 3.3.1.1.16 Verify Turbine Stop Valve-Closure and Turbine Control Valve Fast Closure, Trip Oil Pressure - Low Functions are not bypassed when THERMAL POWER is $\geq 26\%$ RTP.	24 months

(continued)

Table 3.3.1.1-1 (page 1 of 3)  
Reactor Protection System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION D.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
1. Intermediate Range Monitors					
a. Neutron Flux - High	2	2	G	SR 3.3.1.1.1 SR 3.3.1.1.4 SR 3.3.1.1.6 SR 3.3.1.1.7 SR 3.3.1.1.14 SR 3.3.1.1.15 SR 3.3.1.1.19	≤ 125/125 divisions of full scale
	5 <sup>(a)</sup>	2	H	SR 3.3.1.1.1 SR 3.3.1.1.5 SR 3.3.1.1.14 SR 3.3.1.1.15 SR 3.3.1.1.19	≤ 125/125 divisions of full scale
b. Inop	2	2	G	SR 3.3.1.1.4 SR 3.3.1.1.15 SR 3.3.1.1.19	NA
	5 <sup>(a)</sup>	2	H	SR 3.3.1.1.5 SR 3.3.1.1.15 SR 3.3.1.1.19	NA
2. Average Power Range Monitors					
a. Neutron Flux - Upscale, Startup	2	2	G	SR 3.3.1.1.1 SR 3.3.1.1.4 SR 3.3.1.1.7 SR 3.3.1.1.8 SR 3.3.1.1.12 SR 3.3.1.1.15 SR 3.3.1.1.19	≤ 16.6% RTP
b. Flow Biased - High	1	2	F	SR 3.3.1.1.1 SR 3.3.1.1.2 SR 3.3.1.1.3 SR 3.3.1.1.8 SR 3.3.1.1.9 SR 3.3.1.1.12 SR 3.3.1.1.15 SR 3.3.1.1.17 SR 3.3.1.1.19	≤ (0.55W + 67.7) <sup>(b) (c)</sup>

(Continued)

(a) With any control rod withdrawn from a core cell containing one or more fuel assemblies.

(b) When reset for single loop operation per LCO 3.4.1, "Recirculation Loops Operating," the following Allowable Value applies:

$$\leq (0.55W + 61.4)^{(c)}$$

The trip setpoints may be reset by adjusting APRM gain or by recalibrating the APRMs.

(c) W is equal to the percentage of the drive flow, where 100% drive flow is that required to achieve 100% core flow at 100% RTP.

Table 3.3.1.1-1 (page 3 of 3)  
Reactor Protection System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS PER TRIP SYSTEM	CONDITIONS REFERENCED FROM REQUIRED ACTION D.1	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE
7. Scram Discharge Volume Water Level - High					
a. Resistance Temperature Detector	1,2	2	G	SR 3.3.1.1.3 SR 3.3.1.1.10 SR 3.3.1.1.13 SR 3.3.1.1.14 SR 3.3.1.1.15 SR 3.3.1.1.19	≤ 769 ft – 3.0 inches
	5 <sup>(a)</sup>	2	H	SR 3.3.1.1.3 SR 3.3.1.1.10 SR 3.3.1.1.13 SR 3.3.1.1.14 SR 3.3.1.1.15 SR 3.3.1.1.19	≤ 769 ft – 3.0 inches
b. Float Switch	1,2	2	G	SR 3.3.1.1.3 SR 3.3.1.1.9 SR 3.3.1.1.14 SR 3.3.1.1.15 SR 3.3.1.1.19	≤ 769 ft – 2.8 inches
	5 <sup>(a)</sup>	2	H	SR 3.3.1.1.3 SR 3.3.1.1.9 SR 3.3.1.1.14 SR 3.3.1.1.15 SR 3.3.1.1.19	≤ 769 ft – 2.8 inches
8. Turbine Stop Valve - Closure	≥ 26% RTP	4	E	SR 3.3.1.1.3 SR 3.3.1.1.9 SR 3.3.1.1.14 SR 3.3.1.1.15 SR 3.3.1.1.16 SR 3.3.1.1.19	≤ 10% closed
9. Turbine Control Valve Fast Closure, Trip Oil Pressure - Low	≥ 26% RTP	2	E	SR 3.3.1.1.3 SR 3.3.1.1.9 SR 3.3.1.1.14 SR 3.3.1.1.15 SR 3.3.1.1.16 SR 3.3.1.1.19	≥ 465 psig
10. Reactor Mode Switch – Shutdown Position	1,2	1	G	SR 3.3.1.1.13 SR 3.3.1.1.15	NA
	5 <sup>(a)</sup>	1	H	SR 3.3.1.1.13 SR 3.3.1.1.15	NA
11. Manual Scram	1,2	1	G	SR 3.3.1.1.9 SR 3.3.1.1.15	NA
	5 <sup>(a)</sup>	1	H	SR 3.3.1.1.9 SR 3.3.1.1.15	NA

(a) With any control rod withdrawn from a core cell containing one or more fuel assemblies.

3.3 INSTRUMENTATION

3.3.4.1 End of Cycle Recirculation Pump Trip (EOC-RPT) Instrumentation

- LCO 3.3.4.1 a. Two channels per trip system for each EOC-RPT instrumentation Function listed below shall be OPERABLE:
1. Turbine Stop Valve (TSV) - Closure; and
  2. Turbine Control Valve (TCV) Fast Closure, Trip Oil Pressure-Low.
- OR
- b. LCO 3.2.2 "MINIMUM CRITICAL POWER RATIO (MCPR)," limits for inoperable EOC-RPT as specified in the COLR are made applicable.

APPLICABILITY: THERMAL POWER  $\geq$  26% RTP.

ACTIONS

-----NOTE-----  
Separate Condition entry is allowed for each channel.  
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CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more channels inoperable.	A.1 Restore channel to OPERABLE status.	72 hours
	<u>OR</u> A.2 -----NOTE----- Not applicable if inoperable channel is the result of an inoperable breaker. ----- Place channel in trip.	

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. One or more Functions with EOC-RPT trip capability not maintained.  <u>AND</u>  MCPR limit for inoperable EOC-RPT not made applicable.	B.1 Restore EOC-RPT trip capability.	2 hours
	<u>OR</u>  B.2 Apply the MCPR limit for inoperable EOC-RPT as specified in the COLR.	2 hours
C. Required Action and associated Completion Time not met.	C.1 Remove the associated recirculation pump from service.	4 hours
	<u>OR</u>  C.2 Reduce THERMAL POWER to < 26% RTP.	4 hours

SURVEILLANCE REQUIREMENTS

-----NOTE-----  
 When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours provided the associated Function maintains EOC-RPT trip capability.  
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SURVEILLANCE	FREQUENCY
SR 3.3.4.1.1 Perform CHANNEL FUNCTIONAL TEST.	92 days

(continued)



SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
SR 3.3.4.1.2 Perform CHANNEL CALIBRATION. The Allowable Values shall be:  TSV - Closure: $\leq 10\%$ closed; and  TCV Fast Closure, Trip Oil Pressure - Low: $\geq 465$ psig.	24 months
SR 3.3.4.1.3 Perform LOGIC SYSTEM FUNCTIONAL TEST including breaker actuation.	24 months
SR 3.3.4.1.4 Verify TSV - Closure and TCV Fast Closure, Trip Oil Pressure - Low Functions are not bypassed when THERMAL POWER is $\geq 26\%$ RTP.	24 months
SR 3.3.4.1.5 Verify the EOC-RPT SYSTEM RESPONSE TIME is within limits.	24 months on a STAGGERED TEST BASIS

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.4.1.1 -----NOTE-----            Not required to be performed until 24 hours after both recirculation loops are in operation.            -----</p> <p>Verify recirculation pump speed mismatch with both recirculation pumps at steady state operation is as follows:</p> <p>a. The speed of the faster pump shall be <math>\leq 135\%</math> of the speed of the slower pump when operating at <math>&lt; 69.4\%</math> RTP.</p> <p>b. The speed of the faster pump shall be <math>\leq 122\%</math> of the speed of the slower pump when operating at <math>\geq 69.4\%</math> RTP.</p>	24 hours
<p>SR 3.4.1.2 Verify core flow as a function of core THERMAL POWER is outside the Exclusion Region shown in the COLR.</p>	24 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.4.2.1 -----NOTES-----</p> <ol style="list-style-type: none"> <li>1. Not required to be performed until 4 hours after the associated recirculation loop is in operation.</li> <li>2. Not required to be performed until 24 hours after &gt; 21.7% RTP.</li> <li>3. Criterion c is only applicable when pump speed is <math>\leq</math> 60% rated speed.</li> </ol> <p>-----</p> <p>Verify at least one of the following criteria (a, b or c, as applicable) is satisfied for each operating recirculation loop:</p> <ol style="list-style-type: none"> <li>a. Recirculation pump flow to speed ratio differs by <math>\leq</math> 5% from established patterns, and jet pump loop flow to recirculation pump speed ratio differs by <math>\leq</math> 5% from established patterns.</li> <li>b. Each jet pump diffuser to lower plenum differential pressure differs by <math>\leq</math> 20% from established patterns.</li> <li>c. The recirculation pump flow to speed ratio, jet pump loop flow to recirculation pump speed ratio, and jet pump diffuser to lower plenum differential pressure ratios are evaluated as being acceptable.</li> </ol>	<p>24 hours</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.3.1.1	Verify $\geq 67,000$ scf of nitrogen is contained in the CAD System.	31 days
SR 3.6.3.1.2	Verify by administrative means that each CAD System manual, power operated and automatic valve in the required flowpath(s) that is not locked, sealed, or otherwise secured in position is in the correct position or can be aligned to the correct position.	31 days

3.7 PLANT SYSTEMS

3.7.7 The Main Turbine Bypass System

LCO 3.7.7 The Main Turbine Bypass System shall be OPERABLE.

OR

LCO 3.2.2, "MINIMUM CRITICAL POWER RATIO (MCPR)," limits for an inoperable Main Turbine Bypass System, as specified in the COLR, are made applicable.

APPLICABILITY: THERMAL POWER  $\geq$  21.7% RTP.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Requirements of the LCO not met.	A.1 Satisfy the requirements of the LCO.	2 hours
B. Required Action and associated Completion Time not met.	B.1 Reduce THERMAL POWER to < 21.7% RTP.	4 hours

5.5 Programs and Manuals

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5.5.12 Primary Containment Leakage Rate Testing Program (continued)

The peak calculated containment internal pressure for the design basis loss of coolant accident,  $P_a$ , is 45.7 psig.

The maximum allowable primary containment leakage rate,  $L_a$ , at  $P_a$ , shall be 2.0% of primary containment air weight per day.

Leakage Rate acceptance criteria are:

- a. Primary Containment leakage rate acceptance criterion is  $\leq 1.0 L_a$ . During the first startup following testing in accordance with this program, the leakage rate acceptance criteria are:  $\leq 0.60 L_a$  for the Type B and Type C tests; and,  $\leq 0.75 L_a$  for the Type A tests; and
- b. The air lock testing acceptance criterion is overall air lock leakage rate  $\leq 0.05 L_a$  when tested at  $\geq P_a$ .

The provisions of SR 3.0.3 are applicable to the Primary Containment Leakage Rate Testing Program.

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