November 22, 2002

Mr. John L. Skolds, President
and Chief Nuclear Officer
Exelon Nuclear
Exelon Generation Company, LLC
200 Exelon Way, KSA 3-E
Kennett Square, PA 19348

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 - ISSUANCE OF AMENDMENT RE: 1.62% INCREASE IN LICENSED POWER LEVEL (TAC NOS. MB5192 AND MB5193)

Dear Mr. Skolds:

The Commission has issued the enclosed Amendments Nos. 247 and 250 to Facility Operating License Nos. DPR-44 and DPR-56 for the Peach Bottom Atomic Power Station, Units 2 and 3. These amendments consist of changes to the Facility Operating License and Technical Specifications in response to your application dated May 24, 2002, as supplemented by letters dated June 27, September 11, September 24, and October 16, 2002.

These amendments increase the licensed power level by approximately 1.62% from 3458 megawatts thermal (MWt) to 3514 MWt. These changes are based on increased feedwater flow measurement accuracy achieved by utilizing high accuracy ultrasonic flow measurement instrumentation.

A copy of the safety evaluation is also enclosed. Notice of Issuance will be included in the Commission's Biweekly *Federal Register* Notice.

Sincerely,
***/RA/***
John P. Boska, Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-277 and 50-278
Enclosures: 1. Amendment No. 247 to DPR-44
2. Amendment No. 250 to DPR-56
3. Safety Evaluation
cc w/encls: See next page
DISTRIBUTION:

| | | | | | | |
|---|---|---|---|---|---|---|
| PUBLIC | PDI-2 R/F | SRichards | JAndersen | JBoska | MO'Brien | SWall |
| MShuaibi | CHolden | NTrehan | EMarinos | MWaterman | LLund | YDiaz |
| RCaruso | GThomas | SCoffin | MMitchell | KManoly | KChang | JLee |
| MReinhart | FAkstulewicz | LLois | GHill (4) | RDennig | ACRS | |
| BPlatchek, RI | SWeerakkody | EWeiss | DTrimble | JTappert | AHodgdon, OGC | |

Package No:
Accession No.:

* SE input provided - no major changes made.
** See previous concurrence

| OFFICE | PD1-2/PM | PDI-2/LA | EMCB/SC* | EMCB/SC* | SRXB/SC* | SRXB/SC* | EMEB/SC* | SPSB/SC* | EEIB/SC* |
|---|---|---|---|---|---|---|---|---|---|
| NAME | JBoska | MO'Brien | LLund | SCoffin | FAkstulewicz | RCaruso | KManoly | MReinhart | CHolden |
| DATE | 11/21/02 | 11/21/02 | 10/04/02 | 10/03/02 | 09/25/02 | 10/07/02 | 10/12/02 | 09/23/02 | 10/03/02 |

| OFFICE | EEIB/SC* | RLEP/SC** | IEHB/SC** | SPLB/SC** | SPLB/SC** | OGC** | PD1-2/(A)SC | PD1/D | DLPM/(A)D |
|---|---|---|---|---|---|---|---|---|---|
| NAME | EMarinos | JTappert | DTrimble | EWeiss | SWeerakkody | AHodgdon | JAndersen | SRichards | LMarsh |
| DATE | 10/17/02 | 10/31/02 | 11/15/02 | 11/14/02 | 11/14/02 | 11/21/02 | 11/21/02 | 11/22/02 | 11/22/02 |

**OFFICIAL RECORD COPY**

November 22, 2002

Mr. John L. Skolds, President
and Chief Nuclear Officer
Exelon Nuclear
Exelon Generation Company, LLC
200 Exelon Way, KSA 3-E
Kennett Square, PA 19348

SUBJECT: PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3 - ISSUANCE OF AMENDMENT RE: 1.62% INCREASE IN LICENSED POWER LEVEL (TAC NOS. MB5192 AND MB5193)

Dear Mr. Skolds:

The Commission has issued the enclosed Amendments Nos. 247 and 250 to Facility Operating License Nos. DPR-44 and DPR-56 for the Peach Bottom Atomic Power Station, Units 2 and 3. These amendments consist of changes to the Facility Operating License and Technical Specifications in response to your application dated May 24, 2002, as supplemented by letters dated June 27, September 11, September 24, and October 16, 2002.

These amendments increase the licensed power level by approximately 1.62% from 3458 megawatts thermal (MWt) to 3514 MWt. These changes are based on increased feedwater flow measurement accuracy achieved by utilizing high accuracy ultrasonic flow measurement instrumentation.

A copy of the safety evaluation is also enclosed. Notice of Issuance will be included in the Commission's Biweekly *Federal Register* Notice.

Sincerely,

***/RA/***

John P. Boska, Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-277 and 50-278

Enclosures: 1. Amendment No. 247 to DPR-44
2. Amendment No. 250 to DPR-56
3. Safety Evaluation

cc w/encls: See next page

EXELON GENERATION COMPANY, LLC

PSEG NUCLEAR LLC

DOCKET NO. 50-277

PEACH BOTTOM ATOMIC POWER STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 247
License No. DPR-44

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated May 24, 2002, as supplemented by letters dated June 27, September 11, September 24, and October 16, 2002, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to paragraph 2.C.(1) of Facility Operating License No. DPR-44, as indicated in the attachment to this license amendment, and is hereby amended to read as follows:

   (1) Maximum Power level

   Exelon Generation Company is authorized to operate the Peach Bottom Atomic Power Station, Unit 2, at steady state reactor core power levels not in excess of 3514 megawatts thermal.

3. The license is also amended by changes to the Technical Specifications, as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-44 is hereby amended to read as follows:

   (2) Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 247 , are hereby incorporated in the license. Exelon Generation Company shall operate the facility in accordance with the Technical Specifications.

4. This license amendment is effective as of its date of issuance, and shall be implemented within 60 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Ledyard B. Marsh, Acting Director
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to Facility Operating
License No. DPR-44, page 3, and
the Technical Specifications

Date of Issuance: November 22, 2002

ATTACHMENT TO LICENSE AMENDMENT NO. 247

FACILITY OPERATING LICENSE NO. DPR-44

DOCKET NO. 50-277

Replace the following pages of the Facility Operating License and the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

| Remove | Insert |
|---|---|
| **Facility Operating License** | |
| page 3 | page 3 |
| **Technical Specifications** | |
| 1.1-5 | 1.1-5 |
| 3.3-2 | 3.3-2 |
| 3.3-6 | 3.3-6 |
| 3.3-7 | 3.3-7 |
| 3.3-8 | 3.3-8 |
| 3.3-31a | 3.3-31a |
| 3.3-31b | 3.3-31b |
| 3.3-31c | 3.3-31c |
| 3.4-5 | 3.4-5 |

restriction to chemical or physical form for sample analysis or instrument calibration or when associated with radioactive apparatus or components;

(5) Exelon Generation Company, pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not to separate, such byproduct and special nuclear material as may be produced by operation of the facility.

C. This amended 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 below:

(1) Maximum Power Level

Exelon Generation Company is authorized to operate the Peach Bottom Atomic Power Station, Unit 2, at steady state reactor core power levels not in excess of 3514 megawatts thermal. I

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. , are hereby incorporated in the license. Exelon Generation Company shall operate the facility in accordance with the Technical Specifications.

The Surveillance Requirements (SRs) listed in the licensee's letter dated August 4, 1995 are not required to be performed immediately upon implementation of Amendment No. 210. The SRs listed in the licensee's letter dated August 4, 1995 shall be successfully demonstrated prior to the time and condition specified below for each:

a) Those SRs listed as Category A SRs in the licensee's August 4, 1995 letter shall be completed within a period consistent with the implementation date for Amendment 210, the specified frequency for each SR and the allowance of SR 3.0.2;

b) Those SRs listed as Category B SRs in the licensee's August 4, 1995 letter shall be completed within a period consistent with the last completion date for the related existing SRs, the specified frequency for each SR and the allowance of SR 3.0.2.

1.1 Definitions

| | |
|---|---|
| PHYSICS TESTS (continued) | b. Authorized under the provisions of 10 CFR 50.59; or<br><br>c. Otherwise approved by the Nuclear Regulatory Commission. |
| RATED THERMAL POWER (RTP) | RTP shall be a total reactor core heat transfer rate to the reactor coolant of 3514 MWt. |
| REACTOR PROTECTION SYSTEM (RPS) RESPONSE TIME | The RPS RESPONSE TIME shall be that time interval from the opening of the sensor contact up to and including the opening of the trip actuator contacts. |
| SHUTDOWN MARGIN (SDM) | SDM shall be the amount of reactivity by which the reactor is subcritical or would be subcritical assuming that:<br><br>a. The reactor is xenon free;<br><br>b. The moderator temperature is 68°F; and<br><br>c. All control rods are fully inserted except for the single control rod of highest reactivity worth, which is assumed to be fully withdrawn. With control rods not capable of being fully inserted, the reactivity worth of these control rods must be accounted for in the determination of SDM. |
| STAGGERED TEST BASIS | A STAGGERED TEST BASIS shall consist of the testing of one of the systems, subsystems, channels, or other designated components during the interval specified by the Surveillance Frequency, so that all systems, subsystems, channels, or other designated components are tested during *n* Surveillance Frequency intervals, where *n* is the total number of systems, subsystems, channels, or other designated components in the associated function. |
| THERMAL POWER | THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant. |

(continued)

ACTIONS (continued)

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|---|---|---|
| C. One or more automatic Functions with RPS trip capability not maintained.<br><br>OR<br><br>Two or more manual 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 < 29.5% 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. | 6 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 |

(continued)

SURVEILLANCE REQUIREMENTS (continued)

| SURVEILLANCE | | FREQUENCY |
|---|---|---|
| SR 3.3.1.1.13 | Verify Turbine Stop Valve–Closure and Turbine Control Valve Fast Closure, Trip Oil Pressure–Low Functions are not bypassed when THERMAL POWER is ≥ 29.5% RTP. | 24 months |
| SR 3.3.1.1.14 | Perform CHANNEL FUNCTIONAL TEST. | 24 months |
| SR 3.3.1.1.15 | Perform CHANNEL CALIBRATION. | 24 months |
| SR 3.3.1.1.16 | Calibrate each radiation detector. | 24 months |
| SR 3.3.1.1.17 | Perform LOGIC SYSTEM FUNCTIONAL TEST. | 24 months |
| SR 3.3.1.1.18 | Verify the RPS RESPONSE TIME is within limits. | 24 months |

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 Wide Range Neutron Monitors | | | | | |
| a. Period-Short | 2 | 3 | G | SR 3 3 1.1 1<br>SR 3.3.1.1 5<br>SR 3.3.1.1 12<br>SR 3.3.1.1.17<br>SR 3.3.1 1.18 | ≥ 13 seconds |
| | 5(a) | 3 | H | SR 3.3.1.1.1<br>SR 3.3.1.1.6<br>SR 3.3.1.1.12<br>SR 3.3.1.1.17<br>SR 3.3.1.1.18 | ≥ 13 seconds |
| b. Inop | 2 | 3 | G | SR 3.3.1.1.5<br>SR 3.3.1.1.17 | NA |
| | 5(a) | 3 | H | SR 3.3.1.1.6<br>SR 3.3.1.1.17 | NA |
| 2. Average Power Range Monitors | | | | | |
| a. Neutron Flux-High (Setdown) | 2 | 3(c) | G | SR 3.3 1.1.1<br>SR 3.2.1.1.8<br>SR 3.3 1.1.11<br>SR 3.3.1.1.12 | ≤ 15.0% RTP |
| b. Simulated Thermal Power-High | 1 | 3(c) | F | SR 3.3.1.1.1<br>SR 3.3.1.1.2<br>SR 3.3.1.1.8<br>SR 3.3.1.1 11<br>SR 3.3.1.1.12 | ≤ 0.65 W + 63.7% RTP(b) and ≤ 118.0% RTP |
| c. Neutron Flux-High | 1 | 3(c) | F | SR 3.3.1.1.1<br>SR 3.3.1.1.2<br>SR 3.3.1.1.8<br>SR 3.3.1.1 11<br>SR 3.3.1.1.12 | ≤ 119.7% RTP |
| d. Inop | 1,2 | 3(c) | G | SR 3.3.1.1.11 | NA |
| e. 2-Out-Of-4 Voter | 1,2 | 2 | G | SR 3.3.1.1.1<br>SR 3.3.1.1.11<br>SR 3.3.1.1.17<br>SR 3.3.1.1.18 | NA |

(continued)

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

(b) 0.65 W + 63.7% - 0.65 ΔW RTP when reset for single loop operation per LCO 3.4.1, "Recirculation Loops Operating."

(c) Each APRM channel provides inputs to both trip systems.

Table 3.3 1.1-1 (page 2 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 |
|---|---|---|---|---|---|---|
| 3 | Reactor Pressure –High | 1,2 | 2 | G | SR 3 3 1 1.1<br>SR 3 3 1 1.9<br>SR 3.3 1 1 15<br>SR 3.3.1 1.17<br>SR 3.3.1 1.18 | ≤ 1085 0 psig |
| 4. | Reactor Vessel Water Level–Low (Level 3) | 1,2 | 2 | G | SR 3.3.1.1.1<br>SR 3.3.1.1.9<br>SR 3.3.1.1.15<br>SR 3.3.1 1.17<br>SR 3.3.1.1.18 | ≥ 1.0 inches |
| 5. | Main Steam Isolation Valve –Closure | 1 | 8 | F | SR 3.3.1.1.9<br>SR 3.3 1.1.15<br>SR 3.3.1.1.17<br>SR 3.3.1.1.18 | ≤ 10% closed |
| 6. | Drywell Pressure–High | 1,2 | 2 | G | SR 3 3.1.1.1<br>SR 3.3.1.1 9<br>SR 3.3.1.1.15<br>SR 3.3.1.1.17<br>SR 3.3.1.1.18 | ≤ 2.0 psig |
| 7. | Scram Discharge Volume Water Level–High | 1,2 | 2 | G | SR 3.3.1.1.9<br>SR 3.3.1.1.15<br>SR 3.3.1.1.17<br>SR 3.3.1.1.18 | ≤ 50.0 gallons |
| | | 5(a) | 2 | H | SR 3.3.1.1.9<br>SR 3.3.1.1.15<br>SR 3.3.1.1.17 | ≤ 50.0 gallons |
| 8. | Turbine Stop Valve–Closure | ≥ 29.5% RTP | 4 | E | SR 3.3.1.1.9<br>SR 3.3.1.1.13<br>SR 3.3.1.1.15<br>SR 3.3.1.1.17<br>SR 3.3.1.1.18 | ≤ 10% closed |
| 9. | Turbine Control Valve Fast Closure, Trip Oil Pressure–Low | ≥ 29.5% RTP | 2 | E | SR 3.3.1.1.9<br>SR 3.3.1.1.13<br>SR 3.3.1.1.15<br>SR 3.3.1.1.17<br>SR 3.3.1.1.18 | ≥ 500.0 psig |
| 10. | Turbine Condenser–Low Vacuum | 1 | 2 | F | SR 3.3.1.1.1<br>SR 3.3.1.1.9<br>SR 3.3.1.1.15<br>SR 3.3.1.1.17<br>SR 3.3.1.1.18 | ≥ 23.0 inches Hg vacuum |
| 11. | Main Steam Line –High Radiation | 1,2 | 2 | G | SR 3.3.1.1.1<br>SR 3.3.1.1.10<br>SR 3.3.1.1.16<br>SR 3.3.1.1.17<br>SR 3.3 1.1.18 | ≤ 15 X Full Power Background |
| 12. | Reactor Mode Switch – Shutdown Position | 1,2 | 1 | G | SR 3.3.1.1.14<br>SR 3.3.1.1.17 | NA |
| | | 5(a) | 1 | H | SR 3.3.1.1.14<br>SR 3.3.1.1.17 | NA |

(continued)

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

3.3 INSTRUMENTATION

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

LCO 3.3.4.2 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. The following limits are made applicable:

1. LCO 3.2.1, "AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)," limits for inoperable EOC-RPT as specified in the COLR; and

2. LCO 3.2.2, "MINIMUM CRITICAL POWER RATIO (MCPR)," limits for inoperable EOC-RPT as specified in the COLR.

APPLICABILITY: THERMAL POWER ≥ 29.5% RTP.

ACTIONS

---NOTE---
Separate Condition entry is allowed for each channel.
---

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|---|---|---|
| A. One or more channels inoperable. | A.1 Restore channel to OPERABLE status. | 72 hours |
| | OR | |
| | A.2 ---NOTE--- Not applicable if inoperable channel is the result of an inoperable breaker. --- Place channel in trip. | 72 hours |

(continued)

ACTIONS (continued)

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|---|---|---|
| B. One or more Functions with EOC-RPT trip capability not maintained. | B.1 Restore EOC-RPT trip capability. | 2 hours |
| C. Required Action and associated Completion Time not met. | C.1 Remove the associated recirculation pump from service.<br><br>OR<br><br>C.2 Reduce THERMAL POWER to < 29.5% RTP. | 4 hours<br><br><br><br>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.
---

| SURVEILLANCE | FREQUENCY |
|---|---|
| SR 3.3.4.2.1 Perform CHANNEL FUNCTIONAL TEST. | 92 days |

(continued)

SURVEILLANCE REQUIREMENTS (continued)

| SURVEILLANCE | | FREQUENCY |
|---|---|---|
| SR 3.3.4.2.2 | Perform CHANNEL CALIBRATION. The Allowable Values shall be:<br><br>TSV–Closure: ≤ 10% closed; and<br><br>TCV Fast Closure, Trip Oil Pressure–Low: ≥ 500 psig. | 24 months |
| SR 3.3.4.2.3 | Perform LOGIC SYSTEM FUNCTIONAL TEST including breaker actuation. | 24 months |
| SR 3.3.4.2.4 | Verify TSV–Closure and TCV Fast Closure, Trip Oil Pressure–Low Functions are not bypassed when THERMAL POWER is ≥ 29.5% RTP. | 24 months |
| SR 3.3.4.2.5 | ----------NOTE----------<br>Breaker interruption time may be assumed from the most recent performance of SR 3.3.4.2.6.<br>----------<br><br>Verify the EOC-RPT SYSTEM RESPONSE TIME is within limits. | 24 months on a STAGGERED TEST BASIS |
| SR 3.3.4.2.6 | Determine RPT breaker interruption time. | 60 months |

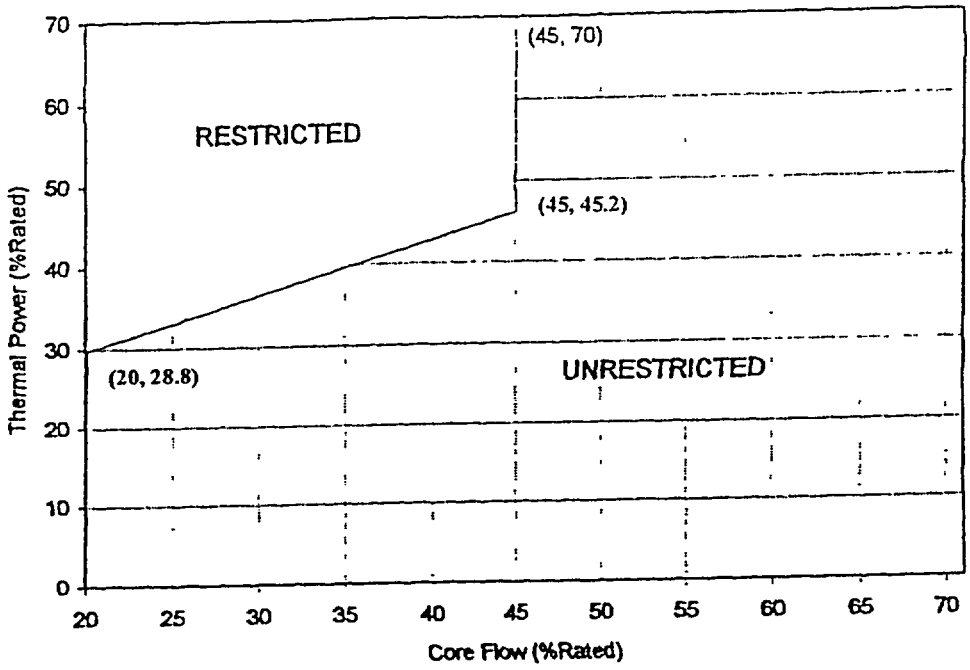


Figure 3.4.1-1 (page 1 of 1)

THERMAL POWER VERSUS CORE FLOW
STABILITY REGIONS

EXELON GENERATION COMPANY, LLC

PSEG NUCLEAR LLC

DOCKET NO. 50-278

PEACH BOTTOM ATOMIC POWER STATION, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 250
License No. DPR-56

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated May 24, 2002, as supplemented by letters dated June 27, September 11, September 24, and October 16, 2002, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to paragraph 2.C.(1) of Facility Operating License No. DPR-56, as indicated in the attachment to this license amendment, and is hereby amended to read as follows:

   (1) Maximum Power level

   Exelon Generation Company is authorized to operate the Peach Bottom Atomic Power Station, Unit 3, at steady state reactor core power levels not in excess of 3514 megawatts thermal.

3. The license is also amended by changes to the Technical Specifications, as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-56 is hereby amended to read as follows:

   (2) Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 250, are hereby incorporated in the license. Exelon Generation Company shall operate the facility in accordance with the Technical Specifications.

4. This license amendment is effective as of its date of issuance, and shall be implemented upon startup following the Unit 3 14th Refueling Outage, currently scheduled for fall 2003.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Ledyard B. Marsh, Acting Director
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to Facility Operating
License No. DPR-56, page 3, and
the Technical Specifications

Date of Issuance: November 22, 2002

ATTACHMENT TO LICENSE AMENDMENT NO. 250

FACILITY OPERATING LICENSE NO. DPR-56

DOCKET NO. 50-278

Replace the following pages of the Facility Operating License and the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

| Remove | Insert |
|---|---|
| Facility Operating License | |
| page 3 | page 3 |
| Technical Specifications | |
| 1.1-5 | 1.1-5 |
| 3.3-2 | 3.3-2 |
| 3.3-6 | 3.3-6 |
| 3.3-7 | 3.3-7 |
| 3.3-8 | 3.3-8 |
| 3.3-31a | 3.3-31a |
| 3.3-31b | 3.3-31b |
| 3.3-31c | 3.3-31c |
| 3.4-5 | 3.4-5 |
| 3.4-25 | 3.4-25 |
| 3.4-26 | 3.4-26 |
| 3.4-27 | 3.4-27 |

(5) Exelon Generation Company, pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not to separate, such byproduct and special nuclear material as may be produced by 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 below:

(1) Maximum Power Level

Exelon Generation Company is authorized to operate the Peach Bottom Atomic Power Station, Unit 3, at steady state reactor core power levels not in excess of 3514 megawatt thermal. I

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. , are hereby incorporated in the license. Exelon Generation Company shall operate the facility in accordance with the Technical Specifications.

The Surveillance Requirements (SRs) listed in the licensee's letter dated August 4, 1995 are not required to be performed immediately upon implementation of Amendment No. 214. The SRs listed in the licensee's letter dated August 4, 1995 shall be successfully demonstrated prior to the time and condition specified below for each:

a) Those SRs listed as Category A SRs in the licensee's August 4, 1995 letter shall be completed within a period consistent with the implementation date for Amendment 214, the specified frequency for each SR and the allowance of SR 3.0.2;

b) Those SRs listed as Category B SRs in the licensee's August 4, 1995 letter shall be completed within a period consistent with the last completion date for the related existing SRs, the specified frequency for each SR and the allowance of SR 3.0.2.

1.1 Definitions

| | |
|---|---|
| PHYSICS TESTS (continued) | b. Authorized under the provisions of 10 CFR 50.59; or<br><br>c. Otherwise approved by the Nuclear Regulatory Commission. |
| RATED THERMAL POWER (RTP) | RTP shall be a total reactor core heat transfer rate to the reactor coolant of 3514 MWt. |
| REACTOR PROTECTION SYSTEM (RPS) RESPONSE TIME | The RPS RESPONSE TIME shall be that time interval from the opening of the sensor contact up to and including the opening of the trip actuator contacts. |
| SHUTDOWN MARGIN (SDM) | SDM shall be the amount of reactivity by which the reactor is subcritical or would be subcritical assuming that:<br><br>a. The reactor is xenon free;<br><br>b. The moderator temperature is 68°F; and<br><br>c. All control rods are fully inserted except for the single control rod of highest reactivity worth, which is assumed to be fully withdrawn. With control rods not capable of being fully inserted, the reactivity worth of these control rods must be accounted for in the determination of SDM. |
| STAGGERED TEST BASIS | A STAGGERED TEST BASIS shall consist of the testing of one of the systems, subsystems, channels, or other designated components during the interval specified by the Surveillance Frequency, so that all systems, subsystems, channels, or other designated components are tested during *n* Surveillance Frequency intervals, where *n* is the total number of systems, subsystems, channels, or other designated components in the associated function. |
| THERMAL POWER | THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant. |

(continued)

ACTIONS (continued)

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|---|---|---|
| C. One or more automatic Functions with RPS trip capability not maintained.<br><br>OR<br><br>Two or more manual 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 < 29.5% 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. | 6 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 |

(continued)

SURVEILLANCE REQUIREMENTS (continued)

| | SURVEILLANCE | FREQUENCY |
|---|---|---|
| SR 3.3.1.1.13 | Verify Turbine Stop Valve—Closure and Turbine Control Valve Fast Closure, Trip Oil Pressure—Low Functions are not bypassed when THERMAL POWER is ≥ 29.5% RTP. | 24 months |
| SR 3.3.1.1.14 | Perform CHANNEL FUNCTIONAL TEST. | 24 months |
| SR 3.3.1.1.15 | Perform CHANNEL CALIBRATION. | 24 months |
| SR 3.3.1.1.16 | Calibrate each radiation detector. | 24 months |
| SR 3.3.1.1.17 | Perform LOGIC SYSTEM FUNCTIONAL TEST. | 24 months |
| SR 3.3.1.1.18 | Verify the RPS RESPONSE TIME is within limits. | 24 months |

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 Wide Range Neutron Monitors | | | | | |
| a. Period-Short | 2 | 3 | G | SR 3 3.1.1.1<br>SR 3.3.1.1.5<br>SR 3.3.1.1.12<br>SR 3.3.1.1.17<br>SR 3.3.1.1.18 | ≥ 13 seconds |
| | 5(a) | 3 | H | SR 3.3.1.1.1<br>SR 3.3.1.1.6<br>SR 3 3.1.1.12<br>SR 3.3 1.1.17<br>SR 3.3.1.1.18 | ≥ 13 seconds |
| b. Inop | 2 | 3 | G | SR 3.3.1.1.5<br>SR 3 3.1.1.17 | NA |
| | 5(a) | 3 | H | SR 3.3.1.1.6<br>SR 3.3.1.1 17 | NA |
| 2. Average Power Range Monitors | | | | | |
| a. Neutron Flux-High (Setdown) | 2 | 3(c) | G | SR 3.3.1 1.1<br>SR 3.3.1.1.8<br>SR 3.3.1.1.11<br>SR 3.3.1.1.12 | ≤ 15 0% RTP |
| b. Simulated Thermal Power-High | 1 | 3(c) | F | SR 3.3.1.1.1<br>SR 3.3.1.1.2<br>SR 3.3.1.1.8<br>SR 3.3.1.1.11<br>SR 3.3.1.1.12 | ≤ 0.65 W + 63.7% RTP(b) and ≤ 118.0% RTP |
| c. Neutron Flux-High | 1 | 3(c) | F | SR 3 3.1.1.1<br>SR 3.3.1.1.2<br>SR 3.3.1.1.8<br>SR 3.3.1.1.11<br>SR 3 3.1.1.12 | ≤ 119.7% RTP |
| d. Inop | 1,2 | 3(c) | G | SR 3.3.1.1.11 | NA |
| e. 2-Out-Of-4 Voter | 1,2 | 2 | G | SR 3.3.1.1.1<br>SR 3.3.1.1.11<br>SR 3.3.1.1.17<br>SR 3.3.1.1.18 | NA |

(continued)

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

(b) 0.65 W + 63.7% - 0.65 ΔW RTP when reset for single loop operation per LCO 3.4.1, "Recirculation Loops Operating."

(c) Each APRM channel provides inputs to both trip systems.

Table 3.3 1.1-1 (page 2 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 |
|---|---|---|---|---|---|---|
| 3 | Reactor Pressure—High | 1,2 | 2 | G | SR 3 3 1 1 1<br>SR 3 3.1 1.9<br>SR 3 3.1.1 15<br>SR 3 3 1.1.17<br>SR 3 3.1 1.18 | ≤ 1085 0 psig |
| 4. | Reactor Vessel Water Level—Low (Level 3) | 1,2 | 2 | G | SR 3.3.1.1.1<br>SR 3.3.1.1.9<br>SR 3.3.1.1.15<br>SR 3.3.1.1.17<br>SR 3.3.1.1.18 | ≥ 1.0 inches |
| 5. | Main Steam Isolation Valve—Closure | 1 | 8 | F | SR 3.3.1.1.9<br>SR 3.3.1.1.15<br>SR 3.3.1 1.17<br>SR 3 3.1.1.18 | ≤ 10% closed |
| 6. | Drywell Pressure—High | 1,2 | 2 | G | SR 3.3.1.1.1<br>SR 3.3.1.1.9<br>SR 3.3.1.1.15<br>SR 3.3.1.1.17<br>SR 3.3.1.1.18 | ≤ 2.0 psig |
| 7. | Scram Discharge Volume Water Level—High | 1,2 | 2 | G | SR 3.3.1.1.9<br>SR 3.3.1.1.15<br>SR 3.3.1.1.17<br>SR 3.3.1.1.18 | ≤ 50.0 gallons |
| | | 5(a) | 2 | H | SR 3.3.1.1.9<br>SR 3.3.1.1.15<br>SR 3.3.1.1.17 | ≤ 50.0 gallons |
| 8. | Turbine Stop Valve—Closure | ≥ 29.5% RTP | 4 | E | SR 3.3.1.1.9<br>SR 3.3.1.1.13<br>SR 3.3.1.1.15<br>SR 3.3.1.1.17<br>SR 3.3.1.1.18 | ≤ 10% closed |
| 9. | Turbine Control Valve Fast Closure, Trip Oil Pressure—Low | ≥ 29.5% RTP | 2 | E | SR 3.3.1.1.9<br>SR 3.3.1.1.13<br>SR 3.3.1.1.15<br>SR 3.3.1.1.17<br>SR 3.3.1.1.18 | ≥ 500.0 psig |
| 10. | Turbine Condenser—Low Vacuum | 1 | 2 | F | SR 3.3.1.1.1<br>SR 3.3.1.1.9<br>SR 3.3.1.1.15<br>SR 3.3.1.1.17<br>SR 3 3.1.1.18 | ≥ 23.0 inches Hg vacuum |
| 11. | Main Steam Line—High Radiation | 1,2 | 2 | G | SR 3.3.1.1.1<br>SR 3.3.1.1.10<br>SR 3.3.1.1.16<br>SR 3.3.1.1.17<br>SR 3.3.1.1.18 | ≤ 15 X Full Power Background |
| 12. | Reactor Mode Switch—Shutdown Position | 1,2 | 1 | G | SR 3.3.1.1.14<br>SR 3.3.1.1.17 | NA |
| | | 5(a) | 1 | H | SR 3 3.1.1.14<br>SR 3 3.1.1.17 | NA |

(continued)

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

3.3 INSTRUMENTATION

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

LCO 3.3.4.2 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. The following limits are made applicable:

1. LCO 3.2.1, "AVERAGE PLANAR LINEAR HEAT GENERATION RATE (APLHGR)," limits for inoperable EOC-RPT as specified in the COLR; and

2. LCO 3.2.2, "MINIMUM CRITICAL POWER RATIO (MCPR)," limits for inoperable EOC-RPT as specified in the COLR.

APPLICABILITY: THERMAL POWER ≥ 29.5% RTP.

ACTIONS

---NOTE---
Separate Condition entry is allowed for each channel.

| CONDITION | REQUIRED ACTION | | COMPLETION TIME |
|---|---|---|---|
| A. One or more channels inoperable. | A.1 | Restore channel to OPERABLE status. | 72 hours |
| | OR | | |
| | A.2 | ---NOTE---<br>Not applicable if inoperable channel is the result of an inoperable breaker.<br>---<br>Place channel in trip. | 72 hours |

(continued)

ACTIONS (continued)

| CONDITION | REQUIRED ACTION | COMPLETION TIME |
|---|---|---|
| B. One or more Functions with EOC-RPT trip capability not maintained. | B.1 Restore EOC-RPT trip capability. | 2 hours |
| C. Required Action and associated Completion Time not met. | C.1 Remove the associated recirculation pump from service.<br><br>OR<br><br>C.2 Reduce THERMAL POWER to < 29.5% RTP. | 4 hours<br><br><br><br>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.
---

| SURVEILLANCE | FREQUENCY |
|---|---|
| SR 3.3.4.2.1 Perform CHANNEL FUNCTIONAL TEST. | 92 days |

(continued)

SURVEILLANCE REQUIREMENTS (continued)

| SURVEILLANCE | | FREQUENCY |
|---|---|---|
| SR 3.3.4.2.2 | Perform CHANNEL CALIBRATION. The Allowable Values shall be:<br><br>TSV—Closure: ≤ 10% closed; and<br><br>TCV Fast Closure, Trip Oil Pressure—Low: ≥ 500 psig. | 24 months |
| SR 3.3.4.2.3 | Perform LOGIC SYSTEM FUNCTIONAL TEST including breaker actuation. | 24 months |
| SR 3.3.4.2.4 | Verify TSV—Closure and TCV Fast Closure, Trip Oil Pressure—Low Functions are not bypassed when THERMAL POWER is ≥ 29.5% RTP. | 24 months |
| SR 3.3.4.2.5 | ----------NOTE----------<br>Breaker interruption time may be assumed from the most recent performance of SR 3.3.4.2.6.<br>----------<br><br>Verify the EOC-RPT SYSTEM RESPONSE TIME is within limits. | 24 months on a STAGGERED TEST BASIS |
| SR 3.3.4.2.6 | Determine RPT breaker interruption time. | 60 months |

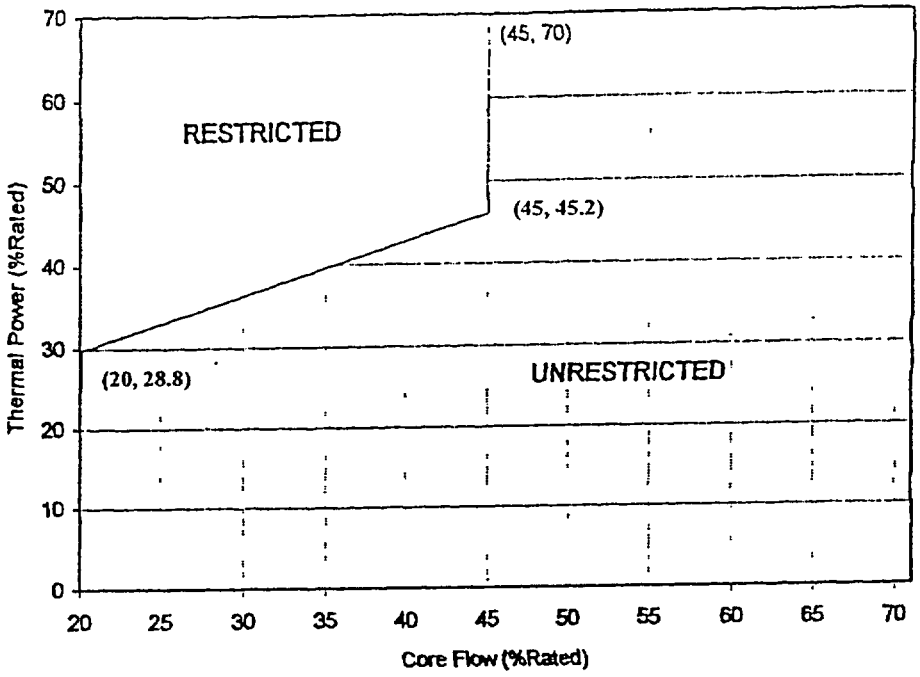


Figure 3.4.1-1 (page 1 of 1)

THERMAL POWER VERSUS CORE FLOW
STABILITY REGIONS

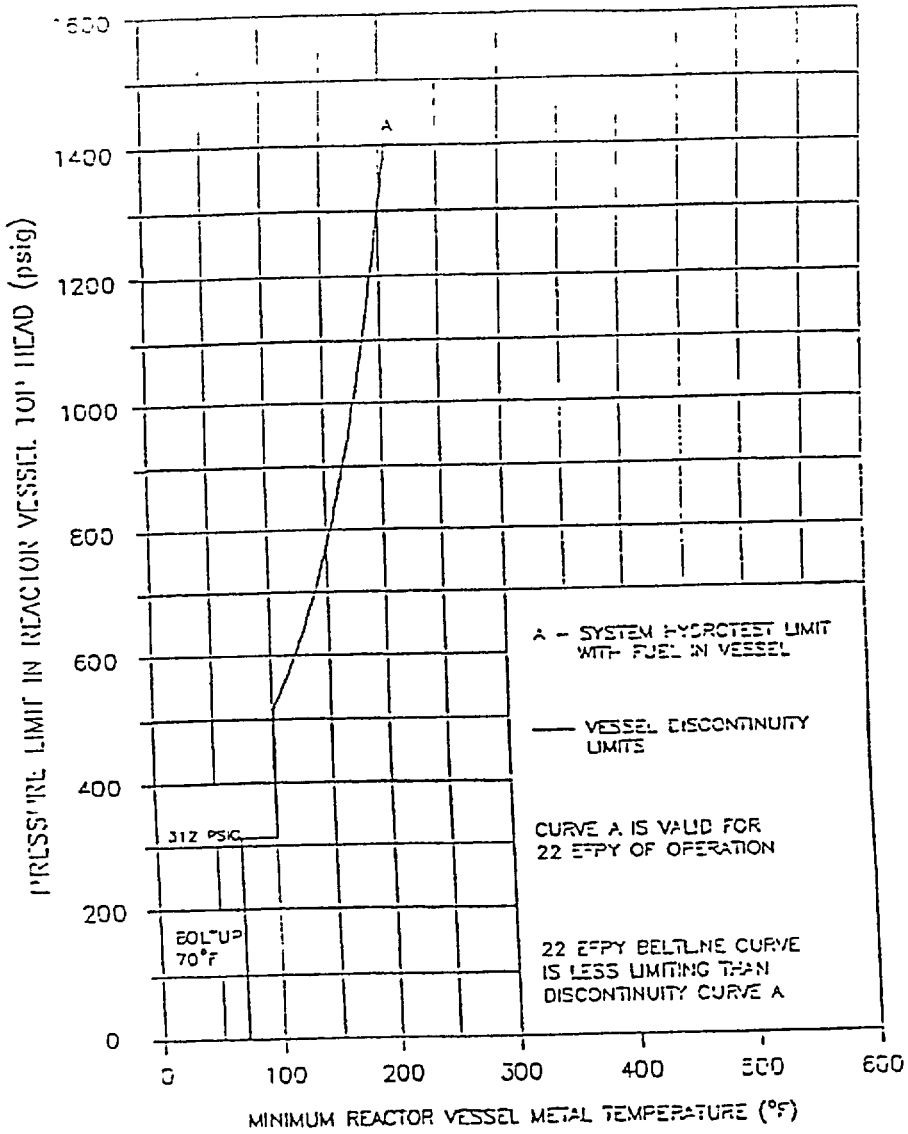


Figure 3.4.9-1 (page 1 of 1)

Temperature/Pressure Limits for
Inservice Hydrostatic and Inservice Leakage Tests

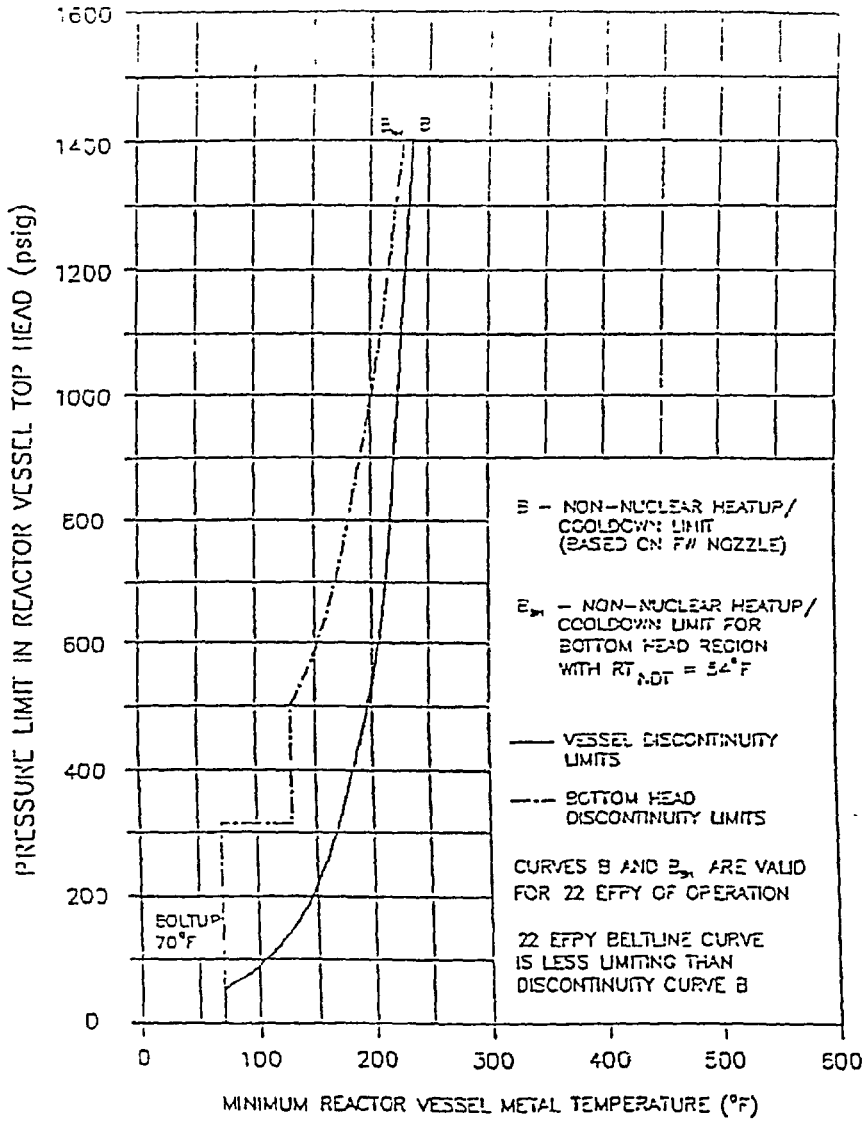


Figure 3.4.9-2 (page 1 of 1)

Temperature/Pressure Limits for
Non-Nuclear Heatup and Cooldown Following a Shutdown

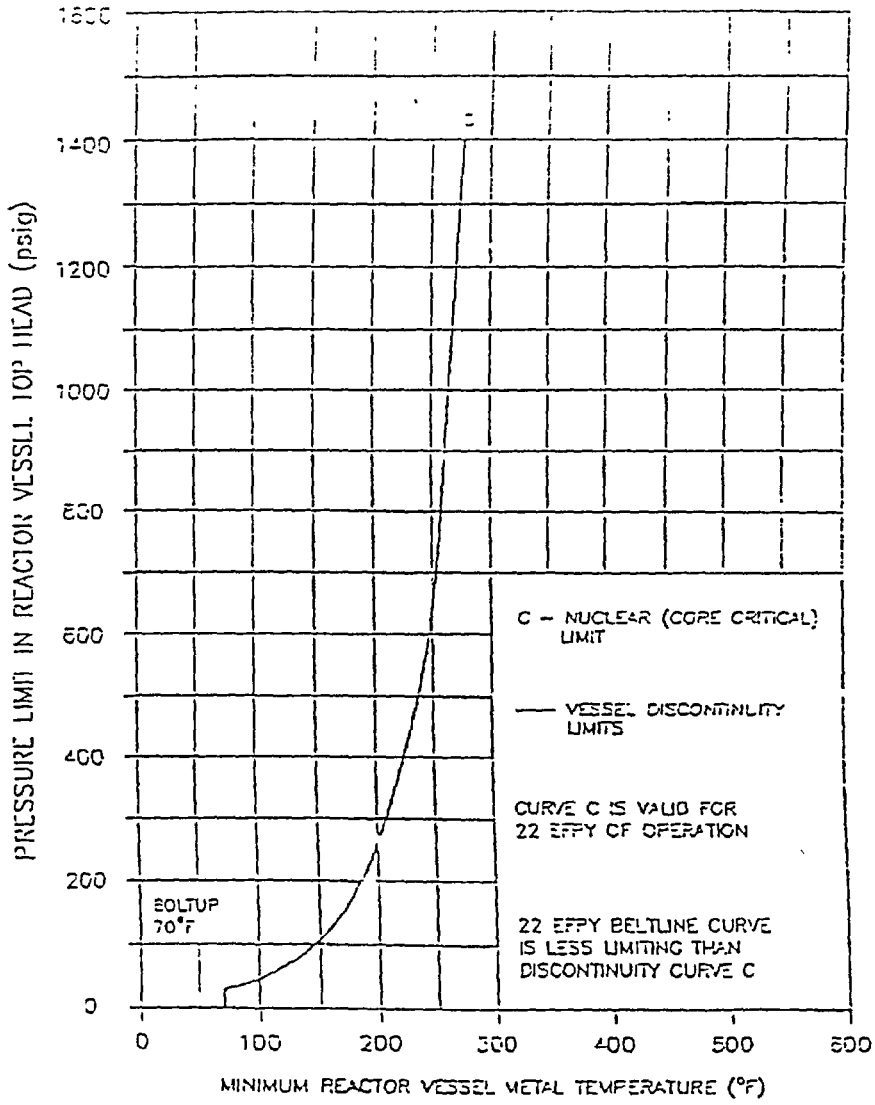


Figure 3.4.9-3 (page 1 of 1)

Temperature/Pressure Limits for Criticality

For the safety evaluation associated with this document, please refer to ML031000317.