

Enclosure C  
L-17-122

LAR Attachment M – License Condition Changes  
(13 pages follow)

**M. License Condition Changes**

12 Pages Attached

The Beaver Valley Power Station, Unit 1 and Unit 2, current fire protection operating license (OL) condition 2.C(5) and 2.F will be replaced with the standard operating license condition in Regulatory Position 3.1 of Regulatory Guide 1.205, Revision 1, "Risk-Informed, Performance-Based Fire Protection for Light-Water Nuclear Power Plants," Revision 1, as modified by FAQ 06-0008, Revision 9 (ML073380976).

It is FENOC's understanding that, implicit in the superseding of these license conditions, prior fire protection SERs and commitments have been superseded in their entirety by the revised license condition. However, Commission Order EA-02-026 (TAC No. MD4496 and MD4497) incorporated the mitigation strategies required by Section B.5.b. This order requires that strategies for addressing large fires and explosions be maintained for key areas. The elements of license conditions 2.C(11), Beaver Valley Power Station, Unit 1, DPR-66, and 2.C(13), Beaver Valley Power Station, Unit 2, NPF-73, will be coordinated with the station organizations responsible for these License Conditions in order to provide effective station integration relative to the Beaver Valley NFPA 805 project implementation. This OL condition will remain in effect.

No other license conditions need to be superseded or revised. FENOC implemented the following process for determining that OL condition 2.C(5) and 2.F are the only license conditions required to be superseded to implement the new fire protection program which meets the requirements of 10 CFR 50.48(a) and 50.48(c):

Reviews of the current Beaver Valley OL DPR-66, Amendment 285, and OL NPF-73, Amendment 174, were performed by using electronic searches of the FENOC FileNet System. The FENOC FileNet System contains Beaver Valley licensing documents, correspondence, regulatory, and guidance materials, including documents related to the operating license, the Technical Specifications, the fire protection program, the UFSAR and subsequent revisions, and correspondence to and from the NRC.

**Supersede the following BVPS-1 Operating License Condition 2.C(5)****2.C(5)      Fire Protection**

FENOC shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report (UFSAR) for the facility, subject to the following provision: FENOC 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.

**Supersede the following BVPS-2 Operating License Condition 2.F****2.F      Fire Protection Program (Section 9.5.1 of SER Supplement 3)**

FENOC shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report through Amendment No. 17, and submittals dated May 18, May 20, May 21, June 24, and July 6, 1987, and as described in the Safety Evaluation Report dated October 1985, and Supplements 1 through 6, subject to the following provision:

FENOC 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.

**Replace with New License Condition:**

DOCKET NO. 50-334, BEAVER VALLEY POWER STATION, UNIT NO. 1, RENEWED FACILITY OPERATING LICENSE, DPR-66, **2.C(5), page 4**

DOCKET NO. 50-412, BEAVER VALLEY POWER STATION, UNIT NO. 2, RENEWED FACILITY OPERATING LICENSE, NPF-73, **2.F, page 8**

**OL INSERT 1**

*FENOC shall implement and maintain in effect all provisions of the approved fire protection program that comply with 10 CFR 50.48(a) and 10 CFR 50.48(c) as specified in the license amendment request dated (\_\_\_\_\_) and as approved in the safety evaluation report dated (\_\_\_\_\_) except where NRC approval for changes or deviations is required by 10 CFR 50.48(c), and provided no other regulation, technical specification, license condition or requirement would require prior NRC approval, the licensee may make changes to the fire protection program without prior approval of the Commission if those changes satisfy the provisions set forth in 10 CFR 50.48(a) and 10 CFR 50.48(c), the change does not require a change to a technical specification or a license condition, and the criteria listed below are satisfied.*

*(a) Risk-Informed Changes that May Be Made Without Prior NRC Approval*

*A risk assessment of the change must demonstrate that the acceptance criteria below are met. The risk assessment approach, methods and data shall be acceptable to the NRC and shall be appropriate for the nature and scope of the change being evaluated; be based on the as-built, as operated, and maintained*

plant; and reflect the operating experience at the plant. Acceptable methods to assess the risk of the change may include methods that have been used in the peer reviewed fire PRA model, methods that have been approved by NRC through a plant-specific license amendment or NRC approval of generic methods specifically for use in NFPA 805 risk assessments, or methods that have been demonstrated to bound the risk impact.

1. Prior NRC review and approval is not required for a change that results in a net decrease in risk. The proposed change must also be consistent with the defense-in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the change evaluation.
2. Prior NRC review and approval is not required if the change results in a risk increase less than  $1E-7/yr$  for CDF and less than  $1E-8/yr$  for LERF. The proposed change must also be consistent with the defense in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the change evaluation.

(b) Other Changes that May Be Made Without Prior NRC Approval

1. Changes to NFPA 805, Chapter 3, Fundamental Fire Protection Program:

Prior NRC review and approval are not required for changes to the NFPA 805, Chapter 3, fundamental fire protection program elements and design requirements for which an engineering evaluation demonstrates that the alternative to the Chapter 3 element is functionally equivalent or adequate for the hazard. The licensee may use an engineering evaluation to demonstrate that a change to NFPA 805, Chapter 3, element is functionally equivalent to the corresponding technical requirement. A qualified fire protection engineer shall perform the engineering evaluation and conclude that the change has not affected the functionality of the component, system, procedure, or physical arrangement, using a relevant technical requirement or standard.

The licensee may use an engineering evaluation to demonstrate that changes to certain NFPA 805, Chapter 3, elements are acceptable because the alternative is "adequate for the hazard." Prior NRC review and approval would not be required for alternatives to four specific sections of NFPA 805, Chapter 3, for which an engineering evaluation demonstrates that the alternative to the Chapter 3 element is adequate for the hazard. A qualified fire protection engineer shall perform the engineering evaluation and conclude that the change has not affected the functionality of the component, system, procedure, or physical arrangement using a relevant technical requirement or standard.

The four specific sections of NFPA 805, Chapter 3, are as follows:

- Fire Alarm and Detection Systems (Section 3.8)
- Automatic and Manual Water-Based Fire Suppression Systems (Section 3.9)
- Gaseous Fire Suppression Systems (Section 3.10)
- Passive Fire Protection Features (Section 3.11)

This license condition does not apply to any demonstration of equivalency under Section 1.7 of NFPA 805.

2. *Fire Protection Program Changes that Have No More than Minimal Risk Impact:*

*Prior NRC review and approval are not required for changes to the licensee's fire protection program that have been demonstrated to have no more than a minimal risk impact. The licensee may use its screening process as described in NEI 04-02, Section 5.3.3 and Appendix I to determine that certain fire protection program changes meet the minimal criterion. The licensee shall ensure that fire protection defense-in-depth and safety margins are maintained when changes are made to the fire protection program.*

(c) *Transition License Conditions*

1. *Before achieving full compliance with 10 CFR 50.48(c), as specified by (2) below, risk-informed changes to the licensee's fire protection program may not be made without prior NRC review and approval unless the change has been demonstrated to have no more than a minimal risk impact, as described in (2) above.*
2. *The licensee shall implement the (Unit 1 or Unit 2) modifications to its facility, as described in Attachment S, Table S-2, "Plant Modifications Committed," in FENOC letter \_\_\_\_\_, dated \_\_\_\_\_, to complete the transition to full compliance with 10 CFR 50.48(c), by the completion of the second (Unit 1 or Unit 2) refueling outage after {date of approval of the safety evaluation report}. The licensee shall maintain appropriate compensatory measures in place until completion of these modifications.*
3. *The Licensee shall implement the items listed in Attachment S, Table S-3, "Implementation Items" of FENOC Letter \_\_\_\_\_, dated \_\_\_\_\_, by 12 months after {date of approval of the safety evaluation report}.*

**BVPS-1 MARKUP**

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(3) Less Than Three Loop OperationDeleted per License Amendment No. 239.(4) Steam Generator Water Rise Rate

Deleted per License Amendment No. 24.

(5) Fire Protection Program

~~FENOC shall implement and maintain in effect all provisions of the approved fire protection program as described in the Updated Final Safety Analysis Report (UFSAR) for the facility, subject to the following provision: FENOC may make changes to the approved fire protection program without prior approval of the Commission only if these changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.~~

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**Revised BVPS-1 DPR-66 Operating License Pages****OL INSERT 1**

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**(3) Less Than Three Loop Operation**Deleted per License Amendment No. 239.**(4) Steam Generator Water Rise Rate**

Deleted per License Amendment No. 24.

**(5) Fire Protection Program**

FENOC shall implement and maintain in effect all provisions of the approved fire protection program that comply with 10 CFR 50.48(a) and 10 CFR 50.48(c) as specified in the license amendment request dated (\_\_\_\_\_) and as approved in the safety evaluation report dated (\_\_\_\_\_) except where NRC approval for changes or deviations is required by 10 CFR 50.48(c), and provided no other regulation, technical specification, license condition or requirement would require prior NRC approval, the licensee may make changes to the fire protection program without prior approval of the Commission if those changes satisfy the provisions set forth in 10 CFR 50.48(a) and 10 CFR 50.48(c), the change does not require a change to a technical specification or a license condition, and the criteria listed below are satisfied.

**(a) Risk-Informed Changes that May Be Made Without Prior NRC Approval**

A risk assessment of the change must demonstrate that the acceptance criteria below are met. The risk assessment approach, methods and data shall be acceptable to the NRC and shall be appropriate for the nature and scope of the change being evaluated; be based on the as-built, as operated, and maintained plant; and reflect the operating experience at the plant. Acceptable methods to assess the risk of the change may include methods that have been used in the peer reviewed fire PRA model, methods that have been approved by NRC through a plant-specific license amendment or NRC approval of generic methods specifically for use in NFPA 805 risk assessments, or methods that have been demonstrated to bound the risk impact.

1. Prior NRC review and approval is not required for a change that results in a net decrease in risk. The proposed change must also be consistent with the defense-in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the change evaluation.
2. Prior NRC review and approval is not required if the change results in a risk increase less than  $1E-7$ /yr for CDF and less than  $1E-8$ /yr for LERF.



The proposed change must also be consistent with the defense in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the change evaluation.

(b) Other Changes that May Be Made Without Prior NRC Approval

1. Changes to NFPA 805, Chapter 3, Fundamental Fire Protection Program:

Prior NRC review and approval are not required for changes to the NFPA 805, Chapter 3, fundamental fire protection program elements and design requirements for which an engineering evaluation demonstrates that the alternative to the Chapter 3 element is functionally equivalent or adequate for the hazard. The licensee may use an engineering evaluation to demonstrate that a change to NFPA 805, Chapter 3, element is functionally equivalent to the corresponding technical requirement. A qualified fire protection engineer shall perform the engineering evaluation and conclude that the change has not affected the functionality of the component, system, procedure, or physical arrangement, using a relevant technical requirement or standard.

The licensee may use an engineering evaluation to demonstrate that changes to certain NFPA 805, Chapter 3, elements are acceptable because the alternative is "adequate for the hazard." Prior NRC review and approval would not be required for alternatives to four specific sections of NFPA 805, Chapter 3, for which an engineering evaluation demonstrates that the alternative to the Chapter 3 element is adequate for the hazard. A qualified fire protection engineer shall perform the engineering evaluation and conclude that the change has not affected the functionality of the component, system, procedure, or physical arrangement using a relevant technical requirement or standard.

The four specific sections of NFPA 805, Chapter 3, are as follows:

- Fire Alarm and Detection Systems (Section 3.8)
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- Gaseous Fire Suppression Systems (Section 3.10)
- Passive Fire Protection Features (Section 3.11)

This license condition does not apply to any demonstration of equivalency under Section 1.7 of NFPA 805.

2. Fire Protection Program Changes that Have No More than Minimal Risk Impact:

Prior NRC review and approval are not required for changes to the licensee's fire protection program that have been demonstrated to have no more than a minimal risk impact. The licensee may use its screening process as described in NEI 04-02, Section 5.3.3 and Appendix I to determine that certain fire protection program changes meet the minimal criterion. The licensee shall ensure that fire protection defense-in-depth

and safety margins are maintained when changes are made to the fire protection program.

(c) Transition License Conditions

1. Before achieving full compliance with 10 CFR 50.48(c), as specified by (2) below, risk-informed changes to the licensee's fire protection program may not be made without prior NRC review and approval unless the change has been demonstrated to have no more than a minimal risk impact, as described in (2) above.
2. The licensee shall implement the Unit 1 modifications to its facility, as described in Attachment S, Table S-2, "Plant Modifications Committed," in FENOC letter \_\_\_\_\_, dated \_\_\_\_\_, to complete the transition to full compliance with 10 CFR 50.48(c), by the completion of the second Unit 1 refueling outage after {date of approval of the safety evaluation report}. The licensee shall maintain appropriate compensatory measures in place until completion of these modifications.
3. The Licensee shall implement the items listed in Attachment S, Table S-3, "Implementation Items" of FENOC Letter \_\_\_\_\_, dated \_\_\_\_\_, by 12 months after {date of approval of the safety evaluation report}.

**BVPS-2 MARKUP**

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- (2) The facility requires an exemption from the requirements of 10 CFR 50, Appendix J, Section III.D.2 (b)(ii). The justification of this exemption is contained in Section 6.2.6 of Supplement 5 to the Safety Evaluation Report and modified by a letter dated July 26, 1995. The staff's environmental assessment was published on May 12, 1987 (52 FR 17651) and on June 9, 1995 (60 FR 30611). Therefore, pursuant to 10 CFR 50.12(a)(1) and 10 CFR 50.12(a)(2)(ii) and (iii), Beaver Valley Power Station, Unit 2 is exempt from the quoted requirements and instead, is required to perform the overall air lock leak test at pressure  $P_a$  before establishing containment integrity if air lock maintenance has been performed that could affect the air lock sealing capability. Local leak rate testing at a pressure of not less than  $P_a$  may be substituted for an overall air lock test where the design permits.

**E. Physical Security**

FENOC shall fully implement and maintain in effect all provisions of the Commission-approved physical security, 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 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21 is entitled: "Beaver Valley Power Station (BVPS) Physical Security Plan" submitted by letter September 9, 2004, and supplemented September 30, 2004, October 14, 2004, and May 12, 2006.

FENOC shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Beaver Valley Power Station CSP was approved by License Amendment No. 174, and amended by License Amendment No. 183.

**F. Fire Protection Program (Section 9.5.1 of SER Supplement 3)**

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~~FENOC 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.~~

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**Revised BVPS-2 NPF-73 Operating License Pages****OL INSERT 1**

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- (2) The facility requires an exemption from the requirements of 10 CFR 50, Appendix J, Section III.D.2 (b)(ii). The justification of this exemption is contained in Section 6.2.6 of Supplement 5 to the Safety Evaluation Report and modified by a letter dated July 26, 1995. The staff's environmental assessment was published on May 12, 1987 (52 FR 17651) and on June 9, 1995 (60 FR 30611). Therefore, pursuant to 10 CFR 50.12(a)(1) and 10 CFR 50.12(a)(2)(ii) and (iii), Beaver Valley Power Station, Unit 2 is exempt from the quoted requirements and instead, is required to perform the overall air lock leak test at pressure  $P_a$  before establishing containment integrity if air lock maintenance has been performed that could affect the air lock sealing capability. Local leak rate testing at a pressure of not less than  $P_a$  may be substituted for an overall air lock test where the design permits.

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(c) Transition License Conditions

1. Before achieving full compliance with 10 CFR 50.48(c), as specified by (2) below, risk-informed changes to the licensee's fire protection program may not be made without prior NRC review and approval unless the change has been demonstrated to have no more than a minimal risk impact, as described in (2) above.
2. The licensee shall implement the Unit 2 modifications to its facility, as described in Attachment S, Table S-2, "Plant Modifications Committed," in FENOC letter \_\_\_\_\_, dated \_\_\_\_\_, to complete the transition to full compliance with 10 CFR 50.48(c), by the completion of the second Unit 2 refueling outage after {date of approval of the safety evaluation report}. The licensee shall maintain appropriate compensatory measures in place until completion of these modifications.
3. The Licensee shall implement the items listed in Attachment S, Table S-3, "Implementation Items" of FENOC Letter \_\_\_\_\_, dated \_\_\_\_\_, by 12 months after {date of approval of the safety evaluation report}.