Units 1 and 2, currently held by Commonwealth Edison Company (ComEd), as the owner and licensed operator. On pages 53043, column 1; 53044, column 1; 53039, column 2; 53040, column 2; 53041, column 2; and 53042, column 1, the following sentence is corrected to read: ''By September 20, 2000, any person whose interest may be affected by the Commission's action on the application may request a hearing and, if not the applicant, may petition for leave to intervene in a hearing proceeding on the Commission's action.''

Dated at Rockville, Maryland, this 8th day of September 2000.

For the Nuclear Regulatory Commission.

Donna M. Skay,

Project Manager, Section 2, Project Directorate III, Division of Licensing Project Management, Office of Nuclear Reactor Regulation.

[FR Doc. 00–23609 Filed 9–13–00; 8:45 am]

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NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–352, 50–353, 50–171, 50–277, 50–278, 50–272, 50–311]

Peco Energy Company, Limerick Generating Station, Units 1 and 2; Peach Bottom Atomic Power Station, Unit Nos. 1, 2, and 3; Salem Nuclear Generating Station, Unit Nos. 1 and 2; Correction to Notice of Consideration of Approval of Application Regarding Proposed Corporate Restructuring and Opportunity for a Hearing

On August 31, 2000, the **Federal Register** published a notice of consideration of issuance of an order under 10 CFR 50.80 approving the indirect transfer of Facility Operating Licenses Nos. NPF–39 and NPF–85 for Limerick Generating Station, Units 1 and 2; DPR–12, DPR–44, and DPR–56 for Peach Bottom Atomic Power Station, Unit Nos. 1, 2, and 3; and DPR–70 and DPR–75 for Salem Nuclear Generating Station, Unit Nos. 1 and 2. On pages 53046, column 1; 53045, column 1; and 53047, column 1, the following sentence is corrected to read: ''By September 20, 2000, any person whose interest may be affected by the Commission's action on the application may request a hearing and, if not the applicant, may petition for leave to intervene in a hearing proceeding on the Commission's action.''

Dated at Rockville, Maryland, this 8th day of September 2000.

For the Nuclear Regulatory Commission.

Donna M. Skay,

Project Manager, Section 2, Project Directorate III, Division of Licensing Project Management, Office of Nuclear Reactor Regulation.

[FR Doc. 00–23606 Filed 9–13–00; 8:45 am]

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NUCLEAR REGULATORY COMMISSION

[Docket No. 50–352]

PECO Energy Company (Limerick Generating Station, Unit 1); Exemption

I

The PECO Energy Company (PECO, the licensee) is the holder of Facility Operating License No. NPF–39 which authorizes operation of the Limerick Generating Station, Unit 1 (Limerick Unit 1). The license provides, among other things, that the facility is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC, the Commission) now or hereafter in effect.

The facility consists of a boiling water reactor located in Montgomery and Chester Counties in Pennsylvania.

II

Title 10 of the Code of Federal Regulations (10 CFR) Part 50, Appendix G, requires that pressure-temperature (P–T) limits be established for reactor pressure vessels (RPVs) for normal operating and hydrostatic or leak rate testing conditions. Specifically, 10 CFR Part 50, Appendix G states, ''The appropriate requirements on both the pressure-temperature limits and the minimum permissible temperature must be met for all conditions.'' Appendix G of 10 CFR Part 50 specifies that the P–T limits identified as ''ASME Appendix G limits'' in Table 1 require that the limits must be at least as conservative as the limits obtained by following the methods of analysis and the margins of safety of Appendix G of Section XI of the ASME Code.

To address provisions of a proposed license amendment to the technical specification P–T limits for the Limerick facility, the licensee requested in its submittal of May 15, 2000, as supplemented by May 19 and August 10, 2000, that the staff exempt Limerick Unit 1 from application of specific requirements of 10 CFR Part 50, Section 50.60(a) and Appendix G, and substitute use of ASME Code Cases N–588 and N–640. Code Case N–588 permits the postulation of a circumferentially-oriented flaw (in lieu of an axially-oriented flaw) for the evaluation of the circumferential welds in RPV P–T limit curves. Since the pressure stresses on a circumferentially-oriented flaw are lower than the pressure stresses on an axially-oriented flaw by a factor of 2, using Code Case N–588 for establishing the P–T limits would be less conservative than the methodology currently endorsed by 10 CFR Part 50, Appendix G, and, therefore, an exemption to apply the Code Case would be required by 10 CFR 50.60. Code Case N–640 permits the use of an alternate reference fracture toughness (K_{Ic} fracture toughness curve instead of K_{Ia} fracture toughness curve) for reactor vessel materials in determining the P–T limits. Since the K_{Ic} fracture toughness curve shown in ASME Section XI, Appendix A, Figure A–2200–1 (the K_{Ic} fracture toughness curve, K_{Ic} curve) provides greater allowable fracture toughness than the corresponding K_{Ia} fracture toughness curve of ASME Section XI, Appendix G, Figure G–2210–1 (the K_{Ia} fracture toughness curve, K_{Ia} curve), using Code Case N–640 for establishing the P–T limits would be less conservative than the methodology currently endorsed by 10 CFR Part 50, Appendix G, and, therefore, an exemption to apply the Code Case would also be required by 10 CFR 50.60.

Code Case N–588

The licensee has proposed an exemption to allow the use of ASME Code Case N–588 in conjunction with ASME Section XI, 10 CFR 50.60(a) and 10 CFR Part 50, Appendix G, to determine the P–T limits.

The proposed license amendment to revise the P–T limits for Limerick Unit 1 relies, in part, on the requested exemption. These proposed P–T limits have been developed using the postulation of a circumferentially-oriented reference flaw as the limiting flaw in an RPV circumferential weld in lieu of an axially-oriented flaw required by the 1989 Edition of ASME Section XI, Appendix G.

Postulating the Appendix G [axially-oriented flaw] reference flaw in a circumferential weld is physically unrealistic and overly conservative, because the length of the flaw would extend well beyond the girth of the circumferential weld and into the adjoining base metal material. Industry experience with the repair of weld indications found during preservice inspection and data taken from destructive examination of actual vessel welds confirm that any remaining flaws are small, laminar in nature, and do not transverse the weld bead orientation.

Therefore, any potential defects, introduced during the fabrication process and not detected during subsequent nondestructive examinations, would only be expected to be oriented in the direction of weld fabrication. A defect with a circumferential orientation is therefore postulated by the ASME Code for circumferential welds.

An analysis provided to the ASME Code's Working Group on Operating Plant Criteria (in which Code Case N–588 was developed) indicated that if an axial flaw is postulated on a circumferential weld, then, based on the correction factors for membrane stress (M_m) given in the Code Case for the inside diameter circumferential (0.443) and axial (0.926) flaw orientations, it is equivalent to applying a safety factor of 4.18 on the pressure loading under normal operating conditions. Appendix G requires a safety factor of 2 on the contribution of the pressure load in the case of an axially-oriented flaw in an axial weld, shell plate, or forging. By postulating a circumferentially-oriented flaw on a circumferential weld and using the appropriate stress magnification factor, the margin of 2 is maintained for the contribution of the pressure load to the integrity calculation of the circumferential weld. Consequently, the NRC staff determined that the postulation of an axially-oriented flaw on a circumferential RPV weld is a level of conservatism that is not required to establish P–T limits to protect the reactor coolant system (RCS) pressure boundary from failure during hydrostatic testing, heatup, and cooldown.

The NRC staff noted that ASME Code Case N–588 also includes changes to the methodology for determining the thermal stress intensity, K_{IT}. The staff already accepted the use of Code Case N–588, including the modifications made to the K_{IT} methodology, for exemption requests from other licensees. Hence, the licensee may use the methodology in the edition of ASME Section XI of record, or later approved Editions of Section XI through the 1995 Edition, inclusive of the 1996 Addenda, or the methodology contained in Code Case N–588 for determining K_{IT}.

In summary, the ASME Section XI, Appendix G, procedure was developed for axially-oriented flaws. It is physically unrealistic and overly conservative to postulate flaws of this orientation to exist in circumferential welds. Hence, the NRC staff concurs that relaxation of the ASME Section XI, Appendix G, requirements by application of ASME Code Case N–588 is acceptable and would maintain, pursuant to 10 CFR 50.12(a)(2)(ii), the underlying purpose of the ASME Code and the NRC regulations to ensure an acceptable margin of safety.

Code Case N–640 (formerly Code Case N–626)

The licensee has proposed an exemption to allow use of ASME Code Case N–640 in conjunction with ASME Section XI, 10 CFR 50.60(a) and 10 CFR Part 50, Appendix G, to determine P–T limits.

The proposed license amendment to revise the P–T limits for Limerick Unit 1 relies in part on the requested exemption. These revised P–T limits have been developed using the K_{Ic} fracture toughness curve, in lieu of the K_{Ia} fracture toughness curve, as the lower bound for fracture toughness.

Use of the K_{Ic} curve in determining the lower bound fracture toughness in the development of P–T operating limits curve is more technically correct than use of the K_{Ia} curve since the rate of loading during a heatup or cooldown is slow and is more representative of a static condition than a dynamic condition. The K_{Ic} curve appropriately implements the use of static initiation fracture toughness behavior to evaluate the controlled heatup and cooldown process of a reactor vessel. The NRC staff has required use of the initial conservatism of the K_{Ia} curve since 1974 when the curve was codified. This initial conservatism was necessary due to the limited knowledge of RPV materials. Since 1974, additional knowledge has been gained about RPV materials which demonstrates that the lower bound on fracture toughness provided by the K_{Ia} curve is well beyond the margin of safety required to protect the public health and safety from potential RPV failure. In addition, P–T curves based on the K_{Ic} curve will enhance overall plant safety by opening the P–T operating window with the greatest safety benefit in the region of low temperature operations.

Since the RCS P–T operating window is defined by the P–T operating and test limit curves developed in accordance with ASME Section XI, Appendix G, continued operation of Limerick Unit 1 with these P–T curves without the relief provided by ASME Code Case N–640 would unnecessarily require that the RPV maintain a temperature exceeding 212 °F in a limited operating window during pressure tests. Consequently, steam vapor hazards would continue to be one of the safety concerns for personnel conducting inspections in primary containment. Implementation of the proposed P–T curves, as allowed by ASME Code Case N–640, does not significantly reduce the margin of safety and would eliminate steam vapor hazards by allowing inspections in primary containment to be conducted at a lower coolant temperature. Thus, pursuant to 10 CFR 50.12(a)(2)(ii), the underlying purpose of the regulation will continue to be served.

In summary, the ASME Section XI, Appendix G, procedure was conservatively developed based on the level of knowledge existing in 1974 concerning RPV materials and the estimated effects of operation. Since 1974, the level of knowledge about these topics has been greatly expanded. The NRC staff concurs that this increased knowledge permits relaxation of the ASME Section XI, Appendix G, requirements by application of ASME Code Case N–640, while maintaining, pursuant to 10 CFR 50.12(a)(2)(ii), the underlying purpose of the ASME Code and the NRC regulations to ensure an acceptable margin of safety.

III

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 50, when (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) when special circumstances are present. These circumstances include the special circumstances that ''Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule; * * *'' The staff accepts the licensee's determination that the exemption would be required to approve the use of Code Cases N–588 and N–640. The staff examined the licensee's rationale to support the exemption requests and concurred that the use of the code cases would meet the underlying purpose of 10 CFR Part 50, Appendix G, and therefore, application of the assumed flaw types and the K_{Ia} equation in Appendix G to Section XI of the ASME Code, as invoked by the rule, is not necessary to meet the underlying purpose of the regulation and thus meets the special circumstance criterion of 10 CFR 50.12(a)(2)(ii) for granting the exemption requests. Based upon a consideration of the conservatism that is explicitly incorporated into the methodologies of 10 CFR Part 50, Appendix G; Appendix G of the ASME Code; and Regulatory Guide 1.99, Revision 2; the staff concludes that application of the code cases as described would provide an adequate margin of safety against brittle failure of the RPV. (See the attached safety evaluation supporting these findings.) This is also consistent with the determination that the staff has reached for other licensees under similar conditions based on the same considerations including Quad Cities Nuclear Power Station, Units 1 and 2, exemption dated February 4, 2000. Therefore, the staff concludes that granting an exemption under the special circumstances of 10 CFR 50.12(a)(2)(ii) is appropriate and that the methodology of Code Cases N–588 and N–640 may be used to revise the P–T limits for Limerick Unit 1.

IV

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law, will not endanger life or property or common defense and security, and is, otherwise, in the public interest. Also, special circumstances are present. Therefore, the Commission hereby grants PECO an exemption from the requirements of 10 CFR Part 50, Section 50.60(a) and 10 CFR Part 50, Appendix G, for Limerick Unit 1.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment (65 FR 54081).

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 7th day of September 2000.

For the Nuclear Regulatory Commission.

John A. Zwolinski,

Director, Division of Licensing Project Management, Office of Nuclear Reactor Regulation.

Safety Evaluation by the Office of Nuclear Reactor Regulation Exemption Request by the Peco Energy Company to Update the Pressure-Temperature Limits for the Limerick Generating Station, Unit 1, Facility Operating License No. NPF–39

[Docket No. 50–352]

1.0 Introduction

1.1 Requirements for Generating Pressure-Temperature (P–T) Limits for Nuclear Power Generation Facilities

The U.S. Nuclear Regulatory Commission (NRC) has established requirements in Appendix G of Part 50 to Title 10 of the *Code of Federal Regulations* (10 CFR Part 50, Appendix G), to protect the integrity of the reactor coolant pressure boundary in nuclear power plants. The Appendix to Part 50 requires the pressure-temperature (P–T) limits for an operating plant to be at least as conservative as those that would be generated if the methods of Appendix G to Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (Appendix G to the ASME Code) were applied. The methodology of Appendix G to the ASME Code postulates the existence of a sharp surface flaw in the reactor pressure vessel (RPV) that is normal to the direction of the maximum applied stress. For materials in the beltline and upper and lower head regions of the RPV, the maximum flaw size is postulated to have a depth that is equal to one-fourth of the thickness and a length equal to 1.5 times the thickness. For the case of evaluating RPV nozzles, the surface flaw is postulated to propagate parallel to the axis of the nozzle's corner radius. The basic parameter in Appendix G to the ASME Code for calculating P–T limit curves is the stress intensity factor, K_I, which is a function of the stress state and flaw configuration. The methodology requires that licensees determine the reference stress intensity (K_{Ia}) factors, which vary as a function of temperature, from the reactor coolant system (RCS) operating temperatures, and from the adjusted reference temperatures (ARTs) for the limiting materials in the RPV. Thus, the critical locations in the RPV beltline and head regions are the ¼-thickness (¼T) and ¾-thickness (¾T) locations, which correspond to the points of the crack tips if the flaws are initiated and grown from the inside and outside surfaces of the vessel, respectively. Regulatory Guide (RG) 1.99, Revision 2, provides an acceptable method of calculating ARTs for ferritic RPV materials; the methods of RG 1.99, Revision 2, include methods for adjusting the ARTs of materials in the beltline region of the RPV, where the effects of neutron irradiation may induce an increased level of embrittlement in the materials.

The methodology of Appendix G requires that P–T curves must satisfy a safety factor of 2.0 on primary membrane and bending stresses during normal plant operations (including heatups, cooldowns, and transient operating conditions), and a safety factor of 1.5 on primary membrane and bending stresses when leak rate or hydrostatic pressure tests are performed on the RCS. Table 1 to 10 CFR Part 50, Appendix G, provides the staff's criteria for meeting the P–T limit requirements of Appendix G to the ASME Code and 10 CFR Part 50, Appendix G.

1.2 PECO Energy Company's Submittal of May 15, 2000

On May 15, 2000, PECO Energy Company (PECO) submitted a license amendment request to update the P–T limit curves for the Limerick Generating Station (LGS), Unit 1 (Reference 1). In the license amendment request, PECO also requested NRC approval for exemptions to use two Code Cases, N–588 and N–640, as methods that would allow PECO to deviate from complying with the requirements in 10 CFR Part 50, Appendix G, for generating the P–T limit curves. Requests for such exemptions are allowed pursuant to 10 CFR 50.60(b), which allows licensees to use alternatives to the requirements of 10 CFR Part 50, Appendices G and H, if an exemption to use the alternatives is granted by the Commission pursuant to 10 CFR 50.12. According to 10 CFR 50.12, the Commission may, upon request, grant exemptions to the requirements of 10 CFR Part 50, if the exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. In considering the exemptions, the Commission will not consider granting exemptions unless special circumstances are present. These special circumstances include, but are not limited to, the following special cases:

- Pursuant to 10 CFR 50.12(a)(2)(ii), the circumstance that application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule,
- Pursuant to 10 CFR 50.12(a)(2)(iii), the circumstance that compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated, and
- Pursuant to 10 CFR 50.12(a)(2)(vi), the circumstance that there is present any other material circumstance not considered when the regulation was adopted for which it would be in the public interest to grant an exemption

The staff's assessment of the exemption request is given in Section 2.0 of this safety evaluation (SE).

2.0 Requests for Exemptions to use Code Cases N–588 and N–640 as Part of the Methods Used for Generation of the Updated P–T Curves

2.1 Exemption Request To Use Code Case N–588

PECO has requested, pursuant to 10 CFR 50.60(b), an exemption to use Code Case N–588 as the basis for evaluating the axial and circumferential welds in the LGS Unit 1 RPV. The current methods of Appendix G to the ASME Code mandate consideration of an axial flaw in full penetration RPV welds, and thus, for circumferential welds, dictate that the flaw be oriented transverse to the axis of the weld. Postulation of an axial flaw in a circumferential weld is unrealistic because the length of the flaw would extend well beyond the girth of the circumferential weld and into the adjoining base metal material. Industry experience with the repair of weld indications found during preservice inspection and data taken from destructive examination of actual vessel welds confirm that any remaining flaws are small, laminar in nature, and do not transverse the weld bead orientation. Therefore, any potential defects, introduced during the fabrication process and not detected during subsequent nondestructive examinations, would only be expected to be oriented in the direction of weld fabrication. For circumferential RPV welds, the methods of the Code Case, therefore, postulate the presence of a flaw that is oriented in a direction parallel to the axis of the weld (*i.e.,* in a circumferential orientation).

An analysis provided to the ASME Code's Working Group on Operating Plant Criteria (WGOPC) (in which Code Case N–588 was developed) indicated that if an axial flaw is postulated on a circumferential weld, then, based on the correction factors for membrane stress (M_m) given in the Code Case for the inside diameter circumferential (0.443) and axial (0.926) flaw orientations, it is equivalent to applying a safety factor of 4.18 on the pressure loading under normal operating conditions.[1] Appendix G to the ASME Code only requires that a safety factor of 2 be placed on the contribution of the pressure load in the case of an axially-oriented flaw in an axial weld, shell plate, or forging. By postulating a circumferentially-oriented flaw on a circumferential weld and using the appropriate correction factor, the margin of 2 is maintained for the stress integrity calculation for the circumferential weld. Consequently, the staff determined that the postulation of an axially-oriented flaw on a circumferential RPV weld adds a level of conservatism in the P–T limits that goes beyond the margins of safety required by 10 CFR Part 50, Appendix G, and by Appendix G of Section XI of the ASME Code.

The Code Case method for evaluating axially-oriented flaws postulated in axial welds or base metal materials does not deviate from the methods for evaluating them in the 1995 Edition of Appendix G to the ASME Code. Thus, application of Code Case N–588 will only matter if the Code Case is applied for the case where a circumferential weld is the most limiting material in the beltline region of the boiling water reactor designed RPV. Since application of the Code Case methods allows licensees to reduce the stress intensities attributed to the circumferential weld, the net effect of the Code Case would allow PECO to use the next most limiting base metal or axial weld material in the RPV as the basis for evaluating the vessel and generating the P–T limit curves, if the circumferential weld (girth weld) is the most limiting material in the beltline region of the vessel. In this case, the Code Case is really not relevant to the evaluation of the LGS Unit 1 RPV, because the LGS Unit 1 RPV is limited in the beltline region by Lower-Intermediate Plate 17–2 (Heat No. C7677–1).[2] However, the use of this Code Case by the licensee results in a more accurate calculation of the applied stress intensity factor for axial welds than would be obtained using Appendix G of Section XI of the ASME Code.

WGOPC has concluded that application of Code Case N–588 to plant P–T limits is still sufficient to ensure the structural integrity of RPVs during plant operations. The staff has concurred with WGOPC's determination and has previously granted exemptions to use Code Case N–588 for the Quad Cities Nuclear Power Station (Quad Cities) (i.e., NRC letter to Commonwealth Edison dated February 4, 2000, Reference 2). In the staff's letter of February 4, 2000, the staff concluded that the procedure in Appendix G to the ASME Code was developed for axially-oriented flaws and that such a procedure was physically unrealistic and overly conservative for postulating flaws of this orientation in a circumferential weld. The staff also concluded that relaxation of the requirements of Appendix G to the Code by application of Code Case N–588 is acceptable and would maintain, pursuant to 10 CFR 50.12(a)(2)(ii), the underlying purpose of the ASME Code and the NRC regulations to ensure an acceptable margin of safety for the Quad Cities RPVs and reactor coolant pressure. PECO's proposal to use Code Case N–588 for generation of the LGS Unit 1 P–T limit curves is predicated on the same technical basis as was used for generation of the Quad Cities P–T limits. The staff, therefore, concludes that Code Case N–588 is acceptable for application to the LGS Unit 1 P–T limits; however, since the LGS Unit 1 RPV is a plate-limited vessel, application of Code Case N–588 in this case will not provide PECO with any reduction in burden for the proposed LGS Unit 1 P–T limits.

2.2 Exemption Request To Use Code Case N–640

PECO has requested, pursuant to 10 CFR 50.60(b), an exemption to use ASME Code Case N–640 (previously designated as Code Case N–626) as the basis for establishing the P–T limit curves. Code Case N–640 permits application of the lower bound static initiation fracture toughness value equation (K_{Ic} equation) as the basis for establishing the curves in lieu of using the lower bound crack arrest fracture toughness value equation (i.e., the K_{Ia} equation, which is based on conditions needed to arrest a dynamically propagating crack, and which is the method invoked by Appendix G of Section XI of the ASME Code). Use of the K_{Ic} equation in determining the lower bound fracture toughness in the development of the P–T operating limits curve is more technically correct than the use of the K_{Ia} equation since the rate of loading during a heatup or cooldown is slow and is more representative of a static condition than a dynamic condition. The K_{Ic} equation appropriately implements the use of the static initiation fracture toughness behavior to evaluate the controlled heatup and cooldown process of a reactor vessel. The staff has required use of the initial conservatism of the K_{Ia} equation since 1974 when the equation was codified. This initial conservatism was necessary due to the limited knowledge of RPV materials. Since 1974, additional knowledge has been gained about RPV materials, which

[1] The margin of safety of 4.18 is arrived at by dividing 0.926 by 0.443 and then multiplying by the required safety factor of 2.

[2] The most limiting ¼T material for the generation of the LGS Unit 1 P–T limits is Lower-Intermediate Shell Plate 17–2 (Material Heat C7677–1). This plate has ¼T nil ductility reference temperature (RT_{NDT}) values at 22 effective full power years (EFPY) and 32 EFPY of 78 °F and 89 °F, respectively. In contrast, the ¼T RT_{NDT} values for the most limiting circumferential weld material (i.e, Weld Heat 640892/J424B27AE) at 22 EFPY and 32 EFPY are considerably less conservative, at 37 °F and 54 °F, respectively.

demonstrates that the lower bound on fracture toughness provided by the K_{Ic} equation is well beyond the margin of safety required to protect the public health and safety from potential RPV failure. In addition, P–T curves based on the K_{Ic} equation will enhance overall plant safety by opening the P–T operating window with the greatest safety benefit in the region of low temperature operations.

Generating the RCS P–T limit curves developed in accordance with Appendix G to the ASME Code, without the relief provided by ASME Code Case N–640, would unnecessarily require the RPV to be maintained at a temperature exceeding 212°F during the pressure test.

Consequently, steam vapor hazards would continue to be one of the safety concerns for personnel conducting inspections in primary containment. Implementation of the proposed curves, as allowed by ASME Code Case N–640, does not significantly reduce the margin of safety and would eliminate steam vapor hazards by allowing inspections in primary containment to be conducted at a lower coolant temperature. Thus, pursuant to 10 CFR 50.12(a)(2)(ii), the underlying purpose of the regulation will continue to be served. However, since use of the K_{Ic} equation results in the calculations of less conservative P–T limits than does use of the K_{Ia} equation, licensees need staff approval to apply the Code Case methods to the P–T limit calculations.

WGOPC has concluded that application of Code Case N–640 to plant P–T limits is still sufficient to ensure the structural integrity of RPVs during plant operations. The staff has concurred with ASME's determination and has previously granted exemptions to use Code Case N–640 for Quad Cities (*i.e.*, in the NRC letter to Commonwealth Edison dated February 4, 2000, Reference 2). In the staff's letter of February 4, 2000, the staff concluded that application of Code Case N–640 would not significantly reduce the safety margins required by 10 CFR Part 50, Appendix G, and would eliminate steam vapor hazards by allowing inspections in the primary containment to be conducted at a lower coolant temperature. The staff also concluded that relaxation of the requirements of Appendix G to the Code by application of Code Case N–640 is acceptable and would maintain, pursuant to 10 CFR 50.12(a)(2)(ii), the underlying purpose of the ASME Code and the NRC regulations to ensure an acceptable margin of safety for the Quad Cities RPVs and reactor coolant pressure boundary. PECO's proposal to use Code Case N–640 for generation of the LGS Unit 1 P–T limit curves is predicated on the same technical basis as was used for generation of the Quad Cities P-T limits. The staff, therefore, concludes that Code Case N–640 is acceptable for application to the LGS Unit 1 P–T limits.

3.0 Conclusion

The staff has determined that PECO has provided sufficient technical bases for using the methods of Code Cases N–588 and N–640 in the calculation of the P–T limits for LGS Unit 1. The staff has also determined that application of Code Case N–588 and Code Case N–640 to the P–T limit calculations will continue to serve the purpose in 10 CFR Part 50, Appendix G, for protecting the structural integrity of the LGS Unit 1 RPV and reactor coolant pressure boundary. In this case, since strict compliance with requirements of 10 CFR 50.60(a) and 10 CFR Part 50, Appendix G, is not necessary to achieve the overall intent of the regulations, the staff concludes that application of the Code Cases N–588 and N–640 to the P–T limit calculations meets the special circumstance provisions in 10 CFR 50.12(a)(2)(ii), for granting exemptions to the regulations, and that, pursuant to 10 CFR 50.12(a)(1), the granting of these exemptions is authorized by law, will not present undue risk to the public health and safety, and is consistent with the common defense and security. The staff therefore grants exemptions to 10 CFR 50.60(a) and 10 CFR Part 50, Appendix G, to allow PECO to use Code Cases N–588 and N–640 as the part of the bases for generating the P–T limit curves for LGS Unit 1; however, since the LGS Unit 1 RPV is a plate-limited vessel, application of Code Case N–588 in this case will not provide PECO with any relaxation in the burden for the generating the unit's P–T limits.

4.0 References

1. Letter from J. A. Hutton, Director—Licensing, Limerick Generating Station, Unit 1, to the U.S. Nuclear Regulatory Commission, Document Control Desk, ''Limerick Generating Station, Unit 1, Technical Specifications Change Request No. 00–02–1, Changes to Reactor Pressure Vessel Pressure-Temperature Limits,'' dated May 15, 2000.

2. Letter from S. N. Bailey, U.S. Nuclear Regulatory Commission, to O. D. Kingsley, Commonwealth Edison Company, ''Quad Cities—Exemption from the Requirements of 10 CFR Part 50, Section 50.60(a) and Appendix G,'' dated February 4, 2000.

Principal Contributors: J. Medoff, B Buckley.

Date: September 7, 2000.

[FR Doc. 00–23610 Filed 9–13–00; 8:45 am]

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NUCLEAR REGULATORY COMMISSION

[Docket No. 50–333]

Power Authority of the State of New York, Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination and Opportunity for a Hearing

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. NPF–59, issued to the Power Authority of the State of New York, (the licensee), for operation of the James A. FitzPatrick Nuclear Power Plant, (FitzPatrick), located in Oswego County, New York.

The proposed amendment would incorporate the additional provisions of analogous Boiling-Water Reactor Technical Specifications Limiting Condition for Operation 3.04 and Surveillance Requirements 3.04 into Technical Specification 3.0.D and 4.0.D respectively. (The Boiling-Water Reactor Technical Specification was adopted in the licensee's request for converting the Current Technical Specifications to the Improved Standard Technical Specifications by letter dated March 31, 1999, and was noticed in the **Federal Register** (64 FR 66509)). The proposed amendment would permit proceeding from the run mode through the startup mode to the shutdown mode without the conditions of TSs 3.0.D and 4.0.D being met, a condition already permitted if required to comply with an Action requirement.

The exigent need for the proposed amendment to the TSs was the result of not having immediate availability of testing equipment needed to calibrate instruments that were required to be operable in the startup mode. Delaying the calibration of the instrumentation until the calibration equipment was made available would require several hours. It was considered undesirable to delay transitioning from the run mode to the startup mode because (1) it was desirable to transition from the run mode to the startup mode as expeditiously as possible because the time to complete failure of the electro-hydraulic control system (EHC) hydraulic control oil pressure boundary was unknown, and (2) manually scramming the reactor would adversely