which the licensee is authorized to modify the existing security plan commitments commensurate with the security threats associated with a permanently shutdown and defueled site for Unit 1 as follows:

(1) 10 CFR 73.55(a)—the requirement that any emergency suspension of safeguards measures be approved by a licensed senior operator in accordance with 10 CFR 50.54(x) and 50.54(y) for Unit 1 and that authority assigned to a certified fuel handler, (2) 10 CFR 73.55(c)(1)—the requirement that a protected area be maintained, since there are no vital areas, (3) 10 CFR 73.55(c)(3)—the requirement that isolation zones be maintained, since there are no vital areas, (4) 10 CFR 73.55(c)(4)—the requirement that an exterior intrusion detection system be located around the spent fuel building of the new security area, (5) 10 CFR 73.55(c)(5)—the requirement that the exterior illumination levels surrounding the spent fuel building be maintained at 0.2 footcandle measured horizontally at ground level, (6) 10 CFR 73.55(c)(6)—the requirement that the control room walls, doors, ceiling, floor, and any windows in the walls and in the doors be bullet-resisting, (7) 10 CFR 73.55(c)(7)—the requirement that a vehicle barrier system be maintained around the spent fuel building, (8) 10 CFR 73.55(d)(1)—the requirement that the individual responsible for the last access control function must be isolated within a bullet-resisting structure to assure the ability to respond or to summon assistance, (9) 10 CFR 73.55(e)(1)—the requirement that a continuously manned central alarm station be located within the protected area, the requirement for a continuously manned secondary alarm station, and the need for a secondary power supply system for the alarm annunciation equipment to be located within a vital area, (10) 10 CFR 73.55(e)(2)—the requirement that alarm transmission lines be tamper indicating and self-checking, (11) 10 CFR 73.55(h)(3)—the requirement that at least five guards be immediately available for responding to threats, theft, and radiological sabotage associated with the spent fuel pool, and (12) 10 CFR 73.55(h)(6)—the requirement that assessment capability of the protected area and isolation zones be provided.

Accordingly, the Commission has determined that, pursuant to 10 CFR 73.5, this exemption is authorized by law, will not endanger life or property or the common defense and security, and is otherwise in the public interest. Therefore, the Commission hereby grants SCE an exemption as described above from those requirements of 10 CFR 73.55 at SONGS1 in its permanently shutdown and defueled condition based on the safety evaluation enclosed with NRC letter to SCE dated August 29, 2000, which issues the exemption.

This exemption does not apply to SONGS Unit 2 or 3 or to the storage of any SONGS Unit 2 or 3 spent fuel in the SONGS Unit 1 spent fuel pool.

Pursuant to 10 CFR 51.32, the Commission has determined that this exemption will not have a significant effect on the quality of the human environment (65 FR 42402, dated July 10, 2000).

This exemption is effective upon issuance.

Dated: Dated at Rockville, Maryland, this 29th day of August 2000.

For the Nuclear Regulatory Commission.

John A. Zwolinski,

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

[FR Doc. 00–22650 Filed 9–1–00; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket Nos. 50–321 and 50–366]

In the Matter of Southern Nuclear Operating Company, Inc.; (Hatch Units 1 and 2)

Exemption

I

The Southern Nuclear Operating Company, Inc. (the licensee) is the holder of Facility Operating License Nos. DPR–57 and NPF–5 which authorize operation of the Hatch, Units 1 and 2. The license provides, among other things, that the facility is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (the Commission) now or hereafter in effect.

The facility consists of boiling water reactors (Units 1 and 2) located on the licensee's Hatch site in Georgia. This exemption refers to both units.

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) during normal operating and hydrostatic or leak rate testing conditions. Specifically, 10 CFR Part 50, Appendix G states that ''[t]he appropriate requirements on * * * the pressure-temperature limits and minimum permissible temperature must be met for all conditions.'' Appendix G of 10 CFR Part 50 specifies that the requirements for these limits are the American Society of Mechanical Engineers (ASME) Code, Section XI, Appendix G limits.

To address provisions of amendments to the technical specifications (TS) P–T limits, the licensee requested in its submittal dated June 1, 2000, that the staff exempt Hatch, Units 1 and 2 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. In addition to the primary function in permitting 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, Code Case N–588 also provides a new set of equations for calculating stress intensity factors due to pressure and thermal gradient for axial flaws. Although the licensee did not use the primary function of Code Case N–588, it employed the new set of equations for calculating stress intensity factors for axial flaws. Since these equations usually give lower stress intensity factors, 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. Likewise, since the K_{IC} fracture toughness curve shown in ASME Section XI, Appendix A, Figure A–2200–1 (the K_{IC} fracture toughness 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), 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.

The proposed amendment will revise the P–T limits in the Technical Specifications for Hatch, Units 1 and 2 related to the heatup, cooldown, and inservice test limitations for the reactor coolant system (RCS) for a series of specified Effective Full Power Years (EFPYs) up to 54 EFPYs for both units.

Code Case N–588

The licensee has proposed an exemption to allow 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 amendments to revise the P–T limits in the TSs for both units rely in part on the requested exemption. Since the limiting beltline materials for both units are plates, the proposed P–T limits did not use the primary function of Code Case N–588, *i.e.,* to postulate a circumferentially-oriented reference flaw as the limiting flaw in a RPV circumferential weld. However, the proposed P–T limits employed the new set of equations for calculating stress intensity factors for the postulated axial flaw.

Postulating the Appendix G reference flaw (an axially-oriented flaw) in a circumferential weld is physically unrealistic and overly conservative because the length of the flaw is 1.5 times the vessel thickness, which is much longer than the width of the reactor vessel girth weld. Industry experience with the repair of weld indications found during preservice inspection and data taken from destructive examination of actual vessel welds confirms that all detected 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 welds this indicates a postulated defect with a circumferential orientation. The above mentioned reasons are the bases for the staff to approve previous applications of Code Case N–588 from other licensees to their P–T limits with the circumferential weld as the limiting beltline material. These approvals also permit the use of the improved set of equations for calculating stress intensity factors due to pressure and thermal gradient for axial flaws to establish P–T limits to protect the RCS pressure boundary from failure during hydrostatic testing, heatup, and cooldown when the limiting beltline material is not a circumferential weld.

Consistent with previous approvals for using Code Case N–588, 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 CFR50.12(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 amendment to revise the P–T limits for Hatch, Units 1 and 2 rely 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 is more technically correct than 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 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.

Consistent with previous approvals for using Code Case N–640, 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. The staff accepts the licensee's determination that exemptions 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 intent of these regulations. 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 Code; and RG 1.99, Revision 2 the staff concluded that application of the code cases as described would provide an adequate margin of safety against brittle failure of the RPV and that application of the specific requirements of 10 CFR Part 50, Section 50.60(a) and Appendix G is not necessary to achieve the underlying purpose of the rule. This is also consistent with the determination that the staff has reached for other licensees under similar conditions based on the same considerations. Therefore, the staff concludes that requesting 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 Hatch, Units 1 and 2.

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. Therefore, the Commission hereby grants Southern Nuclear Operating Company, Inc. an exemption from the requirements of 10 CFR Part 50, Section 50.60(a) and 10 CFR Part 50, Appendix G, for Hatch, Units 1 and 2.

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 52140).

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 29th day of August 2000.

For the Nuclear Regulatory Commission.

John A. Zwolinski,

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

[FR Doc. 00–22648 Filed 9–1–00; 8:45 am]

BILLING CODE 7590–01–P