The Archivist of the United States has determined that the renewal of the Advisory Committee on Preservation is in the public interest due to the expertise and valuable advice the committee members provide on technical preservation issues affecting Federal records of all types of media. NARA uses the Committee's recommendations in NARA's implementation of strategies for preserving the permanently valuable records of the Federal government.

Dated: July 18, 2003.

Mary Ann Hadyka,

Committee Management Officer.

[FR Doc. 03–18806 Filed 7–23–03; 8:45 am]

BILLING CODE 7515–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 50–315]

Indiana Michigan Power Company, Donald C. Cook Nuclear Plant, Unit 1; Exemption

1.0 Background

Indiana Michigan Power Company (the licensee) is the holder of Facility Operating License No. DPR–58 which authorizes operation of the Donald C. Cook (D.C. Cook) Nuclear Plant, Unit 1. The licensee 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 pressurized water reactor located in Stevensville, Michigan.

2.0 Request/Action

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, Appendix G to 10 CFR part 50 states that ''[t]he appropriate requirements on * * * the pressure-temperature limits and minimum permissible temperature must be met for all conditions.'' Further, Appendix G of 10 CFR part 50 specifies that the requirements for these limits are based on the application of evaluation procedures given in Appendix G to section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (Code). In this exemption, consistent with the current provisions of 10 CFR 50.55(a), all references to the ASME Code denote the 1995 Edition through the 1996 Addenda of the ASME Code.

In order to address provisions of amendments to the D.C. Cook, Unit 1, Technical Specification (TS) P-T limit curves, the licensee requested in its submittal dated December 10, 2002, that the NRC staff exempt D.C. Cook, Unit 1, from application of specific requirements of Appendix G to 10 CFR part 50, and substitute the use of ASME Code Case N–641. ASME Code Case N–641 permits the use of an alternate reference fracture toughness curve for RPV materials and permits the postulation of a circumferentially-oriented flaw for the evaluation of circumferential RPV welds when determining the P–T limits. The proposed exemption request is consistent with, and is needed to support, the D.C. Cook, Unit 1, TS amendment that was contained in the same submittal. The proposed D.C. Cook, Unit 1, TS amendment will revise the P–T limits for heatup, cooldown, and inservice test limitations for the reactor coolant system (RCS) through 32 effective full power years of operation.

Code Case N–641

The licensee has proposed an exemption to allow the use of ASME Code Case N–641 in conjunction with Appendix G to ASME section XI, 10 CFR 50.60(a) and 10 CFR part 50, Appendix G, to establish the P–T limits for the D.C. Cook, Unit 1 RPV.

The proposed TS amendment to revise the P–T limits for D.C. Cook, Unit 1, relies in part, on the requested exemption. These revised P–T limits have been developed using the lower bound K_{IC} fracture toughness curve shown in ASME section XI, Appendix A, Figure A–2200–1, in lieu of the lower bound K_{IA} fracture toughness curve of ASME section XI, Appendix G, Figure G–2210–1, as the basis fracture toughness curve for defining the D.C. Cook Unit 1 P–T limits. In addition, the revised P–T limits have been developed based on the use of a postulated circumferentially-oriented flaw for the evaluation of RPV circumferential welds in lieu of the axially-oriented flaw which would be required by Appendix G to section XI of the ASME Code. The other margins involved with the ASME section XI, Appendix G process of determining P–T limit curves remain unchanged.

Use of the K_{IC} curve as the basis fracture toughness curve for the development of P–T operating limits is more technically correct than use of the K_{IA} curve. The K_{IC} curve appropriately implements the use of a relationship based on static initiation fracture toughness behavior to evaluate the controlled heatup and cooldown process of a RPV, whereas the K_{IA} fracture toughness curve codified into Appendix G to section XI of the ASME Code was developed from more conservative crack arrest and dynamic fracture toughness test data. The application of the K_{IA} fracture toughness curve was initially codified in Appendix G to section XI of the ASME Code in 1974 to provide a conservative representation of RPV material fracture toughness. This initial conservatism was necessary due to the limited knowledge of RPV material behavior in 1974. However, additional information has been gained about RPV materials which demonstrates that the lower bound on fracture toughness provided by the K_{IA} fracture toughness curve is well beyond the margin of safety required to protect the public health and safety from potential RPV failure.

Likewise, the use of a postulated circumferentially-oriented flaw in lieu of an axially-oriented one for the evaluation of a circumferential RPV weld is more technically correct. The flaw size required to be postulated for P–T limit determination has a depth of one-quarter of the RPV wall thickness and a length six times the depth. Based on the direction of welding during the fabrication process, the only technically reasonable orientation for such a large flaw is for the plane of the flaw to be circumferentially-oriented (*i.e.*, parallel to the direction of welding). Prior to the development of ASME Code Case N–641 (and the similar ASME Code Case N–588), the required postulation of an axially-oriented flaw for the evaluation of a circumferential RPV weld provided an additional, unnecessary level of conservatism to the overall evaluation.

In addition, P–T limit curves based on the K_{IC} fracture toughness curve and postulation of a circumferentially-oriented flaw for the evaluation of RPV circumferential welds will enhance overall plant safety by opening the P–T operating window with the greatest safety benefit in the region of low temperature operations. The operating window through which the operator heats up and cools down the RCS, is determined by the difference between the maximum allowable pressure determined by Appendix G of ASME section XI, and the minimum required pressure for the reactor coolant pump seals adjusted for instrument uncertainties. A narrow operating window could potentially have an adverse safety impact by increasing the possibility of inadvertent overpressure protection system actuation due to pressure surges associated with normal

plant evolutions such as RCS pump starts and swapping operating charging pumps with the RCS in a water-solid condition.

Since application of ASME Code Case N–641 provides appropriate procedures to establish maximum postulated defects and to evaluate those defects in the context of establishing RPV P–T limits, this application of the Code Case maintains an adequate margin of safety for protecting RPV materials from brittle failure. Therefore, the licensee concluded that these considerations were special circumstances pursuant to 10 CFR 50.12(a)(2)(ii), ''[a]pplication 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.''

In summary, the ASME section XI, Appendix G, procedure was conservatively developed based on the level of knowledge existing in 1974 concerning reactor coolant pressure boundary materials and the estimated effects of operation. Since 1974, the level of knowledge about the fracture mechanics behavior of RCS materials has been greatly expanded, especially regarding the effects of radiation embrittlement and the understanding of fracture toughness properties under static and dynamic loading conditions. 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–641, 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 against brittle failure of the RPV.

The NRC staff has reviewed the exemption request submitted by the licensee and has concluded that an exemption should be granted to permit the licensee to utilize the provisions of ASME Code Case N–641 for the purpose of developing D.C. Cook, Unit 1, RPV P–T limit curves.

3.0 Discussion

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.

Special circumstances, pursuant to 10 CFR 50.12(a)(2)(ii), are present in that continued operation of D.C. Cook, Unit 1, with the P–T curves developed in accordance with ASME section XI, Appendix G, without the relief provided by ASME Code Case N–641 is not necessary to achieve the underlying purpose of Appendix G to 10 CFR part 50. The underlying purpose of the regulations in Appendix G to 10 CFR part 50 is to provide an acceptable margin of safety against brittle failure of the RCS during any condition of normal operation to which the pressure boundary may be subjected over its service lifetime. Application of ASME Code Case N–641 in lieu of the requirements of ASME Code section XI, Appendix G provides an acceptable alternative methodology which will continue to meet the underlying purpose of Appendix G to 10 CFR part 50.

The NRC staff examined the licensee's rationale to support the exemption request, and agrees within the licensee's determination that an exemption would be required to approve the use of Code Case N–641. The NRC staff agrees that the use of ASME Code Case N–641 would meet the underlying intent of Appendix G to 10 CFR part 50. The NRC staff concludes that the application of the technical provisions of ASME Code Case N–641 provides sufficient margin in the development of RPV P–T limit curves such that the underlying purpose of the regulations (Appendix G to 10 CFR part 50) continue to be met so that the use of all provisions in Appendix G to section XI of the ASME Code are not necessary. Therefore, the NRC staff concludes that the exemption requested by the licensee is justified based on the special circumstances of 10 CFR part 50(a)(2)(ii), ''[a]pplication 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.''

Based upon a consideration of the conservatism that is explicitly incorporated into the methodologies of Appendix G to 10 CFR part 50; Appendix G to section XI of the ASME Code; and Regulatory Guide 1.99, Revision 2; the staff concludes that application of ASME Code Case N–641 as described would provide an adequate margin of safety against brittle failure of the RPV. 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 NRC staff concludes that requesting the exemption under the special circumstances of 10 CFR 50.12(a)(2)(ii) is appropriate, and that the methodology of Code Case N–641 may be used to revise the P–T limits for the D.C. Cook, Unit 1, RPV.

4.0 Conclusion

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security. Also, special circumstances are present. Therefore, the Commission hereby grants the licensee an exemption from the requirements of 10 CFR 50.60 and 10 CFR part 50, Appendix G, to allow application of ASME Code Case N–641 in establishing TS requirements for the reactor vessel pressure limits at low temperatures for D.C. Cook, 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 (68 FR 42137).

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 18th day of July 2003.

For The Nuclear Regulatory Commission.

Ledyard B. Marsh,

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

[FR Doc. 03–18842 Filed 7–23–03; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 50–498 and 50–499]

STP Nuclear Operating Company; South Texas Project, Units 1 and 2; Environmental Assessment and Finding of No Significant Impact

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of amendments to Facility Operating Licenses No. NPF–76 and NPF–80, issued to STP Nuclear Operating Company* (STPNOC) acting on behalf of itself and for Texas Genco, LP, the City Public Service Board of San Antonio (CPS), Central Power and Light Company (CPL), and the City of Austin, Texas (COA) (the licensees), dated March 31, 2003, (the licensee), for operation of the South Texas Project, Units 1 and 2 located in Matagorda County, Texas. Therefore, as required by

* STP Nuclear Operating Company is authorized to act for Texas Genco, LP, the City Public Service Board of San Antonio, Central Power and Light Company, and the City of Austin, Texas, and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.