

with respect to core thermal power from 2.0% to 0.6%. This results in a net increase in licensed reactor core thermal power; from 3071.4 MWt to 3114.4 MWt. The LEFM and the flow venturi instrumentation are used to collect data and there is no automatic initiation function performed by this instrumentation. Use of the LEFM instrumentation is therefore not an accident initiator and does not increase the probability of occurrence of an existing analyzed accident. Also, the LEFM instrumentation and the venturi instrumentation do not mitigate accidents so that the consequences of previously analyzed accidents are not increased.

Analyses and evaluations associated with the proposed change to core thermal power have demonstrated that applicable acceptance criteria for plant systems, components, and analyses (including the Final Safety Analysis Report [FSAR] Chapter 14 safety analyses) will continue to be met for the proposed 1.4% increase in licensed core thermal power for Indian Point 2. The subject increase in core thermal power will not result in conditions that could adversely affect the integrity (material, design, and construction standards) or the operational performance of any potentially affected system, component or analysis. Therefore, the probability of an accident previously evaluated is not affected by this change. The subject increase in core thermal power will not adversely affect the ability of any safety-related system to meet its intended safety function. Further, the radiological dose evaluations in support of this power uprate effort show that the current FSAR Chapter 14 radiological analyses are unaffected, and that the current dose analyses of record bound plant operation with the subject increase in licensed core thermal power level.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed license amendment increases the maximum allowed core thermal power through the use of feedwater flow instrumentation that supports a reduction in the measurement uncertainty assumed in certain safety analyses. The LEFM Check System instrumentation has greater measurement accuracy than the differential pressure-type flow venturi instrumentation that was originally used so that the measurement uncertainty assumed in certain analyses can be correspondingly reduced. Both the venturi and LEFM flow instrumentation provide data that is used by plant operators to monitor the thermal output of the plant. The instrumentation does not perform an automatic actuation function and there are no output signals to plant safety systems or control systems. Therefore, instrumentation malfunction or failure does not introduce new accident scenarios or equipment failure mechanisms. Operation, maintenance, or failure of either instrumentation system does not have an

adverse effect on safety-related systems or any structures, systems, and components required for transient or accident mitigation.

Operating the plant at a new maximum core thermal power of 3114.4 MWt, which is 1.4% greater than the current maximum of 3071.4 MWt, is bounded by existing or updated analyses which demonstrate that established limits and acceptance criteria continue to be met. Operating at the new power level does not create new or different accident initiators and existing credible malfunctions are bounded by existing or updated analyses or evaluations.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The evaluations and analyses associated with the proposed increase in maximum core thermal power demonstrate that applicable acceptance criteria will continue to be met. The existing licensed maximum core thermal power level incorporates a 2% measurement uncertainty for the analysis of loss-of-coolant accidents as originally required by Appendix K of 10 CFR [Part] 50. The regulations have subsequently been revised to allow the option of justifying smaller measurement uncertainties by using more accurate instrumentation to calculate reactor thermal power. Certain analyses that already assume a bounding core power level because of the 2% measurement uncertainty are not changed as a result of the proposed increase in core thermal power. Use of the LEFM instrumentation with improved measurement accuracy supports the use of a smaller measurement uncertainty assumption in the safety analyses. Other analyses were updated or evaluations were performed to demonstrate that nuclear steam supply and balance-of-plant systems and components will continue to perform, under normal and credible transient conditions, within established limits.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

*Attorney for licensee:* Mr. John Fulton, Assistant General Counsel, Entergy Nuclear Operations, Inc., 440 Hamilton Avenue, White Plains, NY 10601.

*NRC Section Chief:* Richard J. Laufer.

*Exelon Generation Company, LLC, Docket No. 50-353, Limerick Generating Station, Unit 2, Montgomery County, Pennsylvania*

*Date of amendment request:* November 21, 2002.

*Description of amendment request:* Exelon Generation Company, LLC, the

licensee, is proposing a change to the Limerick Generating Station (LGS), Unit 2, Technical Specifications (TSs) contained in Appendix A to the Operating License. This proposed change will revise the TS section on safety limits to incorporate revised safety limit minimum critical power ratios (SLMCPRs) due to the cycle-specific analysis performed by Global Nuclear Fuel for LGS, Unit 2, Cycle 8.

*Basis for proposed no significant hazards consideration determination:* As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. The proposed TS change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The derivation of the cycle specific Safety Limit Minimum Critical Power Ratios (SLMCPRs) for incorporation into the Technical Specifications (TS), and their use to determine cycle specific thermal limits, has been performed using the methodology discussed in "General Electric Standard Application for Reactor Fuel," NEDE-24011-P-A-14 (GESTAR-II), and U.S. Supplement, NEDE-24011-P-A-14-US, June, 2000, which incorporates Amendment 25. Amendment 25 was approved by the NRC [Nuclear Regulatory Commission] in a March 11, 1999 safety evaluation report.

The basis of the SLMCPR calculation is to ensure that greater than 99.9% of all fuel rods in the core avoid transition boiling if the limit is not violated. The new SLMCPRs preserve the existing margin to transition boiling. The GE-14 fuel is in compliance with Amendment 22 to "General Electric Standard Application for Reactor Fuel," NEDE-24011-P-A-14 (GESTAR-II), and U.S. Supplement, NEDE-24011-P-A-14-US, June, 2000, which provides the fuel licensing acceptance criteria. The probability of fuel damage will not be increased as a result of this change. Therefore, the proposed TS change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The proposed TS change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The SLMCPR is a TS numerical value, calculated to ensure that transition boiling does not occur in 99.9% of all fuel rods in the core if the limit is not violated. The new SLMCPRs are calculated using NRC approved methodology discussed in "General Electric Standard Application for Reactor Fuel," NEDE-24011-P-A-14 (GESTAR-II), and U.S. Supplement, NEDE-24011-P-A-14-US, June, 2000, which incorporates Amendment 25. Additionally, the GE-14 fuel is in compliance with Amendment 22 to "General Electric Standard Application for Reactor Fuel," NEDE-24011-P-A-14 (GESTAR-II), and U.S. Supplement, NEDE-24011-P-A-14-US, June 2000, which provides the fuel licensing acceptance criteria. The SLMCPR is