vicinity of the Hemyc configuration; and the absence of significant combustible loading and ignition sources, the NRC staff finds that a 1-hour rating for the fire barrier protection in this zone is not necessary to ensure the availability of a redundant train necessary to achieve and maintain safe shutdown of the plant in the event of a fire in FZ CT–1. Based upon consideration of the information in the licensee's Fire Hazards Analysis; administrative controls for transient combustibles and ignition sources; responses to NRC staff requests for additional information; previously-granted exemptions for this fire zone; and the considerations noted above, the NRC staff concludes that this exemption meets the underlying purpose of the rule. Therefore, operating in the proposed manner meets the underlying purpose of Subsection III.G.2.c to 10 CFR 50, Appendix R, and special circumstances required by 10 CFR 50.12 for the granting of an exemption from 10 CFR 50 exist.

Authorized by Law

This exemption would allow use of a fire barrier expected to provide less than 1 hour of fire protection. As stated above, 10 CFR 50.12 allows the NRC to grant exemptions from the requirements of 10 CFR Part 50. The NRC staff has determined that granting of the licensee's proposed exemption is permissible under the Atomic Energy Act of 1954, as amended, or the Commission's regulations. Therefore, the exemption is authorized by law.

No Undue Risk to Public Health and Safety

The underlying purpose of Subsection III.G.2.c of 10 CFR 50, Appendix R, is to ensure that one of the redundant trains necessary to achieve and maintain hot shutdown conditions remains free of fire damage in the event of a fire. Based on the existing fire barriers, fire detectors, automatic and manual fire suppression equipment, administrative controls, the fire hazard analysis, the Hemyc configuration, and the absence of significant combustible loads and ignition sources, special circumstances are present such that application of this rule is not necessary. No new accident precursors are created by allowing use of a fire barrier expected to provide less than 1 hour of fire protection and the probability of postulated accidents is not increased. Similarly, the consequences of postulated accidents are not increased. Therefore, there is no undue risk (since risk is probability multiplied by consequences) to public health and safety.

Consistent With Common Defense and Security

The proposed exemption would allow use of a fire barrier expected to provide less than 1 hour of fire protection based on the existing fire barriers, fire detectors, automatic and manual fire suppression equipment, administrative controls, the fire hazard analysis, the Hemyc configuration, and the absence of significant combustible loads and ignition sources. This change to the plant requirements for the specific configuration in this fire zone has no relation to security issues. Therefore, the common defense and security is not impacted by this exemption.

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. Specifically, special circumstances are present in that the application of the regulation is not necessary to achieve the underlying purpose of the rule. Therefore, the Commission hereby grants ENO an exemption from the requirement of a 1-hour rated fire barrier (fire wrap) in Section III.G.2.c of 10 CFR Part 50, Appendix R, for the West Cable Tunnel at JAF provided that the proposed revisions to the procedures for hot work in the vicinity of the Hemyc configuration are implemented. The granting of this exemption is based on the implementation of revised administrative controls for hot work in the vicinity of the Hemyc configuration in FZ CT–1 (addressed in Section 3.3 above), the existing or upgraded fire barrier protection features in FZ CT–1, the maintenance of existing automatic detection and suppression features in FZ CT–1, and the availability of manual fire fighting and associated fire fighting equipment.

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 (71 FR 54100).

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 27th day of September 2006.

For the Nuclear Regulatory Commission.

Catherine Haney,

Director, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation.

[FR Doc. E6–16262 Filed 10–2–06; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 50–259]

Tennessee Valley Authority; Browns Ferry Nuclear Plant, Unit 1; Exemption

1.0 Background

The Tennessee Valley Authority (TVA, the licensee) is the holder of Facility Operating License No. DPR–33, which authorizes operation of the Browns Ferry Nuclear Plant, Unit 1 (BFN–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 BFN–1 facility consists of a boiling water reactor (BWR) located in Limestone County, Alabama.

2.0 Request/Action

Title 10 of the Code of Federal Regulations (10 CFR), 50.54(o), requires that primary reactor containments for water-cooled power reactors be subject to the requirements of Appendix J to 10 CFR part 50. Appendix J specifies the leakage test requirements, schedules, and acceptance criteria for tests of the leak tight integrity of the primary reactor containment and systems and components which penetrate the containment. Appendix J, Option B, Section III.A requires that the overall integrated leak rate must not exceed the allowable leakage with margin, as specified in the Technical Specifications (TSs). The overall integrated leak rate, as specified in the 10 CFR part 50, Appendix J definitions, includes the contribution from main steam isolation valve (MSIV) leakage. By letter dated July 9, 2004, the licensee requested exemption from Option B, Section III.A, requirements to permit exclusion of MSIV leakage from the overall integrated leak rate test measurement.

Option B, Section III.B of 10 CFR part 50, Appendix J, requires that the sum of the leakage rates of all Type B and Type C local leak rate tests be less than the performance criterion with margin, as specified in the TSs. The licensee also requests exemption from this requirement, to permit exclusion of the MSIV contribution to the sum of the Type B and Type C tests.

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 and safety, and are consistent with the common defense and security; and (2) special circumstances are present. Section 50.12(a)(2)(ii) of 10 CFR states that special circumstances are present when ''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.'' In addition, § 50.12(a)(2)(iii) of 10 CFR states that special circumstances are present when ''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.''

Testing in accordance with 10 CFR part 50, Appendix J, ensures that primary containment leakage following a design basis loss-of-coolant accident will be within the allowable leakage limits specified in the TSs and assumed in the safety analyses for determining radiological consequences. For BFN–1, the containment integrated leakage rate test currently includes leakage through closed MSIVs. However, the MSIV leakage effluent has a different pathway to the environment compared to other containment penetrations. It is not directed into the secondary containment and filtered through the standby gas treatment system as is other containment leakage. Instead, the MSIV leakage is directed through the main steam drain piping into the condenser and is released to the environment as an unfiltered ground level effluent. The licensee analyzed the MSIV leakage pathway for the increased leakage (from less than or equal to 11.5 standard cubic feet per hour (scfh) per valve to less than or equal to 100 scfh per valve, with combined leakage for all four main steam lines less than or equal to 150 scfh), and the containment leakage pathway separately in a dose consequences analysis. The calculated radiological consequences of the combined leakages were found to be within the criteria of 10 CFR part 100 and 10 CFR part 50, Appendix A, General Design Criterion 19. The NRC staff reviewed the licensee's analyses and found them acceptable, as described in the safety evaluation associated with Amendment No. 251, dated September 27, 2004. In approving Amendment No. 251, the NRC staff added license condition 2.C(15):

The licensee is required to confirm that the conclusions made in TVA's letter dated September 17, 2004 [Agencywide Documents Access and Management System Accession No. ML042730342], for the turbine building remain acceptable using seismic demand accelerations based on dynamic seismic analysis prior to the restart of Unit 1.

In approving these exemptions, the NRC staff notes that the licensee must satisfy license condition 2.C(15).

By separating the MSIV leakage acceptance criteria from the overall integrated leak rate test criteria, and from the Type B and C leakage sum limitation, the BFN–1 containment leakage testing program will be made more consistent with the limiting assumptions used in the associated accident consequences analyses. It will also allow additional operational flexibility by, in effect, increasing the total containment leakage rate limit while remaining within the applicable dose consequence guidelines and requirements. The licensee's exemption request was submitted in conjunction with a proposed amendment to the TSs to increase the allowable leak rate for MSIVs, which is being evaluated by the NRC staff separately. The amendment associated with this exemption will revise TS Surveillance Requirement (SR) 3.6.1.3.10 to limit the maximum allowable MSIV leakage through each individual valve to 100 scfh and combined MSIV leakage to 150 scfh. The requested exemption from Appendix J requirements for MSIV leakage will allow BFN–1 to operate with the proposed TS increased allowable MSIV leakage rates with reduced radiological exposure to plant personnel for maintaining MSIV leakage limits. The licensee's exemption request and proposed changes to the TSs together would implement the recommendation of BWR Owners Group Topical Report NEDC–31858, ''BWR Report for Increasing MSIV Leakage Rate Limits and Elimination of Leakage Control Systems,'' which was approved by the NRC staff in a safety evaluation dated March 3, 1999. Therefore, the NRC staff finds the proposed exemptions from Appendix J to separate MSIV leakage from other containment leakage to be acceptable.

Authorized by Law

This proposed exemptions would permit exclusion of MSIV leakage from the overall integrated leak rate test measurement and permit exclusion of the MSIV contribution to the sum of the Type B and Type C local leak rate tests. As stated above, 10 CFR 50.12 allows the NRC to grant exemptions from the requirements of 10 CFR part 50, Appendix J. The NRC staff has determined that granting the licensee's proposed exemptions will not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations. Therefore, the exemptions are authorized by law.

No Undue Risk to Public Health and Safety

The underlying purpose of Appendix J is to assure that containment leak tight integrity is maintained (a) as tight as reasonably achievable, and (b) sufficiently tight so as to limit effluent release to values bounded by the analyses of radiological consequences of design-basis accidents (DBAs). The proposed changes require the use of the main steam piping and the condenser to process MSIV leakage. This additional function does not compromise the reliability of these systems. They will continue to function as intended and not be subject to a failure of a different kind than previously considered. Since no new accident precursors are created by permitting the exclusion of MSIV leakage from the overall integrated leak rate test measurement and permitting the exclusion of the MSIV contribution to the sum of the Type B and Type C local leak rate tests, the probability of postulated accidents is not increased. The allowable leak rate specified for the MSIVs is used to quantify a maximum amount of leakage assumed to bypass containment. Sufficient margin relative to the regulatory limits is maintained even when conservative assumptions and methods are utilized. Also, the proposed change does not involve changes to the structures, systems, or components which would affect the probability of an accident previously evaluated in the BFN–1 updated final safety analysis report. Thus, the consequences of postulated accidents are not increased. Therefore, there is no undue risk to public health and safety.

Consistent With Common Defense and Security

The proposed exemptions would permit exclusion of MSIV leakage from the overall integrated leak rate test measurement and permit exclusion of the MSIV contribution to the sum of the Type B and Type C local leak rate tests. This change to the operation of the plant has no relation to security issues. Therefore, the common defense and security are not impacted by these exemptions.

Special Circumstances

Section 50.12(a)(2)(ii) of 10 CFR states that special circumstances are present when ''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 NRC staff examined the licensee's rationale to support the exemption request and concluded that it would meet the underlying purpose of Appendix J, Option B, Sections III.A and III.B. The underlying purpose of Appendix J is to assure that containment leak tight integrity is maintained (a) as tight as reasonably achievable, and (b) sufficiently tight so as to limit effluent release to values bounded by the analyses of radiological consequences of DBAs. Including the MSIV leakage in the test acceptance criteria is not necessary to achieve the underlying purpose of the rule because MSIV leakage is not directed into the secondary containment. Also, TS SR 3.6.1.3.10 specifies a specific leak rate limit to assure operation of BFN–1 remains within the bounds of the DBA analysis. Therefore, the underlying purpose of the rule continues to be met.

In addition, § 50.12(a)(2)(iii) of 10 CFR states that special circumstances are present when ''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.'' The licensee's exemption request and proposed changes to the TSs together would implement the recommendation of Topical Report NEDC–31858. The special circumstances associated with MSIV leakage testing are fully described in the topical report. These circumstances include the monetary costs and personnel radiation exposure involved with maintaining MSIV leakage limits more restrictive than necessary to meet offsite dose criteria and control room habitability criteria. The exemption from Appendix J requirements for MSIV leakage rates is required so that BFN–1 can operate with the proposed TS increased allowable MSIV leakage rates. This results in reduced radiological exposure to plant personnel, greater MSIV reliability, and significant monetary benefit to TVA as a result of reduced plant outage durations.

Therefore, since the underlying purpose of 10 CFR part 50, Appendix J, is achieved and the circumstances described in NEDC–31858 are met, the special circumstances required by 10 CFR 50.12(a)(2)(ii) and 50.12(a)(2)(iii) for the granting of an exemption from 10 CFR part 50, Appendix J exist.

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 TVA an exemption from the requirements of 10 CFR Part 50, Appendix J, Option B, Sections III.A and III.B with respect to MSIV leakage, for BFN–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 (71 FR 33777).

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 26th day of September 2006.

For the Nuclear Regulatory Commission.

Catherine Haney,

Director, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation.

[FR Doc. E6–16270 Filed 10–2–06; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 50–255]

Nuclear Management Company, LLC; Palisades Plant; Environmental Assessment and Finding of No Significant Impact

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an exemption from Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Section 50.46, and Appendix K to 10 CFR Part 50 for Facility Operating License No. DPR–20, issued to Nuclear Management Company, LLC (the licensee), for operation of the Palisades Nuclear Plant (Palisades), located in VanBuren County, Michigan. Therefore, as required by 10 CFR 51.21, the NRC is issuing this environmental assessment and finding of no significant impact.

Environmental Assessment

Identification of the Proposed Action

The proposed action would provide an exemption from the requirements of: (1) 10 CFR 50.46, ''Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors,'' which requires that the calculated emergency core cooling system (ECCS) performance for reactors with zircaloy or ZIRLO fuel cladding meet certain criteria, and (2) 10 CFR Part 50, Appendix K, ''ECCS Evaluation Models,'' which presumes the use of zircaloy or ZIRLO fuel cladding when doing calculations for energy release, cladding oxidation, and hydrogen generation after a postulated loss-of-coolant accident.

The proposed action would allow the licensee to use the M5 advanced alloy in lieu of zircaloy or ZIRLO for fuel rod cladding in fuel assemblies at Palisades.

The proposed action is in accordance with the licensee's application dated October 4, 2005, as supplemented by letter dated June 14, 2006.

The Need for the Proposed Action

The Commission's regulations in 10 CFR 50.46 and 10 CFR Part 50, Appendix K, require the demonstration of adequate ECCS performance for light-water reactors that contain fuel consisting of uranium oxide pellets enclosed in zircaloy or ZIRLO tubes. Each of these regulations, either implicitly or explicitly, assumes that either zircaloy or ZIRLO is used as the fuel rod cladding material.

In order to accommodate the high fuel-rod burnups that are necessary for modern fuel management and core designs, Framatome ANP developed the M5 advanced fuel rod cladding material. M5 is an alloy comprised primarily of zirconium (~99 percent) and niobium (~1 percent) that has demonstrated superior corrosion resistance and reduced irradiation-induced growth relative to both standard and low-tin zircaloy. However, since the chemical composition of the M5 advanced alloy differs from the specifications of either zircaloy or ZIRLO, use of the M5 advanced alloy falls outside of the strict interpretation of NRC regulations. Therefore, approval of this exemption request is needed to permit the use of the M5 advanced alloy as a fuel rod cladding material at Palisades.

Environmental Impacts of the Proposed Action

The NRC staff has completed its evaluation of the proposed action and concludes that use of M5 clad fuel would not result in changes in the operations or configuration of the facility. There would be no change in the level of controls or methodology used for processing radioactive effluents or handling solid radioactive waste.

The proposed action will not significantly increase the probability or consequences of accidents. No changes are being made in the types of effluents that may be released off site. There is no significant increase in the amount of any effluent released off site. There is no significant increase in occupational or public radiation exposure. Therefore, there are no significant radiological