

**JUN 14 2007**  
LR-N07-0100



United States Nuclear Regulatory Commission  
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Hope Creek Generating Station  
Facility Operating License No. NPF-57  
Docket No. 50-354

Subject: Report of Changes, Tests and Experiments

Pursuant to the requirements of 10CFR50.59, "Changes, tests and experiments", paragraph (d)(2), Hope Creek Generating Station (HCGS) is providing the required report for Facility Operating License No. NPF-57. This report provides a summary of changes, tests and experiments implemented at HCGS during the period of March 1, 2005 through February 28, 2007.

This report also includes summaries of changes, tests and experiments prepared at HCGS prior to the current reporting period, but implemented after March 1, 2005.

If you have any questions or comments on this transmittal, please contact Francis D. Possessky at (856) 339-1160.

Sincerely,

A handwritten signature in cursive script that reads "Michael Gaffney".

Michael Gaffney  
Regulatory Assurance Manager – Hope Creek

Attachment

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SUMMARY OF CHANGES, TESTS AND EXPERIMENTS  
HOPE CREEK

Emergency Diesel Generator (EDG) Lube Oil Keep Warm Pump Temporary Modification

The purpose of this change was to remove the automatic function of "C" EDG lube oil keep warm heater by electronically removing the lube oil keep warm heater thermostat (H1KJ-1KJTS-7539C). The setpoint for the thermostat is 138 F (turn heater off), and the installation of a jumper requires operator action to maintain temperature. This modification was required due to the thermostat vibration caused by a degraded oil pump in close proximity and causing the heater to cycle excessively.

Extended Power Uprate Radiological Design Basis Accident Analysis Update

This revision was to update the Design Basis Accident (DBA) radiological analyses documented in the design calculations to assess the impact of the extended power uprate (EPU) project. Specifically, to determine if the analysis could be safely and conservatively adopted as current design and licensing bases. The post-EPU resulting projected dose for each DBA was determined to be within the regulatory allowable limits with adequate margin for future safe operation of the plant during the remaining design life of the plant including the life extension. The resulting dose projections are less than 10% of the minimal dose margin. The revised analyses neither impose any additional restrictions to safe operation of the plant nor require modification to any hardware as described in the UFSAR. The plant will continue operating safely and post accident dose mitigation functions will be performed as described in the applicable sections of the UFSAR.

Mechanical Equipment Qualification (MEQ) Program Deletion

This change was to delete the description of the Mechanical Equipment Qualification (MEQ) program from the Hope Creek UFSAR. Commensurate changes are required to certain Hope Creek maintenance procedures that require maintenance or replacement of MEQ components. Appropriate revisions will be made to UFSAR Section 3.11, as well as other relevant sections, to address the deletion of the MEQ program.

General Electric Noble Chemical Application Infrequently Performed Test or Evolution

This change was to perform the General Electric (GE) Noble Chemical application process. This evolution is the deposition of noble metal on the material surface of reactor components and associated piping to significantly reduce the electrochemical corrosion potential (ECP) in the presence of excess hydrogen concentration. This technique has been shown, by both laboratory and operating plant experience, to enhance the effect of hydrogen water chemistry (HWC) in controlling intergranular stress corrosion (IGSCC) with minimal impact on plant operating dose rates. The Reactor Coolant Pressure Boundary (RCPB), nuclear fuel, Residual Heat Removal (RHR), Reactor Water Cleanup (RWCU), and Incore Neutron detectors will be deposited with noble metal. A General Electric (GE) evaluation determined that the noble metal deposit as well as the undeposited products will not reduce structural integrity, create structural interference or affect the performance of any component involved, including pumps, valves, seals, or heat exchangers.

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#### Independent Spent Fuel Storage Installation

This change was to implement the onsite storage of irradiated fuel at an Independent Spent Fuel Storage Installation (ISFSI). The spent fuel will be stored using the HI-STORM 100 (Holtec International Storage and Transfer Operation Reinforced Module) Dry Fuel Storage System.

#### Localized High Drywell Temperatures After RF11 Refueling Outage (NUCR 70023178 CROD / CRFA)

This change permitted high drywell temperatures (hot spots) as indicated on three drywell temperature elements. The evaluation was based upon a temperature limit of 194 degrees in the drywell. The temperature limit of 194 degrees is based on the maximum conductor temperature to allow a 40-year EQ service life for power cables.