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U S Nuclear Regulatory Commission ATTN: Document Control Desk Washington, DC 20555-0001

Prairie Island Nuclear Generating Plant Unit 1 Docket 50-282 License No. DPR-42

60-Day Report Pursuant to EA-03-009 Paragraph E for 2008 Prairie Island Nuclear Generating Plant Unit 1 Reactor Pressure Vessel (RPV) Head Inspection

Reference:

- Letter from NRC to Specified Pressurized Water Reactor Licensees, "Issuance of First Revised NRC Order (EA-03-009) Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors," dated February 20, 2004 (ADAMS Accession Number ML040220181).
- Letter from NMC to NRC, "Response to Revised Order EA-03-009, 'Issuance of First Revised NRC Order (EA-03-009) Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors'," dated March 8, 2004 (ADAMS Accession Number ML041610280).

The Nuclear Regulatory Commission (NRC) issued First Revised Order EA-03-009 on February 20, 2004 (Reference 1). Nuclear Management Company, LLC, (NMC) consented to the Order as written on March 8, 2004 (Reference 2). Consistent with the requirements of the Order, the Unit 1 RPV head was not inspected during the 2008 Unit 1 refueling outage (1R25) because the RPV head was replaced in 2006.

Paragraph D of the Order requires visual inspection each refueling outage to identify potential boric acid leaks from pressure-retaining components above the RPV head. Paragraph E of the Order requires a report detailing inspection results within 60 days after returning the plant to operation for each inspection required in Paragraph D of the Order if a leak or boron deposit was found during the inspection. In response to this requirement, NMC notes the following with respect to the reactor pressure vessel head inspection conducted during 1R25:

Inspection of components above the Unit 1 RPV head was performed during 1R25. The inspection was performed by qualified VT-2 examiners who identified four minor boric acid indications.

The first component with an indication was valve RC-17-3, an instrument root isolation valve for the reactor vessel level indication system (RVLIS). Approximately 1 teaspoon of white film was found on the compression fitting on the outlet side of the valve. The boric acid leak had dripped onto the insulation on the reactor vessel head. There was no indication that the leak had migrated to the RPV bare metal. After the insulation on the head was removed, the area was re-inspected and no corrosion was noted. This valve was removed, rotated, and re-installed during the outage. The component had no indication of degradation due to exposure to boric acid. Subsequent re-inspection while at normal operating pressure showed no signs of leakage.

The second component with an indication was valve RC-8-33, a reactor head vent orifice bypass valve. Approximately 2 teaspoons of dry white crust was found near the packing and stem area. The boric acid had not extended beyond the packing area. The valve packing was cleaned and tightened. The component had no indication of degradation due to exposure to boric acid. Subsequent re-inspection while at normal operating pressure showed no signs of leakage.

The third component with an indication was valve RC-8-5, reactor vessel head vent valve. Approximately 2 teaspoons of dry white crust was found near the packing. The indication extended down the side of the valve and onto the RPV head insulation below. The valve packing was cleaned and tightened. The component had no indication of degradation due to exposure to boric acid. There was no indication that the leak had migrated to the RPV bare metal. After the insulation on the head was removed, the area was re-inspected and no corrosion was noted. Subsequent re-inspection of the valve while at normal operating pressure showed no signs of leakage.

The final components with indications were the core exit thermocouple nozzle assemblies (CETNAs). Boric acid flakes, approximately 1 teaspoon total, had fallen down the thermocouple tubing sleeves onto the top of the CETNA at ports 34, 35 and 37. Also a trace of boric acid was seen on one of the CETNAs in the o-ring groove used to seal a temporary CETNA sleeve during head disassembly. The o-ring groove was cleaned during CETNA reassembly. Inspection was performed to determine the possible source of the flakes. No significant leakage was found. The component had no indication of degradation due to exposure to boric acid. No corrective action was taken regarding the potential source of the boric acid as the potential source was under the thermocouple tubing sleeves and was not accessible. Subsequent re-inspection of the CETNAs at normal operating pressure showed no additional signs of leakage.

Summary of Commitments

This letter contains no new commitments and no revisions to existing commitments.

I declare under penalty of perjury that the foregoing is true and correct. Executed on

MAY 07 2008

Michael D. Wadley

Site Vice President, Prairie Island Nuclear Generating Plant

Nuclear Management Company, LLC

Michael & Walley

cc: Administrator, Region III, USNRC

Project Manager, Prairie Island, USNRC Resident Inspector, Prairie Island, USNRC