

July 16, 2007

U.S. Nuclear Regulatory Commission
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ULNRC-05425



Ladies and Gentlemen:

**DOCKET NUMBER 50-483
CALLAWAY PLANT UNIT 1
UNION ELECTRIC CO.
FACILITY OPERATING LICENSE NPF-30
CYCLE 15 COMMITMENT CHANGE SUMMARY REPORT**

Please find attached the Cycle 15 Commitment Change Summary Report required by NEI 99-04, "Guideline for Managing NRC Commitment Changes," for changes requiring NRC notification within the next refuel outage interval. These commitment revisions were completed at Callaway Plant Unit 1 for the period between November 19, 2005 and May 10, 2007 and were not reported to NRC in a previous submittal. The Cycle 15 Commitment Change Summary Report provides a description of each change completed along with a brief justification for each revised commitment.

If you should have any questions concerning this report, please contact Scott Maglio at 573-676-8719.

This letter does not contain new commitments.

Sincerely,

A handwritten signature in black ink, appearing to read "Luke H. Graessle".

Luke H. Graessle
Manager, Regulatory Affairs

Enclosure

A001

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CYCLE 15 COMMITMENT CHANGE SUMMARY REPORT

In accordance with NEI 99-04, "Guidelines for Managing NRC Commitment Changes," as endorsed in Regulatory Issues Summary 00-017, "Managing Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff," the following commitment changes are being submitted. The following revisions were completed for Callaway Plant Unit 1 for the period from November 19, 2005 to May 10, 2007. The Commitment Change Summary Report provides a description of each change completed along with a brief justification for each revised commitment.

41774

Commitment 41774, covering Loss of Decay Heat Removal, is documented by ULNRC-01880 in response to NRC Generic Letter 88-17. The change to this commitment allows a second centrifugal charging pump taking suction from the RWST if a hot leg is vented in accordance with Table 5 of Calculation BB-200.

Original Commitment:....(B) a second centrifugal charging pump taking suction from the RWST if a hot leg is vented by 0.5 square foot or greater.

Revised Commitment:....(B) a second centrifugal charging pump taking suction from the RWST if a hot leg is vented in accordance with Table 5 of Calculation BB-200.

Justification – The original vent size is overly conservative for times of shutdown greater than 36 hours when in reduced inventory and with nozzle dams installed. The new approved Calculation BB-200 provides operating flexibility with the required vent size based upon time since shutdown.

41775

Commitment 41775, also covering Loss of Decay Heat Removal, is documented by ULNRC-01880 in response to NRC Generic Letter 88-17. The original commitment requires a vent path will be provided that is large enough to prevent pressurization of the upper plenum of the reactor vessel. The revised commitment requires the vent size for reduced inventory and nozzle dams installed to be selected in accordance with Table 5 of Calculation BB-200.

Original Commitment:...(A) all hot legs are not blocked simultaneously unless a vent path is provided that is large enough to prevent pressurization of the upper plenum of the RV; or.....

Revised Commitment:...(A) all hot legs are not blocked simultaneously unless a vent path is provided in accordance with Table 5 of Calculation BB-200 to prevent pressurization of the upper plenum of the RV;.....

Justification – The original commitment does not specify a vent size. The new calculation provides a specific size of the vent required to prevent pressurization based on Calculation BB-200.

41176

In response to NRC IE Bulletin 82-02, Degradation of Threaded Fasteners in the Reactor Coolant Pressure Boundary of PWR Plants, Callaway committed to the suggested inspections. Based on the new steam generator fastener design, Commitment 41776 is being revised somewhat.

Original Commitment:.....(2) Threaded fasteners of closure connections, identified in the scope of IEB 82-02, when opened for component inspection or maintenance shall be removed, cleaned, and inspected per IWA-2210 and IWA-2220 of ASME Code Section XI (1974 Edition or later) before being reused.

Revised Commitment:.....(same wording as above) Replacement steam generator threaded fasteners have a permanent plasmabond coating. Lubricants will not be used on these connections and therefore when opened for component inspection or maintenance shall be removed, cleaned, and inspected per IWA-2210 of ASME Code Section XI (1974 Edition or later) before being reused.

Justification - In 2005, new steam generators were delivered with a Plasmabond coating on the manway studs. The application of Plasmabond cost approximately \$4 million and eliminated the potential of a stuck fastener and the need for lubricants which could promote SCC. The only drawback is the susceptibility of the Plasmabond to damage upon post liquid penetrant (PT) and magnetic particle (MT) examination cleaning.

To ensure the integrity of the Plasmabond, it is necessary to discontinue the PT/MT inspections and the subsequent cleaning. Therefore, the commitment is being revised to include only a visual inspection as required by Section XI of the adopted ASME code. Factors supporting this revision are listed below.

- Because steam generator manway studs are less than 2", ASME code only requires a visual (VT-1) inspection (Sect XI Table IWB-2500-1, Category B-G-2).
- SCC promoting lubricants are not used or required for components with Plasmabond coating.
- Callaway has never found a flaw during its manway stud inspections. CARS 199601561 noted two linear indications on a stud shank, but subsequent inspection were unable to relocate the indications. The stud was replaced as a precaution.

41624

In response to Generic Letter 88-05, "Boric Acid Corrosion of Carbon Steel Reactor Pressure Boundary Components in PWR Plants," Callaway committed to the recommended boric acid inspections (ULNRC-1779). A change has been made to the frequency of the PM for containment walk-downs included in Commitment 41624.

Original Commitment:....A) The PM program requires operation personnel to inspect the inside of the containment building (once a month) and to identify and report any RCS leakage noticed from accessible areas. Areas inside the bioshield wall are not inspected during power operations.

Revised Commitment:.... A) The PM program requires operation personnel to inspect the inside of the containment building (once a quarter) and to identify and report any RCS leakage noticed from accessible areas. Areas inside the bioshield wall are not inspected during power operations.

Justification – This change is being made to reduce heat stress concerns during the summer months, reduce radiation dose to plant workers and to reduce equipment usage such as operation of the containment personnel hatch. This change will have negligible impact on the ability to identify small leaks of concern as the most significant areas, inside the bioshield and on top of the reactor vessel head, have never been inspected by this walk-down. Other means of identifying leakage are still in place such as performance of the RCS Inventory Balance and the ability to trend radiation monitors and sump levels. An industry benchmarking was also completed that determined Callaway was an outlier in performing monthly inspections.

Commitments Related to GL 89-13

A number of commitments were revised relating to NRC Generic Letter 89-13. Several of the original commitments communicated by Union Electric in ULNRC 02146 (response to GL 89-13) are being revised to correspond to improvements made in the service water system program affecting safety related equipment.

50076

Original Commitment:....A1. Inspect intake pump bays for mollusks, sediment and corrosion whenever they are dewatered for maintenance.

Revised Commitment:....Inspect the intake bays for macrofouling, corrosion, and other debris whenever they are dewatered for maintenance.

Justification – The commitment wording was revised to align with definitions in the plant procedure CDP-ZZ-00950.

50077

Original Commitment:....A2. Inspect the cooling tower basin when drained (usually once per outage).

Revised Commitment:....Inspect the cooling tower basin when drained (usually every other refueling outage or as required).

Justification – The cooling tower basin is cleaned and inspected when drained which usually occurs every other refueling.

50078

Original Commitment:....A4. UHS and sludge ponds are sampled annually in the fall for mollusks and veligers.

Revised Commitment:....UHS and sludge ponds are sampled annually in the fall for macrofouling and veligers.

Justification – Minor changes provide clarification and agreement with plant procedures.

50079

Original Commitment:....B. Chlorinate approximately twice a day to control microbiolic fouling. "Clams are no problem at Callaway."

Revised Commitment:....The service water system is treated with an appropriate biocide to control microbiolic fouling.

Justification – This revision allows optimization of the treatment program to control microbiolic fouling. The current treatment program utilizes both chlorine and bromine.

42089

Original Commitment:....Test program to verify the heat transfer capability of exchanger: Conduct a test program to verify the heat transfer capability of all safety-related heat exchangers cooled by service water. The total test program should consist of an initial test program and a periodic retest program. Both the initial test program and the periodic retest program should include heat exchangers connected to or cooled by one or more open-cycle systems as defined above.

42089 has been superseded by Commitment 50122

42097

Original Commitment:....Heat exchanger testing: In addition to the considerations for all heat exchangers in item 1, for water-to-water heat exchangers A. Perform functional testing with the heat exchanger operating, if practical, at its design heat removal rate to verify its capabilities. Temperature and flow compensation should be made in the calculations to adjust the results to the design conditions. Trend the results, as explained above, to monitor degradation.

42097 has been superseded by Commitment 50122

42098

Original Commitment:....Heat Exchanger Testing: In addition to the considerations for all heat exchangers in item 1, for air-to-water heat exchangers (A) perform efficiency testing (for example, in conjunction with surveillance testing) with the heat exchanger operation under the maximum heat load that can be obtained practically. Test results should be verified. Results should be trended as explained above to identify and degraded equipment.

42098 has been superseded by Commitment 50122.

50084

Original Commitment:....Recommendation II – EDG and CCW Heat Exchangers are inspected each outage in addition to heat transfer testing.

50084 has been superseded by Commitment 50122.

50122 (NEW)

EEG01A/B Performance testing conducted by ETP-EG-00001 will be performed for one heat exchanger per cycle. Thermal performance testing will be the primary monitoring method of CCW (Component Cooling Water) heat exchanger monitoring going forward with cleaning and inspection planned as necessary. Additional monitoring of the CCW heat exchangers will be performed by Essential Service Water flow verification under ESP-EF-0002A/B, every cycle. Other monitoring methods will be cleaning and inspecting, and routine monitoring of heat exchanger DP during system testing.

EKJ03A/B, EKJ04A/B, EKJ06A/B The primary monitoring methods for these emergency diesel heat exchangers will be cleaning and inspection of tubes in accordance with EDP-ZZ-01112. The frequency of the clean and inspect action will not exceed 5 years and will be determined based on past inspection results. Essential Service Water flow verification will be performed by Essential Service Water flow measurement under ESP-EF-0002A/B, conducted every cycle. Other monitoring methods for heat exchanger performance will be routine differential pressure measurement per OSP-EF-P001A/B.

SGF02A/B, SGL09A/B, SGL10A/B, SGL11A/B, SGL12A/B SGL13A/B, SGL15A/B, SGG04A/B The primary monitoring methods for these heat exchangers will be cleaning and inspection of tubes in accordance with EDP-ZZ-01112. The frequency of the clean and inspect action will not exceed 5 years and will be determined based on past inspection results. Periodic flushing of the heat exchangers will be performed by guidance from EDP-ZZ-01112.

Essential Service Water flow verification will be performed by Essential Service Water flow measurement under ESP-EF-0002A/B every cycle. Other monitoring methods for the performance of these room coolers will be fin inspection and cleaning per EDP-ZZ-01112. Thermography will also be performed on these heat exchangers as a method of predictive performance monitoring.

SGN01A/B/C/D The primary monitoring method for the containment air coolers will be cleaning and inspection of the inner tube walls and outer coil fins per EDP-ZZ-01112. The frequency of the clean and inspect action will not exceed 5 years and will be determined based on past inspection results. Flushing of the heat exchangers will be performed by guidance from EDP-ZZ-01112. Fouling, obtained from the CCW heat exchanger performance testing, differential pressure, and flow through coils will be used to trend performance of the containment air coolers with ESP-EF-0002A/B every cycle. Thermography will also be performed on these heat exchangers as a method of predictive performance monitoring.

SGK04A/B, SGK05A/B The primary monitoring method for the A/C heat exchangers will be cleaning and inspection of the heat exchanger tubes in accordance with EDP-ZZ-01112. The frequency of the clean and inspect action will not exceed 5 years and will be determined based on past inspection results. Flushing of the heat exchangers will be performed by guidance from EDP-ZZ-01112. Essential Service Water flow verification will be performed by Essential Service Water flow verification under ESP-EF-0002A/B.

Justification – Service water system performance monitoring methods have changed but continue to meet the intent of Generic Letter 89-13 requirements. Cleaning and inspection will replace heat exchanger thermal performance testing as a method to verify containment cooler heat removal capability as allowed by GL 89-13. Flow, differential pressure, microfouling and thermography will also be monitored. Complete details justifying changes to the Callaway heat exchanger monitoring program are documented in CARS 200700441.