Ameren Missouri – NRC Public Meeting Regarding License Renewal for Callaway Plant, Unit 1

February 20, 2014

Ameren

Purpose

Discuss the proposed resolution of unresolved technical issues associated with Materials Reliability Program (MRP)-227-A in support of the safety review of Callaway Plant Unit 1 license renewal application

Participants

- Ameren
  - Sarah Kovaleski — Director, Engineering Design
  - Mike Hoehn — Supervising Engineer-Programs
  - Roger Wink — Supervising Engineer-LRA Project
  - Andrew Burgess — Engineer-LRA Project
  - Eric Blocher (STARS) — Project Manager
- Westinghouse
  - Cheryl Boggess — Program Manager-RVI Aging Mgmt.
  - Dr. Randy Lott — Consulting Eng.
  - Mike Burke — Consulting Eng.
- EPRI
  - Kyle Amberge — Sr. Project Manager - MRP

Reactor Vessel Internals Industry Timeline

- 6/22/11 – NRC issues SE for MPR-227 Rev. 0
- 7/22/11 – RIS 2011-07 Issued
- 12/15/11 – Callaway LRA Submitted
- 12/16/11 – NRC issues revised SE for MRP-227 Rev. 1
- 6/3/13 – LR-ISG-2011-04 Issued
- 6/30/13 – WCAP-17780-P issued by Westinghouse
- 10/14/13 – MRP 2013-025 Issued

RIS 2011-07

Category A – Facilities that have already submitted an RVI inspection plan

Category B – Facilities that committed to follow industry developed guidance

Category C – Facilities with LRA under review

Category D (Callaway) – Facilities with plans to submit an LRA – "Applicants will be expected to submit an AMP for vessel internals that is consistent with MRP-227-A for NRC staff review and approval."

Status as of February 2014

- Callaway is expediting the ongoing PWROG effort to identify and evaluate RVI materials
- Callaway submitted a commitment on Feb 5, 2014 intended to serve as a conservative "back stop" to satisfy RIS 2011-07 requirements for Category D plants

Cold Work Commitment from ULNRC-06079 (2/5/14)

For all MRP-191 Table 4-4 components, as applicable to Callaway, Ameren Missouri commits to perform one or more of the following resolution options for the non-CASS RVI components:

Option 1: Replacement

RVI components determined to be subject to 20% or greater cold work and 30 ksi operating stress will be replaced.

Option 2: Inspection

For RVI components determined to be subject to 20% or greater cold work and 30 ksi operating stress, an augmented inspection program capable of detecting cracking will be developed. Minimum examination coverage criteria consistent with MRP-227-A Primary Inspection Category Components will apply. The augmented inspection program will be submitted to the NRC prior to performance of the inspection(s).

Cold Work Commitment from ULNRC-06079 (2/5/14)

Option 3: Impact Evaluation

For RVI components determined to be subject to 20% or greater cold work and 30 ksi operating stress, an impact evaluation will be prepared to establish that the effects of aging are minimal and will not have an adverse impact on future plant operability or component intended function. The impact evaluation(s) will be submitted to the NRC.

Option 4: Mitigation

RVI components determined to be subject to 20% or greater cold work and 30 ksi operating stress will be mitigated of stress corrosion cracking (SCC) susceptibility.

Note: Indeterminate components will be conservatively assumed to be subject to 20% or greater cold work and subject to 30 ksi operating stress.

This commitment will be completed no later than 24 months prior to PEO.

Conclusion

- Ameren Missouri's commitment addresses RAI B2.1.6-4d (Part a) and provides supports closure of Open Item B2.1.6-1.

Questions?