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Your ref: Docket No. 52-006
Our ref: DCP_NRC_002636

September 24, 2009

Subject: AP1000 Design Certification Amendment: Safety Evaluation Report Chapter 10 –
Status of Open Items

Westinghouse received Chapter 10 of the NRC Safety Evaluation Report (SER) with Open Items for the AP1000 Design Certification Amendment on June 24, 2009. It includes five actions identified as Open Items. Three of these items can be considered closed.

Each open item is noted below, with the current status and the recommended disposition.

- OI-SRP10.2-SBPA-01 requests that Westinghouse provide a date for the completed design of the emergency overspeed trip system.

Closed: Westinghouse provided the response to RAI-SRP10.2-SBPA-02 R1 (DCP NRC 002530, 6/12/09). The NRC indicated by email (Buckberg to Loza, July 15, 2009) that this open item appears to have been properly addressed with this RAI response. Therefore, this open item should be considered closed.

- OI-SRP10.2-SBPA-02a requests that Westinghouse update the Tier 1 and Tier 2 sections of the DCD, with inspections, tests, analyses, and acceptance criteria (ITAAC), to confirm that the design acceptance criteria requiring diverse hardware, firmware, and software between the two overspeed trips are met.

Open: Westinghouse will revise the response to RAI-SRP10.2-SBPA-02 in September 2009. It will provide revised ITAAC text for the emergency overspeed trip system, adding an item with acceptance wording, "A report exists and concludes that the two turbine electrical overspeed protection systems have diverse hardware and software/firmware."

- OI-SRP10.2-SBPA-02b requests that Westinghouse state whether the independent and redundant backup electrical overspeed trip circuit senses the turbine speed by magnetic pickup.

Closed: Westinghouse provided the response to RAI-SRP10.2-SBPA-02 R1 (DCP NRC 002530, 6/12/09). The NRC indicated by email (Buckberg to Loza, July 15, 2009) that this open item appears to have been properly addressed with this RAI response. Therefore, this open item should be considered closed.

- OI-SRP10.2.3-CIB1-01 requests that Westinghouse justify also applying the WCAP-16650 analysis to low-trajectory turbine missiles for dual unit sites that have unfavorable orientation, and whether the analysis is dependent on missile trajectory.

Open: Westinghouse provided a revised response to RAI-SRP-10.2.3-CIB1-01 on September 22, 2009 via letter DCP NRC 002630 to justify the WCAP-16650 analysis for this use.

- OI-SRP10.2.3-CIB1-02 indicates that the calculated value of “probability of a turbine missile” for “1/Time Interval” is an order of magnitude lower in Table 6-5 of WCAP-16651-P, and requests that Westinghouse confirm the correct number and revise WCAP-16651-P accordingly.

Closed: WCAP-16651-P, R1 corrects the typographical error in Table 6-5, "Annual Probability of Turbine Missile Ejection (95% Confidence)"; the conclusions and results of this report were based on the correct value and therefore are unaffected by this revision. Westinghouse submitted this revision with letter DCP_NRC_002549 on July 10, 2009. Therefore, this open item should be considered closed.

Please let me know if you have any questions or need anything else. Thank you.

Very truly yours,



Robert Sisk, Manager
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