AP1000DCDFileNPEm Resource

From: Melton, Michael A [melto1ma@westinghouse.com]
Sent: Friday, July 23, 2010 4:20 PM
To: Anderson, Brian; Loza, Paul G.; Ritterbusch, Stanley E; Kling, Charles L
Cc: Buckberg, Perry; Brehm, Jason A.; Andrulonis, Nate
Subject: RE: AP1000 RAI-DCP-CN58-SRSB-02

Paul may be out today but we confirm we have this.

-Mike

From: Anderson, Brian [mailto:Brian.Anderson@nrc.gov]
Sent: Friday, July 23, 2010 3:57 PM
To: Loza, Paul G.; Melton, Michael A; Ritterbusch, Stanley E
Cc: Buckberg, Perry
Subject: AP1000 RAI-DCP-CN58-SRSB-02
Importance: High

This e-mail provides RAI-DCP- CN58-SRSB-02. Please confirm receipt of this RAI.

Thank you,
Brian

Brian Anderson
301-415-9967
Senior Project Manager, AP1000 Projects Branch 1
Office of New Reactors
U.S. Nuclear Regulatory Commission

The NRC has completed its review of the final information on proposed changes for the AP1000 Design Control Document (DCD), Revision 18, dated May 10, 2010. Based on a review of the information that was provided, additional information is needed to address the following considerations related to change number 58:

In change number 58, Westinghouse stated that (1) an alternative calculation of the steam nozzle loss factor (K) is proposed, which results in an increase in the value from approximately 0.11 to 0.17. This is projected to result in a loss of 4-6 psi steam pressure and an increase in moisture content of 0.03%, and (2) revise values in the thermal-hydraulic data report. In the attached DCD Section 5.4.4.3, the resulting pressure drop through the steam generator flow restrictor at 100% steam flow is changed from approximately 15 psig to 20 psig. Also, in the attached DCD Table 5.4-5, the steam generator design fouling factor is changed from 1.1×10^{-4} to 9.0×10^{-5} hr-^{o}F-ft^{2}/BTU.

(a) Provide the revised thermal-hydraulic data report
(b) Explain the reason for the change in the steam generator design fouling factor, and describe its effect on Chapter 15 safety analysis
(c) With the increase of the steam moisture content of 0.03%, will the maximum moisture carryover of 0.25% specified in DCD Table 5.4-4 be exceeded?

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From: Melton, Michael A

Created By: melto1ma@westinghouse.com

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