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Subject: Transmittal of Errata Page for WCAP-15029-P-A Revision 1/WCAP-15030-NP-A, Revision 0, "Westinghouse Methodology for Evaluating the Acceptability of Baffle-Former-Barrel Bolting Distributions Under Faulted Load Conditions," (Proprietary/Non-Proprietary)

- References:
1. Safety Evaluation of Topical Report WCAP-15029 "Westinghouse Methodology for Evaluating the Acceptability of Baffle-Former-Barrel Bolting Distributions Under Faulted Load Conditions" (TAC No. MAW1152), dated November 10, 1998.
 2. Westinghouse Topical Report, WCAP-15029-P-A, Rev. 1, "Westinghouse Methodology for Evaluating the Acceptability of Baffle-Former-Barrel Bolting Distributions Under Faulted Load Conditions," January, 1999.
 3. Westinghouse Topical Report, WCAP-15030-NP-A, Rev. 0, "Westinghouse Methodology for Evaluating the Acceptability of Baffle-Former-Barrel Bolting Distributions Under Faulted Load Conditions," January, 1999.
 4. ASME B&PV Code, 1989 Edition, Section III, Division 1, Subsection NG

The NRC issued a Safety Evaluation for WCAP-15029 "Westinghouse Methodology for Evaluating the Acceptability of Baffle-Former-Barrel Bolting Distributions Under Faulted Load Conditions," on November 10, 1998 (Reference 1).

Two typographical errors have been identified in WCAP-15029, as discussed below.

Section 4.3.1, "Replacement Bolts," on pages 4-5 and 4-6 of References 2 and 3 contains the five allowable stress limits for Normal / Upset conditions for replacement bolts, as discussed below.

"Allowable Stress Limits for Normal and Upset Conditions"

- a. Primary Membrane Stress, P_m

$$P_m = S_m$$

- b. Primary Membrane Plus Secondary Membrane, $P_m + Q_m$

$$P_m + Q_m = \text{Lesser of } 0.9 S_y \text{ or } 2/3 S_u$$

- c. Shearing Stress for Threads, τ

$$\tau = 6.0 S_y$$

d. Bearing Stress Under Thread, σ

$$\sigma = 2.7 S_y$$

e. Primary Membrane and Bending Plus Secondary Membrane and Bending, $P_m + Q_m + P_b + Q_b$

$$P_m + Q_m + P_b + Q_b = \text{Lesser of } 1.2 \cdot S_y \text{ or } (8/9) \cdot S_u$$

Item c., above, should read:

" $\tau = 0.6 S_y$," and not: " $\tau = 6.0 S_y$."

The title of item d., above should read:

"Bearing Stress Under Bolt Head," not "Bearing Stress Under Thread."

The correction of these typographical errors is based on Paragraph NG-3232.1 in Subsection NG of the 1989 Edition of Section III of the ASME Code (Reference 4), which contains the following requirements for the average primary plus secondary membrane stress:


"(b) The average shear stress across the threads when loaded in pure shear shall be no greater than **0.6 S_y** , where S_y is determined at service temperature.

(c) The average value of bearing stress **under the fastener head** shall be no greater than $2.7 S_y$, where S_y is determined at service temperature."

These typographical errors do not impact the content of WCAP-15029 or the NRC Safety Evaluation for WCAP-15029.

Enclosed are Errata page 4-5, dated October 2018, for the Proprietary and Non-Proprietary versions of WCAP-15029-P-A, Revision 1 and WCAP-15030-NP-A, Revision 0, "Westinghouse Methodology for Evaluating the Acceptability of Baffle-Former-Barrel Bolting Distributions Under Faulted Load Conditions," that are being submitted for your information.

While page 4-5 of WCAP-15029-P-A, Revision 1 is contained in a Proprietary Topical Report, there is no Proprietary information contained on this page.


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Plant Licensing and Engineering

Enclosures:

1. Copyright Notice
2. WCAP-15029-P-A, Revision 1 Errata page 4-5 (Westinghouse Proprietary)
3. WCAP-15030-NP-A, Revision 0 Errata page 4-5 (Westinghouse Non-Proprietary)

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