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Subject: Interim Report of the Evaluation of a Deviation Pursuant to 10 CFR 21.21(a)(2)

Description of the Deviation

Temperature gradients in the reactor coolant system (RCS) cold leg fluid, commonly referred to as cold leg streaming, have been postulated to occur due to Steam Generator outlet plenum fluid temperature gradients that enter the cold leg piping and do not completely mix after passing through the reactor coolant pump (RCP). If cold leg streaming were to occur it could result in a bias to the as-measured cold leg temperature, " T_{cold} ". The magnitude of this bias is influenced by the magnitude and profile of the fluid temperature gradient across the pipe, as well as the RTD temperature instrumentation locations.

Plant operating data was recently collected from operating plants in support of a Pressurized Water Reactor Owners Group (PWROG) program. The data was provided to Westinghouse for analysis and interpretation. Current indications reveal that the existing Westinghouse methodology for determining the T_{cold} measurement uncertainty may not be conservative in all cases. The difference between the current uncertainty value and the new information constitutes a *deviation*, as defined in 10 CFR 21.3.

Evaluation Completion Date

Westinghouse expects to complete its 10 CFR Part 21 Evaluation on or before March 23, 2020.

Camille T. Zozula, Secretary
Westinghouse Safety Review Committee

cc: E. Lenning