

RAI Number	Reviewer	Question Summary	Full Text
6.2-6 Suppl. 1	Wagage H	Suppression pool equalization line credited but no design details provided	<p>DCD, Tier 2, Revision 3, Section 6.2.1.1.2 states that “[t]here is sufficient water volume in the suppression pool to provide adequate submergence over the top of the upper row of horizontal vents, as well as the passive containment cooling system (PCCS) return vent, when water level in reactor pressure vessel (RPV) reaches one meter above the top of active fuel and water is removed from the pool during post-LOCA equalization of pressure between RPV and the wetwell.”</p> <p>If the ESBWR design relies on the suppression pool equalization line to maintain one meter depth of water above active fuel in RPV, the suppression pool equalization line should be designed as such. In response to RAI 6.3-40, GENE stated that the suppression pool equalization line will not open for 72 hours and beyond for all design basis LOCA scenarios. DCD, Tier 2, Revision 3, Section 6.3.2.7.2 states that “[s]uppression pool equalization lines have an intake strainer to prevent the entry of debris material into the system that might be carried into the pool during a large break LOCA.” Please provide information on how the intake strainer is designed to prevent the entry of debris material into the system.</p>
6.2-11 Suppl. 1	Wagage H	Update DCD	The information provided in this response is necessary to support the basis for a reasonable assurance finding. Thus, please revise DCD, Tier 2 to include information provided in response to RAI 6.2-11.
6.2-13 Suppl. 1	Wagage H	Update DCD	The information provided in this response is necessary to support the basis for a reasonable assurance finding. Thus, please update DCD, Tier 2, Section 6.2.1.2.3 to include information provided in response to RAI 6.2-13.
6.2-14 Suppl. 1	Wagage H	Update DCD	The information provided in this response is necessary to support the basis for a reasonable assurance finding. Thus, please update DCD, Tier 2 to include information provided in response to RAI 6.2-14.
6.2-17 Suppl. 1	Wagage H	Update DCD	The information provided in this response is necessary to support the basis for a reasonable assurance finding. Thus, please update DCD, Tier 2 to include information provided in response to RAI 6.2-17.

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6.2-20 Suppl. 1	Wagage H	Reactor power measurement uncertainty	<p>The GENE response to RAI 6.2-20 provided in GENE letter MFN 06-159, dated June 5, 2006, states that “the reactor is operating at full power and the containment is filled with dry air at atmospheric pressure and 100 °C when the postulated pipe break occurs.”</p> <p>Confirm whether 2% measurement uncertainty for the reactor power was used and explain why the containment atmosphere was assumed to fill with air instead of nitrogen.</p>
6.2-29 Suppl. 1	Wagage H	TRACG validation and approved methods	<p>Concerning GE’s response to RAI 6.2-29, TRACG04 model description, please provide code validation information on TRACG evaluation of subcompartment pressurization and comparison to approved methods. This information is not provided in NEDE-32176P, “Licensing Topical Report: TRACG Model Description,” Revision 3, April 2006.</p>
6.2-30 Suppl. 1	Wagage H	Update DCD	<p>Please update DCD, Tier 2 to include information provided in response to RAI 6.2-30 that instantaneous guillotine break is postulated for feedwater and RWCU line breaks analyzed.</p>
6.2-53 Suppl. 1	Wagage H	Update response as a result of modeling changes and update DCD	<p>The GENE response to RAI 6.2-53 is for the feedwater line break accident, which was the limiting DBA then. Please update the response as follows:</p> <ol style="list-style-type: none"> (1) include the current limiting DBA of main steam line break accident, (2) reflect the modeling changes stated in GENE letter MFN 06-364 in response to RAI 6.2-59, and (3) include graphs for non-condensable gas pressure in wetwell versus time. <p>Update DCD Tier 2 to provide this information.</p>
6.2-59 Suppl. 1	Wagage H	Include response information in a licensing report	<p>In response to RAI 6.2-59, GENE provides input error corrections and model enhancement for the approved TRACG model. Please include this information in a topical report, for e.g., a supplement to NEDC-33083P-A, “TRACG Application for ESBWR,” March 2005.</p>

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6.2-60 Suppl. 1	Wagage H	Locations of breaks considered and update to DCD	<p>In response to RAI 6.2-60, GENE updated DC, Tier 2, Revision 3, Section 6.2.1.3 to state that “[c]ontainment design basis calculations are performed for a spectrum of possible pipe break sizes and locations to assure that the worst case has been identified.” In response to part (B) of RAI 6.2-60, GENE stated the TRACG results regarding break sizes will be incorporated into the DCD.</p> <p>A. Explain whether you considered different locations of breaks in addition to the difference elevations of breaks as discussed in response to part (c) of RAI 6.2-60.</p> <p>B. Incorporate the response to part (c) of RAI 6.2-60 into the DCD.</p>
6.2-61 Part 1 Suppl. 2	Wagage H	Break area mismatch	<p>DCD, Tier 2, Revision 3, Table 6.2-5 lists the break area for MSLB and FWLB as 0.09832 m² and 0.07420 m², and a footnote to this table states that for FWLB, “the total break area from the turbine building side is limited at the two parallel [venturi] sections, with flow area of 0.04997 m² each. However, the total area of the two parallel venturi of 0.09994 m² does not match with the FWLB area of 0.07420 m² used. Please explain this discrepancy.</p> <p>In response to RAI 6.2-61_Part 1, GENE lists the effective total break area for MSLB as 0.9832 m² for both RPV and BOP sides. This value is 31% of the pipe cross sectional area of 0.3167 m², which was calculated using the pipe internal diameter of 0.63501 m. Please explain the difference.</p> <p>Please update the DCD to include the response.</p>
6.2-63 Suppl. 1	Wagage H	Update DCD	<p>The information provided in this response is necessary to support the basis for a reasonable assurance finding. Thus, please update DCD Tier 2 to include information provided in response to RAI 6.2-63.</p>
6.2-73 Suppl. 1	Wagage H	Update DCD	<p>Please update DCD Tier 2 by justifying why “-2 sigma” values was used in the footnote on “Crit Flow” of Table 6.2-8, as provided in response to RAI 6.2-73.</p>
6.2-99 Suppl. 1	Wagage H	Update DCD	<p>The information provided in this response is necessary to support the basis for a reasonable assurance finding. Thus, please update DCD Tier 2 to include information provided in response to RAI 6.2-99.</p>

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6.2-150 Suppl. 2	Wagage H	Update DCD	<p>In response to RAI 6.2-150 Supplement 1, MFN 07-009 Supplement 1, dated May 21, 2007, GE proposed a revision to the DCD. In addition to the proposed revision, please include the following statement to the DCD. {This statement was provided by GE provided in the original RAI response, MFN 07-009, dated April 4, 2007,}</p> <p>“For the feedwater line and main steam line break scenarios, the analyses assume that the manual drywell spray injection is initiated at the worst possible time, which is the point in time when there is a low air content in the drywell relative to the wetwell.”</p>
6.2-151 Suppl. 1	Wagage H	Update DCD	<p>The information provided in this response is necessary to support the basis for a reasonable assurance finding. Thus, please update DCD Tier 2 Section 6.2.1.3 to include information provided in response to RAI 6.2-151.</p>
6.3-42 Suppl. 1	Wagage H	Update DCD	<p>The information provided in this response is necessary to support the basis for a reasonable assurance finding. Thus, please update DCD Tier 2 to include information provided in response to RAI 6.3-42.</p>