

Constellation Energy

R.E. Ginna Nuclear Power Plant

August 31, 2005

U. S. Nuclear Regulatory Commission
Washington, DC 20555

ATTENTION: Document Control Desk

SUBJECT: R.E. Ginna Nuclear Power Plant
Docket No. 50-244

Supplemental Response to NRC Generic Letter 2003-01, Control Room Habitability

- REFERENCES:**
1. NRC Generic Letter (GL) 2003-01, Control Room Habitability
 2. Letter to Mr. Robert L. Clark (NRC) from Robert C. Mecredy (Ginna), Sixty Day Response to Generic Letter (GL) 2003-01, Control Room Habitability, dated August 4, 2003.
 3. Letter to Mary G. Korsnick (Ginna) from Donna Skay (NRC), R.E. Ginna Nuclear Power Plant – Amendment re: Modification of the Control Room Emergency Air Treatment System and Change to Dose Calculation Methodology to Alternate Source Term (TAC No. MB91230), dated February 25, 2005.

On June 12, 2003, the NRC issued Reference 1 which stated in part, *“If an addressee cannot provide the information or cannot meet the requested completion date, the addressee should submit a written response indicating this within 60 days of the date of this generic letter. The response should address any alternative course of action the addressee proposes to take, including the basis for the acceptability of the proposed alternative course of action and the schedule for completing the alternative course of action.”* Based on ongoing modifications to the Control Room Emergency Air Treatment System (CREATS), and associated Technical Specification amendment requests, Ginna elected to provide a sixty (60) day response (Reference 2). Subsequent to that, construction has significantly advanced (remaining construction is electrical in nature), Ginna has measured control room in-leakage for the new configuration, and the NRC has approved the CREATS Technical Specification amendment (Reference 3), providing additional information.

Reference 1 requested the following information (italics). Also included are Ginna’s responses.

1. *Provide confirmation that your facility’s control room meets the applicable habitability regulatory requirements (e.g., GDC 1, 3, 4, 5, and 19) and that the CRHSs [Control Room Habitability Systems] are designed, constructed, configured, operated, and maintained in accordance with the facility’s design and licensing bases. Emphasis should be placed on confirming:*
 - (a) *That the most limiting unfiltered in-leakage into your CRE [Control Room Envelope] (and the filtered in-leakage if applicable) is no more than the value assumed in your*

1001380

A102

design basis radiological analyses for control room habitability. Describe how and when you performed the analyses, tests, and measurements for this confirmation.

Ginna's control room emergency zone (CREZ) assumed in-leakage for the design basis radiological analysis per the recently approved amendment (Reference 3) is 300 cubic feet per minute (CFM). Ginna is a neutral pressure control room with isolation and recirculation in the emergency mode. In February 2005, Ginna performed an in-leakage test of the control room boundary in the new as-analyzed configuration. The test was performed using ASTM E741 methodology, with the following results.

Test Configuration CREZ Isolated	Results
CREATS Trains A&B operating	4 +/- 9 CFM
CREATS Train A operating	15 +/- 6 CFM
CREATS Train B operating	-1 +/- 8 CFM

As can be seen from these results, Ginna's measured in-leakage provides significant margin to that assumed in the dose analysis.

- (b) *That the most limiting unfiltered in-leakage into your CRE is incorporated into your hazardous chemical assessments. This in-leakage may differ from the value assumed in your design basis radiological analyses. Also, confirm that the reactor control capability is maintained from either the control room or the alternate shutdown panel in the event of smoke*

The Ginna Control Room Toxic Hazards Analysis indicates that the limiting chemical (chlorine) concentration limit per Regulatory Guide 1.78, "Evaluating the Habitability of a Nuclear Power Plant Control Room During a Postulated Hazardous Chemical Release, Revision 1," would not be reached until the in-leakage exceeded 500 CFM. Therefore, given the in-leakage reported in section 1(a) above, there is significant margin in the toxic chemical analysis.

Ginna has performed a smoke infiltration assessment Per NEI 99-03, Revision 0, Appendix E, as Amended by Regulatory Guide 1.196, Section 2.6. The assessment indicated that the operator has the capability to safely shut down the plant from either the control room or the remote shutdown locations during a single credible smoke event originating from either inside or outside the control room.

- (c) *That your technical specifications verify the integrity of the CRE, and the assumed in-leakage rates of potentially contaminated air. If you currently have a ΔP surveillance requirement to demonstrate CRE integrity, provide the basis for your conclusion that it remains adequate to demonstrate CRE integrity in light of the ASTM E741 testing results. If you conclude that your ΔP surveillance requirement is no longer adequate, provide a schedule for: 1) revising the surveillance requirement in your technical specification to reference an acceptable surveillance methodology (e.g., ASTM E741), and 2) making any necessary modifications to your CRE so that compliance with your new surveillance requirement can be demonstrated.*
-

GINNA's Technical Specifications do not presently contain surveillance requirements to verify assumed in-leakage.

If your facility does not currently have a technical specification surveillance requirement for your CRE integrity, explain how and at what frequency you confirm your CRE integrity and why this is adequate to demonstrate CRE integrity.

GINNA recently verified the control room in-leakage is less than that assumed in the various analyses, as stated in 1(a) above. The industry and NRC are currently working toward resolution on Technical Specification Task Force (TSTF) 448, a change to NUREG-1431 Standard Technical Specifications, which will answer these concerns. GINNA will continue to work with the NRC and industry in this regard. When appropriate regulatory guidance is available, GINNA will consider submitting a Technical Specification amendment request based on that guidance.

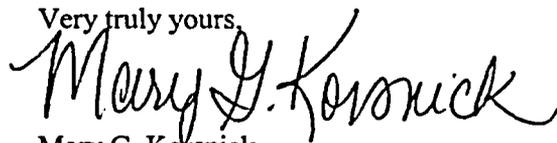
2. *If you currently use compensatory measures to demonstrate control room habitability, describe the compensatory measures at your facility and the corrective actions needed to retire these compensatory measures.*

GINNA does not currently credit compensatory measures to demonstrate control room habitability for normal operation.

3. *If you believe that your facility is not required to meet either the GDC, the draft GDC, or the "Principal Design Criteria" regarding control room habitability, in addition to responding to 1 and 2 above, provide documentation (e.g., Preliminary Safety Analysis Report, Final Safety Analysis Report sections, or correspondence) of the basis for this conclusion and identify your actual requirements.*

N/A

Should you have questions regarding the information in this submittal, please contact Mr. George Wrobel at 585.771.3535 or george.wrobel@constellation.com.

Very truly yours,

Mary G. Korsnick

cc: S. J. Collins, NRC
P. D. Milano, NRC

Resident Inspector, NRC (GINNA)
