NUCLEAR ENERGY INSTITUTE

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5/9/02
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(2)

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Chief, Rules and Directives Branch
U.S. Nuclear Regulatory Commission
Mail Stop T6-D59
Washington, DC 20555-0001

SUBJECT: NEI Comments on Draft Generic Letter 2002-XX, *Control Room Habitability* (67 *Fed. Reg.* 31386)

PROJECT NUMBER: 689

On behalf of the commercial nuclear industry, the Nuclear Energy Institute[1] submits the enclosed comments on Draft Generic Letter 2002-XX, *Control Room Habitability*.

The NRC staff has prepared four related draft regulatory guides (DG-1111, 1113, 1114, and 1115), this draft generic letter and conducted four regional meetings to address management of control room habitability issues. We have commented on the four draft regulatory guides, provided feedback on the regional meetings and now provide our comments on the draft generic letter.

In an August 19, 2002, letter to Mr. Mark Reinhart of the NRC, we stated our intention to revise the guidance contained in NEI 99-03, *Control Room Habitability Assessment Guidance*. Our letter defined the primary changes that we plan to incorporate in NEI 99-03 and recommended not issuing DG-1114 and DG-1115. Furthermore, we concluded that the technical content of DG-1111 and DG-1113 may be useful to licensees in assessing their management of control room habitability issues. The question of whether the final published versions of DG-1111 and DG-1113 are referenced in our revised guidance or the DGs technical

[1] NEI is the organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all utilities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, materials licensees, and other organizations and individuals involved in the nuclear energy industry.

E-RIDS=ADM-03
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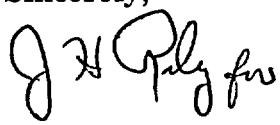
Should the generic letter be issued, we recommend that it reference the revised NEI 99-03 document, rather than DG-1114, as the acceptable method for managing control room habitability. Industry use of the NEI 99-03 revision will minimize the confusion that implementation of four additional regulatory guides would cause.

If you have questions, please contact me or Kurt Cozens at (202) 739-8085, koc@nei.org.

Sincerely,



Alexander Marion

KOC/maa
Enclosure

c: Ms. Susan Black, U.S. Nuclear Regulatory Commission
Mr. W. Mark Blumberg, U. S. Nuclear Regulatory Commission
Mr. John J. Hayes, Jr., U. S. Nuclear Regulatory Commission
Mr. Gary M. Holahan, U. S. Nuclear Regulatory Commission
Mr. Steve F. LaVie, U. S. Nuclear Regulatory Commission
Mr. F. Mark Reinhart, U.S. Nuclear Regulatory Commission
Dr. Brian Sheron, U.S. Nuclear Regulatory Commission

ENCLOSURE

COMMENTS ON DRAFT CRH GENERIC LETTER

COMMENT NUMBER	FED. REG. PAGE	FED. REG. COLUMN	PARA. # OR TITLE	COMMENT	PROPOSED REVISION
1.	31386	3	Background 2nd paragraph	The draft generic letter states: "Unlike the ΔP test, the E741 test measures the total CRE inleakage from all sources. It is well suited for assessing the integrity of positive or neutral-pressure CREs." Several concerns exist with these statements. They are that ASTM E741: • Does not measure inleakage. Inleakage is inferred through a variety of indirect measurements and analyzes. • Determines total inleakage and does not define the method for inferring the spilt between filtered and unfiltered inleakage. • Does not provide guidance on defining the uncertainty associated with the inferred values of filtered and unfiltered inleakage. • Does not provide guidance to assure that proper test configurations, mixing of tracer gas, or which form of the test should be performed in a given application. • Fails to define how uncertainties should be used in the assessments of control room habitability. For a pressurized control room the uncertainty can be significantly larger than the inferred mean inleakage. • Does not address application of the test	Revise the draft generic letter to address the bulleted comment items and add an explanation for concluding that the single volume ASTM E741 test method is appropriate for the complex volume of a control room.

				results to meteorological conditions that differ from those occurring at the time of the actual testing. • Does not reflect that verbatim compliance is not possible and has not been achieved in control room tests to date.	
2.	31386	1	Background, 1st paragraph	The NRC states, "The CRE encompasses the control room and ..." The term "control room envelope" is not a term used in previous regulation, and is inconsistently used in Draft Regulatory Guides DG-1114 and DG-1115. The CRE term has the potential to infer that other areas of the plant are included under GDC 19, which were not previously discussed. GDC 19 refers explicitly to the control room and the SRP expands this area definition but, restricts it based on occupancy.	Revise the text of the draft generic letter to clarify that the CRE encompasses the control room, other rooms, and areas within the confines of the control room boundary. The control room boundary is the physical surfaces (e.g., ducts, dampers, floors, ceilings, walls, doors) that separate the CRE from other plant areas.
3.	31386	3	Background - last paragraph	ASTM E741 testing alone should not be identified as having helped to identify deficiencies. The ΔP surveillance tests have also helped to identify potential system deficiencies. ASTM E741 testing does not identify the exact source of inleakage. In order to identify the actual sources of inleakage, a component test might be required. Furthermore, many of the examples that affect CRE and CREHS performance could be areas of exfiltration for positive pressure CREs that would more likely be identified as result of adverse DP surveillance results rather that E741 testing. As written the paragraph overstates E741 testing benefits. Revise the paragraph to delete reference to E741 testing.	Revise the first sentence of the paragraph to read as: "Testing has helped to identify a spectrum of CREHS deficiencies that affect system design, construction, and quality; system boundary construction and integrity; and technical specification surveillance requirements."
4.	31386	2	Background	The text states that: "Plants with a positive-pressure CRE have generally implemented testing programs.	Revise the sentences to read: "Most plants with a positive-pressure CRE have a technical specification surveillance to verify

				These programs verify those ventilation systems serving the CRE can maintain the CRE at a positive differential pressure relative to adjacent areas." These are surveillances, not tests or testing programs, unless the NRC staff has authorized the licensee to use an alternative approach. NRC approved alternatives include pressurization flow rates, ΔP across filtration banks, etc. The text should be revised to describe what exists at plants for determining positive pressure.	that the ventilation systems serving the CRE can maintain the CR at a positive differential pressure relative to adjacent spaces."
5.	31386	3	Background, 3rd paragraph	The discussion of the ΔP surveillance is not characterized accurately. The paragraph implies the surveillance is deficient. This characterization is incorrect. The surveillance correctly determines the ability of the pressurization system to pressurize the control room envelope. This assures that inleakage is not possible across major portions of the control room boundary. However, the assertion that the surveillance cannot directly measure inleakage is correct. But, it is not intended to directly measure inleakage. The second assertion that the surveillance cannot determine whether there are unrecognized sources of pressurization is correct.	Revise the text to accurately describe what the ΔP surveillance does and does not accomplish. Delete the first three sentences of the paragraph and change it to read: "The ΔP surveillance only ensures that inleakage does not exist across major portions of the control room boundary." Change fourth sentence to read: The ΔP surveillance cannot determine ...."
6.	31387	2	Discussion, 1st paragraph	The final sentence states: "It is, therefore, imperative to the health and safety of the public that operators are confident of their safety in the CRE at all times." This statement is presented as an opinion. Industry is unaware of any research that demonstrates instances where an Operator perception of his safety based on CRH would affect his confidence in his abilities to perform his duties.	Revise the first paragraph of the discussion section to read: "The NRC is concerned that some licensees have not maintained adequate configuration control over their CREs and have not corrected identified design and performance deficiencies. Configuration control must be maintained to ensure that operators can function in a habitable environment."

				Statements of opinion should not be included in regulatory documents.	
7.	31387	3	Discussion, 2nd full Para	The draft GL states: "Addressees are encouraged, but not required, to work closely with industry groups on the coordination of their responses. Coordinating the responses is more efficient, and public confidence may ensure from a uniform approach to demonstrating compliance with the design bases of their CREs." There is no basis for the statement that public confidence will ensue if the licensees coordinate their responses to this draft GL. Furthermore, the phrase addressing public confidence does not add substance to the draft generic letter.	Rewrite the sentence to read: "Coordinating the responses is more efficient with a uniform approach to demonstrating compliance with the design bases of their CREs."
8.	31388	1	Discussion	Editorial Comment The last paragraph before the Requested Information section states: "Licensees unable to confirm item 1 under the Required Information section may also use DG-1114 to develop and implement corrective actions The text should be revised to indicate that it is the "Requested Information"	Revise "Required" to "Requested".
9.	31388	1	Required Information Paragraph 1(b)	This paragraph states: "That the most limiting unfiltered inleakage into your CRE (and filtered inleakage if applicable) is incorporated into your fire and hazardous chemical assessment, and CRE integrity preserves reactor control capability or alternate shutdown panel in the event of a fire." This infers that the same limiting unfiltered inleakage values should be used to assess all events. This may not be true, since system	Clarify the intent of this paragraph so that proper infiltration rates may be used with each type of assessment. Revise the paragraph to read: "(b) That the most limiting inleakage into your CRE is incorporated into your hazardous chemical assessments. This inleakage may differ from the value assumed in your design basis radiological analyses. Also confirm that the reactor control capability is preserved from either the Control Room or the alternate

				lineups may differ for radiological, fire and hazardous chemical events. Furthermore, Draft Regulatory Guide DG-1114, Regulatory Position 2.6, states, "No regulatory limit exists on the amount of smoke allowed in the control room. Therefore, the plants ability to manage smoke infiltration is assessed qualitatively." This Regulatory Position seems to imply that the fire assessment would not need to specify a specific inleakage value.	shutdown panel in the event of a fire."
10.	31388	1	Required Information Paragraph 1(c)	Paragraph 1.(c) has extraneous text addressing ASTM E741 tracer gas testing as it relates to CRE integrity. The request should focus solely on how and on what frequency CRE integrity is confirmed.	Revise Paragraph 1.(c) to read as: "That if your facility has a technical specification surveillance requirement for CRE integrity, it remains adequate. If your facility does not currently have a technical specification surveillance requirement for CRE integrity, explain how and on what frequency you confirm your CRE integrity."
11.	31389	2	Paperwork Reduction Act Statement	Question 1a Is the proposed information collection necessary for the proper performance of the functions of the NRC?	Response 1a No. The staff could review license amendment requests, past SERs, UFSAR, and review inspection reports. The staff can always initiate an inspection to validate the information contained in the above documents.
12.	31389	2	Paperwork Reduction Act Statement	Question 1b Will the information have practical use?	Response 1b Not always, but for specific plants it may.
13.	31389	2	Paperwork Reduction Act Statement	Question 2 Is the burden estimate accurate?	Response 2 No. The NEI Control Room Habitability Task Force estimated, based on the utility member's experience that it will require 1000 hours to respond to an issued GL. This would be greater for a site with multiple units.
14.	31389	2	Paperwork Reduction Act Statement	Question 3 Can the quality, utility, or clarity of the information to be collected be improved?	Response 3 Yes. See submitted comments. Use of the revised NEI 99-03 would improve clarity of the guidance.
15.	31389	2	Paperwork Reduction Act Statement	Question 4a How can the burden of the information collection be minimized?	Response 4a More interaction with industry groups (NEI) prior to issuing the documents could reduce the

					burden of collecting the requested information. In addition the burden could be reduced if the proposed GL relied on existing data and processes. (See Response 1a).
16.	31389	2	Paperwork Reduction Act Statement	Question 4b Can automated collection techniques be used?	Response 4b We are unable to identify an automated collection process.