

Response to Public Comments on Draft Regulatory Guide (DG)-1352 Instrument Sensing Lines Proposed Revision 2 of Regulatory Guide (RG) 1.151

On 02/08/2019, the NRC published a notice in the *Federal Register* (84 FR 2934) that Draft Regulatory Guide, DG-1352 (Proposed Revision 2 of RG 1.151), was available for public comment. The public comment period ended on 04/09/2019. The NRC received comments from the organizations listed below. The NRC has combined the comments and NRC staff responses in the following table.

Comments were received from the following:

Ronald LaVera
NRO/DLSE/RPAC
US NRC
11555 Rockville Pike
Rockville, MD 20852
ADAMS Accession No. ML 19072A243

Southern Nuclear
3535 Colonnade Parkway
Birmingham, AL 35243
ADAMS Accession No. ML 19102A240

Anonymous
ADAMS Accession No. ML 19099A192

Commenter	Section of DG-1352	Specific Comments	NRC Resolution
Ronald LaVera	Section B/Section C	<p>The proposed revision to RG 1.151 omitted 2 key criteria from the Regulatory Positions of the 2010 version of the RG 1.151.</p> <p>IEEE Std 622-1987 regarding heat tracing. ANSI/ISA-67.02.01-1999 regarding non-condensable gases.</p> <p>While these documents are discussed to some limited degree in section B of the proposed revision, unless there is some other RG that you can point to within this RG that endorses those 2 Regulatory Positions, the references to those documents should not be deleted.</p>	<p>The staff agreed that IEEE Std 622-1987 should be in Section C instead of Section B. The staff does not agree that ANSI/ISA-67.02.01-1999 should be in Section C.</p> <p>The staff met with Mr. LaVera and discussed his comments and reached agreement. IEEE Std 622-1987 is important enough to add an item in Section C to clarify NRC's position. The added statement in Section C is as follows: "Instrument sensing lines should be designed and maintained to ensure that the fluids or gases in the lines remain within the temperature ranges necessary to perform their intended functions. Should heat tracing be used, the staff considers IEEE Std. 622-1987 to be acceptable for the design and installation of these systems." The staff explained that the non-condensable gases are addressed in ANSI/ISA-67.02.01-2014,</p>

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			<p>therefore, there is no need to endorse the older ANSI/ISA-67.02.01-1999 and Mr. LaVera agreed.</p> <p>For these reasons, the staff decided to add a position to clarify IEEE Std. 622-1987 in Section C and modified Section B which states “This revision (Revision 2) of RG 1.151 clarifies the previous Regulatory Position C.3 that was in Revision 1 regarding the acceptability and use of ANSI/IEEE Std. 622-1987.”</p>
Ronald LaVera	Section B	In addition, the discussion about Heat Tracing in Section B does not sufficiently address the need for heat trace to prevent the deposition of radionuclides of interest on the sampling line surfaces.	<p>The staff agreed with the comment and made two changes to the DG.</p> <p>The first change is to add a position to clarify IEEE Std. 622-1987 in Section C. The second change is to modify Section B which states “This revision (Revision 2) of RG 1.151 clarifies the previous Regulatory Position C.3 that was in Revision 1 regarding the acceptability and use of ANSI/IEEE Std. 622-1987.”</p>
Ronald LaVera	Section C	RG 4.16, ANSI N13.1 should be mentioned in the regulatory positions section. RG 4.16, ANSI N13.1 and 10 CFR 20 Subpart F Surveys and Monitoring should be discussed in Section B.	<p>The staff disagreed with the comment.</p> <p>During the meeting with Mr. LaVera, he agreed with the staff’s position that these two documents are unrelated to the scope of the DG, which is intended as guidance for the design and installation of instrument sensing lines (including sample lines) in nuclear power plants.</p> <p>For this reason, no change to the DG is made.</p>
Ronald LaVera	Section C	The regulatory positions section should include references to GDC 60 and GDC 64.	<p>The staff disagreed with the comment.</p> <p>GDC 60 discusses “control of release of radioactive materials to the environment” and GDC 64 discusses “monitoring radioactivity release”. These are topics covered in RG 4.16 but are not within the scope of RG</p>

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			<p>1.151, which is intended as guidance for the design and installation of instrument sensing lines (including sample lines) in nuclear power plants. During the meeting with Mr. LaVera, he agreed with the staff's position.</p> <p>For this reason, no change to the DG was made.</p>
Ronald LaVera	General	<p>RG 4.16, "Monitoring and Reporting Radioactivity in Releases of Radioactive Materials in Liquid and Gaseous Effluents from Nuclear Fuel Processing and Fabrication Plants and Uranium Hexafluoride Production Plants," states, "The NRC recognizes the guidance developed in American National Standards Institute (ANSI)/Health Physics Society (HPS) N13.1-1999, "Sampling and Monitoring Releases of Airborne Radioactive Substances from the Stacks and Ducts of Nuclear Facilities.""</p> <p>ANSI N13.1 states, "If the contaminants are in the form of condensible vapors or reactive gases, long transport lines and large temperature changes in the sample or the transport line shall either be avoided or measures shall be taken to minimize potential loss of sample. Heat tracing of the transport line is readily accomplished, but conditioning of the sample may be necessary, such as a deliberate temperature change and purposeful dilution with a carrier gas."</p> <p>Conformance with this guidance is necessary in order for licensees to demonstrate compliance with 10 CFR 20 Subpart F Surveys and Monitoring.</p>	<p>The staff disagreed with the comment.</p> <p>The staff reviewed 10 CFR 20 Subpart F, "Surveys and Monitoring," and found no direct impact to RG 1.151. During the meeting with Mr. LaVera, he agreed with the staff's position.</p> <p>For this reason, no change to the DG was made.</p>
Anonymous	General	"Good"	The staff made no changes to the DG in regards to this comment.
Southern Nuclear	General	Typically, ISA standards have an "S" at the beginning of the number to differentiate it as a standard. Thus, it is	The staff disagreed with the comment.

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		<p>expected that the ANSI/ISA standard would be S67.02.01-2014 versus 67.02.01-2014.</p>	<p>The staff checked the standard and the standard number is correct.</p> <p>For this reason, no change to the DG was made.</p>
Southern Nuclear	Section B	<p>GDC 2, "Design Basis for Protection Against Natural Phenomena" was not included in Revision 1 of RG 1.151. Because the "Reason for Revision" does not address the inclusion of GDC 2, is not clear from the current context as to why the staff chose to add it in this revision.</p>	<p>The staff agreed with the comment.</p> <p>In Section B, a statement “This revision of RG 1.151 (Revision 2) also includes a reference to GDC 2 as an applicable regulation because the fluids or gases in sensing lines are required to remain within the temperature ranges necessary to perform their intended functions” was added.</p>
Southern Nuclear	Section B	<p>In revision 1 of RG 1.151, a later version of IEEE Std. 279 (1971) is referenced. It is not clear why the staff chose to refer to an earlier version of IEEE Std. 279 (1968) instead of the later version that was previously referenced in revision 1 of RG 1.151 .</p>	<p>The staff disagreed with the comment.</p> <p>Section B of RG 1.151 (Revision 2) quotes information and standards directly from the requirements specified in 10 CFR 50.55 a(h) which includes references to both IEEE Std 279-1968, “Proposed IEEE Criteria for Nuclear Power Plant Protection Systems” and IEEE Std 279-1971, “Criteria for Protection Systems for Nuclear Power Generating Stations,” accordingly. For this reason, no changes to the DG were made.</p>