Garry, Steven

From: ANDERSON, Ellen <exa@nei.org>
Sent: Wednesday, August 07, 2019 10:12 AM
To: Garry, Steven
Cc: SCHLUETER, Janet; Hsueh, Kevin
Subject: [External_Sender] Regulatory Guides 8.34 & 8.38 - Industry Comments for NRC Consideration

Steve,
Industry respectfully requests NRC to consider the following comments when performing the next review/revision to Regulatory Guides 8.34 & 8.38. Please note that these comments come from industry's experience using these guidance documents. We understand that stakeholders will have the opportunity to comment on the draft revisions to these guidance documents when they are made available to the public. Industry's comments are as follows:

Regulatory Guide 8.34 "Monitoring"

- Incorporate information contained in other NRC guidance documents (e.g. HPPOS, Part 20 Q&A's, etc.)
- Additional guidance on what NRC expects in licensees' prospective evaluations

Regulatory Guide 8.38 "Control of High & Very High Radiation Areas" - As stated in the title of the document and discussed in the introduction section, this Regulatory Guide is for the control of High Radiation Areas and Very High Radiation areas in Nuclear Power Plants. To that end, these comments are focused on that aspect of the document relative to industry implementation.

- **Background**

Because of the controls and processes established at Nuclear Power Plants, the following scheme has been implemented at all Nuclear Power Plants in the United States:

High Radiation Area (HRA) – Any area, accessible to individuals, in which radiation levels from radiation sources external to the body could result in an individual receiving a dose equivalent in excess of 0.1 rem in 1 hour at 30 centimeters from the radiation source or 30 centimeters from any surface that the radiation penetrates.

Locked High Radiation Areas (LHRA) – Any area accessible to individuals in which deep dose equivalent rates are greater than or equal to 1 rem per hour (but less than 500 rads in one hour at 1 meter) 30 centimeters from the source of radiation or from any surface that the radiation penetrates

Very High Radiation Area (VHRA) - An area, accessible to individuals, in which radiation levels from radiation sources external to the body could result in an individual receiving an absorbed dose in excess of 500 rads (5 grays) in 1 hour at 1 meter from a radiation source or 1 meter from any surface that the radiation penetrates

These controls have been implemented by either Technical Specifications or in two instances, procedures approved by the Nuclear Regulatory Commission. This forms the basis for the discussion and the concerns that exist in the current Regulatory Guide.

- **Comments**

Comment #1

- Definition and terminology in the Existing Regulatory Guide is leading to confusion due to the use of only HRAs and VHRAs. We recognize that two sites do not have the alternate controls

specified in Tech Specs; this is described later in the document. However, these sites implement the posting scheme as described above in the Background section.

- Proposed solution: Acknowledge the current posting scheme used in Nuclear Power Plants and in Improved Technical Specifications.

Comment #2

- As discussed in Section 1.5, Physical Controls, the definition and discussion of Unauthorized Access needs to be improved, specifically the statement highlighted in red below. The industry views this statement as misleading regarding reasonable and unauthorized. This is specifically true when climbing walls and ladders as created by installed plant equipment and/or individual risking physical injury, up to including potential lethal bodily harm. This behavior is contrary to all safety guidance and training provided to individuals accessing the facilities. These situations continue to be a significant issue within the industry and have resulted in several violations. The regulatory guide should be clarified to review this type of scenario. As such, industry believes that if an individual would intentionally risk physical injury, than this should be considered beyond the definition of reasonable.

  - Current Document Wording:
    1.5 Physical Controls
    Physical barriers (such as chain link fencing or fabricated walls) may be used to prevent unauthorized personnel access to high and very high radiation areas. Barriers used to control access to high radiation areas should provide ***reasonable*** *assurance that they secure the area against* ***unauthorized*** *access and cannot be easily circumvented. (That is, an individual who incorrectly assumes, for whatever reason, that he or she is authorized to enter the area, would be unlikely to disregard and/or circumvent the barrier.)*

Comment #3

- The statement regarding adequate height of a barrier. With reference to the metric system, the actual measure of 6 feet has been questioned. Specifically, by definition 2 meters is 78.7 inches while 6 feet is actually 72 inches. The current wording in the regulatory guide indicates approximately 6 feet. The current practice since the 1990's has been to use a 6-foot barrier. An issue that has been questioned many times is "what is approximately 6 feet?" There are several examples of where violations have been issued for a 70 inch-barrier or the utility was required to spend resources to increase a barrier to greater than 72 inches. The industry view is that under the definition of "approximately" a 70- inch barrier would be adequate under the definition of reasonable assurance as discussed above.

  - Current Document Wording:
    A fence that is 2 meters (approximately 6 ft) high would normally be adequate to control access to a high radiation area at a nuclear power plant.

Comment #4

- There are inconsistencies in the wording between existing Tech Specs, the Regulatory Guide and Improved Tech Specs. Industry suggests realigning the wording and moving to an appendix of the Regulatory Guide.

Comment #5

- Posting and controls of areas such as a Drywell and Containment. The industry position is that controlling access to these areas at the access points provides excellent controls for access to these areas. However, some RPMs do not believe that this meets the intent of the Regulatory

Guide. This section of the Regulatory Guide needs to be revised to account for these two specific areas and that the control of these areas at the access point is acceptable relative to the regulatory guidance. The words leading to confusion are highlighted in the existing wording below.

- Current Document Wording:

> *Controls (e.g., locked doors, access control, and posting) for high radiation areas may be established at locations beyond the immediate boundaries of the high radiation areas to take advantage of natural or existing barriers. The use of one locked door, or one control point where positive control over personnel entry is exercised, to establish control over multiple high radiation areas is acceptable, provided that the following conditions are met:*
> *(1) The individual high radiation areas are barricaded and posted separately to identify the actual areas of concern.[3]*
> *(2) Control points are established sufficiently close to the high radiation areas that adequate supervision of access to the areas can be ensured.*
> *(3) The required protective measures and other requirements for entering the high radiation areas (e.g., dosimetry, monitoring) are enforced at the control point.*
>
> *[3] Relatively small areas with several discrete high radiation areas (i.e., near several valves or components) do not require separate barricades and posting for each if the whole room (or area) is considered a high radiation area.*
> .

We hope that you find these industry comments helpful as you revise these two regulatory guidance documents. I would be happy to discuss these with you should you desire to do so.

Thank you!

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