Comments in response to Request for Information on Potential Impacts of Draft REGDOC-2.11.2

by Dr. Helmy Ragheb, PhD, P.Eng. Safety Probe International

Please find in the attachment the feedback of my consulting company Safety Probe International (SPI), to your request for information on the impacts of the Draft REGDOC 2.11.2.

A marked up copy of the Draft REGDOC 2.11.2 is also attached which includes proposed changes by SPI.

Kind Regards,

Helmy Ragheb October 10, 2019

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Attachment

Background:

In a multiunit nuclear power station, deferred decommissioning may involve the preparation for decommissioning of one or more units while the remaining neighbouring units continue to operate. Since multiunit plants are supported by common services and their containments could share a vacuum building, the challenge here is to address safety issues that may arise from severing units to be decommissioned from these common services.

In reaching the end state in this case, operating experience showed that the containment boundary and reactor equipments in the units prepared for deferred decommissioning undergo significant changes. The reactor core is defueled, coolant is drained from the heat transport system and the unit containment boundary moves to its Reactor Building Pressure Relief Duct bulkhead. Equipment may be removed, and the remaining ones are drained, disconnected or isolated. Other system components such as the Reactor Building ventilation system are to be de-energized and abandoned in place, but still need to be available for manual operation including the ventilation fans and main filter. Other design changes may also include severing common services and moving alarms and annunciation to panels of operating units.

Comments and changes proposed by SPI

Comments by SPI presented here are aimed at clarifying certain sections in the Draft REGDOC 2.11.2 to adequately address one of the decommissioning strategies where portions of the nuclear facility are selected for "deferred decommissioning" while the remaining part of the facility continues to operate under an operating license. This strategy is described in section 4 b) as "storage with surveillance".

Proposed Changes in Section 4 b)

This section should make it clear that portions of the nuclear facility to be selected for "storage with surveillance" could possibly be connected physically (such as the situation described in the Background) and not necessarily separate buildings within the same facility. We propose changing the wording of section 4 b) to read:

"b) deferred decommissioning – to place the facility in a period of storage with surveillance followed by decontamination and dismantlement, or to conduct activities directed at placing certain independent or relatively-independent buildings or facilities in a safe, secure interim end state, followed by a period of storage with surveillance, and ultimately decontamination and dismantlement"

Proposed Changes in Other Sections

Proposed changes are marked up in red in the attached PDF copy of the Draft REGDOC 2.11.2