

SLR Document Changes: Manholes with water level monitoring and alarms

Overview of purpose of change: Add inspection of manholes with water level monitoring and alarms that result in consistent, subsequent pump out of accumulated water prior to wetting or submergence of cable at least once every five years. Also, add inspection of manholes following event-driven occurrences such as heavy rain, rapid thawing of ice and snow, or flooding when water level monitoring indicates water is accumulating. Based on the review of a previous SLRA, manholes with water level monitoring and alarms are self-monitoring, and therefore do not require annual inspection for water accumulation.

Basis Document Input: Revise NUREG-2221 as follows.

Add the following text to Table 2-31, XI.E3A/B/C under “preventive actions” program element:

Inspect manholes with water level monitoring and alarms that result in consistent and subsequent pump out of accumulated water prior to wetting or submergence of cables, at least once every five years, as support by plant operating experience. Inspect manholes with water level monitoring and alarms following event-driven occurrences such as heavy rain, rapid thawing of ice and snow, or flooding when the water monitoring indicates water is accumulating.

Technical basis for change: The staff finds that there is no need to perform annual inspections for manholes that have the installed water level monitoring and alarm system if there are provisions for a timely response to level alarms. Manholes with water level monitoring and alarms, and timely pump out, prevent water accumulation from wetting or submerging cables. There is no adverse industry operating experience for the level monitoring equipment. Therefore, the staff finds that inspecting manholes with installed water level monitoring and alarms every five years is acceptable. Additionally, because of the level transmitters’ continuous monitoring and alarms, there is no need for event-driven inspections if there is no water accumulation. Therefore, the staff finds that inspecting manholes with water level monitoring and alarms following event-driven occurrences, only when the water monitoring indicates water is accumulating, acceptable.

References.

[1] Peach Bottom Atomic Power Station Units 2&3 Subsequent License Renewal Application, July 2018 (ML# 18193A773)

[2] Safety Evaluation Report Related to the Subsequent License Renewal of Peach Bottom Atomic Power Station, Units 2 and 3 Docket Nos. DPR 44 and DPR 56 (ML# 19317E013)

Document Changes:

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Sections XI.E3A/B/C under “Preventive Actions” program element adds:

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such as heavy rain, rapid thawing of ice and snow, or flooding when the water monitoring indicates water is accumulating.

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