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**Attachments:** [Inquiries - 07-17-12.doc](#)

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Chris, Ed;

When we were discussing our flooding FAQ process, I told you that I would send you a copy of the inquiries that we process internally so you are aware of our interpretations and can ask questions about them if you wish. A group of interpretations on our walkdown guidance that the task force just finished addressing is attached.

If you have any questions on this information, perhaps we can discuss them during our call tomorrow.

Jim Riley



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## **Walkdown guidance questions**

### **SCOPE:**

- Question:  
Roof leakage and drainage – Should roof leakage/drainage be included in the flooding walkdown scope? The NRC seems to have always been concerned with site drainage for the local intense PMP. Roof drains are part of the building's incorporated plumbing system; runoff from roofs become site drainage once it is discharged from the roof, scuppers, gutter drains, etc. External evidence of leaks is one thing; inspecting roof drainage system could become very involved depending on the type of system. This could add significant effort to the Exelon walkdowns.

Response:

Unless they are specifically addressed in the flood protection licensing basis, roof drainage systems are not part of the walkdown scope. Roof drainage systems should be included in the walkdown scope to the degree they are discussed in the licensing basis. Runoff from the roof does need to be taken into account as a source of water in the site drainage system.

- Question:  
CLB Documentation - We are finding situations where the documentation is limited and unclear about what features are credited in the CLB. Site personnel are aware of flood protection or mitigation features that exist in the field but some of these features may not be explicitly documented as credited in the CLB.

Response:

Features are included in the walkdown scope if they are credited for flood protection; these features do not need to be specifically described in licensing basis documentation. Some examples:

- A wall is credited for flood protection. Any penetration seals in that wall up to the level of the design basis flood are in the walkdown scope even though they are not specifically described.
- If the plant flood licensing basis states a specific flood level or elevation, any feature that is below that elevation and that serves to protect SR equipment from a flood, is within the walkdown scope.
- If a conduit passes through a credited wall, but the penetration does not include a seal around the conduit, the interface between the conduit and wall should be inspected for general integrity (no obvious cracks, gaps, or spalling)

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### **METHODOLOGY:**

- Question:  
Site Topography and Drainage – Is it acceptable to base the assessment of changes to site topography and configuration (i.e. buildings, security barriers, additional pavement, drainage systems, etc.) on field observations. See Section 4.2 of NEI 12-07.

Response:

It is not necessary to perform a complete site survey for the walkdowns to assess changes in site topography, compared to that used in the licensing basis flood evaluation. For the 2.3 flooding walkdowns, changes can be assessed primarily through field observations. The 2.1

## **Walkdown guidance questions**

flooding reevaluations may require updated/new topographic surveys, particularly for the local intense precipitation/site drainage evaluation.

- Question:  
Debris/Blockage in Culvert (or other site drainage feature) – Pipes and other site drainage features should be visually inspected if they are credited in the CLB as providing conveyance for the local-intense PMP. If the systems are assumed blocked in the CLB, inspections are not required.  
Response:  
Yes
- Question:  
Seal for Penetration Below Grade – Only need to visually inspect the accessible side of the seal.  
Response:  
Yes
- Question:  
Plant Shut-Down Procedures – There are situations where the site's response to a flooding event is to shut down the plant (specifically for wet sites). There are general procedures that apply regardless of the reason for the shut-down. The only shut-down procedures that need to be evaluated during the flooding walkdowns are 1) those specifically developed for flood mitigation, 2) those potentially challenged by flooding conditions, and 3) those involving time-dependent activities (need to assess against available flood warning time). A temporary pump for cooling water would not be considered a flood protection feature; it would be evaluated as 'equipment' used to implement a flood mitigation procedure. (See Q17 in Appendix B of NEI 12-07.)  
Response:  
Yes. Validate those portions of procedures that are applicable to the flood response.