

- The mapping program for the Unit 2 excavation purposefully went beyond what is required to meet regulatory requirements and commitments made in FSAR Section 2.5.
 - Mapping the excavation walls in saprolite provided a large amount of data and a preview of features later encountered in the rock at final grade beneath the Unit 2 NI.
 - This additional mapping was planned as insurance to avoid “surprises” at the bottom of the excavation (as occurred earlier at Unit 1).
 - For Unit 3 (only 1000 ft from Unit 2), mapping the entire saprolite section is not likely to provide data that would justify the added effort and cost.
 - Mapping of final grade within the PB excavation, but outside the NI footprint and CWS trenches in sound rock, is necessarily a “best efforts” activity due to the variable quality of the rock surface there (PWR and MWR). Because the rock surface is irregular, it is not practical to excavate saprolite from peripheral areas of the PB until after the COL is issued.

- Complete documentation of the NI portion of the excavation (walls and floor) provides sufficient and definitive information to meet the FSAR commitments to map the rock below foundations of safety-related structures.
 - “Best efforts” mapping of potentially important lithologic and structural features observed throughout the rest of the PB excavation (and in excavations elsewhere on site) continues to be prudent. This is a useful supplement to the NI mapping and provides added confidence for understanding the site geologic setting.

Based on the prior lessons learned, we plan to proceed as follows:

- Reduce detailed mapping of PB walls (saprolite) at Unit 3 (mapping is already complete for 1st and 2nd lifts).
 - Map one more lift (at a lower level) in saprolite .
- Final Geologic Mapping reports for Unit 2 and Unit 3 will include the saprolite wall maps, the top of rock (MWR) maps, and will focus on detailed maps of the NI floor and surrounding excavation walls in sound rock.
- Photo documentation and maps will be prepared later for the CWS trenches and the remainder of the PB excavation floor; but will not necessarily be entered into the GIS data base.
 - This work will focus on extending coverage of the more important lithologic and structural features observed in the NI and will be saved in project files to supplement the final reports for each unit.
 - Any observed features that could materially change interpretations in the final reports will be reported and evaluated in more detail.

Unit 2 Excavation and Mapping

