Units 6 & 7

https://www.hec.usace.army.mil/software/hec-ras/

Welcome to the Hydrologic Engineering Center's (CEIWR-HEC) River Analysis System (HEC-RAS) website. This software allows the user to perform one-dimensional steady flow, one and two-dimensional unsteady flow calculations, sediment transport/mobile bed computations, and water temperature/water quality modeling.

HEC-RAS has been developed for the U.S. Army Corps of Engineers (USACE). However, software developed at the Hydrologic Engineering Center is made available to the public whenever appropriate. Use is not restricted and individuals outside of USACE may use the program without charge. HEC will not provide user assistance or support for this software to non-USACE users. Downloading this software indicates full acceptance of your responsibility in the use of this program. Please see the distribution policy for more details.

HEC-RAS model analysis and the estimated local PMP water levels at each model cross section are shown in Table 2.4.2-215. Plots of representative cross sections along the model flow paths are shown on Figures 2.4.2-205 through 2.4.2-233. In the figures, blue color indicates water and gray color indicates no-flow area such as obstruction or blockage associated with the wall and road crossings. There are no abrupt changes in the channel cross sections in the HEC-RAS model flow paths near the safety-related facilities, and the simulated water surface profile has a mild slope.

Units 3 and 4

The PMSS is postulated to be caused by a Probable Maximum Hurricane (PMH). A PMH is a hypothetical hurricane with a combination of characteristics that make it the most severe that can reasonably occur in the particular region in question. The meteorological parameters are selected in such a way that the PMH makes landfall near PTN and maximizes the effects of the PMSS. The computer model used to compute the storm surge effects is calibrated to the largest historical event observed near the Turkey Point plant. The probable maximum storm surge with wind-wave activity in combination with an antecedent 10 percent exceedance tide are the combined effects considered with the PMH. Additionally, higher water level in the ocean is expected over the next 20 years, nominally the remaining lifespan of the plant. The expected sea level rise is added to the PMSS maximum water level.