

2.4.10 Flooding Protection Requirements

The design basis flood elevation for Units 6 & 7 is established at 24.8 feet NAVD 88, as presented in [Subsection 2.4.2.2](#). The design basis flood elevation is a result of the probable maximum storm surge including wave run-up, details of which are described in [Subsection 2.4.5](#). The elevations of floor entrances and openings of all safety-related structures (also referred to as the design plant grade elevation, which is 100 feet, or 30.48 meters, for the AP1000 reference datum) are at 26 feet NAVD 88. Because the design basis flood elevation is below the entrance floor elevations of the safety-related structures, the safety functions of the plant are not affected by the design basis flood event.

[Subsection 2.4.2.3](#) describes the flood elevation as a result of the local intense precipitation (also referred to as the local probable maximum precipitation or local PMP) for Units 6 & 7. The local PMP flood analysis is performed on the conservative basis that all underground storm drains and culverts are clogged. As indicated in [Subsection 2.4.2.3](#), the maximum flood water level in the Units 6 & 7 power block area, where safety-related structures, systems, and components (SSCs) are located, is 24.5 feet NAVD 88 during the local PMP storm event. Consequently, the local PMP storm event does not cause flooding impacts to the safety-related SSCs.

Because none of the Units 6 & 7 safety-related SSCs are adversely affected by any of the postulated flood events, no flood protection measures are required for Units 6 & 7. Additionally, no technical specifications or emergency procedures to implement flood protection activities are required.

As addressed in [Subsection 3.4.1.1.1](#), the roofs of safety-related structures are designed to preclude accumulation and ponding of water during storms, including the local PMP event. The design basis snow and probable maximum winter precipitation load on the roofs of safety-related structures is presented in [Subsection 2.3.1.3.4](#).

The Units 6 & 7 plant area is built up to higher elevations from the adjacent grade and is surrounded by a retaining wall structure with the top of the wall elevation varying from 20 feet to 21.5 feet NAVD 88. The safety-related structures of Unit 6 and Unit 7 are at least 750 feet and 690 feet away from the nearest retaining wall, respectively. In addition, the retaining wall, though not a safety-related structure, is designed to withstand the hydrostatic and hydrodynamic forces from hurricane surge up to the probable maximum storm surge and coincidental wave run-up actions.