Pilgrim Nuclear Power Station NDT, January Winter Storm and ISFSI Siting Updates

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Introductions

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Nuclear Decommissioning Trust Update

- The Pilgrim Nuclear Decommissioning Trust (NDT) balance was $1.0 Billion on April 30, 2017 as reported at the May 2017 NDCAP meeting.

- The Pilgrim NDT balance was $ 1.09 Billion on January 31, 2018.

January 4th Winter Storm (Grayson)

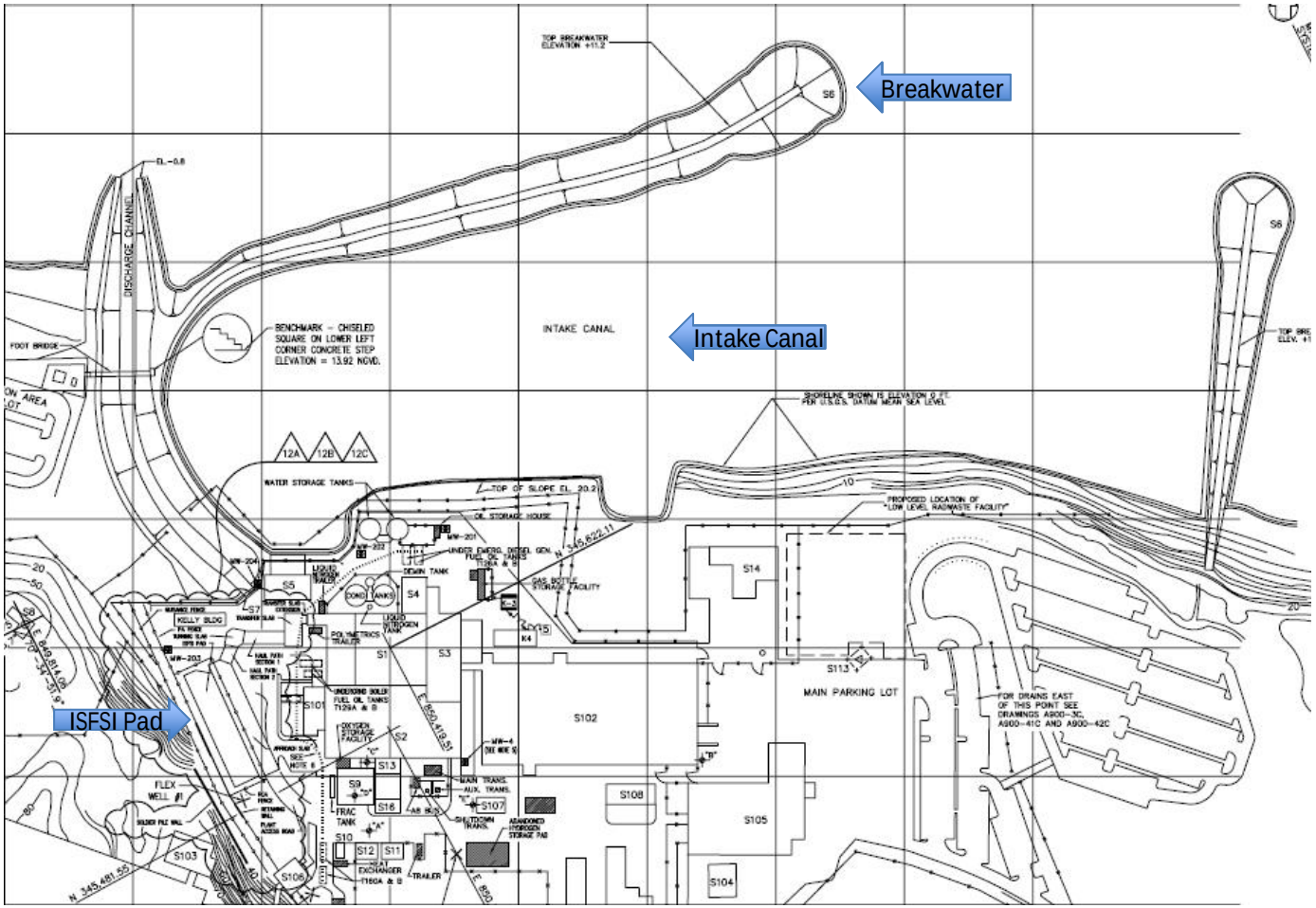
- Definition
  - Mean Sea Level – The average level of the ocean's surface, calculated for all stages of the tide and used as a reference for elevations.

- Background Information
  - Site Elevation is generally 23' above Mean Sea Level (MSL)
  - The lowest paved surface elevation located on the eastern most edge of the property behind the Fire Water Storage tanks is 21.5' above MSL.
  - Top of Breakwater is 11.2' above MSL
  - Existing ISFSI pad is at elevation 25' above MSL
  - Existing ISFSI pad is approximately 200 feet from the shoreline

January 4th Winter Storm (Cont'd)

- Impact of Winter Storm Grayson
  - Significant flooding was observed along the east coast of Massachusetts from Boston to Cape Cod including downtown Plymouth.
  - There was no flooding observed at the Pilgrim site during site tours conducted by Operations.
  - The maximum measured tide level was 13.5' above MSL as recorded by site instrumentation.
  - This represents an elevation margin of 8' below the lowest paved surface elevation and 11.5' below the ISFSI pad elevation.

Pilgrim Site Plan



Pilgrim Aerial View

Second ISFSI Pad Siting Update

- The effort to site the second ISFSI pad is continuing with a number of site locations being evaluated based, in part, on the following criteria and requirements.
  - Security and ISFSI Protected Area (PA) Requirements*
  - Impact on Decommissioning*
  - Radiological Considerations*
  - Interferences and Sub-Surface Utilities*
  - Geotechnical
  - Regulatory Requirements (NRC/Local Permitting)
  - Storage Capacity and Layout
  - Physical/Engineering Design Considerations (Structural/Electrical)
  - Hazard Considerations
- An engineering design contractor selection is in process.
- The Decommissioning Planning Organization at Pilgrim continues to work on this effort as an important priority.

* Key Siting Issues

Security Requirements

- The siting evaluation shall confirm compliance with the security requirements of 10CFR72.106, 10CFR73.51 and 10CFR73.55.
- The siting location shall assess the effect on the Security Owner-Controlled Area (SOCA) vehicle barrier required location(s) and determine minimum required distances from the barrier to the closest cask system.
- The selected location must support a new ISFSI Protected Area (PA) boundary.

Radiological Considerations

- Determination of site boundary dose shall be performed for the location of the new pad in accordance with 10CFR72.104(a)
- Verify compliance with 10CFR72.126 criteria for radiological protection.
- Radiological considerations include future decommissioning work, access to the switchyard as well as management of radiological waste.

Sub-Surface Utilities & Soil Stability

- All buried utilities (electrical, security, piping systems, leach fields, storm water) within the pad footprint shall be evaluated for the design loads imposed by the new pad and/or removed/relocated.
- Location options shall consider the complexity and impact of relocating or removing buried utilities.
- Where practical, the pad design shall be customized to accommodate the presence of any identified buried utilities.
- A preliminary survey of buried electrical utilities has been performed in conjunction with the previous pad's site selection process.
- The cask pad shall be designed for dynamic loading and liquefaction settlements for the site selected.

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