



# **Turkey Point Nuclear Power Plant**

# Units 6 & 7

**Safety Panel** 

Steve Franzone Licensing Manager

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#### **Conservative Probable Maximum Storm Surge Analysis** accounts for sea level rise



The analysis is performed using worst case parameters to calculate storm surge and wave run-up



Highest estimated historical 3-second wind gust speed was 204 mph during Hurricane Andrew in 1992 & is bounded by the 300 mph AP1000 DCD Tornado Wind Speed

# Wind Speeds Associated with PTN 6&7

- AP1000 DCD Tier 2 Operating Basis wind speed is 145 mph, 3 second gust, 50-year return interval
- Turkey Point "Operating Basis " wind speed is 150 mph, 3 second gust, 50-year return interval
- The wind load does not control the design for the Nuclear Island structures, therefore, a small increase is acceptable





#### **Turkey Point Units 6 & 7**

#### **Underground Injection Control Well Design**





# Members of the public are geologically isolated from liquid effluents

#### SURFICIAL PRODUCTION WELL IW-1 DZMW-1 0 SURFICIAL AQUIFER SURFACE 500 **UPPER CONFINING ZONE** 1000 **BELOW GROUND UPPER FLORIDAN AQUIFER** BASE OF UNDERGROUND SOURCE OF 1500 **DRINKING WATER** DEPTH MIDDLE FLORIDAN CONFINING ZONE 3000 **BOULDER ZONE** 3500 NOT TO SCALE

#### **Deep Well Injection System**



### **Geologic confinement of liquid effluent minimizes exposure**







