



Preparing for Climate Change – Infrastructure (nuclear)

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Salem and Hope Creek Nuclear Generating Stations



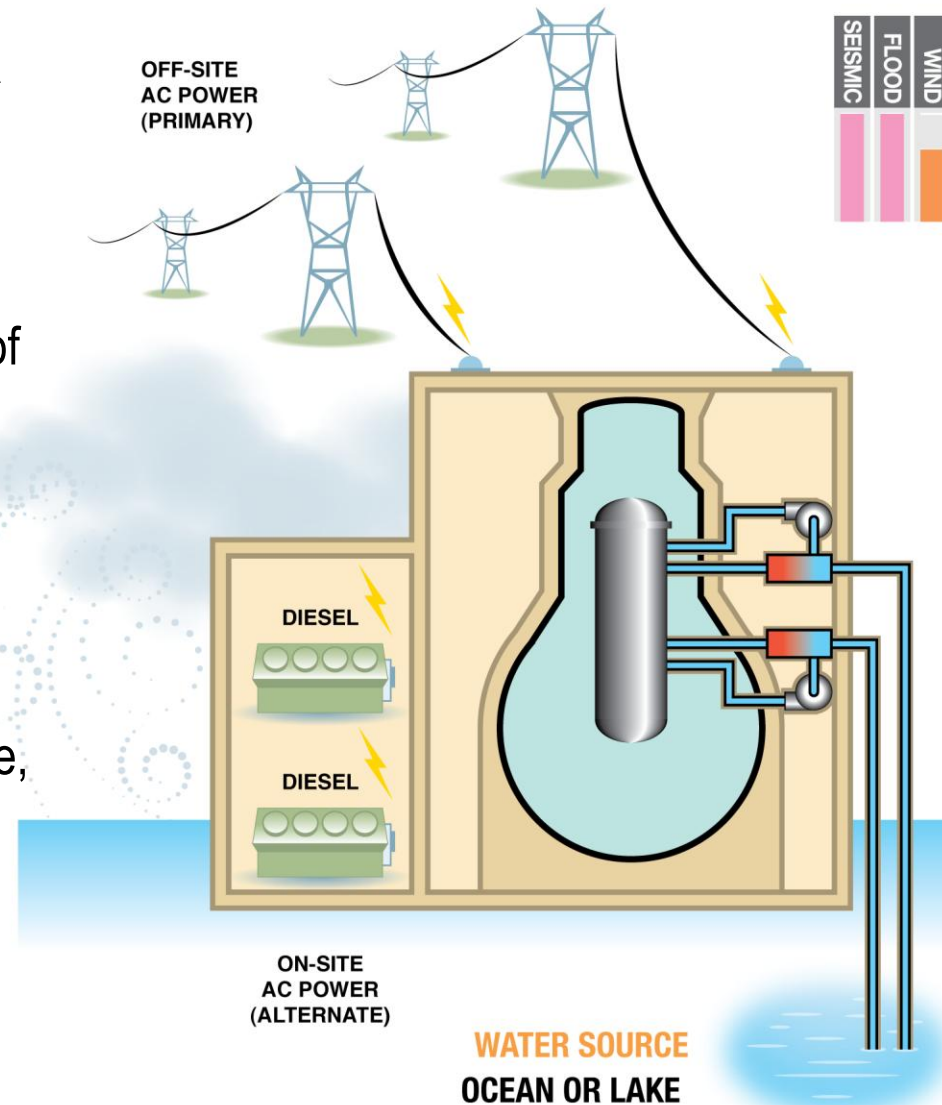
General Design Criteria of all nuclear power plants

Minimum requirements for design criteria for water-cooled nuclear power plants

- No single failure can affect safety function
- Requires redundancy and diversity of key safety systems

Site specific environmental requirements that “take into account unusual sites and environmental conditions”

- Based on historical information with added conservatism (flood, hurricane, earthquake, etc)
- Based on geology



Significant Weather-related impacts in New Jersey

Hurricane Irene – first Cat 1 hurricane in >100 years

Tropical Storm Lee

October Nor'easter

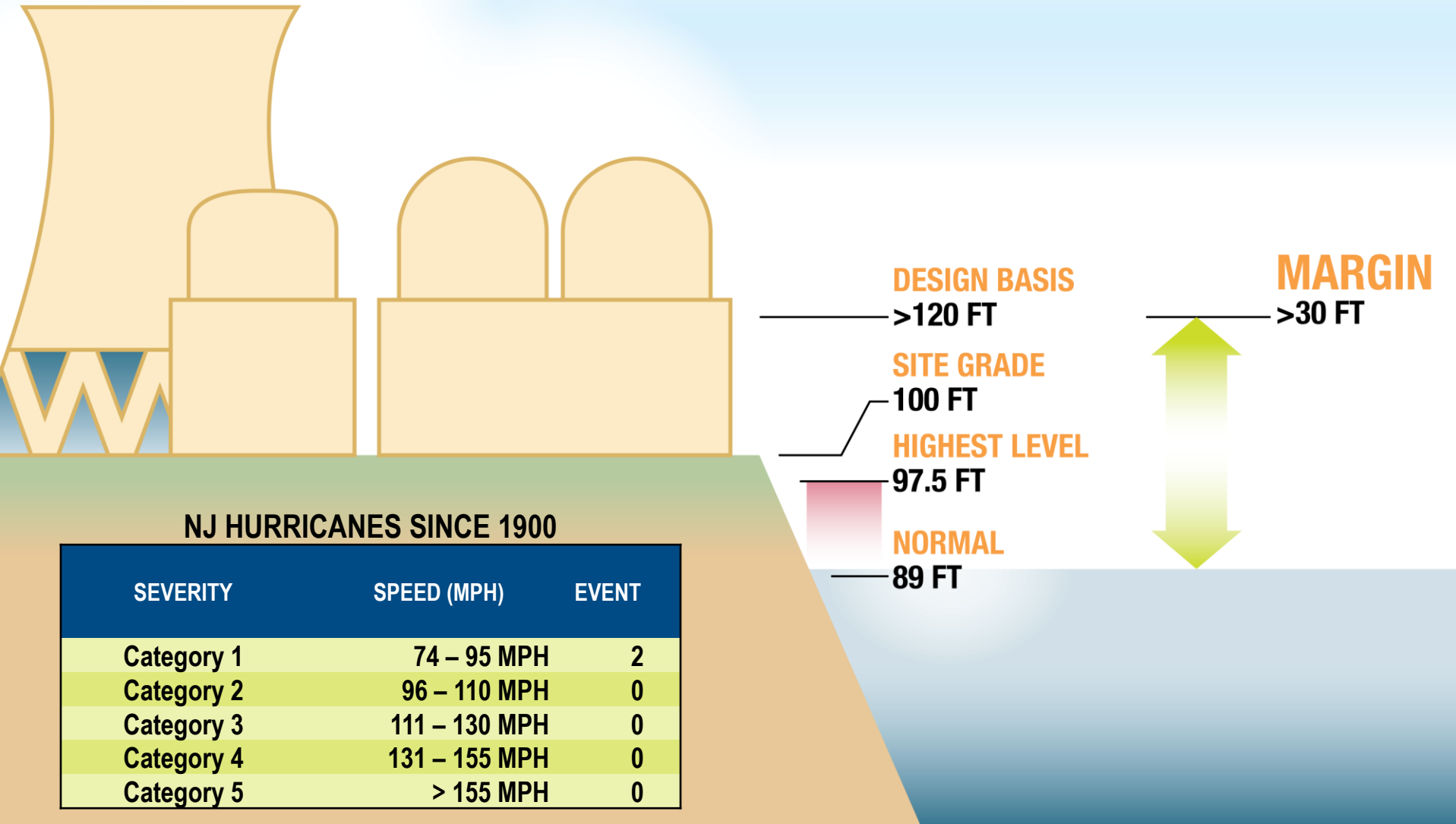
Virginia Earthquake

Record Heat – July 22

- Newark 106 degrees
- Trenton 102 degrees
- Atlantic City 102 degrees

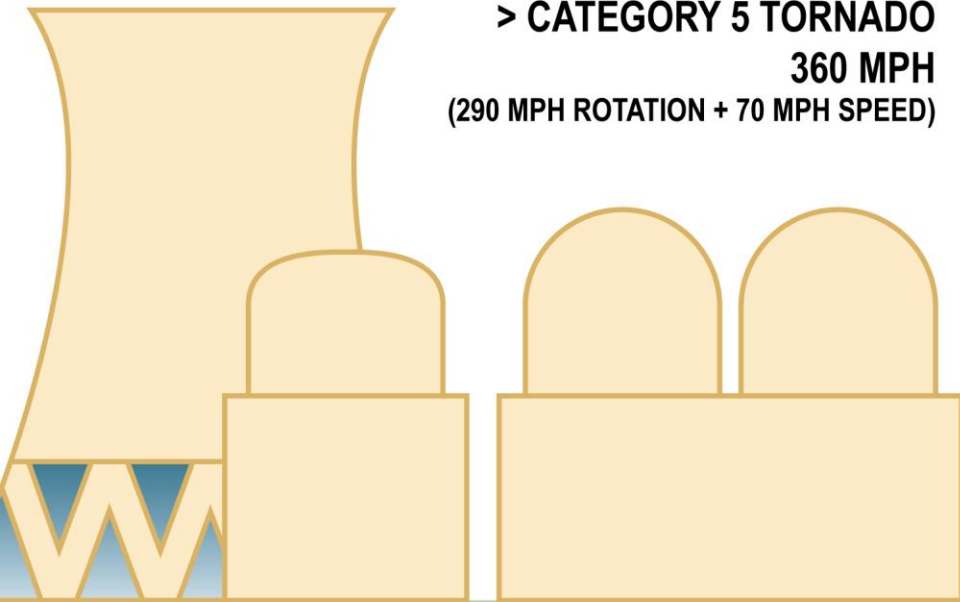
Wettest month in last 100 years – August (17+ inches)

Salem/Hope Creek Flood Design



Salem and Hope Creek Tornado Design

**DESIGNED TO WITHSTAND
> CATEGORY 5 TORNADO
360 MPH
(290 MPH ROTATION + 70 MPH SPEED)**



NEW JERSEY TORNADO HISTORY

F-SCALE	SPEED (MPH)	OCCURANCES
F0	40 – 72	50
F1	73 – 112	62
F2	113 – 157	30
F3	158 – 206	4
F4	207 – 260	0
F5	261 – 318	0

