



Potential Impacts

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Today's Agenda

- **NRC approach to prioritize the Fukushima Near Term Task Force (NTTF). Tier 1, Tier 2, and Tier 3**
- **Cook response**
- **Why is response needed**

NRC Approach

- **Developed team (Fukushima Near Term Task Force – NTTF) to review nuclear safety and provided recommendation to commission.**
- **No recommended actions raised level of actions to be taken without delay.**
- **Developed a priority system to address based on greatest potential for safety improvement in the near term.**

NRC Approach

- **TIER 1 – should be started without unnecessary delay and for which sufficient resource flexibility , including critical skill sets, exists.**
- **TIER 2 – could not be initiated in the near term due to factors that include need for further technical assessment and alignment.**
- **TIER 3 – require further staff study to support regulatory action**

NRC Approach

- **TEIR 1 recommendations**
 - **Seismic & flood hazard reevaluations**
 - **Seismic & flood walkdowns**
 - **Station blackout (SBO) regulatory actions**
 - **Equipment covered under 10CFR50.54 (hh)(2).**
 - **Reliable hardened vents for Mark I & II containments.**
 - **SFP Instrumentation**
 - **Integrations of EOPs, SAMGs, and extensive damage mitigation guidelines**
 - **EP regulator action (staffing & communication)**

Diverse and Flexible Mitigation Capability (FLEX)

- **Additional layer of safety to mitigate beyond design bases events**
- **Focuses on maintaining key safety functions**
 - **Core cooling, containment integrity, SFP cooling**
- **Multiple supplies of power and cooling water**
- **Portable equipment reasonably protected**
- **Symptom based guidance and instruction**
- **Regional support centers**

DC Cook Response

Extended Loss of AC Power

General Solution Path

- Enter Loss of All AC procedure
- Deep Load Shedding
- Connect Temporary Power
 - 120 VAC generators to power local instrumentation for controlling SG pressure and level
 - 600 VAC generators to power battery chargers
 - 120 VAC generators to critical control room power panels in each control room



COOK NUCLEAR PLANT

DC Cook Response

Planned Equipment Purchases

- **Two diesel driven raw water pumps as backup to B.5.b pumper truck (ordered)**
 - Suction from Forebay
 - Can provide water to SGs and/or the Spent Fuel Pit
- **Westinghouse shutdown seals (The SHIELD®)**
 - Scheduled for U1C25 and U2C21 (spring and fall of 2013)
 - Significant improvement in risk profile
 - Limits RCP seal leak to 1 gpm vs. 21 gpm on loss of cooling
- **Two mobile (towable) 600vac / 500kW diesel generators**
 - Power 600 V busses

DC Cook Response

Planned Equipment Purchases

- **Twelve portable 120vac / 5kW to 10kW diesel generators**
 - Power Logic Safety Injection (LSI) panels, Control Room Instrumentation and Distribution (CRID) and Critical Control Room Power (CCRP) inverters
- **Portable refueling tanker trailer**
 - 500 gallon capacity with fuel oil transfer pump
- **Communications equipment**
 - Satellite phones, pagers, additional batteries

Cook built dual unit main control room simulators

- Allows integrated dual unit EP Scenarios.
- Cook Facility also has new state-of-the-art four, rear projection plant parameter display emergency response training facility.



Industry

Industry Developments

- **Shared Equipment Distribution Center concept**
 - INPO surveyed plants on their existing equipment and intended purchases
- NEI and industry providing significant input
- Good high level alignment thus far between regulator and industry
- Also responding to INPO IER

Why are these initiatives important

- **Earthquake occurred in Virginia near the North Anna site.**
- **Units shutdown and diesels provided emergency power.**
- **Units not restarted until November 2011 after a comprehensive site wide safety evaluation was completed.**

Why are these initiatives important

- **Heavy Snowfall in Montana: Photo Taken June 17, 2011**
- **Spring Snow Melt Flows to Missouri & Mississippi Rivers.**



Why are these initiatives important

- **Fort Calhoun
PWR Station
Nebraska,
USA**



Why are these initiatives important



POWER



Why are these initiatives important

- **Cooper BWR Station on Mississippi River, Summer 2011**

