# **The Nuclear Industry's View**

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### **Fukushima Response Steering Committee (FRSC)**

Industry FRSC made up of representatives from:

- Electric Power Research Institute (EPRI)
- Institute of Nuclear Power Operations (INPO)
- Nuclear Energy Institute (NEI)
- Utility executives

#### "The Way Forward"

 Joint leadership model to integrate and coordinate U.S. nuclear industry's response, identifying and incorporating lessons learned and supporting coordinated action



## **Goals of the FRSC – "The Way Forward"**

- 1. The nuclear workforce remains focused on **safety and operational excellence** at all plants, particularly in light of the increased work that the response to the Fukushima event will represent.
- 2. Timelines for emergency response capability to ensure continued **core cooling, containment integrity** and **spent fuel storage pool cooling** are synchronized to preclude damage following station blackout or challenges to the ultimate heat sink.
- 3. The U.S. nuclear industry is capable of responding effectively to any significant event in the U.S. with the response being scalable to support **an international event**, as appropriate.
- 4. Severe accident management guidelines, security response strategies (B.5.b), and external event response plans are effectively integrated to ensure nuclear energy facilities are capable of symptom-based response to events that could impact multiple reactors at a single site.
- 5. Margins for protection from external events are sufficient based on the latest hazards analyses and historical data.
- 6. Spent fuel cooling and makeup functions are fully protective during periods of high heat load in the spent fuel pool and during extended station blackout conditions.
- 7. Primary containment protective strategies can effectively manage and mitigate post-accident conditions, including elevated pressure and hydrogen concentrations.
- 8. Accident response procedures provide steps for controlling, monitoring, and assessing potential radiation and ingestion pathways during and following an accident, including timely communication of accurate information.



#### **Fuel Behavior During Extraordinary Events**

- Dryout
- Hydrogen Production

#### **Containment Systems Performance**

• Limiting socioeconomic impacts for accidents at existing units

#### **Used Fuel Management**

• Used fuel response during accidents (both in-pool and in-canister)



#### **Advanced Cladding Materials**

Minimizes potential for post-accident explosions

#### Small Modular Reactor (SMR) Development

Others

