

# Gap Analysis – Relevant Risks in Requirements of Current Products/Mechanisms

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#### • Last Meeting:

 Assessed what current mechanisms exist today that contribute toward fuel/energy/resource security and what uncertainties/risks are currently accounted for by these mechanisms

#### • Today:

 Given the relevant risks to fuel/energy/resource security that were identified during the last meeting, determine which of these risks are not accounted for in the requirements for the current mechanisms that exist today

#### Next Meeting:

 Given the relevant risks to fuel/energy/resource security that were identified, determine if any gaps exist in the compensation available for the current mechanisms



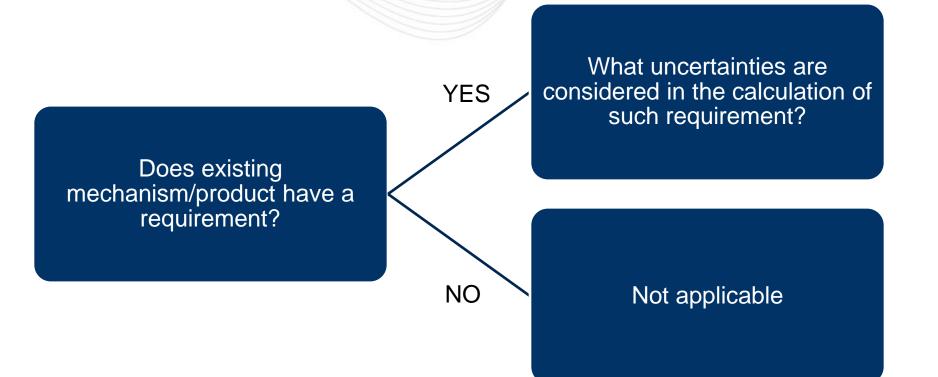
# Relevant Risks Identified at June FSSTF Meeting

Relevant Risks	
Long Duration Cold Snap	
Short Duration Cold Snap	
Natural Gas Pipeline Disruptions	
Solar Intermittency	Renewable Intermittency -
Wind Intermittency	Related
Coal Refueling (Bridge Failure)	
Coal Refueling (Lock and Dam Failure)	
Coal Refueling (Rail Failure)	
Coal Refueling (River Freezing)	
Coal Unavailability (Coal Quality)	
Natural Gas Unavailability Non-Firm Units	
Oil Refueling (Oil Terminal)	
Oil Refueling (Truck Restrictions)	Forced Outages - Related
Nuclear Regulatory Shutdown (Fuel Related)	
Nuclear Regulatory Shutdown (Non-Fuel	
Related)	
Nuclear Unavailability (High Winds)	
Hydro Unavailability (Freezing Rivers)	
River Freezing (Cooling Water Impacts)	
Ice Storm (Transportation Impacts)	

For ease of exposition in the upcoming slides, some of the Relevant Risks are grouped in two categories: Renewable Intermittency and Forced Outages.



# Uncertainties/Risks in Requirements of Current Products





#### Uncertainties/Risks in Requirements of Current Products

**Uncertainties / Risks** Planned Forced Largest Net-Interchange Frequency Schedule Outages Outages Contingency Solar Wind Deviations Load Capacity Performance -Energy Market – Addressed Contingency Reserves Current -Contingency Reserves Reserve Price Formation Regulation Reserves -Products / Mechanisms Partially Addressed Maximum Generation \_ Emergency Action \_ Resource Limited Unit Dispatch Voltage Reduction -– Not Addressed Gas Contingency \_ Procedures -Gas/Electric Coordination -Transmission Planning Solution Not Applicable Restoration Plan -Emergency Operating Procedures



# Relevant Risks (RR) in Requirements of Current Products

