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## **PWROG Lessons Learned from Derecho ASP**

NRC Public Meeting – May 27<sup>th</sup>, 2021



# PWROG Presentation Agenda

- Specific items in PRA space
- Specific Items in Place by the Station that Helped Mitigate the Situation
- Additional Follow Up to Support Realism

# Specific Items in PRA Space

## Offsite Power Non-Recovery

- Different methodologies available for crediting offsite power recovery
- Important to recognize when power COULD and IS restored

## FLEX HRA

- Clear decision criteria for declaration of ELAP
- IDHEAS-ECA would be expected to provide more realistic HRAs
- PWROG-20008-P “Pilot Application of FLEX HRA Methods”

## Component Failure Rates

- Realistic EDG Failure rates - PWROG-18026-P “Component Reliability Data Issues and Strategies”
- FLEX failure rates compared to a draft PWROG report and numbers looked similar. 3x nominal failure rates chosen by NRC based on PWROG analysis.



# Specific Items in Place by the Station that Helped Mitigate the Situation

## Credit for FLEX

- Clear timeframe for declaration of ELAP
- Procedural credit for FLEX

## Clear procedural guidance for changing the strainers for the DGs

- Proceduralizing simple recovery action
- Risk Beneficial Procedure Changes PWROG Program



# Additional Follow Up to Support Realism

Investigation for recovery for failed equipment

- Ongoing PWROG program

FLEX Data

- Issue final report PWROG-18042-P in the summer of 2021
- Update to capture additional data and Common CauseBD

Risk Beneficial Procedure Change PWROG Program



# Products Utilized

- PWROG-18026-P, Revision 1, “Component Reliability Data Issues and Strategies,” August 2020.
- PWROG-18042-P, Revision 1-A, “FLEX Equipment Data Collection and Analysis.”
- PWROG-20008-P, Revision 0, “Pilot Application of FLEX HRA Methods,” November 2020.
- EPRI LOOP and Convolution Reports
- EPRI 3002018232 “High Wind Loss of Offsite Power Durations and Recovery”
- NRC IDEHAS-ECA Reports

