Indiana Utility Regulatory Commission 2022 Summer Reliability Forum





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aes Indiana Team







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- 528 square miles \rightarrow
- Serves downtown Indianapolis and 8 counties in \rightarrow Indiana
- Serves > 500,000 regulated customers \rightarrow
- 3,643 MW of Generation \rightarrow
 - 1,464 MW Coal* •
 - 38 MW Oil •
 - 1,745 MW Gas •
 - 300 MW Wind •
 - 96 MW Solar •



3,634 Total MW of Generation



CALCS Indiana Summer Capacity Reserve Margin



2022 - 2023

AES Indiana generation based on Unforced Capacity ("UCAP") accreditation for MISO 2022-23 Planning Year



Outages & Generation Needs

Summer Preparation Outages

- → Outages are coordinated with our Commercial Operations & Resource Planning Team and MISO
- \rightarrow Target 6/15 for completion of all outages
- \rightarrow Ensure heat exchangers are working well
- \rightarrow Check all AC and ventilation systems

Planned outages include summer prep with expanded scope addressing reliability and regulatory needs





Generation: Proactive Management of Extreme Weather

Safety is always first

2 Months Out

- \rightarrow Complete summer prep outages
- \rightarrow Review extreme weather policies, plans and procedures
- \rightarrow Inspect lightning arresters
- \rightarrow Verify tornado shelters are in acceptable condition
- \rightarrow Verify weather warning notification system

1 Week Out

- \rightarrow Internal discussions regarding status of equipment and lineups
- \rightarrow Review applicable Emergency **Action Plans**
- \rightarrow Contact and prepare local agencies with impending weather
- \rightarrow Verify weather radios in control rooms work
- \rightarrow Monitor weather

- rounds
- \rightarrow Verify cooler cleanliness
- \rightarrow Test siren system
- \rightarrow Monitor weather

2 Days Out

 \rightarrow Implement hot weather operator

 \rightarrow Verify cooling systems are operating correctly

1 Day Out

- \rightarrow Schedule additional staffing for emergency response in extreme weather events
- \rightarrow Start all cooling tower fans
- \rightarrow Last minute check of cooling systems
- \rightarrow Monitor weather



T&D Operations: Proactive management of extreme weather

7+ Days Out

- → Constantly monitoring Weather at least 7 days out, using National Weather Service ("NWS") and Private Weather Services
- → Monitor Storm Prediction Center Convection Forecast days 4-8

2-3 Days Out

- → Internal discussions taking place daily on operations & staffing
- → Monitoring NWS Storm Prediction Center Convection Forecast for next 3 days and forecast from Private Weather Services
- → Transmission Operations begin looking at maintenance outages that can be recalled, return lines & equipment to service to the extent possible
- → Supply Chain begins checking critical materials levels for common storm restoration material



- → Monitor NWS Storm Predication Center Severe Weather outlook focus on Day 1 and Day 2
- → Transmission Operations would declare Conservative Operations [Depending on the areas affected, MISO may also declare Conservative Operations for portions of the MISO footprint]
- → Schedule additional staffing around the clock for outage response

1 Day Out

Day Of

- → Adjust Staffing Schedule based on current conditions and latest forecast
- \rightarrow Activate On-Call Storm Team
- → Activate and man Emergency Command Center if conditions warrant
- → Monitor weather radar, lightning network, and storm reports to the west of our system.
- → With Declared Storm begin storm status calls





Vegetation Management





- Hazard Tree program to mitigate trees outside the trim zone (up to 45' from conductor) utilizing ISA Tree Risk Assessment Qualified Inspectors to identify
- Increase overhang clearance from 15' to removing all overhang of species with weak branching structure

- 2021 20 declared storms
- 2021 Vegetation SAIDI 39.47 minutes / SAIFI 0.329
- Contract labor issues, leading to fewer miles trimmed
- 91% of non-storm outages due to branch failure above conductor or tree failure outside of trim zone
- Ash trees continue to be an issue (continual decay with no access to mitigate)

INITIATIVES

• Targeted circuit trim, based off time since last trim and impact on SAIFI/SAIDI (data analytics approach)



aes Indiana revAMP

In the 3rd year of 7-Year Plan designed to achieve:

- → Fewer outages and shorter
 duration of outages
- \rightarrow Improved reliability
- → A more resilient system to face
 growing energy needs



Circuit Reb

Substation

4 kV Conve

Tap Reliabi

XLPE Cabl

Distributio

Project	Quantity (12/31/21)	Unit
builds	103	Miles
Asset Replacement	21	Projects
ersion	4	Circuits
ility ent Projects (TRIPS)	28	Miles
e Replacement	1,302,235	Feet
n Automation	350	Reclosers



Our hedging policies reduce price risk for customers, especially important during periods of rising fuel prices

Key drivers of rising fuel prices

- Increasing global demand \rightarrow
- \rightarrow Low inventories and tight logistics

Hedge program for coal units and baseload natural gas address price and supply reliability

- \rightarrow Coal
 - Fixed price contracts for delivery entered-into over time
- Natural Gas \rightarrow
 - Fixed price natural gas for Eagle Valley CCGT on Rockies Express ("REX") and Texas Gas Transmission ("TGT")



We are prudently managing our fuel supply in current market conditions



Onsite \rightarrow Inventories

- Maintain onsite coal inventories to address potential supply disruptions
- Coal 100% hedged for 2022
 - including high range of inventory for winter
- Maintain higher than historical fuel oil onsite for Harding Street dual fuel units

Natural Gas \rightarrow Transportation

- Firm transportation on TGT pipeline
- REX pipeline purchases include firm transportation
 - Increases firm capacity overall – supports firm transport and reliability for Harding Street

Communication \rightarrow with Supply and Logistics

- Be prepared get ready for the season internal and external
- 20-day look forward monitor weather and plan for potential events
- During an event hypercommunicate as appropriate to recognize and address issues in addition to normal daily calls





MISO \rightarrow

- Follow MISO protocol
- Generation operators in continuous contact with MISO
- Monitor Multiday Operating Margin Forecast Report to anticipate critical days



RTO Changes & Impacts

We continue to monitor and engage with MISO as they seek to implement:

- → Seasonal Capacity Accreditation
 - AES Indiana fleet transition, market volatility, system reliability \bullet
- \rightarrow FERC Order 2222
 - Roles and responsibilities, planning and operation of a modern distribution system, cost to participate
- \rightarrow Long Range Transmission Planning
 - Cost exposure for retail customers, stranded assets, prudent planning \bullet



Supporting our customers

- Extended Winter Moratorium \rightarrow
- Energy Efficiency Programs \rightarrow
- Billing and Payment Assistance \rightarrow
- **Budget Billing** \rightarrow









Scammers are aggressively targeting AES Indiana customers. Their efforts are intentional to confuse and defraud customers as we transition to our new brand, AES Indiana. The most common types of utility scams involve customers receiving an unsolicited telephone call, text message, or electronic or in-person communication by an individual claiming to represent the utility.

Don't be a victim of a scam, look for the signs:



- AES Indiana. Your caller ID might ever say "AES Indiana." Scammers may threaten to turn o power within an hour.
- Scammers may demand paymer immediately by use of a prepaid deb
- Do not answer anyone who shows up at a home or business unannounced without identification. AES Indiana technicians will always carry an official ID badge.





Leading the inclusive, clean energy transition





Customer

Reliability. Affordability. Diverse needs.

Create value in how we serve customers today to become their energy partner in the future.

Smart Grid

Use new technologies across our value chain to create the resilient grid of the future.

Maintain reliability and affordability while driving lower carbon emissions.

Facilitate economic and community development





Sustainability

Workforce of the Future

Work differently, using new technologies and skills. Strengthen our culture of safety, innovation and belonging.







Q&A

