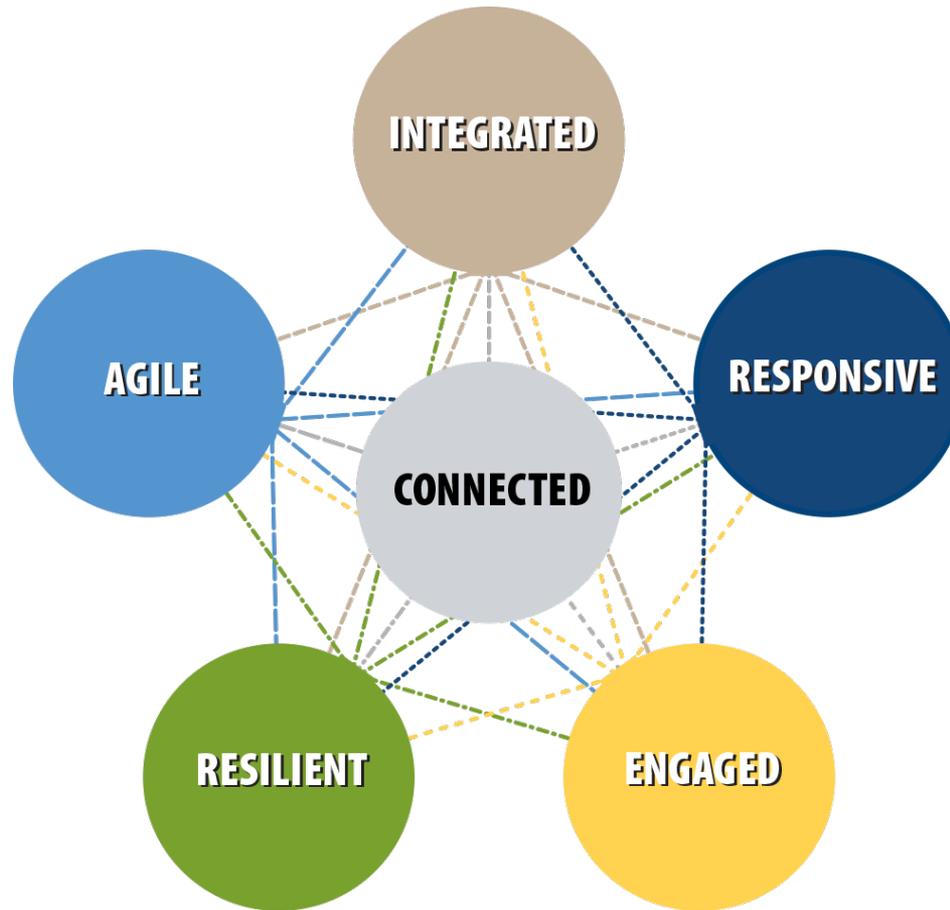


Investing in a connected future

Northern California Power Agency
Sept. 26, 2019 | Olympic Valley, CA

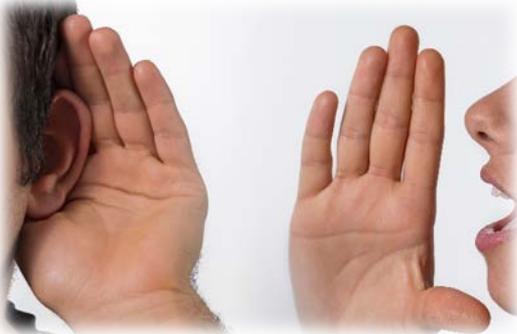
Mark A. Gabriel
Administrator and CEO

Connected energy future



Core Values

**Listen to understand,
speak with purpose**



Seek. Share. Partner.



**Be curious, learn more,
do better. Repeat.**



**Respect self, others
and environment.**



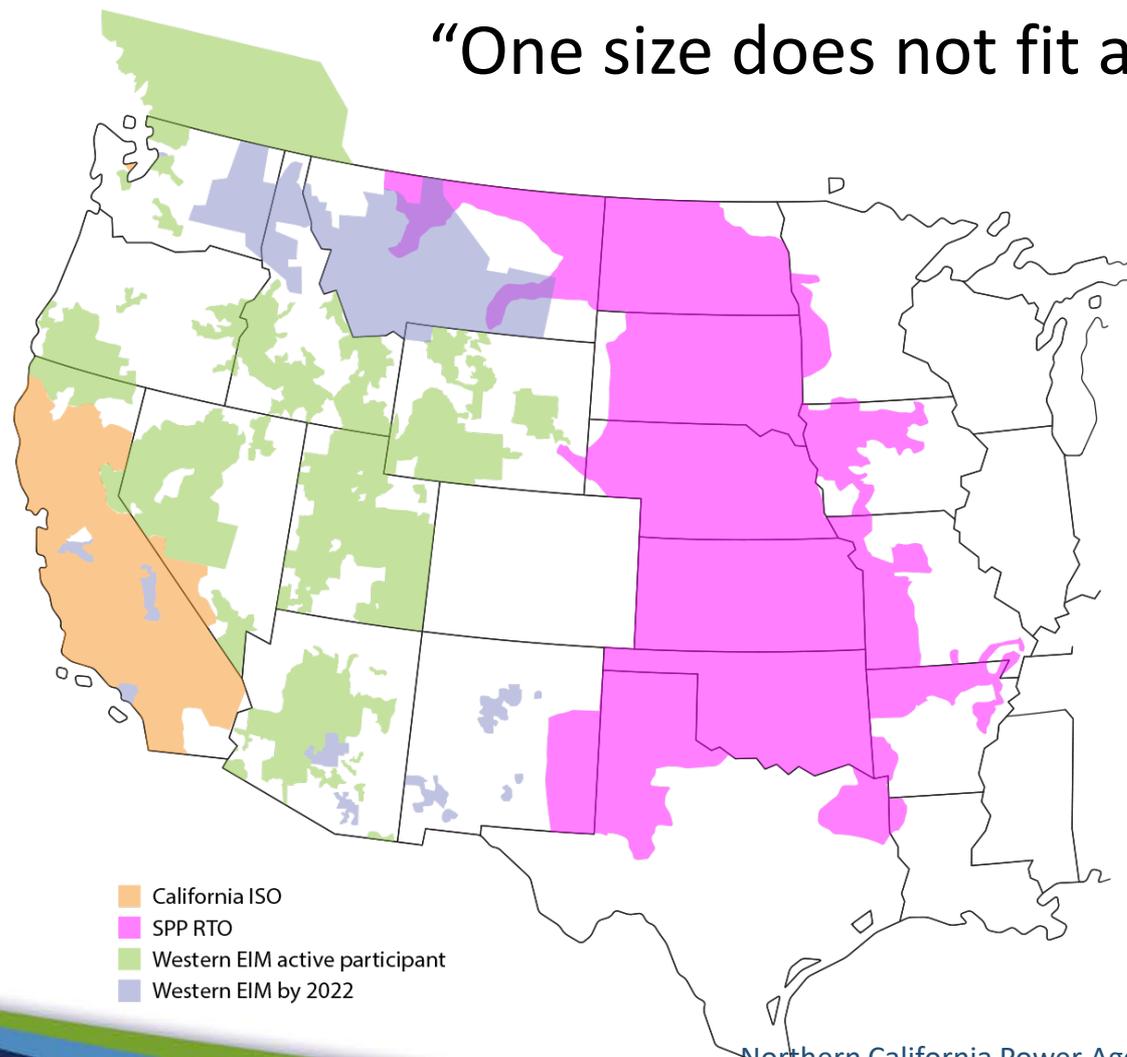
**Do what is right.
Do what is safe.**



**Serve like your lights
depend on it.**

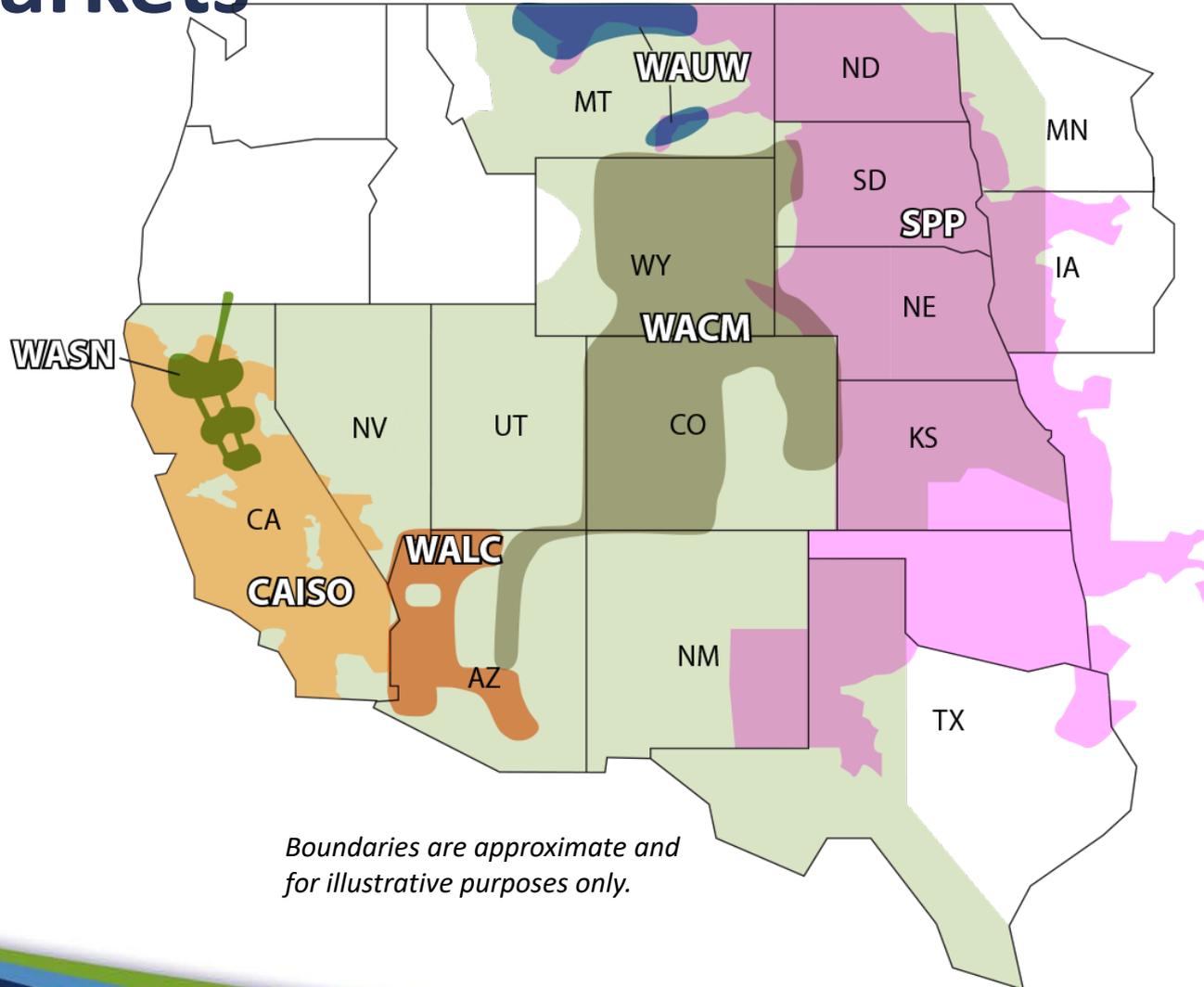
Energy imbalance decisions

“One size does not fit all”



- California ISO
- SPP RTO
- Western EIM active participant
- Western EIM by 2022

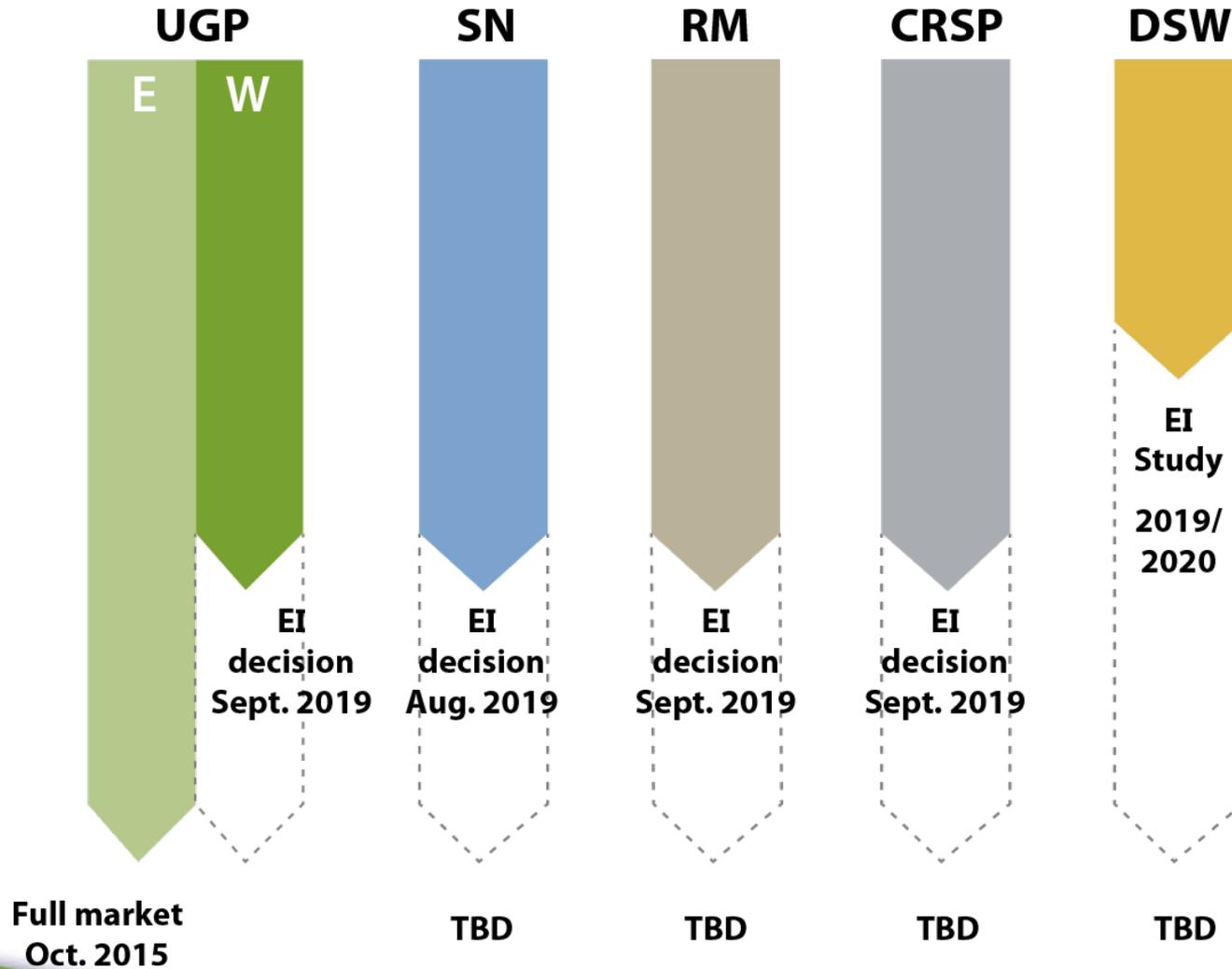
WAPA balancing authorities & markets



Energy imbalance objectives

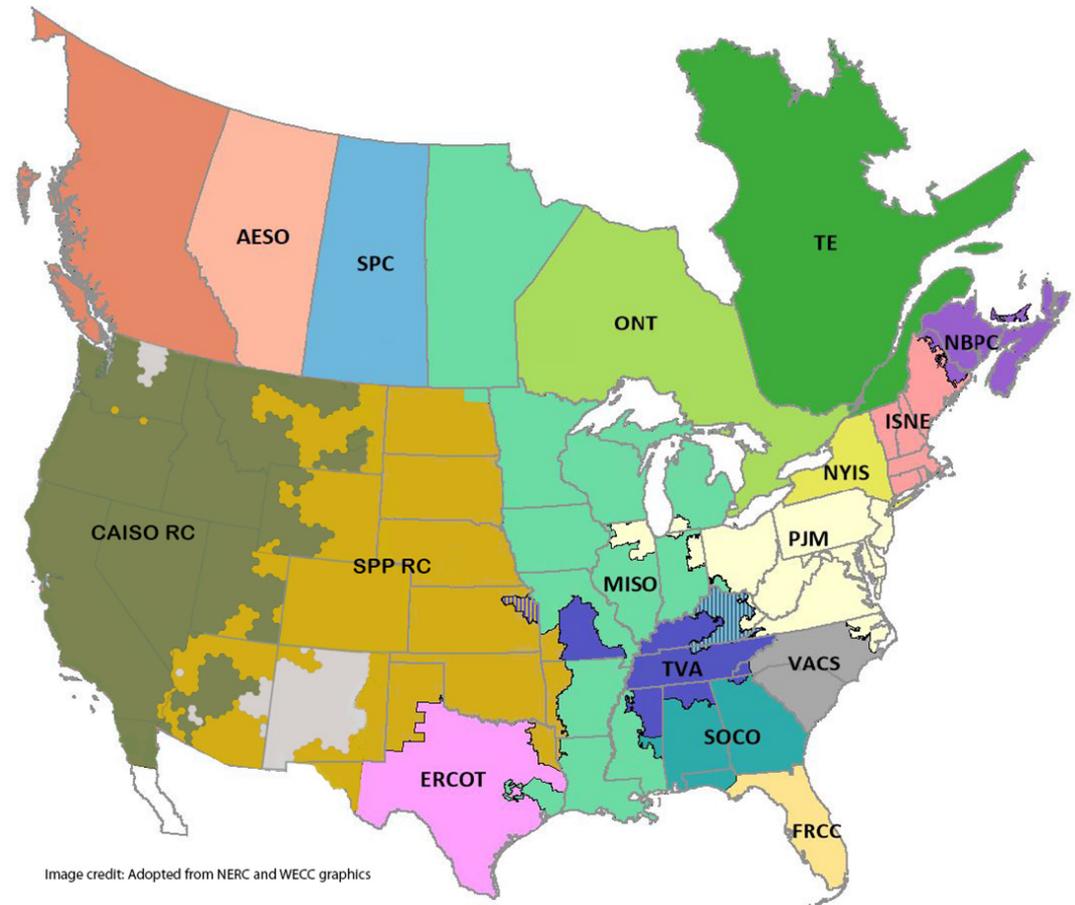
- Ensure reliable delivery of our hydropower while adjusting to a changing energy mix
- Respond to customer feedback requesting WAPA lead organized market discussions
- Address WAPA BA limitations
- Facilitate integration of renewable resources
- Enable participants who want to optimize their resources

Market status timeline



RC transition

- UGP-East – SPP
10/2015
- SN – CAISO
7/2019
- DSW/RM/CRSP/
UGP-West – SPP
12/2019

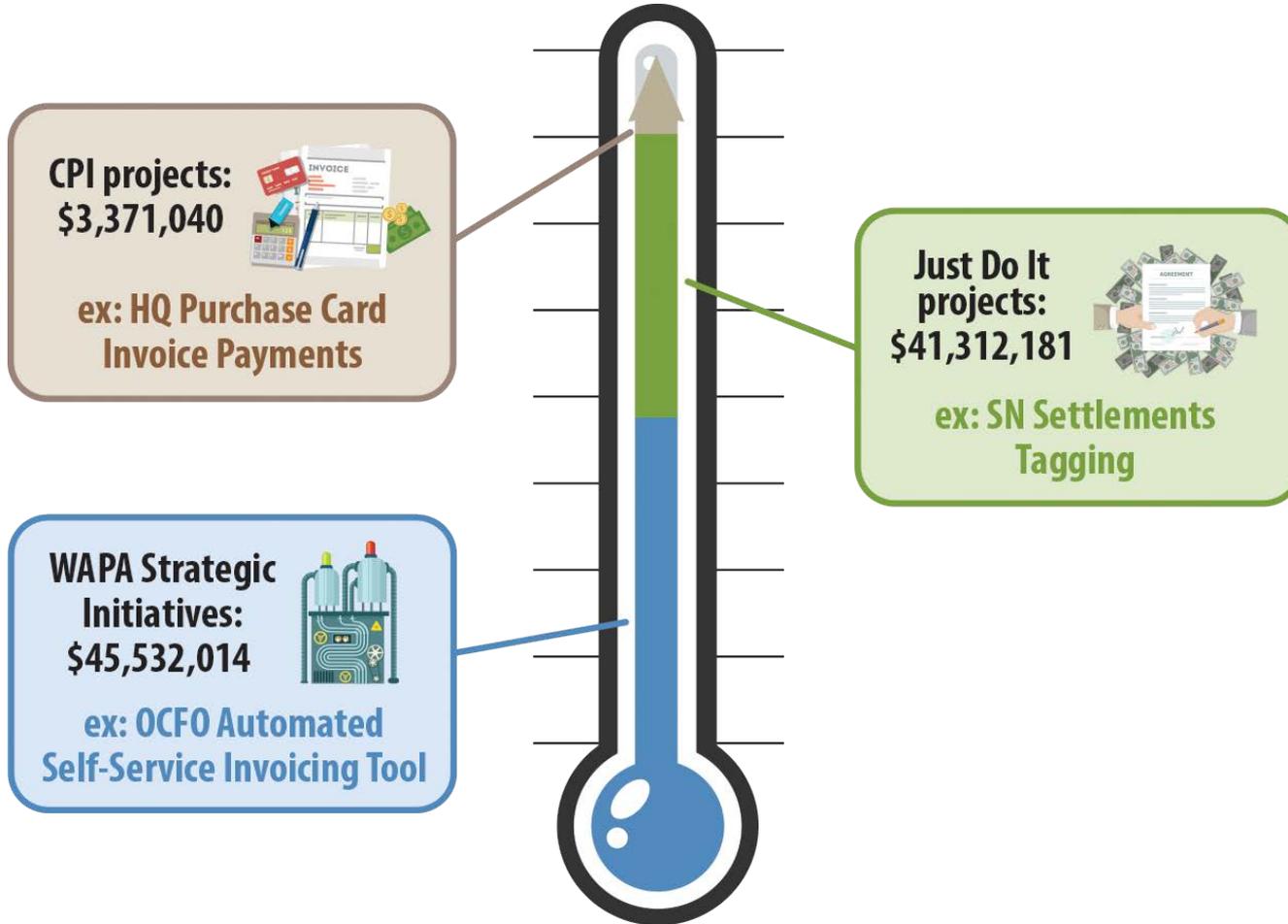


Wildfire prevention & mitigation

- Reviewing vegetation management programs
- Voluntarily complying with SB 901
- Participating in TANC's Ad-hoc Wildfire Committee



Continuous Process Improvement



WAPA cost savings and avoidance: \$90,215,234 as of June 30, 2019

Physical Security update

- Implementing new remediation validation process
- Tiered security protection levels focus resources on more critical sites
 - 1,000+ tasks reduced to ~450
- ~94 site assessments done in FY 2019
- 84%+ of planned security remediations done in FY 2019
- Conducting assessments in house in FY 2020 will save over \$378,000



Cyber threat environment

- Increasing regulations
- Internet of Things
- Scope and breadth of organization
- Asset management nexus
- Continuous communications



OT/IT convergence

- Lifecycle discrepancy
- “Smart” technology
- Situational awareness
- Data management



DC update

- Fiber discussions
 - Improved capabilities for utility operations
 - Protect customers' investments
 - Support customer needs for expanded services
- Integrated Resource Plans
- Purchase Power and Wheeling report

Key takeaways

- Make the best decisions based on regional needs.
- Prepare for and adapt to industry change.
- Leverage partnerships to achieve mission.



Contact/follow me

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