Markets in the West Workshop

April 9-10, 2019  |  Phoenix, AZ

WELCOME!
Investing in a Connected Future

Mark A. Gabriel
WAPA Administrator and CEO
Why a Workshop?
Changes in industry

- Reliability Coordinator
- Markets
- New regulations
- Changing fuel mix
- Security and resilience emphasis
Changing generation mix

Wind records
- ERCOT: 56.16% penetration Jan. 19, 2019 at 3:10 am
- SPP: 62.13% penetration, March 31, 2018 at 1:54 am
- CAISO: 64.6% served by wind & solar, May 26, 2018 at 2:28 pm

Solar
- Electric co-operatives - 75% of utility-sponsored community solar programs

Battery storage
- 1st storage connected to WAPA system in December
- Biggest technology disruptor for customers
Preparing for the future

- Chart the course
- Take control of our joint destiny
- Gain market access for our customers
- Facilitate benefits for transmission system
- Protect your investment
Markets are coming

- Reduced trading partners
- Load demands are shifting
- Appropriate compensation for transmission
- Flow gates vs. contract paths
Future drivers

• Advances in artificial intelligence
• Blockchain
• Consumer choice and control
• Electrification of Everything
Strategic Roadmap 2024

Mission
Market and deliver clean, renewable, reliable, cost-based Federal hydroelectric power and related services

Evolution of Services
Mutually Beneficial Partnerships
Business, Technology and Organizational Excellence

Powering the Energy Frontier
Strategic Roadmap 2024

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2014 2016 2018 2020 2022 2024
2019 Tactical Action Plan

MISSION CRITICAL CUSTOMER SERVICES IN AN EVOLVING INDUSTRY

GRID RESILIENCE

ASSET MANAGEMENT 2.0

PEOPLE AND ORGANIZATION

Preparing for Markets

Organizational Approach to Markets

Physical Security

Life Cycle Management of Major Assets

Human Performance and Just Culture

Cybersecurity

Life Cycle Management of Additional Assets

Leadership Development

Emergency Management

Data as a Strategic Asset

Program and Budget Integration

Strategic Transformer Management

Fiber Partnerships

Acquisition Management

Business, Technology and Organizational Excellence

Mutually Beneficial Partnerships

Evolution of Services
A connected WAPA
Today’s discussion

- Opportunity to look into the crystal ball together
- Appreciate active participation
- Continue to travel a successful path forward
Contact/follow me

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Fort Randall Dam
Courtesy of USACE
Reliability Coordinator Transition

Don Fuller
CAISO Director of Strategic Alliances

Carl Monroe
SPP Executive Vice President and COO
Map of Reliability

Image credit: Adopted from NERC and WECC graphics
State of the Regions
Rocky Mountain

- Northwest Power Pool
- WEIS
- WAPA RC project update
Colorado River Storage Project
Management Center

- EIM changes timing of bi-lateral market
- SCED vs AGC
- Drought & BA regulation
Upper Great Plains

- SPP participation
- Able to meet power obligations to customers & buy and sell in market
- Benefits exceed expectations
Sierra Nevada

- Keeping CVP viable
- BANC EIM Phase II gap analysis for customers
- Evaluate participation in EIM with Reclamation
Desert Southwest

Market formation efforts

• Past
• Present
• Future
Structured conversations

- Facilitator
- Note taker
- Four rounds of discussions
- 30 minutes of discussion, 30-minute report out
Ground rules

• Be respectful
• Eliminate distractions
• Be specific
• Believe in best intention
• Honor others’ time
• Participate
• No defensiveness
• Agree to disagree
• Use the parking lot
• Others?
Next Steps

Rodney Bailey
WAPA Power Marketing Advisor
Thank you