Desert Southwest Region

Jack Murray
Vice President of Transmission System Asset Management
ATEA Annual Meeting - February 20, 2020
Energy Imbalance Study
Energy Imbalance

• Energy imbalance is the difference between energy scheduled and what is needed in real-time

• Additional energy imbalance is needed as renewable (variable) energy sources connect to the grid
Desert Southwest Region’s (DSW) Requirements

• DSW covers our energy imbalance requirements with purchases and capacity not used for Firm Electric Service

• The status quo is not sustainable, so we must consider other sources to support our requirements
Energy Imbalance Markets
Tailored Approach

• Sierra Nevada Region is joining CAISO’s Energy Imbalance Market (EIM)

• Colorado River Storage Project, Rocky Mountain, and Upper Great Plains regions are joining SPP’s Western Energy Imbalance Service (WEIS)

• DSW is studying the cost and benefits of EIM and WEIS with its customers
Energy Imbalance Study

- Study Participants:
  - DSW
  - Arizona Electric Power Cooperative
  - Central Arizona Water Conservation District
  - Southwest Public Power Agency

- Contracted with E3 for benefits analysis and Utilicast for cost/gap analysis
Energy Imbalance Study

• Argonne National Laboratory is working with DSW and will support both the E3 and Utilicast analyses.

• Currently finalizing study parameters and topology with E3 and participants. Began meeting with Utilicast this week.

• Study work to be completed by the end of summer of 2020.

https://www.wapa.gov/regions/DSW/Pages/DSW-EIM.aspx
Fiber Optic Partnerships
WAPA’s System

- 5,500 miles of overhead fiber optic groundwire
- Provides communication necessary to support power operations
Tactical Action Plan

- Explore additional opportunities to use WAPA’s fiber assets

- WAPA will explore leveraging its fiber assets to:
  - Improve its communication capacity to support current and future technologies
  - Improve support to customers
  - Support grid resilience with the Departments of Energy and Defense
  - Support the Presidential Broadband Initiative
American Broadband Initiative

• A report will be completed by the Department of Commerce, National Telecommunications and Information Administration

• Required WAPA and the Southwestern Area Power Administration to complete a feasibility assessment

• Determine if excess fiber can be leased to customers and broadband service providers
2019 Customer Outreach

Fiber Working Group
May 2019

Compile Outreach Data
October/November 2019

Assessment Plan
April 2019

WAPA-wide & Regional Customer Meetings
June/September 2019

Final Assessment Report
December 2019
Summarized Customer Input

• Interest
  • Aid connectivity to rural areas
  • Increase redundancy/resiliency of existing networks
  • Enable cost-sharing and partnerships on tribal lands

• Priorities/Goals
  • Not impact delivery of power
  • Beneficiary pays

• Challenges/Concerns
  • Authority to enter into partnerships/expansion
  • Cost allocation among users
Next Steps

- **Fall 2019**: Draft and finalize the assessment
- **December 2019**: Submit assessment report to DOE
- **Winter 2020**: DOE and administration review of assessment
- **Spring 2020**: Discussions & determination of next steps

https://www.wapa.gov/About/keytopics/Pages/fiber-feasibility-assessment.aspx
Other Updates
DSW’s Regional Manager

- Ron Moulton retired December 2019 after 30 years of service

- Tracey LeBeau, WAPA’s Chief Administrative Officer, is the Acting Senior Vice President and Regional Manager for DSW
Parker-Davis Project Remarketing

- Identified by customers in July 2019 as a top initiative

- Existing power allocations and Firm Electric Service contracts expire September 30, 2028
Parker-Davis Project Remarketing

• Need to consider how to remarket the project:
  • Extend existing allocations or allow the opportunity for new allocations
  • Firm product or an alternative

• At the request of customers, we will initiate preliminary discussions about remarketing in the summer of 2020
Combined Transmission Rates

- Also identified as a key initiative by customers

- Currently separate rates for DSW’s transmission systems:
  - Central Arizona Project
  - ED5-PVH
  - Intertie Project
  - Parker-Davis Project
Combined Transmission Rates

• Separate transmission rates result in inefficient use of transmission systems and additional costs for customers that need to use multiple systems (pancaked)

• Rates of individual transmission systems are converging and projects are financially congruent

• Performing modeling now and will initiate discussions later this year about combining the rates
Questions / Comments
Contact Information

Jack Murray
(602) 605-2440
jmurray@wapa.gov

Tracey LeBeau
(602) 605-2453
lebeau@wapa.gov

602-605-2525
wapa.gov
@westernareapowr
WesternAreaPower1