



Western  
Area Power  
Administration

# WAPA Energy Management Overview

Chrystal Dean – CRSP Project Manager

October 27<sup>th</sup>, 2016

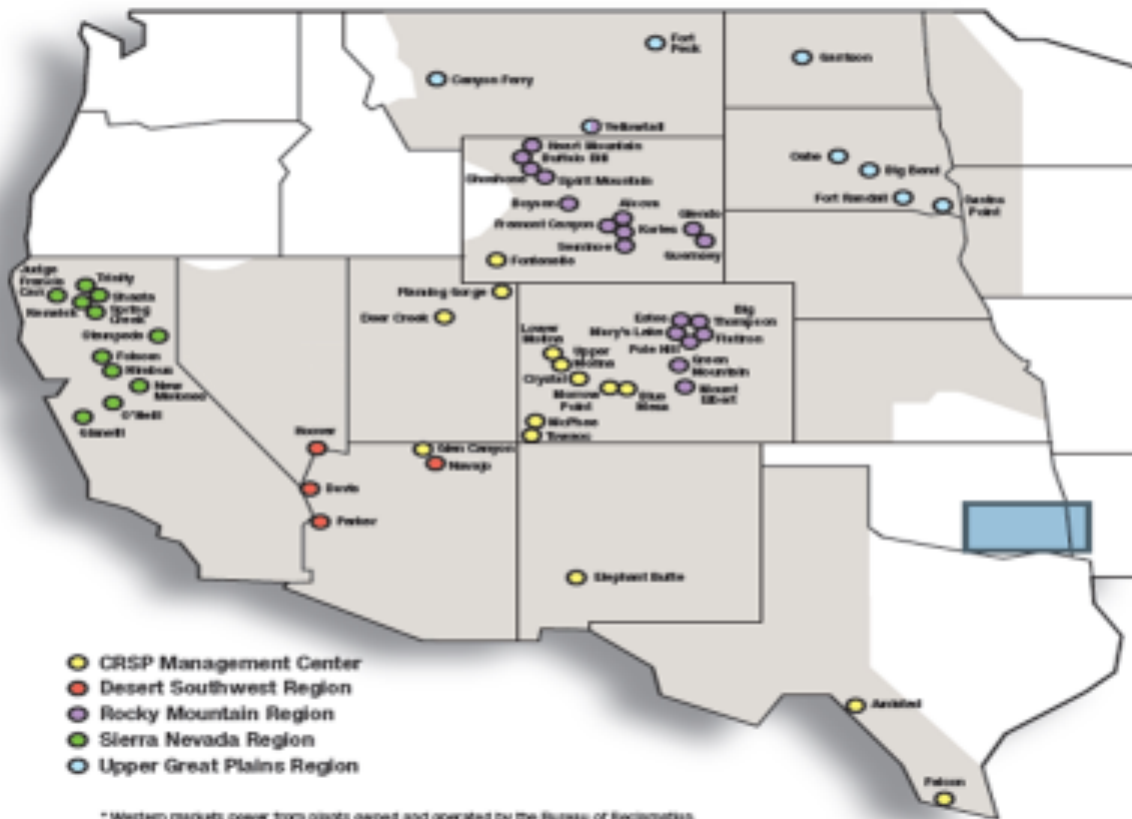
CRFS Technical Committee Meeting  
Salt Lake City, UT



# Who we are...

WESTERN AREA POWER ADMINISTRATION

## Powerplants



- CRSP Management Center
- Desert Southwest Region
- Rocky Mountain Region
- Sierra Nevada Region
- Upper Great Plains Region

\* Western markets power from plants owned and operated by the Bureau of Reclamation, Army Corps of Engineers and the International Boundary and Water Commission.  
\* Shivers dam and O'Neill are pump generating plants.



# Systems managed in Montrose, CO

- Colorado River Storage Project- Seven Power plants
  - Glen Canyon
  - Aspinall Units – Blue Mesa, Morrow Point and Crystal
  - Flaming Gorge
  - Fontenelle
  - Molinas – Upper and Lower
- Loveland Area Project 22 power plants:
  - Big Horn System
  - North Platte System
  - Fryingpan-Arkansas System
  - Colorado-Big Thompson System



# Project Manager Responsibilities

- Analyze forecast of predicted hydrological conditions and load requirements.
  - Up to a year out. Minimum looking at the next season
- Act on the forecast analysis to balance resource and load in the most economic manner.
  - Purchase and/or Sales of energy
- Regularly interact with The Bureau of Reclamation hydrologists and Plant Personnel
  - 24-mo. Study
  - Technical Work Group Meetings



# Project Management, continued



- Each Manager must coordinate generation outages with multiple groups: BOR (Loveland, Casper, Salt Lake City, Grand Junction), WACM, Water Conservancy Districts, and Internal personnel
- Be cognizant of how generation and or transmission outages affect overall system reliability, and Firm Electric schedules.
- Communicate with customers giving appropriate advance notice.





# After the Project Manager...

- Once our long(er) term forecasts are complete
  - Daily Prescheduling
    - Making two to three day schedules
    - Have the ability to fine tune the Project Managers projections
  - Real Time Marketing
    - Hour by hour balancing of resources to loads
    - Spring Runoff and big events most impacting
  - Continuous discussion with Reclamation and our internal hydrologists to adjust our operations based on current/actual hydrology.



Questions?

Chrystal Dean  
[cdean@wapa.gov](mailto:cdean@wapa.gov)  
970-252-3025

