

Glen Canyon Dam Adaptive Management Work Group
Agenda Item Information
August 24-25, 2016

Agenda Item

Basin Fund and Revenue Overview

Purpose of Agenda Item

To share crucial information about the Colorado River Storage Project (CRSP) system and Glen Canyon Dam from a hydropower production point of view.

Action Requested

Information item only; we will answer questions but no action is requested.

Presenter

Lynn Jeka, Senior VP and Colorado River Storage Project Manager, Western Area Power Administration, Department of Energy

Previous Action Taken

N/A

Relevant Science

N/A

Summary of Presentation and Background Information

This informational presentation will provide an overview of CRSP. You will have an opportunity to learn about how we establish the rates our customers pay for the power they receive, how the resulting revenues are used, and how the approximately \$20 million per year for environmental programs are funded. In addition, you'll learn how the Basin Fund is operated and why it is critical to CRSP, Reclamation, the seven Basin States, the Upper Colorado and San Juan River Recovery Implementation Programs, and the Glen Canyon Adaptive Management Program.

Congress created the Colorado River Storage Project (CRSP) through the CRSP Act of 1956 (Act of April 11, 1956, ch. 203, 70 Stat. 105). The Act authorized the Secretary of the Interior to construct, operate, and maintain the Colorado River Storage Project and participating projects. In the same Act, Congress authorized a separate fund in the Treasury of the United States to be known as the Upper Colorado River Basin Fund (referred to as the Basin Fund).

60 years later the Western Area Power Administration's CRSP Management Center works collaboratively in partnership with the Bureau of Reclamation (Reclamation) to generate and market power from the Colorado River Storage Project, Collbran, Seedska-dee, Dolores and Rio Grande projects (marketed together as the Salt Lake City Area Integrated Projects) and deliver this power to Firm Electric Service customers.

Basin Fund and Revenue Overview, continued

With a total investment of \$2.375 billion, 11 power plants, 24 generating units, and 2,325 miles of transmission lines CRSP and Reclamation provide clean, reliable, wholesale electric service to 130 wholesale customers in the west including 53 Native American tribes. Our service territory spans Arizona, New Mexico, Nevada, Colorado, Utah, Texas and Wyoming.



Colorado River Storage Project (CRSP) Update

Lynn Jeka, Senior VP and CRSP Manager

Steve Johnson, Manager, Energy Management & Marketing Office



August 25, 2016

AMWG Meeting

Flagstaff, AZ

Overview

- WAPA mission and responsibilities
- Salt Lake City Area Integrated Projects (SLCA/IP)
Financial Operations Update
- Grid Reliability Responsibility
 - Emergency Energy Support
- Transmission Owner/Operator Responsibility
 - Mountain West Transmission Group (MWTG)
participation



WAPA's Mission

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

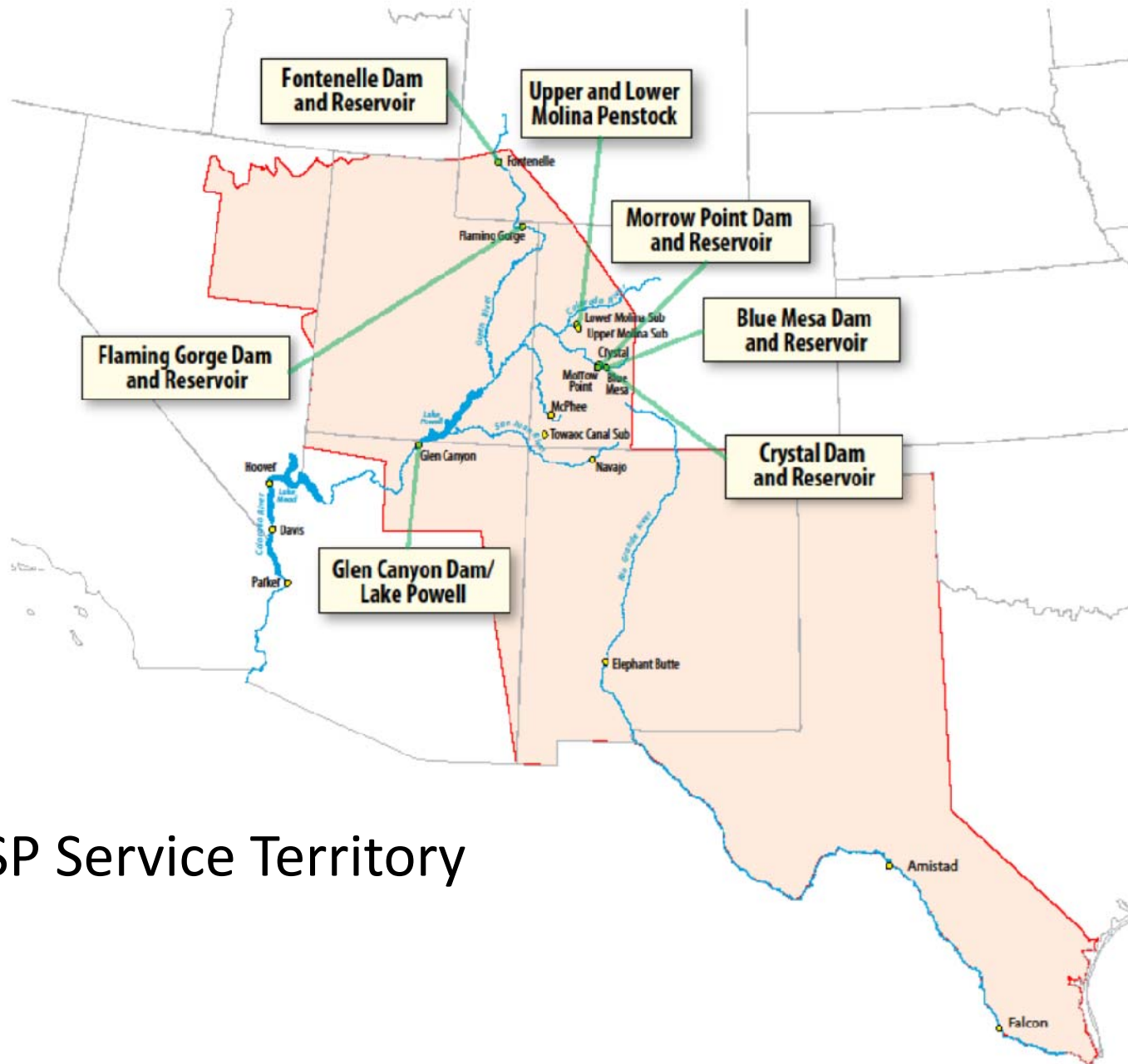


WAPA's Responsibilities

- Market, schedule, and deliver energy to long term firm electric service customers
- Supports grid reliability (regulation and reserve capacity)
- Own and operate the transmission system infrastructure
- Rate setting and repayment of project debt to U.S. Treasury from revenue

Joint responsibility for support for environmental activities related to CRSP and participating projects



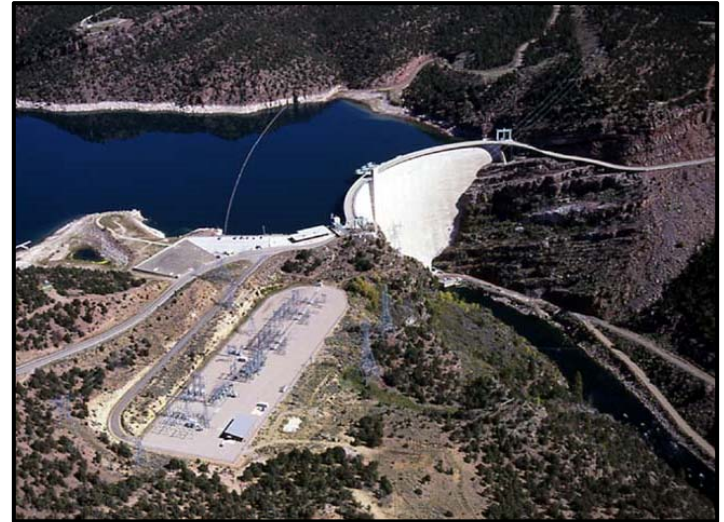


CRSP Service Territory



Salt Lake City Area Integrated Projects (SLCA/IP)

- 11 power plants
- 24 generating units
- 1,816 MW total installed capacity (73% from Glen Canyon)
- 5,263 GWh Net Generation (73.4% from Glen Canyon)
- 2,323 circuit miles (Arizona, Colorado, New Mexico, Utah, Wyoming)
- 135 long-term customers
 - 54 Native American Tribes (40% of total)



SLCA/IP Energy Sales by Customer Category (in million \$)

Category	FY2014	FY2015
Municipalities	\$ 77.8	\$84.4
Cooperatives	\$ 79.4	\$63.8
Federal Agencies	\$ 6.8	\$ 4.9
State Agencies	\$ 14.0	\$12.3
Irrigation Districts	\$ 10.7	\$ 4.1
Native American Tribes	\$ 16.1	\$15.5
Project Use	\$ 0.5	\$ 2.3
Other	\$ 1.7	\$ 3.7
Total	\$207.0	\$191.0



SLCA/IP Financial Profile

Sales/Revenue (in million \$)

	FY2014	FY2015
Total Energy Sales	\$207.0	\$191.0
Less: Pass Through Sales	(32.8)	(14.5)
Net Energy Sales	\$174.2	\$176.5
Transmission Services Sales	\$ 15.8	\$ 17.5
Ancillary Services Sales	\$ 5.9	\$ 6.4
Total Sales/Revenue	\$195.9	\$200.4



SLCA/IP Revenue and Costs (in Millions of \$)

	FY2014	FY2015
Total Sales/Revenue	\$195.9	\$200.4
Operations & Maintenance	\$ 91.3	\$ 81.0
Purchase Power & Wheeling	\$ 84.4	\$ 46.9
States' MOA funds	\$ 11.5	\$ 11.5
Salinity Program	\$ 2.3	\$ 2.0
Repayment of Investment	\$ 3.9	\$ 54.1
Interest on Investment	\$ 2.5	\$ 4.9
Total Costs	\$195.9	\$200.4

**LEGISLATION REQUIRES FULL COST RECOVERY
MEANING ... TOTAL REVENUE EQUALS TOTAL COSTS
"PROFIT" IS NOT ALLOWED !!**



SLCA/IP Repayment Status @9/30/15

Project	Total Investment	Amount Repaid	Percent Repaid
CRSP (Glen Canyon, Flaming Gorge, Aspinall Units)	\$1,207,370,000	\$1,118,289,000	92.6%
CRSP Irrigation/Aid	\$1,156,432,000	\$ 110,556,000	9.6%
Collbran (Upper & Lower Molina dams)	\$ 22,077,000	\$ 17,273,000	78.2%
Dolores (McPhee & Towaoc dams)	\$ 39,009,000	\$ 9,771,000	25.1%
Rio Grande (Elephant Butte dam)	\$ 20,102,000	\$ 16,399,000	81.6%
Seedskadee (Fontenelle dam)	\$ 9,456,000	\$ 9,456,000	Fully Repaid in 2013

**All Projects are on target to be repaid
per the required schedule !!**



Environmental Programs

Non-reimbursable funding provided from the Basin Fund:

- Glen Canyon Dam Adaptive Management Program
-- \$10.8 million
 - Upper Colorado River Endangered Fish Recovery Program
-- \$5.5 million
 - San Juan River Recovery Program -- \$2.7 million
 - Quality of Water & Consumptive Use Studies -- \$1 million
- Experimental Flows – Nov. 2014 HFE estimate \$1.8 million
Nov. 2013 HFE actual cost \$2.6 million



We've covered the financial operations ...

Let's talk about CRSP's other responsibilities



Grid Reliability Responsibility

- Emergency Support and Response



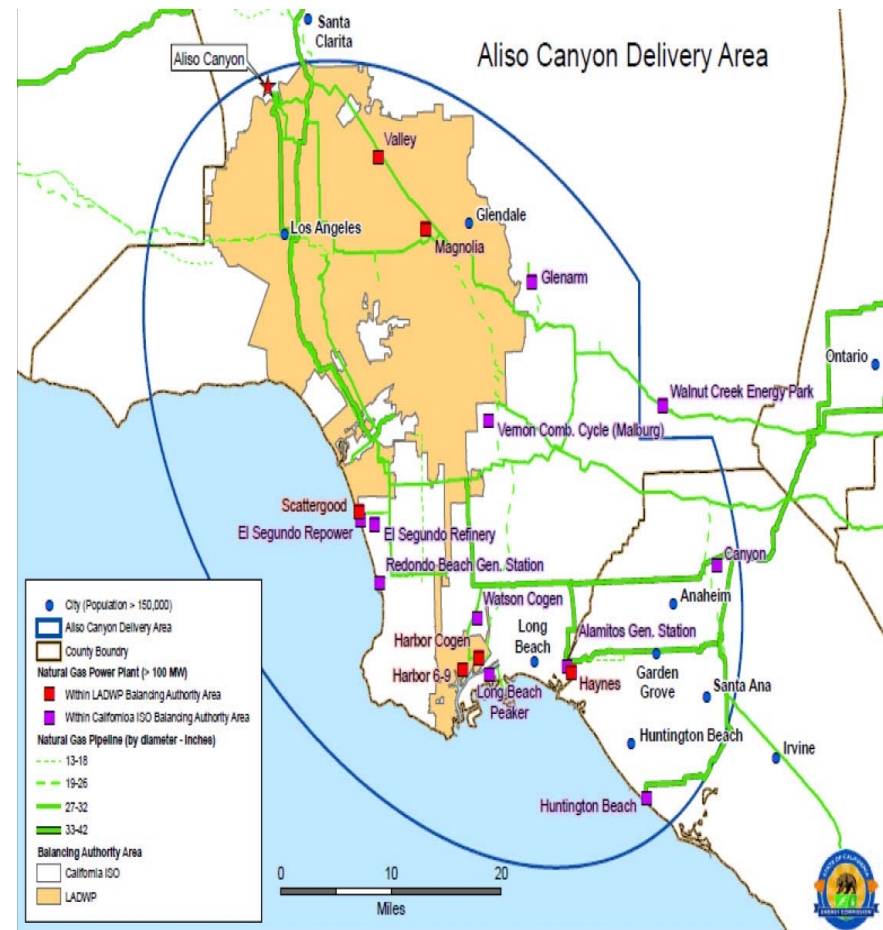
Emergency Energy Support for Grid Reliability

- Aliso Canyon gas storage facility
- Leak Discovered on October 23, 2015
- Leak stopped, but 114 other wellheads to be tested before refilling to capacity

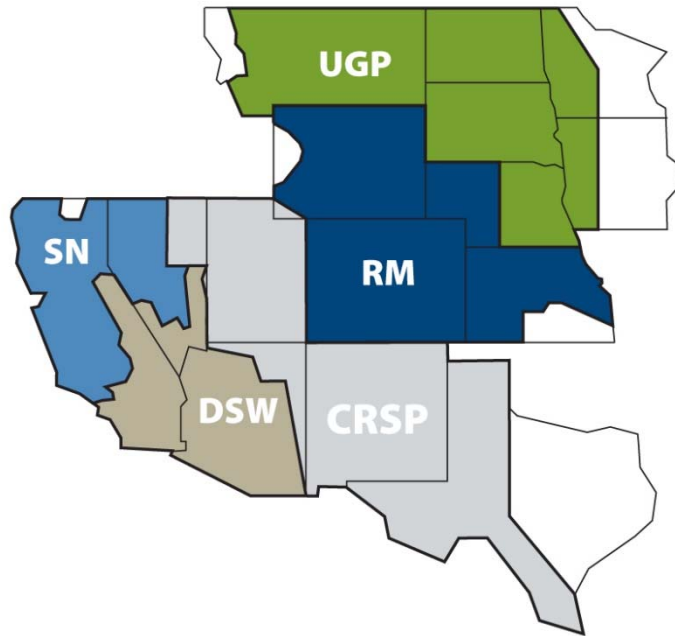


Emergency Energy Support for Grid Reliability

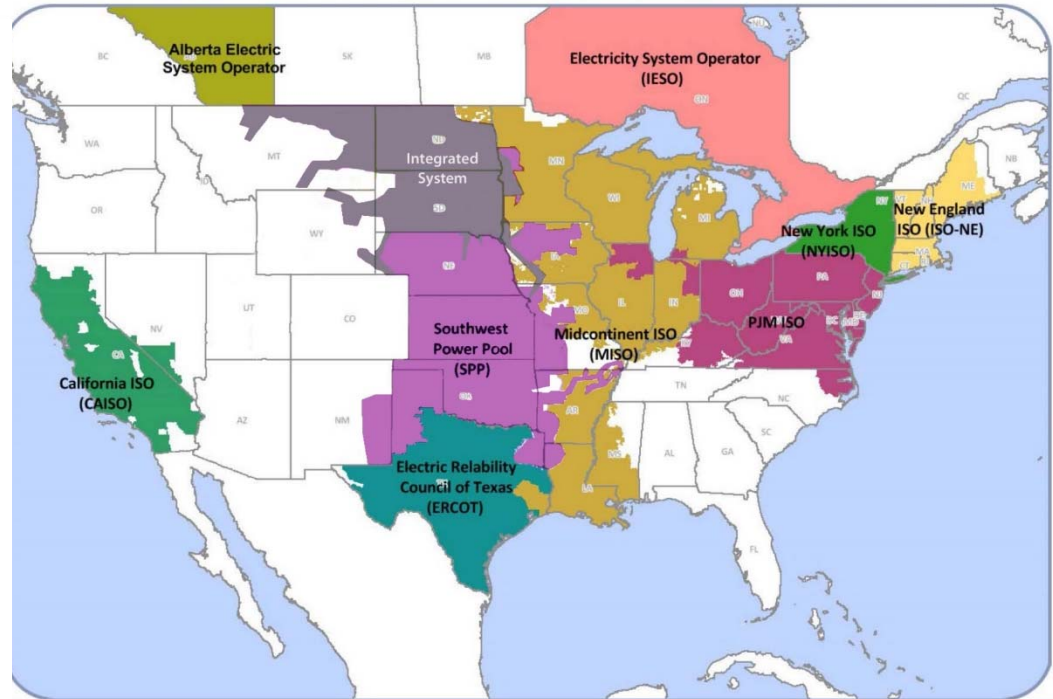
- Requires Stage 3 emergency
- No power available anywhere else
- Initiate emergency protocols at GCD
- Desk top exercises conducted with BOR
- Actual delivery amount depends on availability of power and transmission



WAPA: Transmission Owner & Operator



WAPA Service Territory

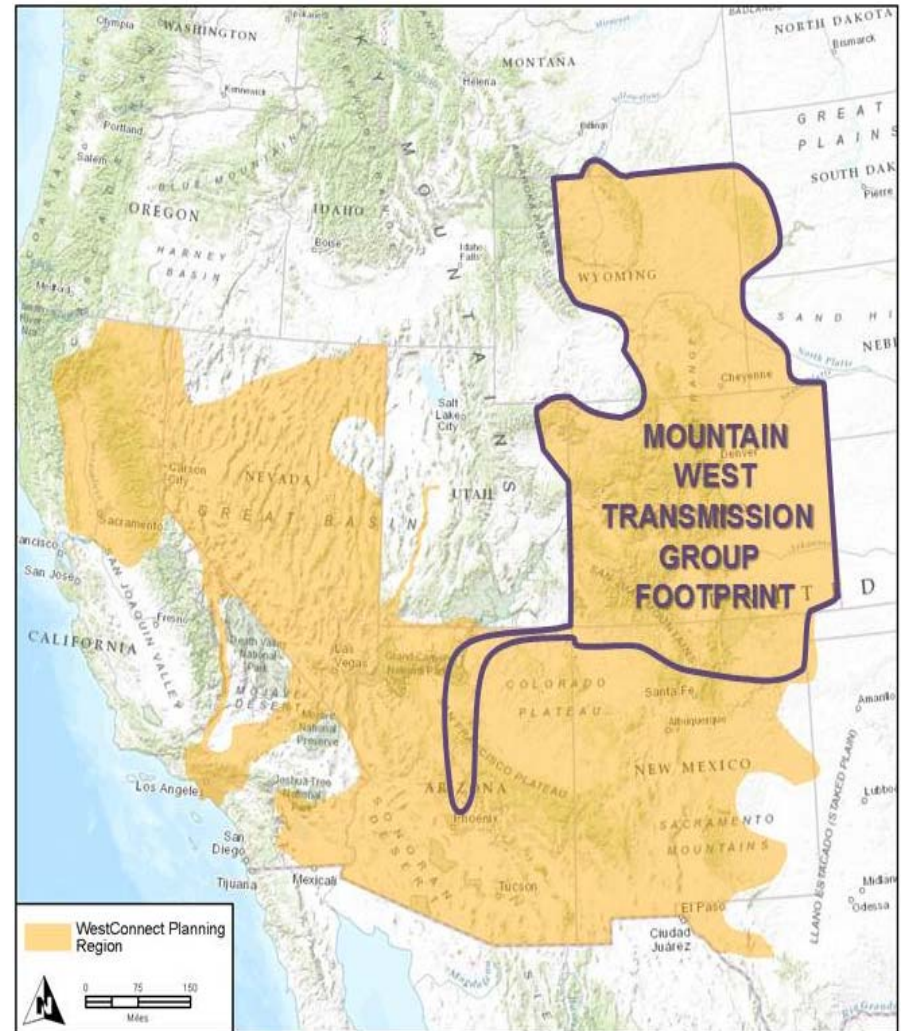


Regional Transmission Markets



MWTG

- Goal – Create a single multi-company transmission tariff (rate) and explore market alternatives
- MWTG Transmission Service Providers include: two Investor Owned Utilities, two municipalities; two Rural Electric Associations; two Federal PMA projects
- Currently includes seven parties with nine transmission tariffs (rates)



MWTG Benefits

- One transmission provider
 - De-pancaking of transmission charges
 - Foundation for an organized transmission market
 - Improved transmission planning and interconnection processes
 - ✓ Avoid duplication of facility investments
 - ✓ One point of contact for system interconnections
 - ✓ Additional siting opportunities for new resources
 - May assist in addressing future regulatory challenges



QUESTIONS ?



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