

CRSP MC Update

Steve Johnson
CRSP MC Manager

January 25th, 2018

Arizona Tribal Energy Association
Annual Meeting
Phoenix, Arizona



CRSP MC Changes Since Last Year

- Lynn Jeka Retirement
 - End of December
- New Financial Manager
 - Tyler Nelson
- New Contracts Staff Member
 - Tim Kutz
- New Office
 - 299 South Main St., suite 200 (Wells Fargo building)

Basin Fund Status

- FY17 Ending Balance - \$106.4M
- FY18 Projected Ending Balance - \$116.4M
- Current Balance (as of January 23rd) - \$144.3M
- FY17 Purchase Power - \$9.5M
- FY18 Projected Purchase Power - \$6.9M

Olmsted Update

- Olmsted Marketing Plan
 - Final marketing plan was issued on October 11th
 - Call for applications closed on December 11th
 - 4 applications were received
- Proposed allocations expected to be published in February
- Rate will be published in April/May
 - Preliminary calculations show a competitive rate

LTEMP Record of Decision

- Signed on December 15th, 2016
- 20-year framework for operations of Glen Canyon Dam
- Implementation was phased in beginning January 2017 with new water volumes
- CRSP & BOR working collaboratively on operational guidelines
- Programmatic Agreement executed in August, 2017

Glen Canyon Operational Changes

Operational Parameter	Prior to 1991 Interim Flows	1996 ROD (MLFF)	2016 LTEMP
Minimum Release (cfs)	3,000 Summer 1,000 rest of the year	8,000 7am – 7 pm 5,000 7pm – 7 am	8,000 7am – 7 pm 5,000 7pm – 7 am
Maximum Release (cfs)	31,500 cfs (power plant capacity)	25,000 cfs	25,000 cfs
Daily Fluctuations (cfs change/24 hr period)	Unrestricted	5,000 to 8,000 cfs depending on monthly volume	Factor of 9x or 10x the monthly volume (KAF) 8,000 cfs/day cap
Ramping Rate (cfs change/hour)	Unrestricted	4,000 cfs upramp 1,500 cfs downramp	4,000 cfs upramp 2,500 cfs downramp
Operational/Environmental Experiments	None	High Flow Experiments (HFE) up to 96 hours Low Summer Steady Flows (LSSF)	High Flow Experiments (HFE) up to 250 hours Low Summer Flows (LSF)

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Reduced marketable capacity by 30% or \$50M/yr.

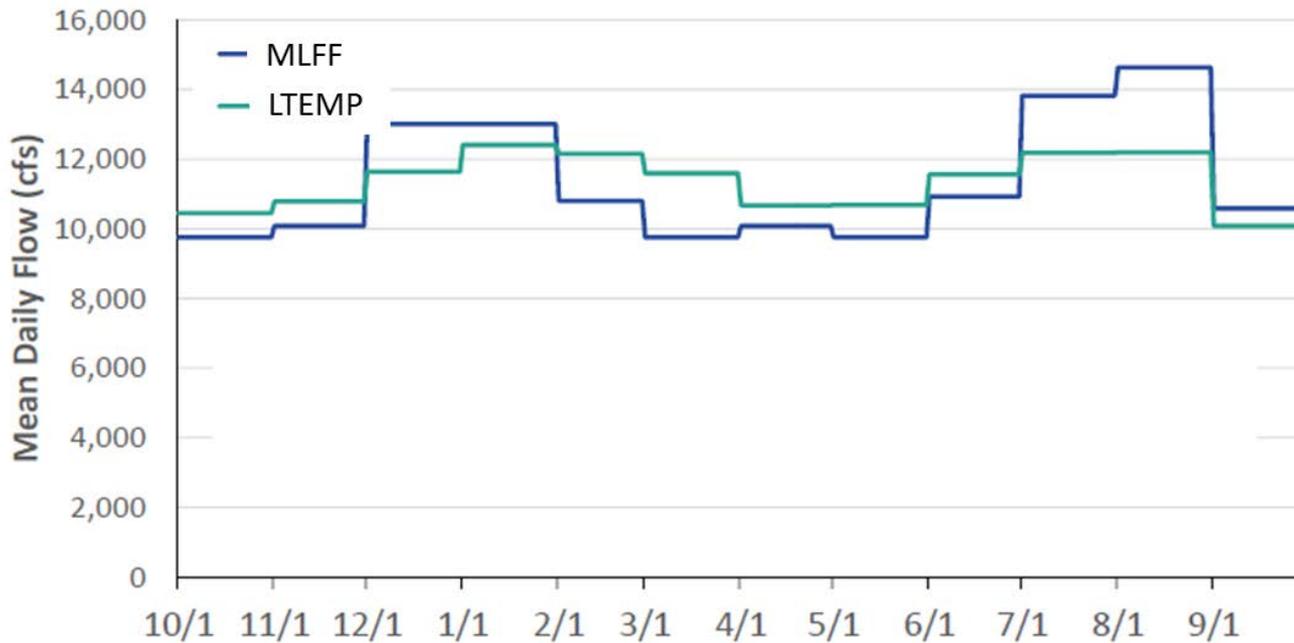
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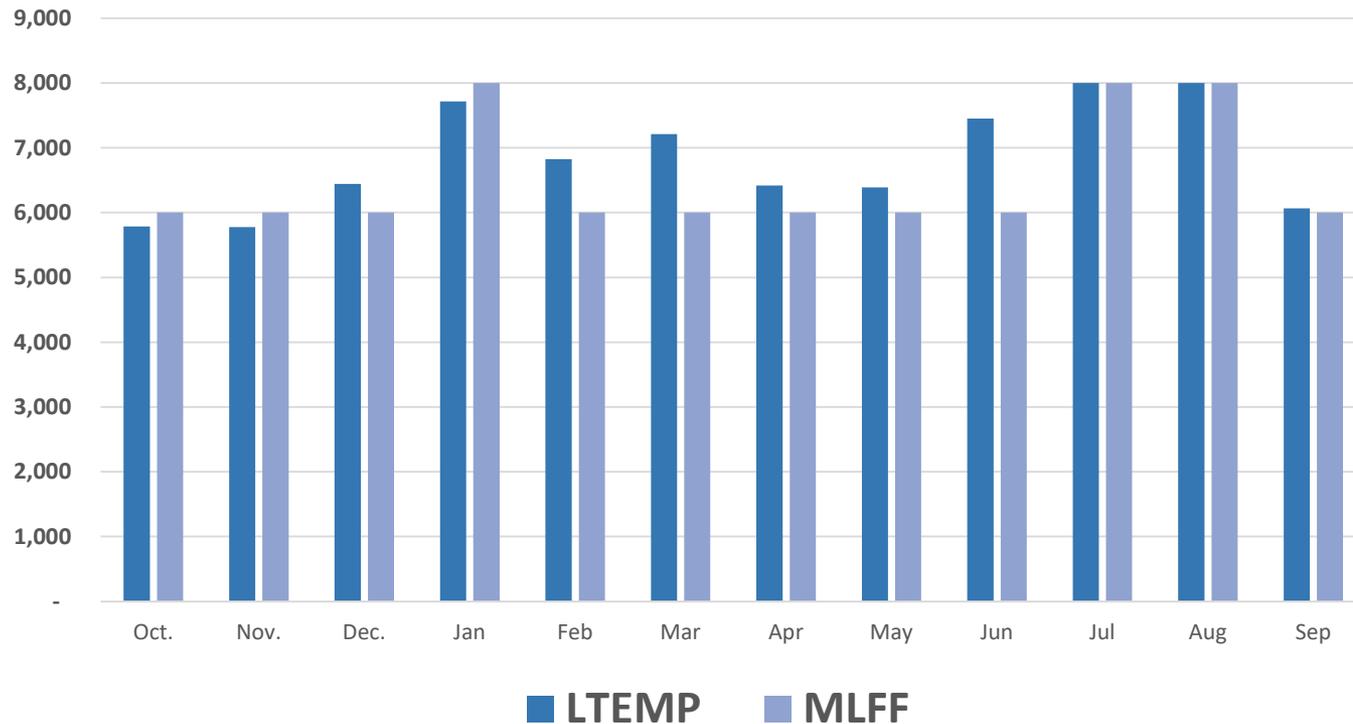
Further reduced marketable capacity by another 48 MW or \$3M/yr.

Changes in monthly volumes with LTEMP



Daily Fluctuations (LTEMP vs MLFF)

-LTEMP Monthly Volumes used for MLFF comparison



Project N

- Experiments will be coordinated/associated with operational experiments at Glen Canyon
- Experiments include
 - HFEs
 - Macroinvertebrate production flows
 - Trout management flows
 - Improve hydropower and energy resources

Historic Preservation Plan

- CRSP MC working with Reclamation to develop HPP no later than August, 2018
- Will identify roles, responsibilities and program goals
- Lisa Meyer and Brian Sadler overseeing effort for CRSP MC
- Working to ensure language is clear on use of power revenues

LTEMP Implementation

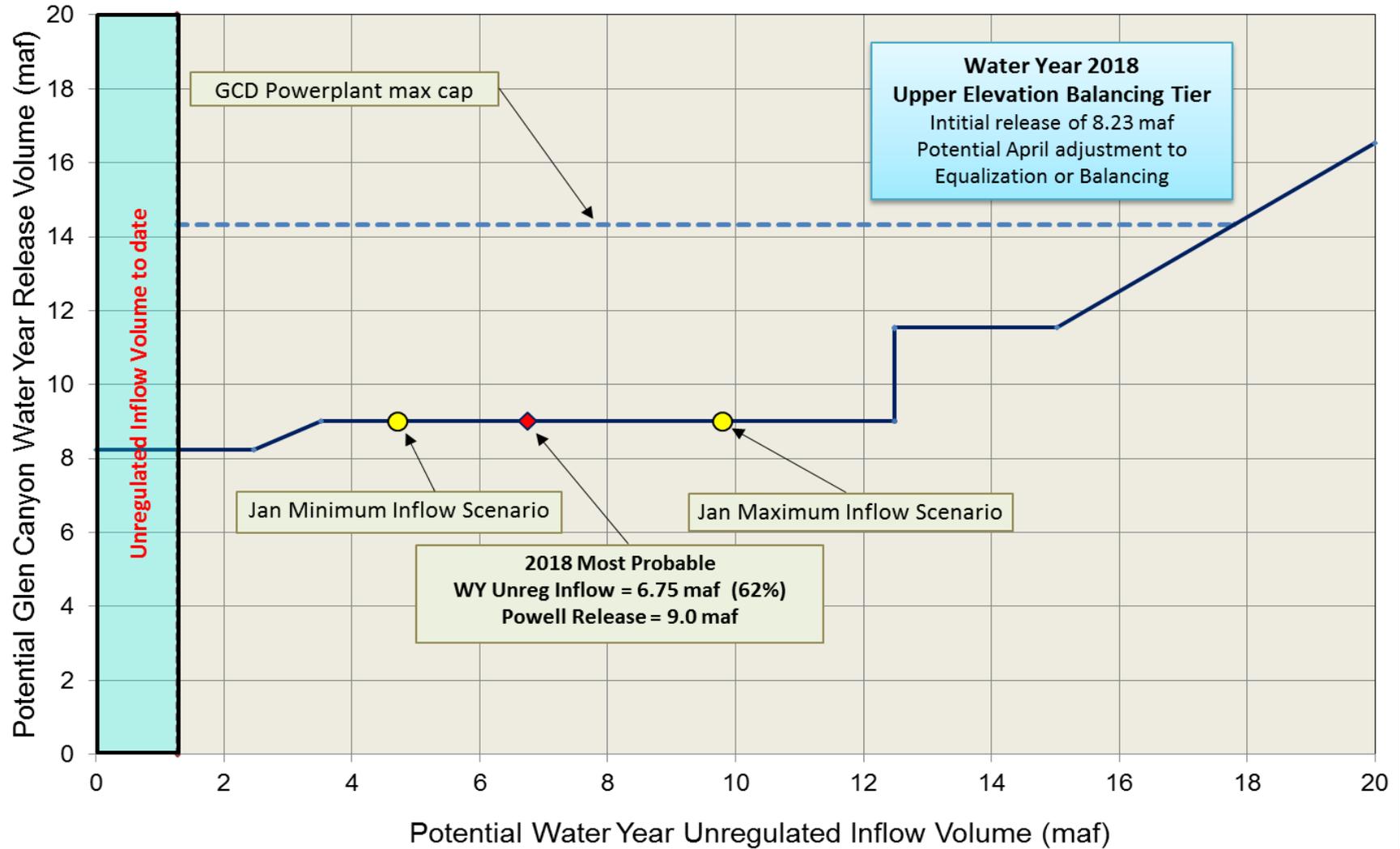
- Implementation for the CRSP MC EMMO group has gone smoothly
- Good coordination between WAPA and Reclamation to adjust when needed
 - e.g. Unexpected Flaming Gorge Outage resulting in adjusting Glen Canyon monthly volume for October.
- Finalized the Glen Canyon operating criteria for the new LTEMP operations with Reclamation

Other Operations Highlights

- No HFE in November 2017
 - Sediment load did not support
- 9 MAF year for WY 2018
 - Current hydrology does not look favorable for WY 2019
 - Most probable forecast for inflow is 6.75 MAF (62%)

Potential Lake Powell Release Scenarios

Water Year 2018 Release Volume as a Function of Unregulated Inflow Volume based on January 2018 24-Month Study Conditions



Environmental Program Funding

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

WAPA Updates

- Continuing Resolution
 - Could impact certain construction and rehabilitation projects funded by appropriations
- Reliability Coordinator
 - CAISO announced it will provide RC services
- Organizational Approach to Markets
 - Realignment of some functions between regions to improve consistency in organizational structure
 - Improve monitoring of RTO and market activities
 - Move toward consistent IT toolsets across WAPA

Mountain West Update

- Began Customer and public outreach in 2015
- FRN published Oct. 12
- Three public forums
- 45-day comment period closed Nov. 27 with responses posted January 10th
- Recommendation to pursue final negotiations with SPP
- Decision will likely be made in early 2018

Mountain West electricity providers to explore RTO options

Mountain West Transmission Group to open discussions on possible membership; expanded electricity market may improve reliability and create savings
FOR IMMEDIATE RELEASE: January 6, 2017

Mountain West announces next step to potential Southwest Power Pool membership

Initial discussions with SPP reach completion; Mountain West to proceed to negotiations for SPP regional transmission organization membership
FOR IMMEDIATE RELEASE: September 22, 2017

WAPA seeks comments on SPP membership for two projects

Holding public meetings about RTO membership
FOR IMMEDIATE RELEASE: October 12, 2017

Questions?

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