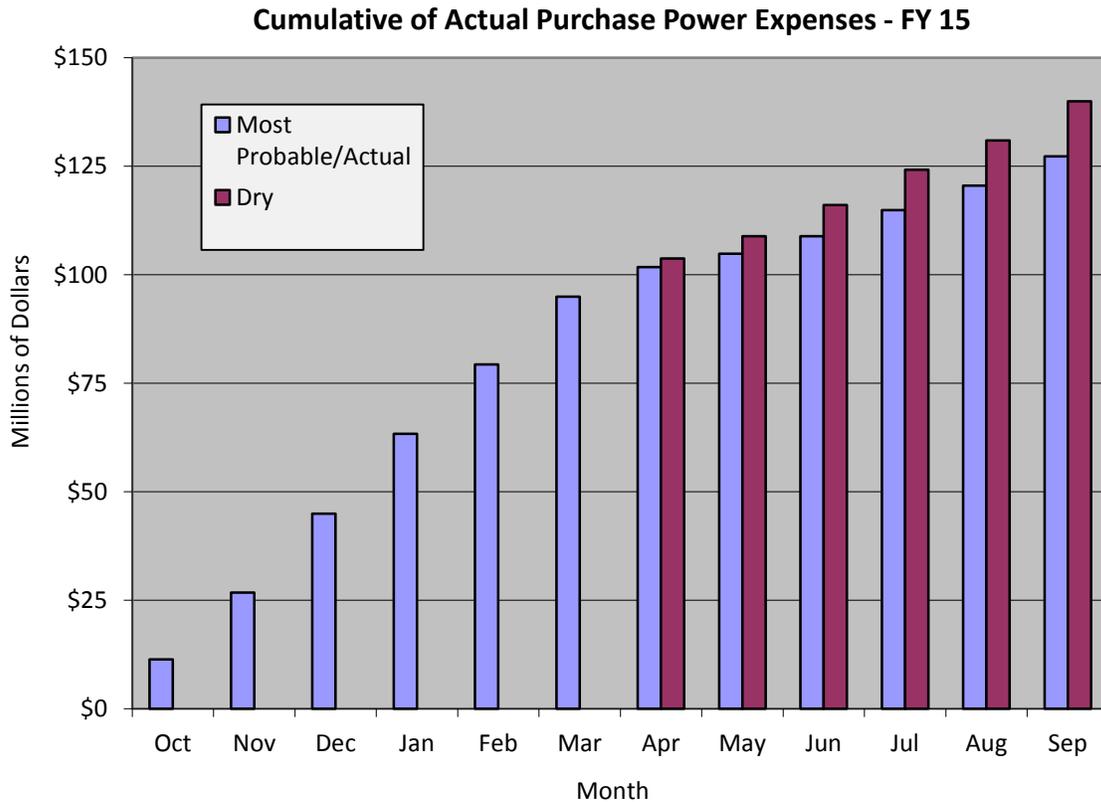


**Hydro Conditions and
Purchase Power Monthly Outlook
April 2015**

Western Summary

- The most probable forecast of net generation for fiscal year (FY) 2015 is 24,620 gigawatt-hours (GWh) or 93 percent of average. October through March generation was 95 percent of average.
- The lower level forecast of generation for FY 2015 is 23,481 GWh or 89 percent of average.
- The amount of power purchased for FY 2015 is expected to range between 2,345 and 2,799 GWh.
- The average price for purchase power across all hydro projects and off-peak and on-peak periods is expected to range between \$50/megawatt-hour (MWh) and \$54/MWh for FY 2015 – compared to an actual average price of \$50/MWh for FY 2014.
- Purchase power expenses for FY 2015 are forecast to range between \$127 and \$140 million – compared to actual purchase power expenses of \$226 million in FY 2014.
- October through March purchases totaled \$95 million – compared to \$162 million for the same timeframe the year before.



Upper Great Plains Region

Corps of Engineers Report: Runoff for March was 2.2 million acre-feet (MAF) or 74 percent of normal. Temperatures were near normal in Montana and Wyoming but the lack of snow and rain persisted. The April forecast runoff for 2015 is 20.3 MAF or 80 percent of normal. This is well below the average of 25.2 MAF. System storage increased slightly to 57.4 MAF above March's 57.1 MAF. This is still slightly above the Base Flood Control level of 56.1 MAF.

Snowpack: The lack of any measurable spring snow has caused a significant drop in snowpack from last month. As of April 1, 2015, the snowpack at Yellowtail was 76 percent of normal while Canyon Ferry dropped to 75 percent. The main stem snowpack dropped to 66 percent above Fort Peck and 74 percent on the reach from Fort Peck to Garrison.

Canyon Ferry: As of April 12, 2015, reservoir storage at Canyon Ferry was 1,546.6 thousand acre-feet (kAF) and the active conservation pool was 81.7 percent full. The anticipated inflow for the April-July spring runoff period is forecast to be 1,107.5 kAF or 65 percent of the 30-year average.

Yellowtail: As of April 12, 2015, reservoir storage at Yellowtail was 853.4 kAF and the active conservation pool was 83.6 percent full. Streamflows into Bighorn Lake during March were 110 percent of average. On April 1, the Natural Resources Conservation Service measured the snow water content of the mountain snowpack in the Bighorn Basin at 75 percent of average. Based on the April 1 water supply forecast and the planned releases out of the Boysen and Buffalo Bill Reservoirs, the April-July runoff into Bighorn Lake is expected to equal 675.5 kAF or 62 percent of average.

Generation: The six main stem power plants generated 745 GWh of electricity in March.

Purchase Power: UGPR is in the spring months of the generating season and with loads decreasing, prices are expected to be in the low \$20s for off-peak power and the low \$30s for on-peak power.

Rocky Mountain Region

The Loveland Area Projects (LAP) reside in both the Upper Missouri and Upper Colorado basins. Hydrologic conditions can vary from one river basin and watershed to another. The three LAP watersheds are the Bighorn River Basin in Wyoming, the North Platte River Basin in Colorado and Wyoming, and the headwaters of the Colorado River Basin in Colorado.

Moderate to severe drought conditions have returned to the Colorado River headwaters above Lake Powell with the extreme upper headwaters above Kremmling that supply the Colorado-Big Thompson Project (CBT) less impacted. The snowpack is now well below average in all three

basins. Reservoir inflows were well above average all winter due to good fall precipitation and then some melting of lower elevation snow during warmer periods. The overall LAP reservoir storage at the end of March was still above average with gains in all three basins since the end of last March. The latest National Weather Service forecast calls for temperatures in the May to July period to be just as likely above as below normal in Colorado and Eastern Wyoming and more likely to be above normal in Western Wyoming. Precipitation is more likely to be above normal throughout the LAP area. Reclamation is forecasting spring reservoir inflows to be below average for the CBT and well below average in the North Platte and Bighorn basins.

LAP Water Conditions At-A-Glance									
	Reservoir Storage 1,000 acre-feet			Snowpack inches snow water equivalent			Most Probable Reservoir Inflow 1,000 acre-feet (April - July)		
	end of March	average	% of average	beginning of April	average	% of average	April forecast	average	% of average
	CBT	808.6	629.3	128%	375.4	468.9	80%	532.6	599.0
North Platte	1,746.0	1,478.2	118%	342.2	499.3	69%	250.0	694.0	36%
Bighorn	2,004.4	1,723.2	116%	299.2	373.5	80%	827.0	1,321.1	63%
TOTAL	4,559.0	3,830.7	119%	1,016.8	1,341.7	76%	1,609.6	2,614.1	62%
Net At Plant Generation Projections (GWh)									
	Most Probable Case median inflow			Reasonable Minimum Case lower decile inflow			Reasonable Maximum Case upper decile inflow		
	April projection	average	% of average	April projection	average	% of average	April projection	average	% of average
Winter 14-15	520.3	718.0	72%	520.3	718.0	72%	520.3	718.0	72%
Summer 15	1,201.1	1,217.8	99%	1,001.9	1,217.8	82%	1,351.2	1,217.8	111%
TOTAL 2015	1,721.4	1,935.8	89%	1,522.2	1,935.8	79%	1,871.5	1,935.8	97%

The winter season generation was 72 percent of average and about 485 GWh of energy was purchased to support LAP firm electric service commitments. CBT Adams Tunnel imports from the west slope and associated generation were well below normal over the winter because the east slope storage space was limited after low water demands last year. Winter reservoir releases and associated generation in the North Platte Basin were typical of recent operations and the release from Bighorn Lake via the Yellowtail power plant was above average under the latest Bighorn Lake operating criteria. The upcoming summer LAP generation is projected to be between 79 percent and 97 percent of average at this time with some surplus generation expected only in the heaviest snow melt runoff months of May and June. No surplus LAP firm energy will be offered to firm electric service customers this spring and summer.

Colorado River Storage Project Management Center

The total storage volume for the CRSP main stem reservoirs is 16.037 MAF, which is about 52 percent of the total main stem reservoir storage capacity. Main stem reservoir inflows for the most recent historical month (March 2015) were about 89 percent of average. Lake Powell elevation currently is about 3,591 feet, 109 feet from maximum reservoir level and about 101 feet from the minimum generation level. Based on the current forecast, the April 24-Month study projects Lake Powell elevation will end the water year near 3,583 feet with approximately 10.236 MAF in storage or 42 percent capacity. A lack of storms in the Colorado River Basin thus far this year has lowered the inflow estimates for the April to July runoff period to about 52 percent of average.

Based on the most probable inflow forecast, estimated SLCA/IP net generation for FY 2015 is 4,899 GWh as compared to 5,571 GWh based on the long-term historical average generation.

Purchase power expenses for firming during the fiscal year 2015 are estimated at \$22.1 million as compared to about \$21.7 million based on long-term average historical releases. Purchase power availability in the region is good and prices are low for this time of year. Firming purchases for the last month have been averaging in the mid to upper \$20s off-peak and mid \$30s on-peak.

Desert Southwest Region

Current Aggregate Storage (Mead, Mohave & Havasu): 12.690 MAF (12.993 MAF February 2015), 20.663 MAF (65-Year Historical Average).

The Lake Mead end of March 2015 elevation was 1,084.87 feet (4.11 feet lower than end of February 2015 elevation), or about 134.77 feet below full storage elevation of 1,219.64 feet and 34.87 feet above the minimum generation elevation for Hoover of 1,050 feet.

Lake Mead's elevation peaked at 1,088.98 feet in February of water year (WY) 2015 (19.8 feet below the WY 2014 peak elevation of 1108.75 feet), and is projected to drop to a minimum elevation of 1,073.03 feet in June of WY 2015. This projected minimum elevation is below the 1,075 feet Shortage Criteria elevation. However, this does not mean that Lake Mead would be operating under Shortage Conditions for WY 2015. Lake Mead is currently operating under Normal Conditions for WY 2015. Lake Mead's elevation at the beginning of WY 2015 (October 1, 2014) was 25.4 feet lower than at the beginning of WY 2014 (October 1, 2013). There is now a 20 percent probability that Lake Mead will be operating under the Shortage Criteria for WY 2016.

The Lake Powell operational tier for WY 2015 is currently the Upper Elevation Balancing Tier. Total releases from Lake Powell are projected to average about 9.0 MAF for WY 2015 (actual of

7.48 MAF for WY 2014). These releases above the normal 8.23 MAF are characterized as “balancing releases” due to the current projection that the Lake Powell elevation will be at or above 3,575 feet and the Lake Mead elevation will be below 1,075 feet on September 30, 2015. The projected 2015 April-July unregulated inflow into Lake Powell is 3.75 MAF or 52 percent of average (actual of 6.92 MAF or 97 percent of average for 2014).

Basin Snow Pack and Precipitation: DSW hydrology, or the Lower Colorado River Basin, is mostly dependent on the Colorado River Basin snow pack and precipitation above Lake Powell. The WY 2015 precipitation is currently 75 percent of average and the snowpack is 56 percent of median.

Lower Basin Runoff: The lower basin tributary inflow into Lake Mead for March 2015 was 57 kAF. The projected side inflow into Lake Mead for WY 2015 is 844 kAF which represents a 24.7 percent increase over last year’s actual of 677 kAF, and represents 65 percent of the normal annual side inflow of 1.3 MAF.

Forecasted WY 2015 Generation: 5,088 GWh compared to 5,632 GWh (Historical Average). The projected Hoover and Parker-Davis generation for WY 2015 is 90 percent of the average historical generation.

Wholesale Power Market Conditions: The March market prices in the Desert Southwest averaged about \$22/MWh firm off-peak, \$25/MWh firm on-peak compared to \$21/MWh firm off-peak, \$24/MWh firm on-peak for the previous month.

Sierra Nevada Region

The total storage of the four major CVP reservoirs is 4.951 MAF, compared to 5.178 MAF last year. Accumulated inflow for the water year-to-date is 110 percent of the 15-year average for Trinity, 79 percent for Shasta, and 46 percent for both Folsom and New Melones. None of the reservoirs is in flood control operations at this time.

The Northern Sierra Eight Station index averages slightly more than 50 inches of precipitation per water year. This water year started out with October recorded precipitation totaling 2.74 inches, which is 90 percent of the monthly average. November recorded precipitation totaled 4.35 inches, which is 70 percent of average. December recorded precipitation totaled 15.85 inches or 179 percent of average. January recorded precipitation totaled 0.28 inches or 3 percent of average. It was one of the fifth driest on record. February ended at 7.50 inches or 92 percent of its average. March ended at 1.08 inches or 16 percent of average. It was one fifth driest on record. As of April 27, the month was at 2.37 inches or 61 percent of average. The cumulative total at this time is 33.02 inches or 68 percent of the annual average. December and January are the months with the highest average, with February very close.

Water year type forecasting begins in December, but snow surveying doesn't begin until January. The snowpack is assumed to reach its peak on April 1. Therefore, snow water equivalents are reported as a percentage of this average. As of April 27, the North is at 1 percent, the Central is at 5 percent, and the South is at 3 percent of this average. The Sacramento River Index forecast of water supply based upon April 1 conditions is "critical" for both the 90 percent and the 50 percent exceedence cases.

The average projection of net generation is again taken from the latest modeling using the update to our customers' "Green Book." This average, at 3.34 GWh, is less than the 3.63 GWh from the CVPIA PEIS planning studies. Under the Post 2004 Marketing Plan, net generation, after Project Use load, First Preference Customer load and sub-control area reserve requirement, becomes the Base Resource which is allocated among the Base Resource, Variable Resource and Full Load Service Customers. This past fiscal year ended at approximately 60 percent of that average. Reclamation forecasts are based upon February 1 conditions, which were "critical" for the both the 90 percent and the 50 percent exceedence cases of the Sacramento River Index. These forecasts would be 51 percent and 62 percent of the "Green Book" average.