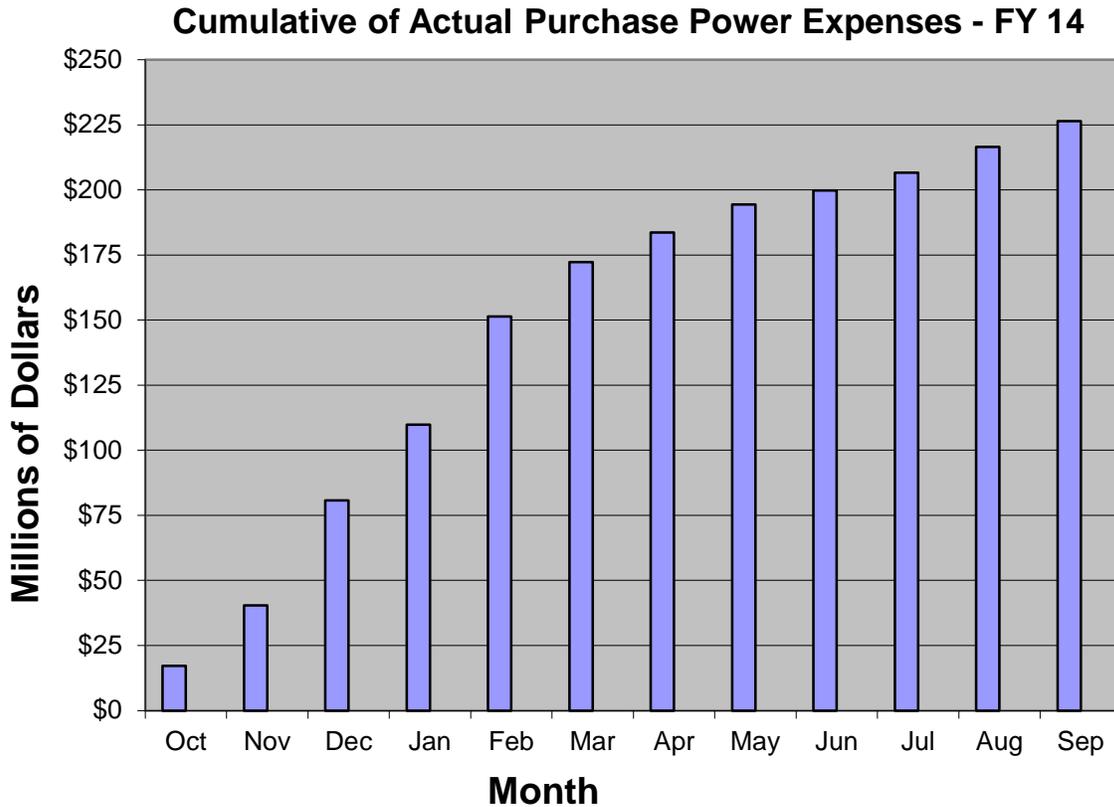


**Hydro Conditions and
Purchase Power Report
October 2014**

Western Summary

- Fiscal year (FY) 2014 ended with net generation of 22,938 gigawatt-hours (GWh), or 88 percent of average.
- The amount of power purchased for FY 2014 was 4,547 GWh, compared to FY 2013 purchases of 4,428 GWh.
- The average price for purchase power across all hydro projects and off-peak and on-peak periods was \$50/megawatt-hour (MWh). The average price for FY 2013 was \$41/MWh.
- Purchase power expenses for FY 2014 were \$226.4 million, compared to \$181.5 million for FY 2013. The breakdown for the FY 2014 purchases, in millions, is: UGPR - \$80.0, RMR - \$21.1, CRSP - \$62.0, DSW - \$5.7, and SNR - \$57.6.



Upper Great Plains Region

Canyon Ferry: The anticipated inflow for October is forecast to be 282.1 thousand acre-feet (kAF) or 114 percent of the 30-year average. As of October 8, 2014, reservoir storage at Canyon Ferry was 195,589 acre-feet and the active conservation pool was 89.7 percent full.

Yellowtail: Streamflows into Bighorn Lake during September were 135 percent of average. Based on the October 1 water supply forecast and the planned releases out of Boysen and Buffalo Bill Reservoirs, the October runoff into Bighorn Lake is expected to equal 187,600 acre-feet or 117 percent of average. As of October 8, 2014, reservoir storage at Yellowtail was 1,007,279 acre-feet and the active conservation pool was 98.7 percent full.

COE: Several large rainfall events in September caused above normal runoff to persist on the Missouri River system, which continues to keep the three largest reservoirs above normal heading into the winter season. System storage peaked in September with 61.3 million acre-feet (MAF). Gavins Point releases are expected to be 20,000 cubic feet per second through the winter due to the continued runoff, and energy production this winter looks to be better than the last few years. The October forecasted runoff for 2014 remains at 35.5 MAF or 141 percent of normal. Normal runoff is 25.2 MAF. The October forecasted energy production for the year decreased slightly to 9,818 GWh. This is down from the September forecast of 9,898 GWh.

FY Generation: The six main stem power plants generated 1,043 GWh of electricity in September, and the total energy production for FY 2014 was 9,571 GWh. 10,027 GWh is the 100-year average.

Purchased Power: We are in the fall months of the generating season, and with loads decreasing but more units offline for scheduled maintenance, prices are expected to be in the mid \$20s for off-peak power and the mid \$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.

The LAP area continues to be drought free. The snowpack peaked at the normal time this year with peaks of 135 percent of average in the Bighorn Basin, 112 percent in the North Platte, and 140 percent in the Upper Colorado headwaters of the Colorado-Big Thompson Project (CBT). Good soil moisture and stream bank storage carrying over from a very wet fall season and a very good snowpack resulted in reservoir inflows that were well above average in all three river basins. Water demands were below normal due to a rather cool and wet summer and the resulting overall LAP reservoir storage at the end of September was above average with gains in all three river basins since last September. The latest National Weather Service forecast indicates November through January temperatures will more likely be above average in Wyoming with an equal chance of being above or below normal in Colorado. The precipitation in that same period is just as likely to be above as below average in Colorado and all but the

northwest portion of Wyoming. The precipitation is more likely to be below average in Wyoming's Bighorn Basin.

LAP Water Conditions At-A-Glance							Net At Plant Generation Projections (GWh)			
	Reservoir Storage 1,000 acre-feet			Actual Annual Reservoir Inflow 1,000 acre-feet			FY2014 Actual Generation FY2015 Winter Projection			
	end of FY2014	average	% of average	FY2014	average	% of average		average	% of average	
CBT	864.4	699.9	124%	1,123.0	792.0	142%	Winter 13-14	555.3	718.0	77%
North Platte	1,425.2	1,209.7	118%	1,470.7	1,081.1	136%	Summer 14	1,336.3	1,217.8	110%
Bighorn	2,198.6	1,899.9	116%	2,442.1	1,741.6	140%	TOTAL 2014	1,891.6	1,935.8	98%
TOTAL	4,488.2	3,809.5	118%	5,035.8	3,614.7	139%	Winter 14-15	551.1	718.0	77%

LAP generation was near average in FY 2014, with the winter generation well below average and the summer generation above average. There was an extended CBT outage due the flooding last September. Reclamation drained Lake Estes and curtailed all imports through Adams Tunnel through early December to allow for the removal of sediment and debris washed into the Lake by the flood. Imports resumed in mid-December and heavier Adams Tunnel imports later in the winter shifted normal October and November CBT generation into February and March. There were minimum winter reservoir releases and associated generation in the North Platte Basin due to depleted reservoir storage.

There were plant bypasses in the Bighorn and North Platte basins in the spring due to the heavy snowmelt runoff. Some of the Yellowtail bypass was at the request of Western to allow for upward on-peak regulation in the WACM balancing authority while other load following plants were loaded to capacity. In the CBT a bypass was required at the Green Mountain plant and Lake Granby spilled when East Slope CBT storage filled. The generation was, however, below average in August due to a curtailment of Adams Tunnel imports and associated CBT generation from August 11 through the September 1 as a means to improve water clarity in Grand Lake.

Winter generation is based on reservoir storage at the end of the irrigation season and reservoir releases required to achieve spring reservoir storage targets. Spring reservoir targets may be modified as mountain snowpack develops over the winter and early spring. The upcoming winter season generation is expected to be about 77 percent of average and seasonal energy purchases have been arranged to support LAP firm electric service commitments.

Colorado River Storage Project Management Center

The total storage volume for the CRSP main stem reservoirs is 17,636,000 acre-feet, which is about 57 percent of the total main stem reservoir storage capacity. Main stem reservoir inflows for the most recent historical month (September 2014) were about 131 percent of average. Lake Powell elevation currently is about 3,606 feet, 94 feet from maximum reservoir level and about 116 feet from the minimum generation level. Based on the current forecast, the October 24-Month study projects Lake Powell elevation will end the water year near 3,605 feet with approximately 12.286 MAF in storage (51 percent capacity).

Based on the most probable inflow forecast, estimated SLCA/IP net generation for FY 2014 is 4,160 GWh as compared to 5,584 GWh based on the long-term historical average generation.

Purchase power expenses for firming during FY 2014 were \$62 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 typical for this time of year. Firming purchases for the last month have been averaging in the low \$30s off-peak and low \$40s on-peak.

Desert Southwest Region

Current Aggregate Storage (Mead, Mohave & Havasu): 12.349 MAF (12.396 MAF August 2014), 20.614 MAF (64-Year Historical Average). The Lake Mead end-of-September 2014 elevation was 1,081.33 feet (0.22 feet lower than end of August 2014 elevation), or about 138.31 feet below full storage elevation of 1,219.64 feet and 31.33 feet above the minimum generation elevation for Hoover of 1,050 feet. Lake Mead's elevation peaked at 1,108.75 feet in January of water year (WY) 2014 (13.57 feet below the WY 2013 peak elevation of 1,122.32 feet), and dropped to a minimum elevation of 1,080.6 feet in July of WY 2014, a maximum fluctuation in lake elevation of 28.15 feet. The Lake Powell operational tier for WY 2014 was the Mid-Elevation Release Tier. Total releases from Lake Powell to Lake Mead were 7.48 MAF for WY 2014 (actual of 8.232 MAF for WY 2013). The observed 2014 April-July unregulated inflow into Lake Powell was 6.923 MAF or 97 percent of average (actual of 2.56 MAF or 36 percent of average for 2013).

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. WY 2014 ended with a precipitation of 106 percent of average. Observed precipitation for September was 125 percent. Forecasted precipitation for October is 146 percent, November is 106 percent, and December is 105 percent.

Lower Basin Runoff: The lower basin tributary inflow into Lake Mead for September 2014 was 138 kAF. The observed side inflow into Lake Mead for WY 2014 was 675 kAF which represents a 18 percent decrease over last year's actual of 824 kAF, and 52 percent of the normal annual side inflow of 1.3 MAF.

Actual WY 2014 Generation (Parker, Davis & Hoover): 5,311 GWh compared to 5,636 GWh (Historical Average). The actual Hoover and Parker-Davis generation for WY 2014 was 94 percent of the average historical generation.

Wholesale Power Market Conditions: The September market prices in the Desert Southwest averaged about \$41/MWh firm on-peak and \$32/MWh firm off-peak, compared to \$41/MWh firm on-peak and \$32/MWh firm off-peak for the previous month.

Sierra Nevada Region

The total storage of the four major CVP reservoirs is 2.629 MAF, compared to 4.841 MAF last year. The water year ended on September 30 with 2.212 MAF less storage than last water year. Accumulated inflow for the water year ended at 29 percent for Trinity, 52 percent for Shasta, 42 percent for Folsom, and 36 percent for New Melones.

The Northern Sierra Eight Station Index averages slightly more than 50 inches of precipitation per water year. October recorded precipitation totaled 0.72 inches, or 23 percent of the monthly average. November recorded precipitation totaled 1.66 inches, or 26 percent of average. December came in at 0.92 inches, or 10 percent of average. January came in at 1.20 inches, or 13 percent of its average. February ended at 14.20 inches, or 130 percent of its average. March came in at 10.21 inches, or 153 percent of average. April ended at 3.95 inches, or 67 percent of average. May, which averages 2.20 inches, ended at 0.75 inches or only 34 percent of average. June, which averages 0.97 inches, ended at 0.05 inches. July, which averages 0.17 inches, ended at 0.22 inches or 128 percent of average. August, which averages 0.27 inches, ended at 0.64 inches. September, which averages 0.79 inches, ended at 1.63 inches. The cumulative total for the water year was 31.34 inches, or 62 percent of the annual average.

The snowpack is assumed to reach its peak April 1. Snow water equivalents are reported as a percentage of this average. By June 9, the snowpack was gone. The Sacramento River Index forecast of water supply, based upon the May 1 conditions forecast, was “critical” for the 90 percent exceedence as well as the 50 percent case. The 40-30-30 year type declaration based upon May 1 conditions at the 50 percent exceedence level was also “critical.”

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. The previous fiscal year ended at 91 percent of that average, and this year ended at 60 percent of that average. Delta outflow remains an issue. Reclamation continues to cycle Delta pumping with two days “on” and one day “off.”