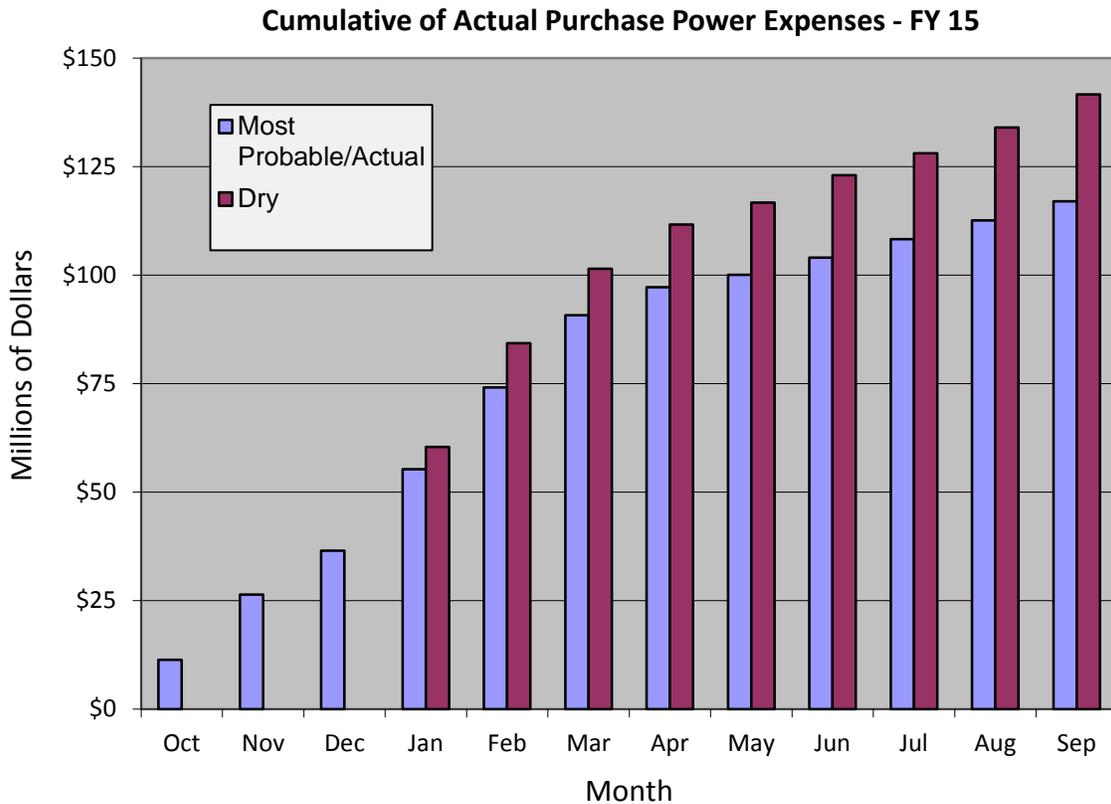


Hydro Conditions and Purchase Power Monthly Outlook January 2015

Western Summary

- The most probable forecast of net generation for fiscal year (FY) 2015 is 24,754 gigawatt-hours (GWh) or 94 percent of average. October through December generation was 97 percent of average.
- The lower level forecast of generation for FY 2015 is 23,590 GWh or 89 percent of average.
- The amount of power purchased for FY 2015 is expected to range between 2,110 and 2,899 GWh.
- The average price for purchase power across all hydro projects and off-peak and on-peak periods is expected to range between \$49/megawatt-hour (MWh) and \$55/MWh for FY 2015 – compared to an actual average price of \$50/MWh for FY 2014.
- Purchase power expenses are forecast to range between \$117 and \$142 million for FY 2015 – compared to actual purchase power expenses of \$226 million in FY 2014.
- October through December purchases totaled \$36 million – compared to \$69 million for the same timeframe the year before.



Upper Great Plains Region

Corps of Engineers Report: Run-off for 2014 ended up at 25.6 million acre-feet (MAF), which ranks eleventh in the past 118 years on record. The December system storage remained stable and the forecasted energy production was increased along with releases due to cold temperatures and icing over of the reservoirs. Gavins Point winter release has been increased to 20,000 cubic feet per second (cfs) for the next couple of months which is up from the 17,000 cfs in December. System storage peaked in September with 61.3 MAF and has since dropped to 56.4 MAF at the end of December. This is slightly above the Base Flood Control level.

Snowpack: The snowpack at Canyon Ferry and Yellowtail started out below normal this fall but ended near 100 percent in December. The snowpack above Fort Peck is 101 percent and from Fort Peck to Garrison is 101 percent of normal. Light plains snow pack has accumulated in the Dakotas.

Canyon Ferry: As of January 13, 2015, reservoir storage was 1,573,686 acre-feet and the active conservation pool was 83.2 percent full. The anticipated inflow for the April-July spring runoff period is forecast to be 1,867,800 acre-feet or 110 percent of the 30-year average.

Yellowtail: As of January 13, 2015, reservoir storage at is 909,589 acre-feet and the active conservation pool is 89.1 percent full. Streamflows into Bighorn Lake during December were 134 percent of average. Based on the January 1 water supply forecast and the planned releases out of Boysen and Buffalo Bill Reservoirs, the April-July runoff into Bighorn Lake is expected to equal 1,095,700 acre-feet or 101 percent of average.

Generation: Water year (WY) 2014 ended with energy production of 9,574 GWh. This is down from the December forecast of 9,602 GWh. The six main stem power plants generated 606 million kilowatt-hours of electricity in December.

Purchase Power: UGPR is in the winter months of the generating season and with loads increasing, prices are expected to be in the low thirties for off-peak power and the mid forties 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 is drought free and an improvement over last January. The snowpack ranged from below average to well above average at the beginning of the month. Reservoir inflows have been well above average so far due to good precipitation this fall and early winter. The

overall LAP reservoir storage at the end of December was well above average with gains in all three basins since the end of last December. The latest National Weather Service forecast indicates February through April temperatures will more likely be above average in western Wyoming and just as likely to be above as below average in southeast Wyoming and Colorado. The same forecast indicates precipitation will just as likely be above average as below average in Wyoming and more likely to be above average in Colorado.

LAP Water Conditions At-A-Glance									
Reservoir Storage 1,000 acre-feet			Snowpack inches snow water equivalent			Actual Reservoir Inflow To-Date 1,000 acre-feet			
end of December	average	% of average	beginning of January	average	% of average	October - December	average	% of average	
CBT	821.1	661.1	124%	142.1	118.3	120%	89.4	58.7	152%
North Platte	1,575.9	1,344.7	117%	137.6	146.1	94%	119.9	99.2	121%
Bighorn	2,077.2	1,825.3	114%	148.1	142.8	104%	260.1	200.6	130%
TOTAL	4,474.2	3,831.1	117%	427.8	407.2	105%	469.4	358.5	131%
Net At Plant Generation Projections (GWh)									
Most Probable Case median inflow			Reasonable Minimum Case lower decile inflow			Reasonable Maximum Case upper decile inflow			
January projection	average	% of average	January projection	average	% of average	January projection	average	% of average	
Winter 13-14	536.7	718.0	75%	531.8	718.0	74%	577.5	718.0	80%
Summer 14	1,401.6	1,217.8	115%	1,181.5	1,217.8	97%	1,594.2	1,217.8	131%
TOTAL 2014	1,938.3	1,935.8	100%	1,713.3	1,935.8	89%	2,171.7	1,935.8	112%

The winter season generation is expected to be about 75 percent of average and seasonal energy purchases have been arranged to support LAP firm electric service commitments. Adams Tunnel imports from the west slope and associated generation will be well above normal this winter because the east slope storage space is limited after low water demands last year. Winter reservoir releases and associated generation in the North Platte Basin will be typical of recent operations and the release from Bighorn Lake via the Yellowtail power plant is above average under the latest Bighorn Lake operating criteria. The upcoming summer LAP generation is projected to be between 89 percent and 112 percent of average at this time.

Colorado River Storage Project Management Center

The total storage volume for the CRSP main stem reservoirs is 16,507,000 acre-feet, which is about 53 percent of the total main stem reservoir storage capacity. Main stem reservoir inflows for the most recent historical month (December 2014) were about 115 percent of average. Lake Powell elevation currently is about 3,596 feet, 104 feet from maximum reservoir level and about 106 feet from the minimum generation level. Based on the current forecast,

the January 24-Month Study projects Lake Powell elevation will end the water year near 3,609 feet with approximately 12.631 MAF in storage (52 percent capacity).

Based on the most probable inflow forecast, estimated SLCA/IP net generation for FY 2015 is 5,040 GWh as compared to 5,571 GWh based on the long-term historical average generation.

Purchase power expenses for firming during FY 2015 are estimated at \$17.8 million as compared to about \$21.5 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 high \$30s on-peak and low \$30s off-peak.

Desert Southwest Region

Current Aggregate Storage (Mead, Mohave & Havasu): 12.774 MAF (12.405 MAF November 2014), 20.694 MAF (65-Year Historical Average).

The Lake Mead end of December 2014 elevation was 1,087.79 feet (4.22 feet higher than end of November 2014 elevation), or about 131.85 feet below full storage elevation of 1,219.64 feet and 37.79 feet above the minimum generation elevation for Hoover of 1,050 feet.

Lake Mead's elevation is projected to peak at 1088.98 feet in February of WY 2015 (19.77 feet below the WY 2014 peak elevation of 1,108.75 feet), and drop to a minimum elevation of 1,072.95 feet in June of WY 2015. This projected minimum elevation is below the 1,075 feet Shortage Condition 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).

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 April-July unregulated inflow into Lake Powell is 6.50 MAF or 91 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 82 percent of average and the snowpack is 86 percent of average.

Lower Basin Runoff: The lower basin tributary inflow into Lake Mead for December 2014 was 67 thousand acre-feet (kAF). The projected side inflow into Lake Mead for WY 2015 is 839 kAF which represents a 20.4 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: 5,164 GWh compared to 5,633 GWh (Historical Average). The projected Hoover and Parker-Davis generation for WY 2015 is 92 percent of the average historical generation.

Wholesale Power Market Conditions: The December market prices in the Desert Southwest averaged about \$31/MWh firm on-peak, \$24/MWh firm off-peak compared to \$38/MWh firm on-peak, \$33/MWh firm off-peak for the previous month.

Sierra Nevada Region

The total storage of the four major CVP reservoirs is 3.821 MAF, compared to 4.045 MAF last year. Accumulated inflow for the water year-to-date is 155 percent of the 15-year average for Trinity, 102 percent for Shasta, 68 percent for Folsom, and 62 percent for 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. As of January 21, the month was at 0.28 inches or 3 percent of average. The cumulative total at that time was 23.22 inches or 46 percent of the annual average.

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 January 20, the North is at 18 percent, the Central is at 16 percent, and the South is at 15 percent of this average. The Sacramento River Index forecast of water supply based upon January 1 conditions is "dry" for the 90 percent exceedance, but "above normal" for the 50 percent case, expecting quite a different picture based upon February 1 conditions given this month's dryness.

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 Central Valley Project Improvement Act Programmatic Environmental Impact Statement 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 past fiscal year ended at approximately 60 percent of that

average. The Bureau of Reclamation forecasts are based upon December 1 conditions, which were based upon water supply forecast of “critical” for the 90 percent exceedance and “below normal” for the 50 percent exceedance Sacramento River Index. These forecasts would be 51 percent and 61 percent of this “Green Book” average net generation, and more indicative of current dry conditions.