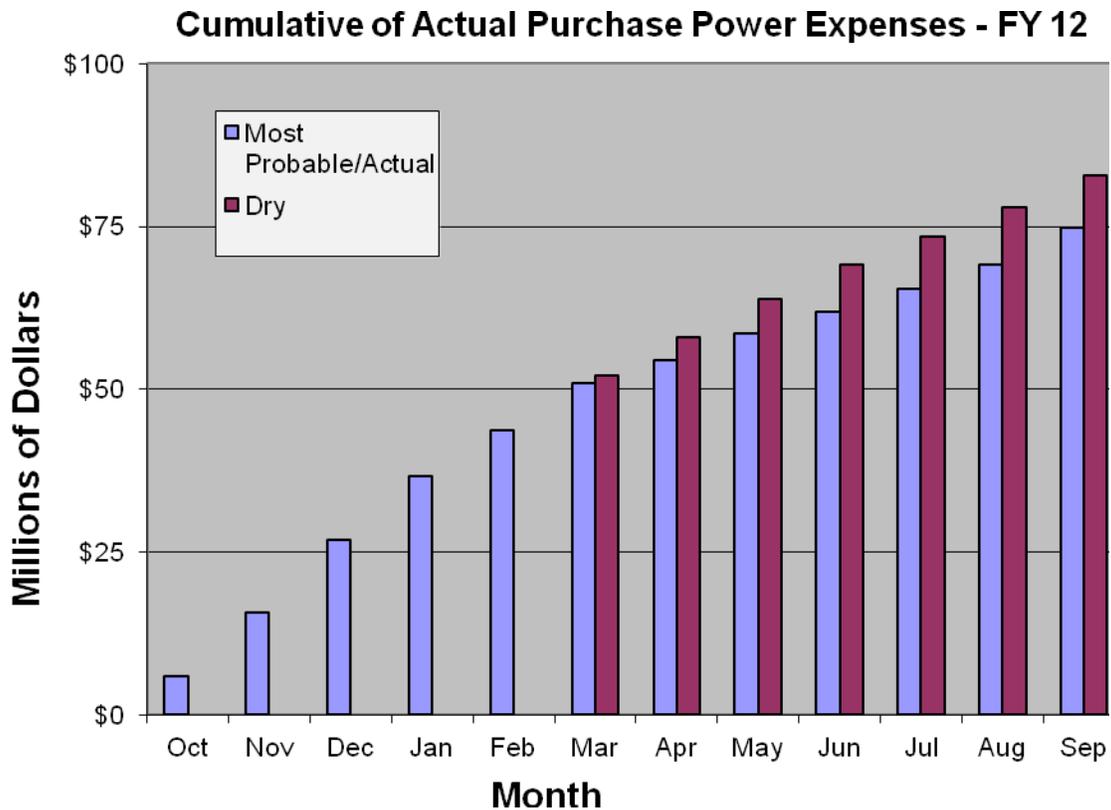


Hydro Conditions and Purchase Power Monthly Outlook March 31, 2012

Western Summary

- The most probable forecast of net generation for FY 2012 is 27,423 Gigawatthours (GWh) or 100 percent of average. October through February generation was 106 percent of average.
- The lower level forecast of generation for FY 2012 is 26,814 GWh or 97 percent of average.
- The purchased power for FY 2012 is expected to range between 1,440 and 1,742 GWh.
- The average price for purchase power across all hydro projects and off-peak and on-peak periods is expected to be \$52/MWh. This price compares to \$58/MWh last year.
- Purchase power expenses for FY 2012 are forecast to range between \$75 and \$83 million.
- October through February purchases totaled almost \$44 million – compared to \$58 million for the same period last year.



Upper Great Plains Region

Storage: Due to the open-mild winter, stream-flows into Canyon Ferry during February were the 14th highest on record at 112 percent of average. Mountain snowpack conditions in the Missouri River Basin upstream of Canyon Ferry are about 85% of average. Based on the March 1 water supply forecast, the April-July runoff into Canyon Ferry is expected to equal 1,565,000 acre-feet (82% of average). Based on the current conditions, releases out of Canyon Ferry to the Missouri River below Holter Dam are expected to be maintained above the minimum fishery flow of 4,100 cfs through the spring and summer. Streamflows into Bighorn Lake during February were 106% of average. Mountain snowpack in the Bighorn Basin is 116 percent of average. Based on the March 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 1,344,300 acre-feet (118% of average).

As of March 19, 2012, the storage level at [Canyon Ferry](#) is 1,533,548 acre feet and the active conservation pool is 81.1% full. Storage at [Yellowtail](#) is 827,322 acre feet and the active conservation pool is 81.1% full.

COE Runoff: The COE plans to reduce the mainstream levels by the end of March to facilitate the spring runoff season. Navigation season will begin April 1st at Gavins Point, but since the winter releases were of a more aggressive nature, there will be little difference in release. The higher than normal winter releases have increased the storage capacity by 300,000 acre feet over this time last year. Mountain snowpack has now reached normal averages and the COE is predicting an above average runoff this year of about 105%. Estimated generation for 2012 has not significantly changed and stands at 9,946 GWh. Normal is 10,000.

Snow pack The March 1 forecasted runoff for calendar year 2012 is 26.1 MAF. This runoff would be 105% of normal runoff. As of March 1, 2012, the mountain snowpack in the reach above Fort Peck is 94% of the average snowpack for this date. Mountain snowpack in the reach between Fort Peck and Garrison is 105% of the average snowpack for this date. The snowpack for the North Platte River Basin is currently 85% of average and the snowpack for the South Platte River Basin is 91% of average. Missouri River Basin mountain snowpack normally peaks near April 15.

FY Generation: The six main stem power plants generated 730 million kilowatt hours of electricity in February. Total energy production for 2012 was earlier forecasted to reach 14.1 billion kWh, but has been reduced to around 11.1 billion kWh. The long-term average is approximately 10 billion kWh.

Purchase Power: Springtime and warmer weather typically signals excess generation in relation to the lower demand. This is true again this year as the prices for power have dropped dramatically to around \$9.00 for off peak and about \$15.00 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 drought conditions have returned to the Colorado River headwaters due to disappointing snow pack accumulation so far this winter. Severe drought conditions in the Arkansas River basin do not materially impact LAP generation. The overall LAP reservoir storage is still higher than it was at this time last year and above average in all three river basins. The snowpack is near average in the Bighorn Basin and well below average in the Colorado River headwaters and the upper North Platte basin. The reservoir inflows from October through February were above average in all three basins but are forecast to be well below average in the Colorado River headwaters and the upper North Platte basin and only forecast to be above average in the Bighorn basin. The latest National Weather Service forecast calls for temperatures in the April through June period to be more likely above normal in southwestern Colorado with equal chances of being above or below normal in northeastern Colorado and in Wyoming. Precipitation is more likely to be below normal in Colorado and Wyoming.

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 February	average	% of average	end of February	average	% of average	March forecast	average	% of average
	CBT	715.1	639.9	112%	295.4	395.4	75%	533.5	618.3
North Platte	2,064.3	1,441.3	143%	283.4	350.1	81%	631.5	793.7	80%
Bighorn	1,917.1	1,758.9	109%	366.5	342.7	107%	1,431.0	1,216.8	118%
TOTAL	4,696.5	3,840.1	122%	945.3	1,088.2	87%	2,596.0	2,628.8	99%
Net At Plant Generation Projections (GWh)									
	Most Probable Case median inflow			Reasonable Minimum Case lower decile inflow			Reasonable Maximum Case upper decile inflow		
	March projection	average	% of marketed	March projection	average	% of marketed	March projection	average	% of marketed
	Winter 11-12	587.6	726.2	81%	583.0	726.2	80%	588.6	726.2
Summer 12	1,342.8	1,211.1	111%	1,117.1	1,211.1	92%	1,748.6	1,211.1	144%
TOTAL 2012	1,930.4	1,937.3	100%	1,700.1	1,937.3	88%	2,337.2	1,937.3	121%

LAP generation has been well below average this winter. An extended CBT outage restricted all CBT generation other than at Green Mountain in November and December. There have been minimum releases from Seminole and Pathfinder reservoirs this winter due to high carryover storage in the downstream Glendo Reservoir. The winter release from Bighorn Lake was higher than in recent drought years but still below average. At this date, the LAP generation is expected to be below average through early spring, above average in the late spring and early summer, and near average later in the summer. The generation may, however, fall well below average in August if Reclamation and other entities decide to curtail Adams Tunnel imports and associated CBT generation as a means to improve the water clarity of Grand Lake. Reservoir spills and associated plant bypasses are not expected this spring and summer.

Colorado River Storage Project Management Center

The total storage volume for the CRSP main stem reservoirs is 20,608,000 acre feet, which is about 67 percent of the total main stem reservoir storage capacity. Main stem reservoir inflows for the

most recent historical month (February, 2012) were about 89 percent of average. Lake Powell elevation currently is about 3,635 feet, 65 feet from maximum reservoir level. The current runoff forecast for April through July, 2012 into Lake Powell is 74% of average.

Projected SLCA/IP net generation for Fiscal Year 2012 is 5,580 GWh as compared to 5,937 GWh based on the long-term historical average generation.

Estimated purchase power expenses for firming during the fiscal year 2012 are about \$16.7 million as compared to about \$17 million based on long-term median historical releases. Purchase power availability in the region is abundant and purchase prices are quite low compared to the recent past, which is helping to reduce firming purchase costs.

Desert Southwest Region

Current Aggregate Storage (Mead, Mohave & Havasu): 17.120 MAF (17.204 MAF Jan-2012), 21.168 MAF (61-Year Historical Avg).

The Lake Mead end of February 2012 elevation was 1,133.06 ft. (1.12 ft. lower than end of January 2012 elevation), or about 86.55 ft. below full storage elevation of 1,219.61 ft. and 83.06 ft. above the minimum generation elevation for Hoover of 1,050 ft.

Lake Mead's elevation peaked at 1,134.18 ft in January of WY 2012 (18.14 ft. above the WY 2011 peak elevation of 1,116.04 ft.), and is projected to drop to a minimum elevation of 1,115.2 ft. in September of WY 2012, a maximum fluctuation in lake elevation of 18.98 ft.

The Lake Powell operational tier for WY 2012 is still the Equalization Tier. Total releases from Lake Powell are projected to be 9.463 MAF for WY 2012 (actual of 12.518 MAF for WY 2011). The projected 2012 April – July unregulated inflow into Lake Powell is 74% of average (actual of 162% of average for 2011).

Basin Snow Pack and Precipitation: DSW hydrology is mostly dependent on the Colorado River Basin snow pack and precipitation above Lake Powell. The WY 2012 year-to-date precipitation is currently 85% of average. The current snowpack is 76% of average.

Lower Basin Runoff: The lower basin tributary inflow into Lake Mead for February 2012 was 45 KAF. The projected side inflow into Lake Mead for WY2012 is 769 KAF which represents a 33.5% decrease from last year's actual of 1,157 KAF, and represents 59.2 % of the normal annual side inflow of 1.3 MAF.

Forecast WY12 Generation: 5,381 GWh compared to 5,649 GWh (Historical Average). The projected Hoover and Parker-Davis generation for WY 2012 is 95.3% of the average historical generation.

Wholesale Power Market Conditions: The February market prices in the Desert Southwest averaged about \$26/MWh firm on-peak, \$20/MWh firm off-peak compared to \$27/MWh firm on-peak, \$21/MWh firm off-peak for the previous month.

Sierra Nevada Region

The total storage of the four major CVP reservoirs is 8.073 million-acre-feet, compared to 8.744 MAF last year. Accumulated inflow for the water year-to-date is 44 percent of the 15-year average for Trinity, 51 percent for Shasta, 53 percent for Folsom and 66 percent for Melones. New Melones is approximately 10 thousand-acre-feet above flood control level.

The Northern Sierra Eight Station index averages slightly more than 50 inches of precipitation per water year. We are currently at 28.88 inches or 58 percent of average. This water year started out with October recorded precipitation totaling 3.91 inches, which is above average for that month. November recorded precipitation totaled 2.69 inches, or less than 50 percent of average. December came in at 0.32 inches, making it one of the fifth worst since 1921. January ended at 85 percent of its monthly average. February ended at 3.0 inches, which is only 36 percent of average. March is currently at 170 percent of the monthly average, and another storm system is forecast for this weekend.

The snowpack is assumed to reach its peak April 1st. Therefore, snow water equivalents are reported as a percentage of this average. As of March 23rd, the North is at 54 percent, the Central is at 44 percent and the South is at 38 percent of this average. The Northern and Central areas have doubled their amounts since last month. The Sacramento River Index forecast of water supply based upon March 1st conditions is “critical” for the 90 percent exceedence and “critical” for the 50 percent exceedence case.

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 109 percent of that average. Reclamation forecasts are based upon February 1st conditions, which were based upon water supply forecast of “critical” for the 90 percent exceedence and “dry” for the 50 percent exceedence. These forecasts would be 93 percent and 94 percent of this “Green Book” average net generation. While the precipitation is much needed, with the Central Valley Project, more precipitation does not translate into more Base Resource. Instream flows for the environment can often be met through natural runoff (side flows) so reservoir releases will decrease if flood control requirements are being met. In addition, when the natural flow reaches the Sacramento-San Joaquin Delta, pumps capture as much water as is permitted for storage off-stream at San Luis Reservoir for future delivery to the southern part of the state. With decreased project generation and increased project use pumping, Base Resource decreases dramatically.