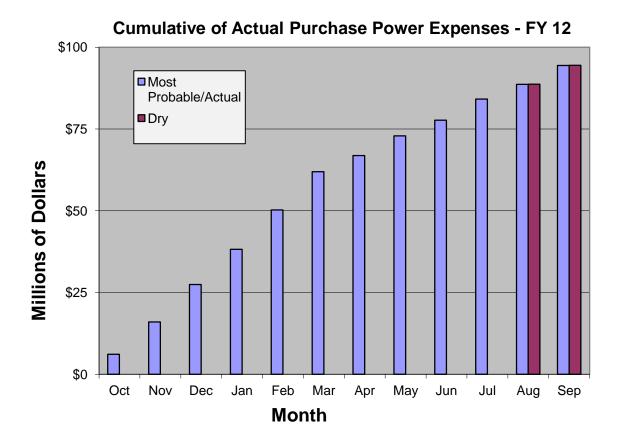
Hydro Conditions and Purchase Power Monthly Outlook August 31, 2012

Western Summary

- The most probable forecast of net generation for FY 2012 is 27,347 Gigawatthours (GWh) or 99 percent of average. October through July generation was 101 percent of average.
- The lower level forecast of generation for FY 2012 is 27,291 GWh or 99 percent of average.
- The purchased power for FY 2012 is expected to be approximately 1,955 GWh.
- The average price for purchase power across all hydro projects and off-peak and on-peak periods is expected to be \$48/MWh. This price compares to \$60/MWh last year.
- Purchase power expenses for FY 2012 are forecast to be approximately \$94 million.
- October through July purchases totaled over \$84 million compared to \$97 million for the same period last year.



Upper Great Plains Region

Storage: The snow water content in the mountain snowpack in the Missouri River Basin upstream of Canyon Ferry has essentially melted out. Due to the lack of normal spring precipitation, stream-flows into Canyon Ferry dropped to 54 percent of average during July. The August 1 water supply forecast indicates the August runoff into Canyon Ferry is expected to equal 91,800 acre-feet (56% of average). With storage in Canyon Ferry currently at the top of the joint-use pool, releases out of Canyon Ferry to the Missouri River below Holter Dam are expected to be maintained at or above the desired fishery flow of 4,100 through August and may need to be reduced if dry conditions persist. Mountain snowpack in the Bighorn Basin above Yellowtail Dam has melted out. Based on the August 1 water supply forecast and the planned releases out of Boysen and Buffalo Bill Reservoirs, the August runoff into Bighorn Lake is expected to equal 99,800 acre-feet (63% of average).

As of August 19, 2012, the storage level at <u>Canyon Ferry</u> was 1,704,983 acre feet and the active conservation pool is 90.1% full. Storage at <u>Yellowtail</u> is 907,783 acre feet and the active conservation pool is 88.9% full.

COE Runoff: There has been very little change to the Missouri River System over the last two months. Forecast runoff for the year is 85% of normal which has changed very little from May to August. There has been a minor increase in the forecasted generation level of about 300 GWh. The drought downstream has caused more water releases than in normal years. This could cause a draw-down large enough to effect next year's total generation output from the river.

<u>Snow pack</u> The August 1 forecasted runoff for calendar year 2012 has been lowered to 21.0 MAF. This runoff would be 85% of normal runoff. As of August 1, 2012, the mountain snowpack in the reach above Fort Peck is 107% of the average snowpack for this date. Mountain snowpack in the reach between Fort Peck and Garrison is 5% of the average snowpack for this date. The mountain snowpack above Fort Peck peaked on April 9 at 97% of the normal April 15th peak. The mountain snowpack in the reach between Fort Peck and Garrison peaked on March 22nd at 88% of the normal April 15th peak.

FY Generation: The six main stem power plants generated 1,109 million kilowatt hours of electricity in July. 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: Cooler weather is causing the prices to drop to lower-mid teens for off peak and mid twenties for on peak.

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.

Severe to extreme drought conditions persist in all three river basins due to low snowmelt runoff and a lack of seasonal precipitation. Scarce precipitation and heavy water demands have drawn down the overall LAP reservoir storage to below average and to quite a bit lower than it was at this time last year. Reservoir inflows were well below average since May and are forecast to be well below average for the remainder of the season. The spring snowmelt runoff was only about half of average. Winter base flows are expected to be below normal due to the depletion of soil moisture and tributary ground water this summer. The latest National Weather Service forecast calls for temperatures in the September through November period to be more likely above normal in Colorado and Wyoming while precipitation is just as likely to be above normal as below normal.

				LAP Water	Conditions /	At-A-Glance			
	Reservoir Storage 1,000 acre-feet			Actual Reservoir Inflow To-Date			Spring Reservoir Inflow 1,000 acre-feet (April - July)		
	end of		% of	October		% of			% of
	July	average	average	- July	average	average	actual	average	average
СВТ	650.3	803.2	81%	403.4	714.0	56%	281.9	618.3	46%
North Platte	1,493.2	1,643.8	91%	579.0	1,086.8	53%	284.6	849.0	34%
Bighorn	2,107.6	2,210.3	95%	1,242.4	1,633.3	76%	810.8	1,253.8	65%
TOTAL	4,251.1	4,657.3	91%	2,224.8	3,434.1	65%	1,377.3	2,721.1	51%
	Net At Plant Generation Projections (GWh)								
	Most Probable Case			Reasonable Minimum Case			Reasonable Maximum Case		
	median inflow			lower decile inflow			upper decile inflow		
	August		% of	August		% of	August		% of
	projection	average	average	projection	average	average	projection	average	average
Winter 11-12	583.8	726.2	80%	583.8	726.2	80%	583.8	726.2	80%
Summer 12	1,123.2	1,211.1	93%	1,125.7	1,211.1	93%	1,116.8	1,211.1	92%
TOTAL 2012	1,707.0	1,937.3	88%	1,709.5	1,937.3	88%	1,700.6	1,937.3	88%
Winter 12-13	487.6	726.2	67%	468.2	726.2	64%	550.0	726.2	76%

LAP generation was well below average from October through April, above average in May, near average in June, and well below average in July. LAP generation is now expected to be near average in August and September and then well below average in the upcoming winter. Reclamation is not curtailing Adams Tunnel imports and associated CBT generation in August as a means to improve the water clarity of Grand Lake this year. There were no reservoir spills and associated plant bypasses due to surplus generation this summer. There is a small chance that Twin Lakes levels may decline to levels which prohibit pumping with both Mt. Elbert pump-generating units some time this winter or next spring.

Colorado River Storage Project Management Center

The total storage volume for the CRSP main stem reservoirs is 19,501,000 acre feet, which is about 63 percent of the total main stem reservoir storage capacity. Main stem reservoir inflows for the most recent historical month (July, 2012) were about 23 percent of average. Lake Powell elevation currently is about 3,627 feet, 73 feet from maximum reservoir level. The elevation peaked for the water year in May at 3,637 feet and has been dropping ever since. The actual April through July, 2012 runoff into Lake Powell is 2.06 million acre feet which is 29% of average.

Projected SLCA/IP net generation for Fiscal Year 2012 is 5,625 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 \$20.2 million as compared to about \$14.5 million based on long–term median historical releases. Purchase power availability in the region is abundant. However, electricity costs in the region have spiked in August with the summer heat.

Desert Southwest Region

Current Aggregate Storage (Mead, Mohave & Havasu): 15.501 MAF (15.477 MAF June-2012), 21.098 MAF (61-Year Historical Avg).

The Lake Mead end of July 2012 elevation was 1,115.92 ft. (.08 ft. higher than end of June 2012 elevation), or about 103.72 ft. below full storage elevation of 1,219.64 ft. and 65.92 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 1,113.8 ft. in September of WY 2012, a maximum fluctuation in lake elevation of 20.38 ft.

The Lake Powell operational tier for WY 2012 is 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 preliminary observed 2012 April – July unregulated inflow into Lake Powell is 29% 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 74% of average.

Lower Basin Runoff: The lower basin tributary inflow into Lake Mead for July 2012 was 70 KAF. The projected side inflow into Lake Mead for WY2012 is 645 KAF which represents a 44% decrease from last year's actual of 1,157 KAF, and represents 50% of the normal annual side inflow of 1.3 MAF.

Forecast WY12 Generation: 5,410 GWh compared to 5,650 GWh (Historical Average). The projected Hoover and Parker-Davis generation for WY 2012 is 96% of the average historical generation.

Wholesale Power Market Conditons: The July market prices in the Desert Southwest averaged about \$33/MWh firm on-peak, \$18/MWh firm off-peak compared to \$29/MWh firm on-peak, \$17/MWh firm off-peak for the previous month.

Sierra Nevada Region

The total storage of the four major CVP reservoirs is 6.866 million-acre-feet, compared to 8.982 MAF last year. Accumulated inflow for the water year-to-date is 70 percent of the 15-year average for Trinity, 66 percent for Shasta, 64 percent for Folsom and 54 percent for Melones.

The Northern Sierra Eight Station index averages slightly more than 50 inches of precipitation per water year. We are currently at 41.50 inches or 81 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 ended at 235 percent of its monthly average. April ended at 165 percent of its monthly average, while May ended at 23 percent. June averages nearly 1 inch and we ended at 114 percent of average. July ended at 0.20 inches or 116 percent of average. No measurable precipitation for August which averages 0.27 inches.

The snowpack is assumed to reach its peak April 1st. Therefore, snow water equivalents are reported as a percentage of this average. As of April 1st, the North was at 77 percent, the Central at 51 percent and the South at 38 percent of this average. As of June 14th, there is no snowpack left. The Sacramento River Index (SRI) forecast of water supply based upon May 1st conditions is "critical" for the 90 percent exceedence and "dry" for the 50 percent exceedence case. The State of California bases water year type declarations on May 1st conditions at the 50 percent exceedence level of the Sacramento Valley 40-30-30 (SVI) which at 6.9 makes this year is "below normal." This index takes carryover storage into account unlike the SRI.

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 March 1st conditions, which were based upon water supply forecasts of "critical" for the 90 percent exceedence and "critical" for the 50 percent exceedence. These forecasts would be 95 percent and 97 percent of this "Green Book" average net generation. Reclamation is at maximum pumping from the Delta, but generation remains high and Base Resource also remains high.