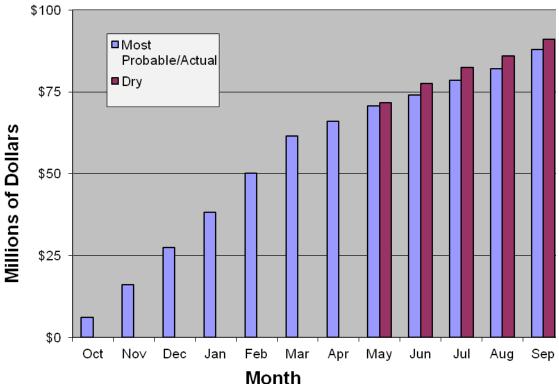
Hydro Conditions and Purchase Power Monthly Outlook May 31, 2012

Western Summary

- The most probable forecast of net generation for FY 2012 is 26,907 Gigawatthours (GWh) or 98 percent of average. October through April generation was 105 percent of average.
- The lower level forecast of generation for FY 2012 is 26,629 GWh or 97 percent of average.
- The purchased power for FY 2012 is expected to range between 1,724 and 1,833 GWh.
- The average price for purchase power across all hydro projects and off-peak and on-peak periods is expected to be \$51/MWh. This price compares to \$61/MWh last year.
- Purchase power expenses for FY 2012 are forecast to range between \$88 and \$91 million.
- October through April purchases totaled over \$66 million compared to \$77.5 million for the same period last year.

Cumulative of Actual Purchase Power Expenses - FY 12



Upper Great Plains Region

Storage: Due to the open-mild winter, stream-flows into Canyon Ferry during March were 111 percent of average. Mountain snowpack conditions in the Missouri River Basin upstream of Canyon Ferry have improved to about 94% of average. Based on the April 1 water supply forecast, the April-July runoff into Canyon Ferry is expected to equal 1,808,500 acre-feet (94% of average). Based on the current conditions, releases out of Canyon Ferry to the Missouri River below Holter Dam are expected to be gradually increased to near 6,000 or higher to control the anticipated spring snowmelt.

Streamflows into Bighorn Lake during April were 93% of average. Mountain snowpack in the Bighorn Basin is 63 percent of average. Based on the May 1 water supply forecast and the planned releases out of Boysen and Buffalo Bill Reservoirs, the May-July runoff into Bighorn Lake is expected to equal 600,0000 acre-feet (61% of average).

As of May 21, 2012, the storage level at <u>Canyon Ferry</u> was 1,697,586 acre feet and the active conservation pool is 98.7% full. Storage at <u>Yellowtail</u> is 809,291 acre feet and the active conservation pool is 79.3% full.

COE Runoff: Mountain snowpack continues to diminish due to the dry spring weather. Forecast runoff dropped about 7% and the forecasted 2012 generation has been reduced slightly. Full reservoirs account for the small reduction in generation. Estimated generation for 2012 dipped slightly and now estimated to be 9,769 GWh; normal is 10,000.

<u>Snow pack</u> The May 1 forecasted runoff for calendar year 2012 has been lowered to 21.6 MAF. This runoff would be 87% of normal runoff. As of May 1, 2012, the mountain snowpack in the reach above Fort Peck is 78% of the average snowpack for this date. Mountain snowpack in the reach between Fort Peck and Garrison is 68% 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 876 million kilowatt hours of electricity in April. 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: Prices have been ranging from \$13 off peak to mid 20s 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 drought conditions prevail in the Colorado River and North Platte River headwaters due to disappointing snow pack accumulation over the winter and correspondingly low projected spring runoff. Moderate to severe drought conditions in the Arkansas River basin do not materially impact

LAP generation. The overall LAP reservoir storage remains higher than it was at this time last year and above average in all three river basins. The snowpack is well below average in all three river basins with the snowmelt runoff starting a month earlier than normal. The October through April reservoir inflows were above average in all three basins and are forecast to be well below average from now through September. The latest National Weather Service forecast calls for temperatures in the June through August period to be more likely above normal in Colorado and Wyoming while precipitation is as likely to be above normal as below normal.

				LAP Water	Conditions	At-A-Glance				
	Re	servoir Stora	ge	Snowpack inches snow water equivalent			Most Probable Reservoir Inflow 1,000 acre-feet (April - July)			
	1,	000 acre-fee	et							
	end of		% of	end of		% of	May		% of	
	April	average	average	April	average	average	forecast	average	average	
СВТ	738.9	625.3	118%	103.2	471.0	22%	307.6	595.0	52%	
North Platte	2,221.0	1,559.7	142%	144.2	457.3	32%	160.0	770.0	21%	
Bighorn	1,906.0	1,697.8	112%	240.2	371.6	65%	852.0	1,409.7	60%	
TOTAL	4,865.9	3,882.8	125%	487.6	1,299.9	38%	1,319.6	2,774.7	48%	
		Net At Plant Generation Projections (GWh)								
	Most Probable Case			Reasonable Minimum Case			Reasonable Maximum Case			
	median inflow			lower decile inflow			upper decile inflow			
	May		% of	May		% of	May		% of	
	projection	average	marketed	projection	average	marketed	projection	average	marketed	
Winter 11-12	583.8	726.2	80%	583.8	726.2	80%	583.8	726.2	80%	
Summer 12	1,148.2	1,211.1	95%	1,088.5	1,211.1	90%	1,198.9	1,211.1	99%	
TOTAL 2012	1,732.0	1,937.3	89%	1,672.3	1,937.3	86%	1,782.7	1,937.3	92%	

LAP generation has been well below average since October. LAP generation is expected to be below or near average in all months through September except for this month. 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 with surplus generation are not expected this spring and summer.

Colorado River Storage Project Management Center

The total storage volume for the CRSP main stem reservoirs is 20,780,000 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 (April, 2012) were about 79 percent of average. Lake Powell elevation currently is about 3,636 feet, 64 feet from maximum reservoir level. The current runoff forecast for April through July, 2012 into Lake Powell is about 2.3 million acre feet or 33% of average. The inflow forecast has continued to decrease as dry conditions have prevailed in the basin so far this spring.

Projected SLCA/IP net generation for Fiscal Year 2012 is 5,535 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 \$17.4 million as compared to about \$14.5 million based on long—term median historical releases. Purchase power availability in the region is abundant and purchase prices are low compared to the recent past, which is helping to reduce firming purchase costs. As the weather warms for the summer, electricity costs are beginning to rise.

Desert Southwest Region

Current Aggregate Storage (Mead, Mohave & Havasu): 16.296 MAF (16.770 MAF Mar-2012), 20.822 MAF (61-Year Historical Avg).

The Lake Mead end of April 2012 elevation was 1,123.93 ft. (5.48 ft. lower than end of March 2012 elevation), or about 95.71 ft. below full storage elevation of 1,219.64 ft. and 73.93 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 1,114.3 ft. in September of WY 2012, a maximum fluctuation in lake elevation of 19.88 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 projected 2012 April – July unregulated inflow into Lake Powell is 33% 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. The current snowpack is 16% of average.

Lower Basin Runoff: The lower basin tributary inflow into Lake Mead for April 2012 was 46 KAF. The projected side inflow into Lake Mead for WY2012 is 703 KAF which represents a 39.2% decrease from last year's actual of 1,157 KAF, and represents 54.1% of the normal annual side inflow of 1.3 MAF.

Forecast WY12 Generation: 5,375 GWh compared to 5,651 GWh (Historical Average). The projected Hoover and Parker-Davis generation for WY 2012 is 95% of the average historical generation.

Wholesale Power Market Conditons: The April market prices in the Desert Southwest averaged about \$21/MWh firm on-peak, \$15/MWh firm off-peak compared to \$23/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 9.498 million-acre-feet, compared to 9.656 MAF last year. Accumulated inflow for the water year-to-date is 77 percent of the 15-year average for Trinity, 66 percent for Shasta, 67 percent for Folsom and 61 percent for Melones.

The Northern Sierra Eight Station index averages slightly more than 50 inches of precipitation per water year. We are currently at 39.55 inches or 79 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 is at 9 percent.

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 May 24th, the North is at 6 percent of the April 1st average while the Central is at 2 percent and the South at zero percent. 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 91 percent and 90 percent of this "Green Book" average net generation. Temperatures are mild and Reclamation has been able to cut releases to rivers, yet combined with cuts to project use pumping in the Delta and withdrawals from San Luis Reservoir off-stream storage, base resource remains high.