Western Area Power Administration (WAPA) generated a total of 13,254,213 gigawatt-hours (GWh) during October through May of fiscal year 2021, or 84.2 percent of the average. For the months of October through April, total purchase power was 2,966 GWh and total purchase power expenses were $186,508,389, which equates to $62.89 per MWh overall, across WAPA. High purchase power prices during the February polar vortex contribute to the average.

The following pages indicate WAPA’s Regional snowpack, lake/reservoir inflow and storage, generation, and purchase power expenses. Snowpack is reported as snow water equivalent, which is the depth of water that theoretically would result if the entire snowpack is melted instantaneously.

The monthly purchase power numbers indicated herein are used by WAPA’s Regions as a forecasting tool, and therefore they do not reflect energy imbalance transactions and other such information that cannot be forecasted. Furthermore, the purchase power numbers have not been verified for financial auditing purposes. Consequently, these numbers will vary from those reported in WAPA’s year-end financial statements, and the latter should be considered the definitive source for WAPA’s purchase power data.
Colorado River Storage Project

Lake/Reservoir Levels
End of May storage volume for Lake Powell was 8.4 million acre-feet or 34 percent of capacity. Lake Powell reservoir inflow for May was 543,000 acre-feet or 23 percent of average. End of May Lake Powell elevation was about 3,561 feet, 139 feet from maximum reservoir level, and 71 feet from the minimum generation level.

Weather and Other Conditions
The Upper Colorado River Basin is currently experiencing a protracted drought that began in 2000 with hydrologic conditions in April through December being some of the driest on record. Dry conditions have resulted in low water releases and low reservoir conditions that reduce power head, greatly reducing power generation. Due to the dry hydrologic conditions, purchase power estimates for FY 2021 are expected to be very high.
### Desert Southwest Region

#### Lake/Reservoir Levels
Aggregate system storage for the Lower Colorado River Basin, or Lakes Mead, Mohave and Havasu, was 11.75 million acre-feet at the end of May, or 41.2 percent of the Lower Basin capacity. The lower basin tributary inflow into Lake Mead for May was 28,000 acre-feet and the total side inflow into Lake Mead projected for WY21 is 621,000 acre-feet, which is 48 percent of average.

#### Weather and Other Conditions
The Desert Southwest Region’s (DSWR) hydrology, or the Lower Colorado River Basin, is mostly dependent on the Colorado River Basin snowpack and precipitation above Lake Powell. The precipitation is currently 73 percent of average.

**Note:** DSWR’s projected dry and most probable generation data are reported from studies conducted by the U.S. Bureau of Reclamation.
Rocky Mountain Region

Lake/Reservoir Content
At the end of May, reservoir inflows were 71 percent of average and reservoir storage was at 105 percent of average.

Weather and Other Conditions
LAP’s hydrologic conditions can vary from one river basin and watershed to another. Runoff is complete. June through August temperatures are projected to be above average, and precipitation is projected to be below average. Summer generation in the Colorado River Basin, North Platte Basin and Big Horn Basin is forecasted to be average due to decent storage and water movement.
Sierra Nevada Region

Lake/Reservoir Content
As June 30, reservoir storage for the water year was 69 percent of the 15-year average for Trinity, 53 percent for Shasta, 41 percent for Folsom, and 83 percent for New Melones. Accumulated inflow was 34 percent of the 15-year average for Trinity, 48 percent for Shasta, 33 percent for Folsom, and 37 percent for New Melones.

Weather and Other Conditions
June precipitation was 8 percent of average and the water year total is 46 percent of average. Based upon May 1 conditions, the Sacramento River Index forecast for 50 percent exceedance at 6.7 is "critical" and the 90 percent exceedance at 6.0 is also "critical."

Note: The Sierra Nevada Region’s (SNR) average generation is based upon long-term modeling done for its "Green Book." SNR does not project purchase power expenses for dry conditions, and its most probable expenses are based upon term purchases of 35 to 65 percent of projected power needs, with the difference being left to day-ahead markets after project pumping and generation have been scheduled.
Upper Great Plains Region

The yearly runoff forecast for the Missouri River basin as of June 1 was 17.9 million acre-feet (MAF) or 69 percent of average and runoff above Sioux City for the month of May was 2.1 MAF or 61 percent of average. System storage is at 55.3 MAF. The snowpack has melted.

Weather and Other Conditions
The U.S. Drought Monitor shows large areas of the upper Basin continue to be impacted by drought. Extreme Drought conditions are occurring in most of North Dakota, northwest South Dakota, and northeastern Montana with some Exceptional Drought conditions in north central North Dakota. Severe, Moderate Drought and Abnormally Dry conditions are occurring in much of the lower half of South Dakota.

Average purchase power amounts and prices for the year are skewed by the extreme pricing and increased purchasing during the polar vortex on February 15 and 16, with UGP significantly exceeding its purchase power estimates for FY21 in just the month of February.

Note: The Upper Great Plains Region reports its 50 percent share of generation from Yellowtail Dam, and RMR reports the snowpack, inflow, content, and remaining share of generation. Asterisks indicate that actual purchase power data is not available for the month.