

Participating projects in proposed combined transmission service rate



Central Arizona Project

Central Arizona Project (CAP) is one of three related water development projects that make up the Colorado River Basin Project. Congress authorized CAP in 1968 to improve water resources in the Colorado River Basin. CAP transmission facilities include a 230-kilovolt (kV) line that begins at McCullough Substation in Nevada and interconnects to the Davis and Parker substations in Arizona. CAP has capacity rights in the transmission line from Parker to Liberty substations in Arizona. CAP also includes 230-kV lines east of Phoenix, Arizona, and several 115-kV lines that feed pumping stations near Salome and Tucson, Arizona. Although not included in the rate set by WAPA, CAP also includes the federal share of capacity in the 500-kV lines of the Navajo Southern Transmission System and the Navajo Western Transmission System.

The calendar year 2020 firm transmission rate for CAP is \$21.00/kilowatt-year (kW-year) based on a revenue requirement of \$13.2 million and sales of 630 megawatts (MW). Project pumping load represents 540 MW of the 630 MW.

Colorado River Storage Project

The Colorado River Storage Project (CRSP) transmission system was constructed as part of the CRSP Act of 1956 to deliver federal hydropower to project use and preference customers in several states. The system consists of mostly 138-kV, 230-kV and 345-kV high-voltage transmission lines and attendant facilities, including 36 substations, extending across Arizona, New Mexico, Colorado and into portions of Utah and Wyoming. There are over 2,300 transmission line miles with 56% of those line miles in Colorado and 29% in Arizona.

The fiscal year (FY) 2021 firm transmission rate for CRSP is \$20.27/kW-year based on a revenue requirement of \$87.8 million and sales of 4,333 MW.

ED5-Palo Verde Hub Project

The Electrical District 5-to-Palo Verde Hub Project's (ED5-PVH) 230-kV transmission line, completed under WAPA's Transmission Infrastructure Program as a public-private partnership, began commercial operation in 2015. The transmission line is integrated with the Parker-Davis Project and provides service from the Palo Verde Hub to ED5 Substation south of Phoenix, Arizona.

The FY 2020 firm transmission rate for ED5-PVH is \$20.52/kW-year based on a revenue requirement of \$3.2 million and sales of 156 MW.

Pacific Northwest – Pacific Southwest Intertie

The Pacific Northwest-Pacific Southwest Intertie (Intertie) was authorized by the Pacific Northwest Power Marketing Act of Aug. 31, 1964. Originally, the Intertie was envisioned to connect the Pacific Northwest with the Pacific Southwest with alternating- and direct-current transmission line segments. The Desert Southwest Region's portion of the Intertie consists of a:

- 345-kV line from Mead Substation in Nevada to Liberty Substation in Arizona
- 230-kV line interconnecting Liberty, Westwing and Pinnacle Peak substations in Arizona
- 500-kV line from Marketplace Substation in Nevada to Perkins Substation in Arizona
- 500-kV line from Marketplace to Adelanto Substation in southern California

The FY 2021 firm transmission rate for Intertie is \$19.32/kW-year based on a revenue requirement of \$30.6 million and sales of 1,584 MW. Intertie does not provide firm electric service or project use power; however, its transmission system is used to deliver federal hydropower from other projects.

Parker-Davis Project

The Parker-Davis Project (P-DP) was formed by consolidating two projects, Parker Dam and Davis Dam, under terms of the Consolidate Parker Dam Power Project and Davis Dam Project Act of May 28, 1954. Transmission facilities of P-DP include 230-kV lines from Mead Substation in Nevada to Davis, Parker, Liberty and Pinnacle Peak substations in Arizona. P-DP also includes 161-kV lines from Parker Substation to Yuma, Arizona, 115-kV lines from Phoenix to southeastern Arizona and a number of shorter line segments from Mead Substation to other nearby substations in southern Nevada.

The FY 2021 firm transmission rate for P-DP is \$20.64/kW-year based on a revenue requirement of \$53.2 million and sales of 2,578 MW. Firm electric service and priority use power represent 271 MW of the 2,578 MW.



Transmission Systems at a Glance

	Transmission Line Miles	Number of Substations	Rate Calculation	Rate (\$/kW-year)	Revenue Requirement (millions)	Total Forecast Firm Sales (MW)
CAP	270	10	Annual	21.00	\$13.2	630
CRSP	2,324	36	Annual	20.27	\$87.8	4,333
ED5-PVH	46	-	Annual	20.52	\$3.2	156
Intertie	587	7	Every 5-Years	19.32	\$30.6	1,584
PDP	1,662	48	Annual	20.64	\$53.2	2,578