Delta-Mendota Canal/ California Aqueduct Intertie

Overview

The Delta-Mendota Canal/California Aqueduct Intertie (DCI) is a shared federal/state water system located in a rural agricultural area of the San Joaquin Valley, west of the city of Tracy. The 500-foot DCI connects the Delta-Mendota Canal and the California Aqueduct via two 108-inch-diameter pipes. The DCI originally had four pumps with a pumping capacity of 467 cubic feet per second (cfs) from the canal to the aqueduct, and 900 cfs reverse gravity flow from the aqueduct to the canal. Two additional pumps were installed in 2022 to increase operational flexibility and increase the pumping capacity to 700 cfs.

Operations

The Intertie provides operational flexibility in the federalstate water distribution system, allows for maintenanceand-repair activities that are less disruptive to water deliveries, and provides options to respond to Central Valley Project (CVP) and State Water Project (SWP) emergencies.

Jones Pumping Plant and the DMC are the primary federal water delivery facilities that provide water to CVP contractors south of the Sacramento-San Joaquin Bay-Delta.



The 500-foot-long Intertie connects the California Aqueduct on the left to the Delta-Mendota Canal on the right.

The Intertie's purpose is to improve the DMC conveyance conditions that restrict the Jones Pumping Plant to less than its original design pumping capacity of 4,600 cfs. The Intertie allows the DMC and California Aqueduct to conveyance capacity and can be used to convey water in either direction.

To convey water from the DMC to the California Aqueduct, the Intertie uses a pumping plant at the DMC that allows up to 700 cfs to be pumped from the DMC to the



Intertie is shown while under construction.

California Aqueduct via an underground pipeline. This additional 700 cfs allows the Jones Pumping Plant to pump at its designed maximum monthly average of about 4,600 cfs throughout the year. Water can also

be conveyed from the California Aqueduct to the DMC. Since the California Aqueduct is approximately 50-feet higher in elevation than the DMC, up to 900-cfs flow can be conveyed from the California Aqueduct to the DMC through the Intertie using gravity flow.

The first phase of the Intertie was completed in May 2012, after which the facility was transferred to the San Luis & Delta-Mendota Water Authority for operation, maintenance, and replacement. The installation of the final two pumps was completed in October 2022, expanding the capacity from 467 cfs to the final design capacity of 700 cfs. Intertie operations are subject to all applicable Delta export pumping restrictions for water quality and fisheries protection. In 2022, two additional pumps at the Intertie were completed.