

CENTRAL ARIZONA PROJECT

Project Description and History

The Central Arizona Project (CAP) was authorized by passage of the Colorado River Basin Project Act (Act of September 30, 1968, Public Law 90-537, 82 Stat. 885) for the purposes of furnishing irrigation water and municipal water supplies to the water-deficient areas of Arizona and western New Mexico through direct diversion or exchange of water, conservation and development of fish and wildlife resources, enhancement of recreation opportunities, and for other purposes.

The Secretary of Interior was directed to construct, operate and maintain the CAP, consisting of the following principal works: (1) a system of main conduits and canals, including a main canal and pumping plants for diverting and carrying water; (2) water storage facilities and power-pumping plants; (3) aqueducts and pumping plants; (4) related canals, regulating facilities, hydroelectric powerplants, and electrical transmission facilities required for the operation of said principal works; (5) related water distribution and drainage works; and (6) appurtenant works.

The Colorado River Basin Project Act also authorized Federal participation with non-Federal interests for construction, operation and maintenance of thermal generating powerplants (i.e., Navajo Generating Station) whereby the United States acquired the rights to plant capacity, including the delivery of power and energy over appurtenant transmission facilities (i.e., Navajo Southern and Western Transmission Systems) to mutually agreed upon delivery points, as the Secretary of Interior determines is required to provide pumping power for the CAP.

When not required for the CAP, the power and energy may be disposed of by the Secretary of Interior for other purposes at such prices the Secretary determines, including its marketing in conjunction with the sale of power and energy from Federal powerplants in the Colorado River system so as to produce the greatest practicable amount of power and energy that can be sold at firm power and energy rates.

On August 4, 1977, the Department of Energy Organization Act (Public Law 95-91, 91 Stat. 565; 42 U.S.C. Sections 7101) was signed into law, establishing the Department of Energy (DOE). Section 302(a)(3) of the Act created the Western Area Power Administration within DOE. Section 302(a)(1)(E) transferred the power marketing functions of the Bureau of Reclamation, including the construction, operation, and maintenance of transmission lines and attendant facilities to the DOE.

Revenue Requirement

The annual revenue requirement for the CAP 115-kV and 230-kV transmission lines and attendant facilities (115/230-kV transmission system) is equal to the estimated annual costs less applicable annual revenue credits.

The estimated annual costs consist of an amortization component and operation and maintenance component. The amortization component is the repayment of investments in transmission facilities (i.e., capitalized construction costs). The operation and maintenance component is the estimated direct and indirect costs associated with operating and maintaining the transmission facilities.

The annual revenue credits are reductions to the estimated annual costs to adjust for the transmission capacity associated with pumping power for the CAP and other sources of revenue.

The annual revenue requirement represents the amount of firm transmission service sales on the CAP 115/230-kV transmission system needed to recover the costs for facilities associated with providing transmission service and the non-facilities costs allocated to transmission service. The following table displays the elements that make up the annual revenue requirements for Fiscal Years (FY) 2005 - 2009.

**CENTRAL ARIZONA PROJECT
ANNUAL REVENUE REQUIREMENTS**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Amortization Costs					
Principal and Interest	\$6,572,075	\$6,516,441	\$6,640,808	\$6,789,330	\$6,720,858
Total Amortization Costs	\$6,572,075	\$6,516,441	\$6,640,808	\$6,789,330	\$6,720,858
Estimated Operation & Maintenance Costs					
Western O&M	\$1,741,566	\$1,858,871	\$2,396,277	\$2,329,075	\$2,004,308
Reclamation O&M	\$10,500	\$10,500	\$10,500	\$10,500	\$10,500
Other Expenses:					
Unfunded Civil Service Retirement System	\$36,832	\$35,081	\$33,331	\$31,580	\$29,830
Capitalized Movable Equipment Interest	\$1,246	\$1,246	\$1,246	\$1,246	\$1,246
Warehouse Stores Interest	\$870	\$870	\$870	\$870	\$870
Total Operation & Maintenance Costs	\$1,791,014	\$1,906,568	\$2,442,224	\$2,373,271	\$2,046,754
Total Annual Costs	\$8,363,089	\$8,423,009	\$8,903,032	\$9,162,601	\$8,767,612
Revenue Credits					
UNS Electric (formerly CUC)	\$282,878	\$282,878	\$282,878	\$282,878	\$282,878
Central Arizona Water Conservation District	\$4,344,311	\$4,578,229	\$4,892,622	\$5,062,630	\$4,803,928
Total Revenue Credits	\$4,627,189	\$4,861,107	\$5,175,500	\$5,345,508	\$5,086,806
Annual Revenue Requirement	\$3,735,900	\$3,561,902	\$3,727,532	\$3,817,093	\$3,680,806

Amortization Costs

The original project investment in the CAP 115/230-kV transmission system is \$128,051,985; which is amortized over a 50-year period with a 3.342 percent interest rate. The unpaid balance of the original project investment is \$112,429,643 and scheduled to be repaid by FY 2043. No capital investments (i.e., additions or replacements) are projected for FY 2005-2009.

Operation and Maintenance Costs

The estimated costs for operating and maintaining the CAP 115/230-kv transmission system (including administrative and general expenses) are based upon Western's and Reclamation's budget documents.

The other expenses are estimated cost allocations to the CAP 115/230-kV transmission system relating to the unfunded Civil Service Retirement System liability, interest on the undepreciated balance of Capitalized Movable Equipment and interest on the balance of Warehouse Stores inventory.

Revenue Credits

The revenue credits represent cost adjustments for the transmission service that UNS Electric (UNS) and Central Arizona Water Conservation District (CAWCD) receive on the CAP 115/230-kV transmission system.

The UNS revenue credit is determined by multiplying its capacity reservation by the contracted rate of \$2.20 /kW-Yr. This firm transmission service contract was entered into prior to Western developing formula rates for transmission service on the CAP 115/230-kV transmission system and will terminate on May 31, 2008.

The CAWCD revenue credit is a calculated amount based on its percentage use of the CAP 115/230-kV transmission system for pumping power. This percentage use is multiplied by the total annual costs less the UNS revenue credit to determine the CAWCD revenue credit.