

D - HISTORICAL PROJECT BENEFITS AND COSTS

1.0 USE OF HISTORICAL PROJECT BENEFITS AND COST INFORMATION

The following historical benefits and cost data for the Sacramento Municipal Utility District’s (SMUD’s) Upper American River Project (Project) have previously been made publicly available, but not compiled in a single location. It is important to recognize that these are historical data only. Any use of these historical data for forecasting future costs and/or values is speculative, may be inappropriate, and is subject to the user’s assumptions.

2.0 HISTORICAL PROJECT BENEFITS

SMUD is the sixth largest publicly-owned electric utility in the United States in terms of customers served. It generates and purchases electric power for distribution to about 500,000 customers in the Sacramento area, including 48,000 small businesses and 8,000 large businesses. As a customer-owned electric utility, SMUD does not have shareholders nor is it a profit-making organization. UARP generation is used, in conjunction with other SMUD generation and purchases, to meet SMUD’s annual total electric sales. For the period 1984-1999, the annual generation produced by the UARP has ranged from a low of 739,000 MWh in 1994 (a low water year) to a high of 3.04 million MWh in 1995 (a high water year). This range of output from the UARP amounts to a percentage of total electric sales from approximately 9 to 36 percent (Table D2.0-1).

Table D2.0-1. Annual generation of Upper American River Project compared to total SMUD annual electric sales (1984-1999).			
Year	Annual UARP Generation (thousand MWh)	Annual Total Electric Sales (thousand MWh)	Annual UARP Generation as percentage of Annual Total Electric Sales
1984	2,240	6,360	35.2
1985	1,348	6,882	19.6
1986	2,621	7,015	37.4
1987	951	7,419	12.8
1988	775	8,111	9.6
1989	1,203	7,950	15.1
1990	1,053	8,265	12.7
1991	963	8,421	11.4
1992	812	8,471	9.6
1993	2,168	8,445	25.7
1994	739	8,459	8.7
1995	3,039	8,458	35.9
1996	2,557	9,224	27.7
1997	2,180	9,182	23.7
1998	2,817	10,024	28.1
1999	2,316	10,398	22.3

3.0 HISTORICAL UARP COSTS

3.1 Local, State, and Federal Fees

As a publicly-owned utility, SMUD is generally exempt from public taxation. However, SMUD does pay various federal, state and local fees, which totaled \$1.2 million in 2000. Federal fees (about \$1 million annually) include direct payments to the Federal Energy Regulatory Commission (FERC) and the Eldorado National Forest (ENF). Payments to FERC are made for license administration, use of federally-owned lands on which the Project is located, dam safety related issues, and stream gaging. Payments to ENF are made pursuant to a number of agreements primarily for annual operations of UARP-related recreational facilities. SMUD pays State fees (about \$100,000 annually) for items related to California Division of Safety of Dams activities as well as various routine facility inspections. Local fees (about \$155,000 annually) are paid for Project-related property taxes to El Dorado County. In addition to these fees, SMUD, at its own expense, maintains a number of roads used by the public within the ENF.

3.2 Capital Costs and Debt Service of Project Facilities

The original Project facilities were constructed with \$185 million of revenue bonds (the Hydro Bonds). Since then, well in excess of \$70 million in capital improvements (net of Project facility retirements) have been added to the Project. These additional costs were substantially financed through the issuance of additional revenue bonds over a number of years (Additional Bonds). These Additional Bonds were issued to provide capital for a variety of SMUD activities including, but not limited to, hydro system improvements, construction and improvement of other generation facilities, transmission and distribution facility improvements, construction of a customer service center, vehicles purchases, and the acquisition of various items of computer hardware and software. Accordingly, it is exceedingly difficult to separate out the specific hydro facilities that were financed in any given issuance of the Additional Bonds. Furthermore, SMUD has had an aggressive debt restructuring program over the years to lock in favorable market variations to reduce the total cost of debt. This has resulted in a very complex debt structure for the Project.

Debt service remaining on the estimated \$254 million in total Project costs can be broken into two separate calculations: the cost of the outstanding debt that can be traced back through the various refundings to the original \$185 million in Hydro Bonds, and the cost of the Additional Bonds issued as part of the general capital financing programs. Of the original \$185 million Hydro Bonds issued, the District estimates that, as of June 30, 2001, there is approximately \$82.1 million in outstanding debt identified as arising from Hydro Bonds. Total debt service on this \$82.1 million is \$112 million through 2010, and ranges from a low of \$7.6 million in 2004 to a high of \$37.3 million in 2007. Debt service on the estimated \$70 million in outstanding debt for the Additional Bonds can be estimated by using an average SMUD cost of bonded indebtedness: 5.25 percent and a life of 30 years. These calculations result in an annual cost for the Project of \$3.7 million.

3.3 Depreciation of Project Facilities

The total cost electric plant-in-service related to the Project is \$254 million as of December 31, 2000. This plant in-service amount includes any Project facility additions as well as retirements made during the year. Accumulated depreciation as of December 31, 2000 is \$106 million, resulting in a “book value” of \$148 million for Project facilities and equipment. The total UARP in-service cost, accumulated depreciation, and net book value of property and equipment for the period from 1996 through 2000 are summarized in Table D3.3-1.

	1996	1997	1998	1999	2000
Plant In-Service Cost	\$240,677,452	\$242,908,226	\$245,708,044	\$245,815,858	\$254,298,175
Accumulated Depreciation	\$91,324,705	\$95,373,711	\$98,983,476	\$102,668,526	\$106,440,403
Net Book Value	\$149,352,747	\$147,534,515	\$146,724,568	\$143,147,332	\$147,857,772

SMUD has depreciated plant and equipment using the straight-line method over the estimated useful lives of the varying classification of Project facilities. These depreciation schedules are summarized in Table D3.3-2.

Class of Fixed Asset	Estimated life in years
Dams	74
Buildings and turbines	68 and 44, respectively
Accessory equipment and fixtures	35
Equipment	33

3.4 Operation and Maintenance Costs

The operations and maintenance costs for the Project are shown in Table D3.4-1 below. These annual Project costs include normal operations and maintenance costs, but do not include property insurance or property taxes.

	1996	1997	1998	1999	2000
Operation	\$3,544,536	\$2,955,229	\$3,600,042	\$4,241,124	\$4,481,973
Maintenance	\$5,639,209	\$6,537,903	\$4,602,004	\$6,820,681	\$6,114,728
Total O&M	\$9,183,745	\$9,493,132	\$8,202,046	\$11,061,805	\$10,596,701