

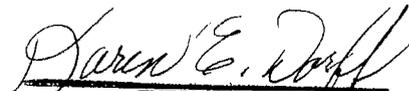
MWD
Metropolitan Water District of Southern California

APPROVED
By the Board of Directors of
The Metropolitan Water District
of Southern California
at its meeting held

41064

OCT 11 1994

REVISED


EXECUTIVE SECRETARY

7-3

September 27, 1994

To: Board of Directors (Engineering and Operations Committee--Action)
(Finance and Insurance Committee--Action)

From: General Manager

Subject: Appropriation No. 679 for \$355,000 to Finance all Costs for Procurement and
Installation of 34.5kV Circuit Breakers for the Lake Mathews and Temescal Power
Plants

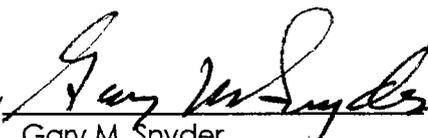
RECOMMENDATION:

That the General Manager be authorized to have all work performed other than contracts in an amount of \$250,000 or more, for design, purchase of equipment, and installation of 34.5kV circuit breakers at the Lake Mathews and Temescal power plants.

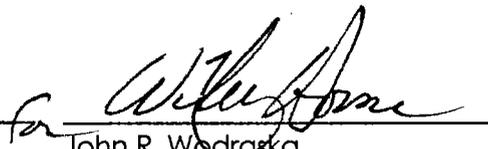
Authorize Appropriation No. 679 in the amount of \$355,000 from the Pay-As-You-Go Fund to finance all estimated costs for design, purchase of equipment and installation of 34.5kV circuit breakers at the Lake Mathews and Temescal power plants.

APPROVAL OF REQUEST

John R. Wodraska
General Manager

By 
Gary M. Snyder
Chief Engineer

Concur:


John R. Wodraska
General Manager

CAPITAL FUNDING REQUEST					
PROJECT NAME: LAKE MATHEWS AND TEMESCAL POWER PLANTS, INSTALL 34.5kV CIRCUIT BREAKERS					
APPROPRIATION NO.:	679	FUNDING REQUEST NO.:	NEW	AMOUNT:	\$355,000
SOURCE OF FUNDS: PAY-AS-YOU-GO					
BUDGET:	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	@ \$182,500	CAPITAL PROGRAM	PAGE NO. REFERENCE: 67
PROJECT JUSTIFICATION AND TYPE: (CHECK ALL APPLICABLE)					
<input type="checkbox"/>	MEET WATER DEMANDS		<input type="checkbox"/>	NEW FACILITY	
<input type="checkbox"/>	MANDATED BY LAW		<input checked="" type="checkbox"/>	IMPROVEMENT	
<input type="checkbox"/>	ASSET PROTECTION/RISK MGT.		<input type="checkbox"/>	REPLACEMENT	
<input checked="" type="checkbox"/>	COST AVOIDANCE		<input type="checkbox"/>	EXPANSION	
<input type="checkbox"/>	OTHER _____				

PROJECT DESCRIPTION (INCLUDE CLASSIFICATION AND PURPOSE):

It is proposed to design, purchase and install a 34.5kV circuit breaker at each end of the Southern California Edison (SCE) Anzar line, where the Lake Mathews and Temescal Power Plants are connected in a loop to prevent Metropolitan's power plants from tripping off-line due to disturbances on the SCE line.

Class: Three---Project not directly related to the delivery of water but demonstrates economic savings outweighing program costs due to reduced labor and energy costs during operations and unscheduled maintenance.

STRATEGIC PLAN PRINCIPLE: 2.1 -- District O&M Budget 2.4 -- Corrective Maintenance

BENEFIT (NARRATIVE FOR DIRECT AND OTHER BENEFITS):

SCE experiences approximately 15 to 20 outages or other disturbances per year on their Anzar line where the Lake Mathews and Temescal power plants are loop connected. This causes the Metropolitan power plants to trip-off line resulting in lost revenues of approximately \$34,000 per year. In addition, unscheduled maintenance costs of approximately \$10,000 are incurred by MWD to restore the power plants to operations after each disturbance. This cost is primarily due to call-out of crews after hours, on weekends and holidays to bring the plants back on-line.

<u>PROJECT PLAN:</u>						
PHASE	COST	1992	1993	1994	1995	1996
PRE. DESIGN	\$3,029	100% COMPLETE; \$3,029 SPENT				
FINAL DESIGN	\$49,481	0% COMPLETE; \$0 SPENT				
CONSTRUCTION	\$252,490	0% COMPLETE; \$0 SPENT				
ACCEPTANCE TESTING	\$0	0% COMPLETE; \$0 SPENT				
TOTAL	\$305,000*	1% COMPLETE; \$3,029 SPENT				
*NOTE: CONTINGENCIES OF \$50,000 NOT INCLUDED						

ALTERNATIVES TO PROPOSED ACTION:

The alternative to this proposed project is to maintain the present configuration at the Lake Mathews and Temescal Power plants and continue to lose revenues and incur unscheduled maintenance costs.

The estimated lost revenue is \$16,480/year for Lake Mathews and \$16,880/year for Temescal power plants. In addition, unscheduled maintenance costs for restoring the power plants to operations when an outage or disturbance takes place on the SCE Anzar line is estimated to be approximately \$10,000 per year. This is a total cost to Metropolitan of approximately \$44,000 per year.

POLICY CONSIDERATIONS:

Avoided cost project; no policy issues.

CEQA COMPLIANCE / ENVIRONMENTAL DOCUMENTATION

The proposed project is exempt from the provisions of the California Environmental Quality Act as it consists of modifications of existing facilities, involving no expansion of use beyond that previously existing.

FINANCIAL ANALYSIS (NEW PROJECTS ONLY)

EVALUATION PERIOD: 7 YEARS

A. PROJECTED COSTS (CAPITAL AND O&M):

	YEAR 1	YEAR 2	YEAR 3	OUT YEARS	TOTAL
LABOR/ADDITIVES	\$ 49,000	\$ 61,000	0	0	\$110,000
PROFESSIONAL SERVICES	0	0	0	0	0
OTHER	109,400	85,600	0	0	195,000
TOTAL	\$158,400	\$146,600	0	0	\$305,000

NOTE: CONTINGENCIES OF \$50,000 NOT INCLUDED

B. PROJECTED SAVINGS:

	YEAR 1	YEAR 2	YEAR 3	OUT YEARS	TOTAL
LABOR/ADDITIVES	\$10,000	\$10,500	\$11,025	\$57,881	\$89,406
PROFESSIONAL SERVICES	0	0	0	0	0
OTHER	33,360	35,028	36,794	193,169	298,351
TOTAL	\$43,360	\$45,528	\$47,819	\$251,050	\$387,757

C. DIFFERENCE (B-A) \$(115,040) \$(101,072) \$47,819 \$251,050 \$82,757

D. CUMULATIVE DIFFERENCE \$(115,040) \$(216,112) \$(168,293) \$82,757 \$82,757

PAYBACK PERIOD: 7 YEARS

ESTIMATED LIFE OF PROJECT: 20 YEARS

ASSUMPTIONS:

- 5% AVERAGE INFLATION RATE PER YEAR
- 10-20 OUTAGES PER YEAR AVERAGE

FINANCIAL STATEMENT

(Program No. 5-0109-53)

A breakdown of the costs for purchase of equipment and installation of 34.5kV circuit breakers at the Lake Mathews and Temescal power plants is as follows:

Labor:

Engineering Design	\$ 47,000
Operations District Forces Installation	<u>63,000</u>
Total Labor	\$ 110,000

Materials and Supplies	\$ 120,000
Incidental Expenses	5,000
Operating Equipment	10,000
Administrative Overhead	60,000
Contingencies	<u>50,000</u>
Project Total	<u>\$ 355,000</u>

Source of Funds: Pay-As-You-Go Fund

Projected Expenditure of Funds:

Through Fiscal Year 1994/95	\$ 158,400
Fiscal Year 1995/96	<u>\$ 196,600</u>
Total	<u>\$ 355,000</u>

1994/95 Capital Program:

Fiscal Year 1994/95 Capital Project Program

Budget Estimate For Fiscal Year 1994/95	\$ 182,500
Original Estimated Program Cost	\$ 386,900

Class:

Three--Project not directly related to the delivery of water but demonstrate economic savings outweighing program's costs due to reduced labor and energy costs during operations and unscheduled maintenance.

Project Benefit:

Will provide for more cost-efficient operations of the power plants by reducing unscheduled maintenance and lost revenues to Metropolitan.