

MAR -8 1994



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METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Karen E. Deff
EXECUTIVE SECRETARY

7-1

February 9, 1994

To: Board of Directors (Engineering and Operations Committee--Action)
From: General Manager
Subject: Authorization to Increase the General Manager's Authority to Issue Extra Work Orders to the Contractor Constructing the Etiwanda Power Plant from \$250,000 to \$370,000

Report

The contract work for the Etiwanda Power Plant, under Specifications No. 1230, as amended, consists of installation of a Metropolitan-furnished 23.9 megawatt turbine-generator and related equipment, construction of a maintenance building, switchyard, and appurtenant works. A contract for this work was awarded to Advanco Constructors, Division of Zurn Constructors, Inc., in July 1992. The turbine-generator and related equipment, including installation drawings and manuals, were supplied by Fuji Electric Company, Limited (Fuji), a subcontractor to Nissho Iwai American Corporation, in accordance with Specifications No. 1142, as amended. Contract No. 1367 for supply of the turbine-generator and related equipment was awarded to Nissho Iwai in April 1990.

During construction of the power plant, Metropolitan ordered several changes to Advanco's work, many of which were due to deficiencies in the equipment supplied by Fuji. Those changes included: correction of misaligned power nozzles; modifications and additions to the electrical system for the turbine-generator; several modifications to the turbine and generator ancillary equipment; modification of a storm drainage system; and other miscellaneous items. Payments totalling \$248,600 for the above-ordered extra work have been made.

In addition to the above, Metropolitan has directed changes for which acceptable quotations totalling \$76,596 have been submitted but for which payment has not been made. Those changes are:

1. Correction of leaks in the turbine power nozzle system caused by excessive tolerances in the nozzle components, and

2. Correction of the problems associated with the fabrication of the generator air housing and turbine power nozzles.

In addition, the contractor has submitted requests for extra compensation totalling approximately \$43,000 for a number of other miscellaneous items which it considers extra work. Staff is currently evaluating these requests. Issuance of extra work orders for these yet unpaid changes will increase the total amount of extra work to \$370,000, approximately 9.6 percent of the bid amount. Staff estimates that as much as \$250,000 of this extra work is attributable to deficiencies associated with the equipment furnished by Fuji under Contract No. 1367. Even though staff believes that a majority of the extra work cost may be ultimately attributable to Nissho Iwai, Metropolitan is required to make direct payment to Advanco for its additional cost incurred because of Metropolitan's contractual relationship with Advanco. A summary of extra work and outstanding issues on the project is attached.

The General Counsel is reviewing Metropolitan's rights under the contract and applicable law for reimbursement of such costs from Nissho Iwai. It is anticipated that Metropolitan will assert a claim against a \$400,000 Letter of Credit submitted by Nissho Iwai in substitution of retention monies withheld by Metropolitan under the Nissho contract. State law requires Metropolitan to accept substitution securities or Letters of Credit when retention monies are withheld.

Section 8115(d) of the Metropolitan Water District Administrative Code requires the approval of your Board for an extra work order when the total cumulative amount expended on extra work exceeds the greater of five percent of the contract bid amount or \$250,000. The original contract amount was \$3,820,000. The \$248,600 total of extra work paid to date is approximately 6.5 percent of the contract bid amount. This letter seeks your Board's authorization for the General Manager to issue extra work orders to Advanco in an amount not to exceed \$120,000.

Funds to cover the cost of this extra work are available under Appropriation No. 562 for the Etiwanda Power Plant.

Board Committee Assignments

This letter was referred for action to the Engineering and Operations Committee because of its authority to study, advise, and make recommendations with regard to (1) the performance of construction programs and work, and (2) construction claims, pursuant to Administrative Code Section 2431(b) and (f).

Recommendation

E & O COMMITTEE FOR ACTION

It is recommended that the General Manager be authorized to issue extra work orders to the contractor constructing the Etiwanda Power Plant that, in aggregate, will not exceed \$370,000 in the form approved by the General Counsel.


J. R. Wodraska

MEB/LLT/jj
(bd:1408brd.ltr-02094)
Attachment

ETIWANDA POWER PLANT

40720

EXTRA WORK SUMMARY

Extra Work Order No.	Description	Amount	Percent of Bid	Estimated Costs Attributable to Fuji
1	Modify Alignment at Turbine Discharge Pit Liner	\$2,000.00	0.05%	\$2,000.00
2	Drill 30 bolt holes in Turbine Service Platform	\$1,605.00	0.04%	\$1,605.00
3	Modify Storm Drain System	\$28,600.00	0.75%	
4	Gouge/Reweld Turbine Head & Wheel Pit Covers	\$965.29	0.03%	\$965.29
5	Install Backing Bars to Weld Pit Liner	\$2,790.00	0.07%	\$2,790.00
6	Furnish/Install Motor Operated Roll-up Doors	\$2,727.90	0.07%	
7	Modify Rotor Rim Air Duct Plates	\$3,702.16	0.10%	\$3,702.16
8	Assemble/Install Turbine Deflector Spring	\$5,426.95	0.14%	\$1,234.53
9	Correct misalignment of power nozzles	\$150,120.00	3.93%	\$150,120.00
10	Install Scales at six nozzles	\$2,150.93	0.06%	\$387.21
11	Rotor Shim Plates	\$775.50	0.02%	\$775.50
12	Electrical Revisions/Inefficiencies--Sachs	\$32,550.00	0.85%	\$7,800.00
13	Various Revisions to Electrical Drawings	\$8,923.90	0.23%	
14	Install Control Boxes/Connecting Links	\$3,100.00	0.08%	\$3,100.00
15	Supply Thermowells for Cooling Pipe, Revise Conduit/Cable	\$3,200.00	0.08%	
SUBTOTAL		\$248,637.63	6.43%	\$174,479.69

Items for which Additional Funds are Requested:

	Removal of Power Nozzles to correct leaks (FM 47&52)	\$70,796.74	1.85%	\$70,796.74
	Generator Air Housing Realignment	\$5,800.00	0.15%	\$5,800.00
	Estimated Cost of Outstanding Issues	\$43,000.00	1.13%	
SUBTOTAL		\$119,596.74	3.13%	\$76,596.74

TOTALS	\$368,234.37	9.56%	\$251,076.43
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