



2008 Capital Budget Project Detail

Budget:	2008	Division:	Electric Resources
Project No:	304979	Department:	6020 Resource Planning/Development
Title:	Recip Power Plnt Proj	Budget Category:	Major or Financed Projects

Project Description

Reciprocating Power Plant Project - Procure and construct a new "in-area" 49.2 MW peaking generation project using multiple reciprocating natural gas fired engines.

Project Justification

The need for additional (in area) peaking generation was identified as one of the necessary ways of meeting the expected load growth in the District's Electric Resource Plan along with additional energy efficiency, renewables, demand response and base load generation. Based on the Resource Plan, approximately 50 MW of new peaking generation will be needed beginning in 2011. The natural gas fired, reciprocating generators have an excellent simple cycle efficiency, are fast responding and are the best option to provide load following and ancillary services.

Applicable Policy

MID Electric Resource Plan goal: Reliability of supply

New Multi-Year Project			
Estimated Amount Required in Future Budget	\$54,850,000	Labor & Benefits	100,000
Total Project Budget, Inception to Completion	\$65,000,000	Material & Supplies	6,000,000
		Outside Services	2,000,000
		Seminar & Meetings	50,000
		Admin & General	2,000,000
		MID Equipment Charges	0
		Total	\$10,150,000



2008 Capital Budget Project Detail

Budget:	2008	Division:	Electric Resources
Project No:	304982	Department:	6020 Resource Planning/Development
Title:	New Lodi Power Plnt Proj	Budget Category:	Major or Financed Projects

Project Description

Jointly participate with NCPA in the development and permitting new Lodi 255 MW combined cycle power plant. This budget is MID's portion (60-75 MW) of the facility output.

Assumptions: Start design and permitting January 2008
Plant Operation August 2012

Project Justification

The need for additional baseload generation is identified in the District's Electric Resource Plan. The Lodi combined cycle is highly efficient and will reside in the SMUD/Western Control Area to meet the District's baseload needs.

Applicable Policy

MID Electric Resource Plan goal: Reliability of supply

New Multi-Year Project					
Estimated Amount Required in Future Budget	\$63,800,000	Labor & Benefits		0	
Total Project Budget, Inception to Completion	\$71,100,000	Material & Supplies		0	
		Outside Services		7,300,000	
		Seminar & Meetings		0	
		Admin & General		0	
		MID Equipment Charges		0	
		Total		<u><u>\$7,300,000</u></u>	



2008 Capital Budget Project Detail

Budget:	2008	Division:	Electric Resources
Project No:	303894	Department:	6068 Don Pedro
Title:	DonPedro Oil Detection Sys	Budget Category:	Don Pedro

Project Description

An oil detection system is needed to detect and activate alarm if oil leakage enters power plant water drainage sump. Without early detection oil could be discharged into waterways. The cost is \$9,500 of which MID pays 31.54%.

Project Justification

This item was included in the 5 year capital plan submitted in 2002, for installation in 2004. It is now projected for 2008.

Applicable Policy

MID Electric Resource Plan goal: Reliability of supply; maintain high availability of generation.
Don Pedro Operating Agreement.

	<table border="0" style="width: 100%;"> <tr><td>Labor & Benefits</td><td style="text-align: right;">0</td></tr> <tr><td>Material & Supplies</td><td style="text-align: right;">3,000</td></tr> <tr><td>Outside Services</td><td style="text-align: right;">0</td></tr> <tr><td>Seminar & Meetings</td><td style="text-align: right;">0</td></tr> <tr><td>Admin & General</td><td style="text-align: right;">0</td></tr> <tr><td>MID Equipment Charges</td><td style="text-align: right;">0</td></tr> <tr><td>Total</td><td style="text-align: right;">\$3,000</td></tr> </table>	Labor & Benefits	0	Material & Supplies	3,000	Outside Services	0	Seminar & Meetings	0	Admin & General	0	MID Equipment Charges	0	Total	\$3,000
Labor & Benefits	0														
Material & Supplies	3,000														
Outside Services	0														
Seminar & Meetings	0														
Admin & General	0														
MID Equipment Charges	0														
Total	\$3,000														



2008 Capital Budget Project Detail

Budget:	2008	Division:	Electric Resources
Project No:	304969	Department:	6068 Don Pedro
Title:	Spillway Gate Cable Rplcmnt	Budget Category:	Don Pedro

Project Description

Replace and re-wedge spillway gate cables and attachments. The cost is \$43,000 of which MID pays 31.54%. Since the 1995 spillway gate failure at Folsom Dam, FERC requires a detailed inspection and report of all spillway control systems every ten years. The Don Pedro inspection was completed in 2007, resulting in this capital item.

Project Justification

Attachment and cables showing signs of corrosion. If not replaced spillway gate may fail to open

Applicable Policy

MID Electric Resource Plan goal: Reliability of supply

	<table style="width: 100%; border: none;"> <tr> <td style="padding-right: 20px;">Labor & Benefits</td> <td style="text-align: right;">5,700</td> </tr> <tr> <td>Material & Supplies</td> <td style="text-align: right;">5,400</td> </tr> <tr> <td>Outside Services</td> <td style="text-align: right;">900</td> </tr> <tr> <td>Seminar & Meetings</td> <td style="text-align: right;">0</td> </tr> <tr> <td>Admin & General</td> <td style="text-align: right;">0</td> </tr> <tr> <td>MID Equipment Charges</td> <td style="text-align: right;">1,600</td> </tr> <tr> <td style="padding-left: 40px;">Total</td> <td style="text-align: right; border-top: 1px solid black; border-bottom: 3px double black;">\$13,600</td> </tr> </table>	Labor & Benefits	5,700	Material & Supplies	5,400	Outside Services	900	Seminar & Meetings	0	Admin & General	0	MID Equipment Charges	1,600	Total	\$13,600
Labor & Benefits	5,700														
Material & Supplies	5,400														
Outside Services	900														
Seminar & Meetings	0														
Admin & General	0														
MID Equipment Charges	1,600														
Total	\$13,600														



2008 Capital Budget Project Detail

Budget:	2008	Division:	Electric Resources
Project No:	304970	Department:	6068 Don Pedro
Title:	Hydraulic Gate Operator	Budget Category:	Don Pedro

Project Description

Power Tunnel hydraulic gate operator: Replace power tunnel bulkhead gate cylinder and hydraulic unit. The cost is \$450,000 of which MID pays 31.54%.

Project Justification

Hydraulic piping under water is leaking. Consequences if not done: Unable to dewater the power tunnel for inspection or emergency.

Applicable Policy

MID Electric Resource Plan goal: Reliability of supply

	<table style="width: 100%; border: none;"> <tr><td>Labor & Benefits</td><td style="text-align: right;">12,600</td></tr> <tr><td>Material & Supplies</td><td style="text-align: right;">31,500</td></tr> <tr><td>Outside Services</td><td style="text-align: right;">94,600</td></tr> <tr><td>Seminar & Meetings</td><td style="text-align: right;">0</td></tr> <tr><td>Admin & General</td><td style="text-align: right;">0</td></tr> <tr><td>MID Equipment Charges</td><td style="text-align: right;">3,200</td></tr> <tr><td>Total</td><td style="text-align: right;">\$141,900</td></tr> </table>	Labor & Benefits	12,600	Material & Supplies	31,500	Outside Services	94,600	Seminar & Meetings	0	Admin & General	0	MID Equipment Charges	3,200	Total	\$141,900
Labor & Benefits	12,600														
Material & Supplies	31,500														
Outside Services	94,600														
Seminar & Meetings	0														
Admin & General	0														
MID Equipment Charges	3,200														
Total	\$141,900														



2008 Capital Budget Project Detail

Budget:	2008	Division:	Electric Resources
Project No:	305114	Department:	6068 Don Pedro
Title:	Spillway Gate #1 Coating	Budget Category:	Don Pedro

Project Description

Sandblast, paint with primer and top coat. The cost is \$200,000 of which MID pays 31.54%

Project Justification

Current coating not adhering due to past painting methods.
If not done: Metal degradation of gate.

Applicable Policy

Don Pedro Operating Agreement. Recommended by FERC.

	<table style="width: 100%; border: none;"> <tr><td>Labor & Benefits</td><td style="text-align: right;">0</td></tr> <tr><td>Material & Supplies</td><td style="text-align: right;">0</td></tr> <tr><td>Outside Services</td><td style="text-align: right;">63,100</td></tr> <tr><td>Seminar & Meetings</td><td style="text-align: right;">0</td></tr> <tr><td>Admin & General</td><td style="text-align: right;">0</td></tr> <tr><td>MID Equipment Charges</td><td style="text-align: right;">0</td></tr> <tr><td>Total</td><td style="text-align: right;">\$63,100</td></tr> </table>	Labor & Benefits	0	Material & Supplies	0	Outside Services	63,100	Seminar & Meetings	0	Admin & General	0	MID Equipment Charges	0	Total	\$63,100
Labor & Benefits	0														
Material & Supplies	0														
Outside Services	63,100														
Seminar & Meetings	0														
Admin & General	0														
MID Equipment Charges	0														
Total	\$63,100														



2008 Capital Budget Project Detail

Budget:	2008	Division:	Electric Resources
Project No:	305115	Department:	6068 Don Pedro
Title:	Relocate DP Archive Room	Budget Category:	Don Pedro

Project Description

Modify the main office second floor print room to accommodate the Don Pedro project records currently stored in the main office basement. The cost is \$110,000 of which MID pays 31.54%.

Project Justification

FERC requires that the project records be protected from fire, flood and other hazards. In addition, the records must be protected from deterioration due to humidity, dryness or lack of proper ventilation. If not done drawings and records may deteriorate.

Applicable Policy

Don Pedro Operating Agreement. FERC requirement.

	<table border="0" style="width: 100%;"> <tr><td>Labor & Benefits</td><td style="text-align: right;">0</td></tr> <tr><td>Material & Supplies</td><td style="text-align: right;">0</td></tr> <tr><td>Outside Services</td><td style="text-align: right;">34,700</td></tr> <tr><td>Seminar & Meetings</td><td style="text-align: right;">0</td></tr> <tr><td>Admin & General</td><td style="text-align: right;">0</td></tr> <tr><td>MID Equipment Charges</td><td style="text-align: right;">0</td></tr> <tr><td>Total</td><td style="text-align: right;">\$34,700</td></tr> </table>	Labor & Benefits	0	Material & Supplies	0	Outside Services	34,700	Seminar & Meetings	0	Admin & General	0	MID Equipment Charges	0	Total	\$34,700
Labor & Benefits	0														
Material & Supplies	0														
Outside Services	34,700														
Seminar & Meetings	0														
Admin & General	0														
MID Equipment Charges	0														
Total	\$34,700														



2008 Capital Budget Project Detail

Budget: 2008
Project No: 706268
Title: DP Pumped Storage Project

Division: Electric Resources
Department: 6068 Don Pedro
Budget Category: Don Pedro

Project Description

Joint project with TID to investigate the feasibility of licensing and building a pumped hydro storage project above the Don Pedro Reservoir.

Project Justification

After completing the preliminary feasibility study for the "Red Mountain Bar Pumped Storage Project", MID and TID have agreed to continue with additional feasibility study work in 2008. Preliminary mechanical design work, core drilling and analysis, further economic studies, further transmission planning studies, bathemetric studies, seismic refraction stability studies and ongoing FERC licensing support for the project will be performed in 2008. Costs for this work will be split 35% MID, 65% TID. Approved by Board resolution 2006-125.

Applicable Policy

MID Electric Resource Plan goal: Reliability of supply

Carry-Over Capital			
Approved Budget in Prior Years	910,000	Labor & Benefits	0
Estimated Year End Totals	198,000	Material & Supplies	0
Authorized Amount to be Carried Over	712,000	Outside Services	350,000
Additional Amount Requested in Current Budget	350,000	Seminar & Meetings	0
Total Budget to be Expended in Current Year	1,062,000	Admin & General	0
Estimated Amount Required in Future Budget Cycles	0	MID Equipment Charges	0
Total Project Budget Inception to Completion	\$1,260,000	Totals	\$350,000



2008 Capital Budget Project Detail

Budget:	2008	Division:	Electric Resources
Project No:	303766	Department:	6072 Woodland Generation
Title:	Routine Projects for WGS	Budget Category:	Generation

Project Description

This Routine Capital work order is intended for small projects and improvements at the Woodland Generation Station Units 1 & 2. This work order will allow for small scale project/improvements to be done as the need arises.

Project Justification

Any capital work or purchase of equipment under this work order will have justification in the form of economic payback, process improvement, increased safety or increased reliability/availability, however it will exceed the \$2,500 trigger for capital improvements.

Applicable Policy

MID Electric Resource Plan goal: Reliability of supply

	<table style="width: 100%; border: none;"> <tr><td>Labor & Benefits</td><td style="text-align: right;">0</td></tr> <tr><td>Material & Supplies</td><td style="text-align: right;">15,000</td></tr> <tr><td>Outside Services</td><td style="text-align: right;">0</td></tr> <tr><td>Seminar & Meetings</td><td style="text-align: right;">0</td></tr> <tr><td>Admin & General</td><td style="text-align: right;">0</td></tr> <tr><td>MID Equipment Charges</td><td style="text-align: right;">0</td></tr> <tr><td>Total</td><td style="text-align: right;">\$15,000</td></tr> </table>	Labor & Benefits	0	Material & Supplies	15,000	Outside Services	0	Seminar & Meetings	0	Admin & General	0	MID Equipment Charges	0	Total	\$15,000
Labor & Benefits	0														
Material & Supplies	15,000														
Outside Services	0														
Seminar & Meetings	0														
Admin & General	0														
MID Equipment Charges	0														
Total	\$15,000														



2008 Capital Budget Project Detail

Budget:	2008	Division:	Electric Resources
Project No:	304646	Department:	6072 Woodland Generation
Title:	New Carpet (Woodland Gen)	Budget Category:	Generation

Project Description

Replace carpet at the Woodland Generation offices, 920 Woodland Ave.

Project Justification

The building was first occupied in Oct 1993. The carpet is worn out and will be 15 years old in 2008. Second floor and one small office on first floor.

Applicable Policy

Maintain District facilities in a workable condition based on Building Services 10 year facility and equipment improvement, replacement and maintenance schedule.

	<table style="width: 100%; border: none;"> <tr><td>Labor & Benefits</td><td style="text-align: right;">0</td></tr> <tr><td>Material & Supplies</td><td style="text-align: right;">0</td></tr> <tr><td>Outside Services</td><td style="text-align: right;">30,000</td></tr> <tr><td>Seminar & Meetings</td><td style="text-align: right;">0</td></tr> <tr><td>Admin & General</td><td style="text-align: right;">0</td></tr> <tr><td>MID Equipment Charges</td><td style="text-align: right;">0</td></tr> <tr><td>Total</td><td style="text-align: right;">\$30,000</td></tr> </table>	Labor & Benefits	0	Material & Supplies	0	Outside Services	30,000	Seminar & Meetings	0	Admin & General	0	MID Equipment Charges	0	Total	\$30,000
Labor & Benefits	0														
Material & Supplies	0														
Outside Services	30,000														
Seminar & Meetings	0														
Admin & General	0														
MID Equipment Charges	0														
Total	\$30,000														



2008 Capital Budget Project Detail

Budget:	2008	Division:	Electric Resources
Project No:	304990	Department:	6072 Woodland Generation
Title:	Unit 2 CTG filter Upgrade	Budget Category:	Generation

Project Description

Installation of pre-filter grid on Unit 2 Combustion Turbine Generator package ventilation air system.

Project Justification

Greater availability and less down time due to the ability to change filters while online.

Applicable Policy

MID Electric Resource Plan goal: Reliability of supply

	<table style="width: 100%; border: none;"> <tr><td>Labor & Benefits</td><td style="text-align: right;">0</td></tr> <tr><td>Material & Supplies</td><td style="text-align: right;">20,000</td></tr> <tr><td>Outside Services</td><td style="text-align: right;">0</td></tr> <tr><td>Seminar & Meetings</td><td style="text-align: right;">0</td></tr> <tr><td>Admin & General</td><td style="text-align: right;">0</td></tr> <tr><td>MID Equipment Charges</td><td style="text-align: right;">0</td></tr> <tr><td>Total</td><td style="text-align: right;">\$20,000</td></tr> </table>	Labor & Benefits	0	Material & Supplies	20,000	Outside Services	0	Seminar & Meetings	0	Admin & General	0	MID Equipment Charges	0	Total	\$20,000
Labor & Benefits	0														
Material & Supplies	20,000														
Outside Services	0														
Seminar & Meetings	0														
Admin & General	0														
MID Equipment Charges	0														
Total	\$20,000														



2008 Capital Budget Project Detail

Budget:	2008	Division:	Electric Resources
Project No:	305003	Department:	6074 McClure/Hydro Generation
Title:	Routine Projs for McClr Gen	Budget Category:	Routine Capital

Project Description

This routine capital work order is intended for small projects and improvements at the McClure Generation Station Units 1 and 2. Due to the unknown process/safety improvements for Unit 2, this work order will allow for small scale project improvements to be done as the need arises.

Project Justification

Any capital work or purchase of equipment under this work order will have justification in the form of economic payback, process improvement, increased safety or increased reliability/availability, however it will exceed the \$2,500 trigger for capital improvements.

Applicable Policy

MID Electric Resource Plan goal: Reliability of supply

	<table style="width: 100%; border: none;"> <tr><td>Labor & Benefits</td><td style="text-align: right;">0</td></tr> <tr><td>Material & Supplies</td><td style="text-align: right;">15,000</td></tr> <tr><td>Outside Services</td><td style="text-align: right;">0</td></tr> <tr><td>Seminar & Meetings</td><td style="text-align: right;">0</td></tr> <tr><td>Admin & General</td><td style="text-align: right;">0</td></tr> <tr><td>MID Equipment Charges</td><td style="text-align: right;">0</td></tr> <tr><td>Total</td><td style="text-align: right; border-top: 1px solid black; border-bottom: 3px double black;">\$15,000</td></tr> </table>	Labor & Benefits	0	Material & Supplies	15,000	Outside Services	0	Seminar & Meetings	0	Admin & General	0	MID Equipment Charges	0	Total	\$15,000
Labor & Benefits	0														
Material & Supplies	15,000														
Outside Services	0														
Seminar & Meetings	0														
Admin & General	0														
MID Equipment Charges	0														
Total	\$15,000														



2008 Capital Budget Project Detail

Budget:	2008	Division:	Electric Resources
Project No:	304732	Department:	6076 Ripon Generation
Title:	Ripon Gas Filters	Budget Category:	Generation

Project Description

Modify piping and install gas filters at the inlet to the gas turbines at Ripon Generation Station.

Project Justification

During commissioning of the gas turbines, problems with debris in the gas lines were encountered. Funds will enable staff to make necessary modifications to prevent costly damage to gas turbines.

Applicable Policy

MID Electric Resource Plan goal: Reliability of supply

	<table style="width: 100%; border: none;"> <tr><td>Labor & Benefits</td><td style="text-align: right;">0</td></tr> <tr><td>Material & Supplies</td><td style="text-align: right;">30,000</td></tr> <tr><td>Outside Services</td><td style="text-align: right;">20,000</td></tr> <tr><td>Seminar & Meetings</td><td style="text-align: right;">0</td></tr> <tr><td>Admin & General</td><td style="text-align: right;">0</td></tr> <tr><td>MID Equipment Charges</td><td style="text-align: right;">0</td></tr> <tr><td>Total</td><td style="text-align: right;">\$50,000</td></tr> </table>	Labor & Benefits	0	Material & Supplies	30,000	Outside Services	20,000	Seminar & Meetings	0	Admin & General	0	MID Equipment Charges	0	Total	\$50,000
Labor & Benefits	0														
Material & Supplies	30,000														
Outside Services	20,000														
Seminar & Meetings	0														
Admin & General	0														
MID Equipment Charges	0														
Total	\$50,000														



2008 Capital Budget Project Detail

Budget:	2008	Division:	Electric Resources
Project No:	304824	Department:	6076 Ripon Generation
Title:	Routine Projs for Ripon Gen	Budget Category:	Routine Capital

Project Description

This routine capital work order is intended for small projects and improvements at the Ripon Generation Station Units 1 and 2. Due to the unknown process/safety improvements for Unit 2, this work order will allow for small scale project improvements to be done as the need arises.

Project Justification

Any capital work or purchase of equipment under this work order will have justification in the form of economic payback, process improvement, increased safety or increased reliability/availability, however it will exceed the \$2,500 trigger for capital improvements.

Applicable Policy

MID Electric Resource Plan goal: Reliability of supply

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Labor & Benefits	0														
Material & Supplies	15,000														
Outside Services	0														
Seminar & Meetings	0														
Admin & General	0														
MID Equipment Charges	0														
Total	\$15,000														



2008 Capital Budget Project Detail

Budget:	2008	Division:	Electric Resources
Project No:	304830	Department:	6076 Ripon Generation
Title:	Ripon Misc Concrete Projs	Budget Category:	Generation

Project Description

Install miscellaneous concrete flatwork at the Ripon Generation Station.

Project Justification

Concrete projects include a pad for two demineralizer trailers, road areas that were rocked to accelerate the schedule during construction for the electrical backfeed, and other miscellaneous flatwork. Spending will be spread out over 3 years at \$75,000/yr.

Applicable Policy

MID Electric Resource Plan goal: Reliability of supply

	<table style="width: 100%; border: none;"> <tr><td>Labor & Benefits</td><td style="text-align: right;">0</td></tr> <tr><td>Material & Supplies</td><td style="text-align: right;">0</td></tr> <tr><td>Outside Services</td><td style="text-align: right;">75,000</td></tr> <tr><td>Seminar & Meetings</td><td style="text-align: right;">0</td></tr> <tr><td>Admin & General</td><td style="text-align: right;">0</td></tr> <tr><td>MID Equipment Charges</td><td style="text-align: right;">0</td></tr> <tr><td>Total</td><td style="text-align: right;"><u><u>\$75,000</u></u></td></tr> </table>	Labor & Benefits	0	Material & Supplies	0	Outside Services	75,000	Seminar & Meetings	0	Admin & General	0	MID Equipment Charges	0	Total	<u><u>\$75,000</u></u>
Labor & Benefits	0														
Material & Supplies	0														
Outside Services	75,000														
Seminar & Meetings	0														
Admin & General	0														
MID Equipment Charges	0														
Total	<u><u>\$75,000</u></u>														