

APPENDIX 6A

SDG&E Gas Interconnect Proposal

Preliminary Project Plan

For

Gas Metering Station & Service Pipeline

To

Duke Energy

Proposed New South Bay

Generating Facility

January 24, 2006



DUKE ENERGY
PROPOSED SOUTH BAY GENERATING FACILITY

Key Information

General

Project Type:	Meter Set Assembly and High Pressure Service Line
Justification:	Customer Request
Collectable:	Yes (100%)
In Service Date:	November 2, 2009
Preliminary Estimated Cost:	\$ 2,313,000

Design Data

Design Level:	375 psig
Maximum Flow:	4.75 MMSCFH
Minimum Flow:	1 MMSCFH
Flow Meter:	12" Ultrasonic
Bypass:	12" – 100% Flow
Service Line Pipe:	16" dia., 0.250" wall, Grade X60
Service Line Fittings:	16" dia., 0.375" wall, Grade Y42
Valves and PCF's:	ANSI Class 300

Project Description

The meter set assembly will consist of a single meter run and a bypass. Based on similar sized plant flows, the meter will most likely be a 12-inch ultrasonic flowmeter. The bypass will be sized for 100% flow and include manual valves. Both the meter run and the bypass run will have natural gas filters. Ball valves will be used for all valves that control the flow of gas through the meter set. Instrumentation, except for the gas chromatograph, will be located in an air-conditioned instrument enclosure.

The estimated size of the easement required for the MSA is 100 feet by 40 feet. Additional easements may be required from Duke Energy depending upon the final routing of the service pipeline.

The service pipeline will be a 16-inch diameter line and it is planned to install this line in the existing utility corridor on the east side of the power plant property, as shown on the attached pipeline location drawing. At this early stage in the planning, we are using a distance of 50 feet from the east PL as a preliminary location for the service pipeline, however this location may change somewhat as the electric undergrounding projects progress.

The service pipeline will be tied into the existing 16-inch and 24-inch lines, which currently feed the existing facility. In order to keep the existing plant in service while the new plant is going through start-up, the tie-ins will be phased as shown on the attached proposed tie-in drawing.

Preliminary Cost Estimate

Since no formal design work has been done on the Meter Set Assembly, a preliminary cost estimate has been developed based on an existing design for a similar sized plant. The estimate is broken down into two parts; the meter set assembly and the service pipeline. The estimate is in 2006 dollars and includes a 37 % CIAC tax rate. This estimate will be updated as the project progresses.

Meter Set Assembly

Design, Materials, Installation	\$ 664,000
CIAC Tax	<u>\$ 246,000</u>
Sub-Total	\$ 910,000

Service Pipeline

Design, Materials, Installation	\$ 1,024,000
CIAC Tax	<u>\$ 379,000</u>
Sub-Total	\$ 1,403,000

Total \$ 2,313,000

Schedule

Duke Energy has indicated a tentative plant in-service date of mid 2010, and that they will require gas service 6 months earlier. Based on this information, a tentative gas service start-up date of November 2, 2009 has been established. It is realized that this schedule can change either way as the plant design and permitting process progresses. It is estimated that it will take approximately 18 months from receipt of the Duke Energy contract and project funds to complete the design, procurement and construction activities. A proposed schedule is attached.

Environmental Mitigation

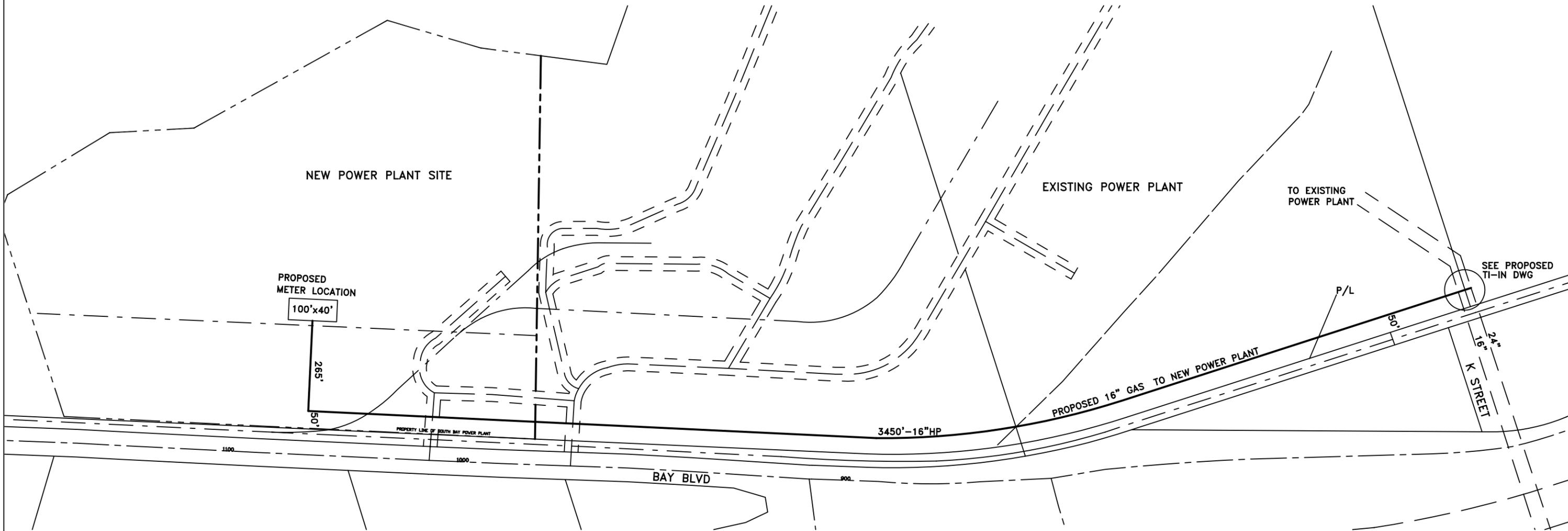
At this time, it is not anticipated that there will be any environmental mitigation required, since the pipeline is planned to be installed in an existing utility corridor. As the project progresses, this issue will be monitored closely for any changes.

Delivery Pressure

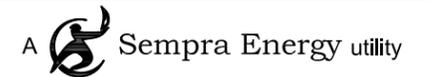
An analysis of delivery pressures to the existing plant over the period 2001-2005, show the average pressure during that time, to be between 350-360 psig. The absolute low during that same period was 211 psig.

Engineering/Design/Construction

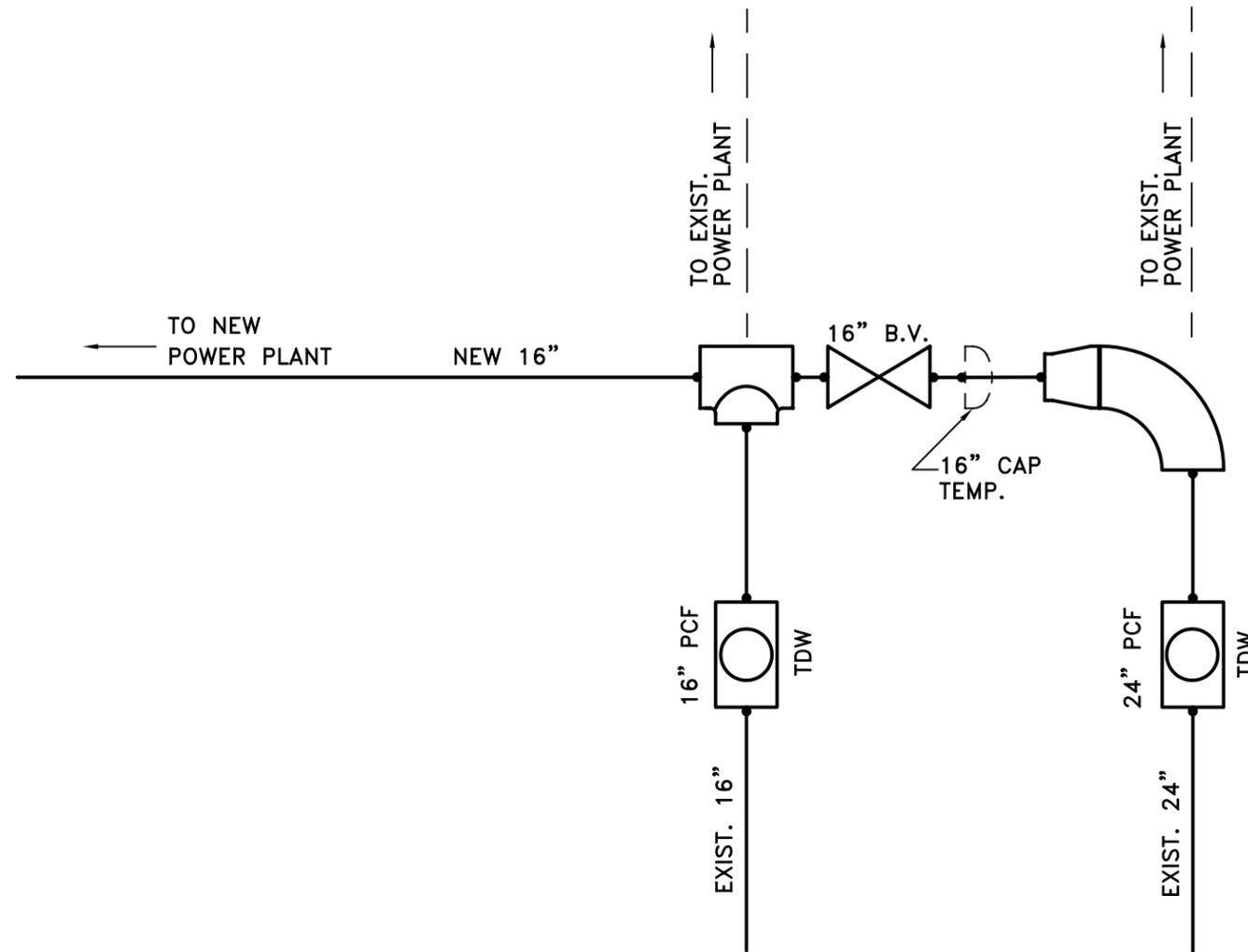
San Diego Gas & Electric and Southern California Gas Co. will work together on this project, as Sempra Utilities, to provide project management, engineering, design, material procurement, and construction inspection services, and ensure timely completion, in accordance with Duke Energy's schedule requirements.



PRELIMINARY—NOT FOR CONSTRUCTION



BUDGET#	501	GAS TECHNICAL SERVICES - MIRAMAR		
THOMAS BROS#	1330/A4	GAS DISTRIBUTION SYSTEM		
PLAT PAGE:	34-84,85A	DATE	PROPOSED 16" - 375 PSI GAS LINE TO NEW DUKE ENERGY COMBINED CYCLE POWER PLANT CITY OF CHULA VISTA	
DRAWN:	ETM	01/17/06		
DESIGNED:	ETM			
SYSTEM PROTECTION:				
SIZED BY:				
PIPELINE OPERATIONS:			DPSS No. 547783-010	Work Order No. 1717610
REGION ENGINEERING:				
APPROVED:	RGD	01/17/06	SCALE: 1:1	SHEET: 1 OF 1
				REV. 0



NOT TO SCALE

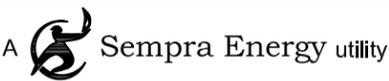
PHASE 1 (PRELIM TIE-IN)

- INSTALL 16" PCF, TAP & PLUG
- BLOW DOWN & PURGE 16" TO EXIST. PLANT
- INSTALL 16" TEE, VALVE & CAP
- TIE INTO NEW 16" P. P. LINE
- ENERGIZE NEW 16" P. P. LINE
- 16" WILL SERVE NEW P. P. DURING START-UP
- 24" WILL SERVE EXIST. P. P. DURING START-UP

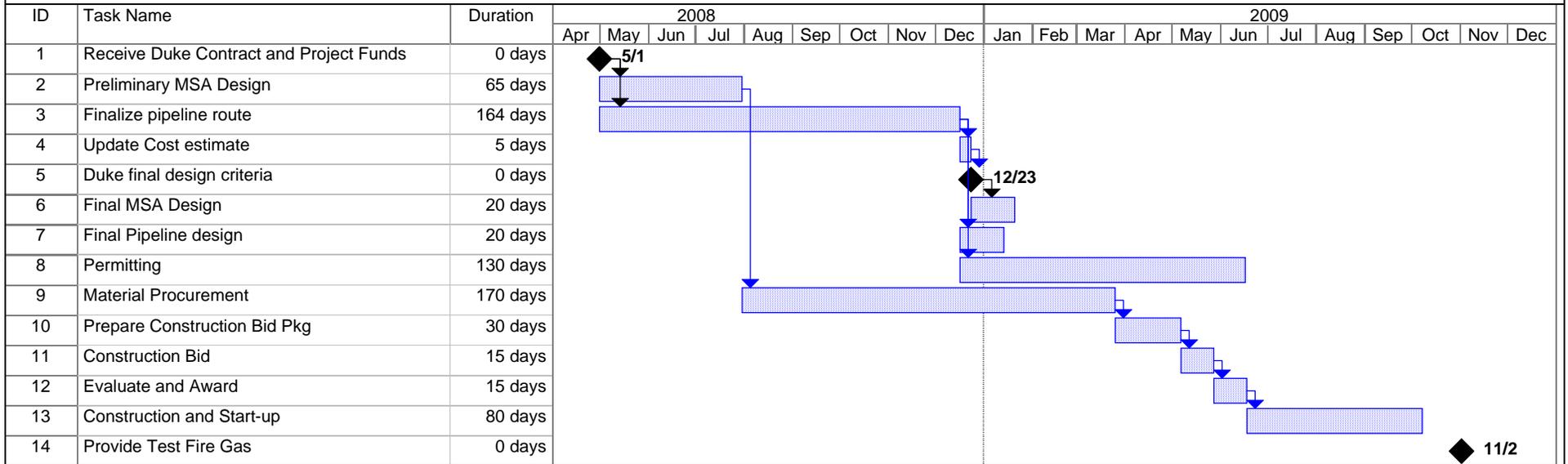
PHASE 2 (FINAL TIE-IN)

- INSTALL 24" PCF, TAP & PLUG
- BLOW DOWN & PURGE 24" TO EXIST. PLANT
- CLOSE 16" B. V. & REMOVE CAP
- INSTALL 24" ELBOW & 24"x16" REDUCER
- ENERGIZE NEW 24" UP TO 16" B. V.
- OPEN 16" B. V.
- BOTH 16" & 24" LINES WILL FEED NEW 16" P. P. LINE

PRELIMINARY—NOT FOR CONSTRUCTION

			
BUDGET#		GAS TECHNICAL SERVICES - MIRAMAR	
THOMAS BROS#		GAS DISTRIBUTION SYSTEM	
PLAT PAGE:	DATE:	PROPOSED TIE-IN TO NEW DUKE ENERGY COMBINED CYCLE POWER PLANT CITY OF CHULA VISTA	
DRAWN: ETM	01/11/06		
DESIGNED:		DPSS No. Work Order No.	
SYSTEM PROTECTION:			
SIZED BY:		SCALE: 1:1 SHEET: 1 OF 1	
PIPELINE OPERATIONS:			
REGION ENGINEERING:		REV. 0	
APPROVED: RGD	01/12/06		

Duke Energy New South Bay Generation Facility



Project: NewDukeGenFac
Date: Fri 1/20/06

Task		Milestone		External Tasks	
Split		Summary		External Milestone	
Progress		Project Summary		Deadline	