APPENDIX 5E

SDG&E Concurrence on Substation Layout

-----Original Message-----

From: Lynch, Kerry

Sent: Thursday, April 27, 2006 6:36 PM

To: 'Rawlins, Andy '

Cc: Yari, Ali; Allen, Tim; Brown, Linda P.; Winn, Caroline A.; Campbell, Susan C.; Torre, William V.

Subject: FW: South Bay Substation Relocation

Andy,

We've reviewed your layout options. Alt 1 is acceptable, with the caveat that cost responsibilities for items in excess of our standard construction practice would still need to be determined if we were to execute the design. We would also need to perform far more feasibility and cost analysis to account for the actual site conditions.

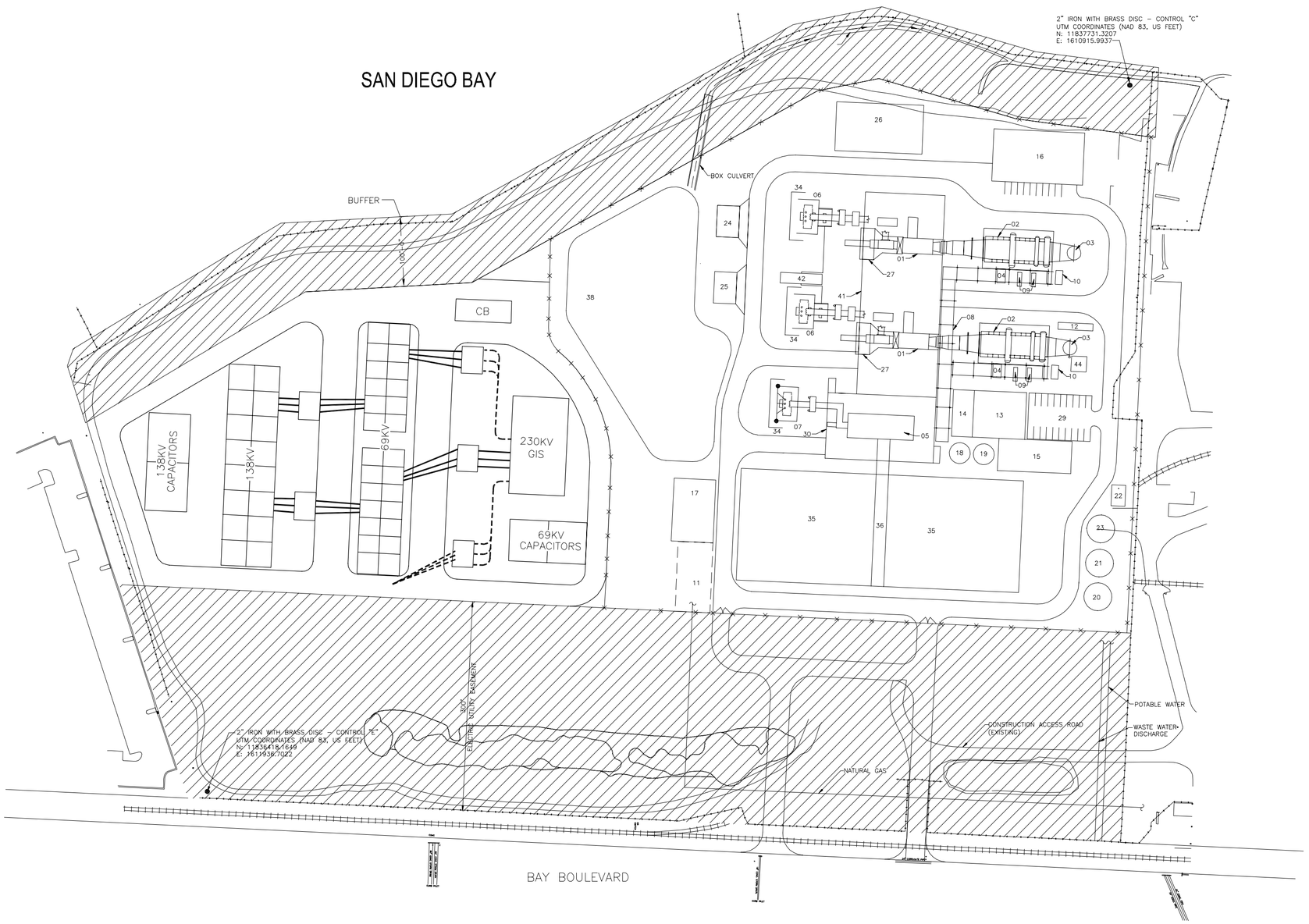
I appreciate the spirit of cooperation you showed by re-shaping the retention pond to make this work.

Kerry Lynch

Substation Engineering & Design Manager

858-654-8656

----Original Message-----



NEW FACILITIES LEGEND

ID	FACILITY	FOUNDATION ELEVATION	HEIGHT	REMARKS
01	COMBUSTION TURBINE/GENERATOR	24' +/- 1	–	
02	HEAT RECOVERY STEAM GENERATOR (HRSG)	24' +/- 1	87' TO DECK 94' TO DRUM CL 110' TO TOP OF STEEL	
03	HRSG STACK	24' +/- 1	125'	
04	HRSG BLOWDOWN TANK	–	–	
05	STEAM TURBINE/GENERATOR	24' +/- 1	–	
06	CT GENERATOR STEP-UP TRANSFORMER	24' +/- 1	20'	
07	ST GENERATOR STEP-UP TRANSFORMER	24' +/- 1	20'	
08	UTILITY/PIPE RACK	24' +/- 1	110'/40'	
09	BOILER FEED PUMPS	24' +/- 1	–	
10	CEMS ENCLOSURE	24' +/- 1	12'	
11	FUEL GAS METERING/CONDITIONING STATION AREA	–	–	
12	OIL/WATER SEPARATOR	–	–	
13	ADMIN/CONTROL ROOM BUILDING	24' +/- 1	20'	
14	POWER DISTRIBUTION CENTER (ST/HRSG/BOP)	24' +/- 1	20'	
15	WATER TREATMENT BUILDING	24' +/- 1	20'	
16	MAINTENANCE/WAREHOUSE BUILDING	23' +/- 1	32'	
17	FUEL GAS COMPRESSOR BUILDING	23' +/- 1	22'	
18	DEMIN WATER STORAGE TANK (150,000 GALLON)	24' +/- 1	30'	
19	CONDENSATE STORAGE TANK (100,000 GALLON)	24' +/- 1	21'	
20	RAW WATER/FIRE WATER STORAGE TANK (300,000 GALLON)	24' +/- 1	28'	
21	RAW WATER/FIRE WATER STORAGE TANK (300,000 GALLON)	24' +/- 1	28'	
22	FIRE PUMP HOUSE/DIESEL STORAGE (STACK ON WEST END OF BUILDING)	24' +/- 1	16' BUILDING HEIGHT 22' STACK HEIGHT	
23	WASTE WATER STORAGE TANK (300,000 GALLONS)	24' +/- 1	28'	
24	AMMONIA STORAGE/CONTAINMENT AREA	23' +/- 1	15'	
25	HYDROGEN STORAGE AREA	23' +/- 1	–	
26	COOLING WATER HEAT EXCHANGER	23' +/- 1	20'	
27	CT INLET AIR FILTER	–	70'	
28	NOT USED	–	–	
29	PARKING	–	–	
30	ST GENERATION BUILDING	24' +/- 1	82'	
31	NOT USED	–	–	
32	NOT USED	–	–	
33	NOT USED	–	–	
34	SOUND BARRIER WALL	–	–	
35	AIR COOLED DRY CONDENSER	–	94'	
36	STEAMDUCT	–	–	
37	NOT USED	–	–	
38	STORMWATER DETENTION BASIN	–	–	
39	AREA RESERVED FOR SOUTH BAY SUBSTATION	–	–	
40	STORM WATER DISCHARGE CHANNEL	–	–	
41	CT GENERATION BUILDING	24' +/- 1	40'	
42	ELECTRICAL EQUIPMENT BUILDING	24' +/- 1	14'	
43	230KV GIS	21' +/- 1	–	
44	AUXILIARY BOILER	24' +/- 1	13' BOILER HEIGHT 125' STACK HEIGHT	

GENERAL LEGEND

- PROPERTY LINE
- FENCING
- ASPHALT SURFACE
- CONCRETE SURFACE
- AGGREGATE SURFACE
- VEGETATED SURFACE

NOTES

NOT TO BE USED
FOR CONSTRUCTION

NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP
B	4/18/06	SDG&E REVIEW	JEF	AGR			
A	4/13/06	CLIENT REVIEW	JEF	AGR			

SCALE: 1"=60' (60' 30' 0 60' 120')

I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF CALIFORNIA.
SIGNED
DATE REG NO.

BLACK & VEATCH CORPORATION
ENGINEER AGR DRAWN JEF
CHECKED DATE 02-10-06

DUKE ENERGY
SOUTH BAY REPLACEMENT GENERATION FACILITY

SDG&E SUBSTATION LAYOUT
ALT 1 LAYOUT

PROJECT / DRAWING NUMBER: 136469-DS-ALT-1
REV: B
CODE
AREA

ACAD 15.05 1=1
A1ASL017 E1