

CLIENT:



OIL AND NATURAL GAS CORPORATION LTD.
AT HAZIRA PLANT, GUJARAT.

EPC CONTRACTOR:



BHARAT HEAVY ELECTRICALS LTD
TRANSMISSION BUSINESS GROUP

FIGHTNER

Consulting Engineers
(India) Private Limited
Chennai, Bangalore.

PROJECT:
1x51 MW COMBINED CYCLE
COGENERATION PLANT

DRN.				CHKD		APPD		DATE		TITLE SLD FOR 66KV GIS					
DM		MM		AS				7/8/15							
G. DWG NO.: TB-0-383-510-001										SHEET: 01 OF 02		SCALE:		REV.02	

		DRG REVISED AS PER ONGC/FE COMMENTS DATED 19.08.2015 CT VT RATING REVISED.					DRG REVISED AS PER ONGC/FE COMMENTS DATED 02.06.2015 ALL LINE/TRFR CHANGED TO 66KV CABLE. 66KV SA PROVIDED IN GIS.			
REV	DATE	AA/MM	VK	AS		REV	DATE	AA/MM	VK	AS
02	19.09.15	DRN.	CHKD	APPD	SIG.	01	10.08.15	DRN.	CHKD	APPD

A

B

Core No.	Current Ratio	Accuracy Class	Min. Burden	Min kVp	Max RCT at 75 DEG	Max Im at kVp /2	Purpose
1	500 / 1	PS	-	700 V	5 Ohms	30 mA	RTT, 64REF
2	500 / 1	PS	-	700 V	5 Ohms	30 mA	50/51
3	500 / 1	0.2S, 150°C3	30 VA	-	-	-	18CU/100TH Metering
4	500 / 1	PS	-	700 V	5 Ohms	30 mA	51G/SPARE
5	500 / 1	PS	-	700 V	5 Ohms	30 mA	87E/50LTH

CORE NO.	RATIO	ACCURACY	BURDEN (VA)
CORE-1	$\frac{66KV}{13} / \frac{110V}{13}$	0.2	10
CORE-2	$\frac{66KV}{13} / \frac{110V}{13}$	0.2	10

Core No.	Current Ratio	Accuracy Class	Min. Burden	Min kV	Max RCT at 75 Deg	Max Im at kV /2	Purpose
1	300 / 1	P8	-	700 V	5 Ohms	30 mA	Differential Protection

1. THE DETAILS OF GIS MAY CHANGE AS PER VENDOR'S STANDARD PRACTICE (LOCATION OF BUS EARTHING SWITCH, PT)
2. 3-CT1B, 8-CT1B, 3-PT1B, 8-PT1B, RATIOS MAY CHANGE AS PER GETCO GUIDELINES.
3. METERING CT & PT SHALL BE OUTDOOR TYPE.
4. RATING OF EQUIPMENTS IN SLD SHALL BE REVISED AFTER FINALIZATION /APPROVAL OF INDIVIDUAL EQUIPMENT RATING/SIZING CALCULATION .

Core No.	Current Ratio	Accuracy Class	Min. Burden	Min kVP	Max RCT at 75 Deg	Max Im at kVP /2	Purpose
1	500 / 1	0.2s	5 VA	-	-	-	Metering

Core No.	Current Ratio	Accuracy Class	Min. Burden	Min kVp	Max. RCT at 75 Deg	Max Im at kVp /2	Purpose
1	500 / 1	0.2s	30 VA	-	-	-	Metering (Tariff)
2	500 / 1	PS	-	700 V	5 Ohms	30 mA	Line Main Protection – Distance
3	500 / 1	5P20	15 VA	-	-	-	Line Backup Protection
4	500 / 1	0.2	30 VA	-	-	-	SAS Metering / Digital MFM
5	500 / 1	PS	-	700 V	5 Ohms	30 mA	87B

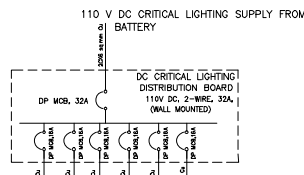
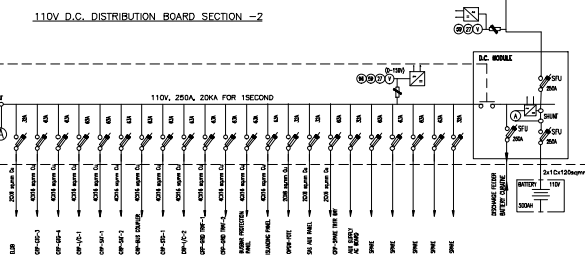
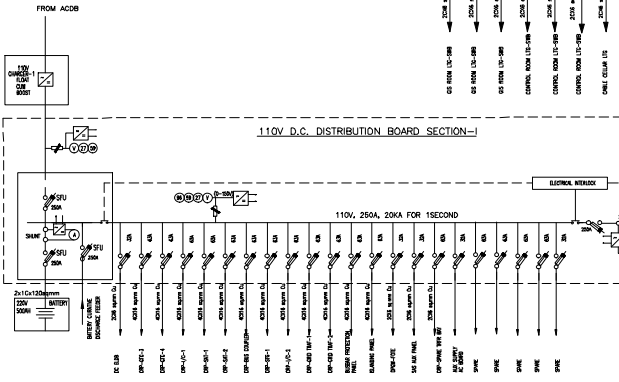
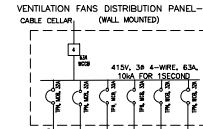
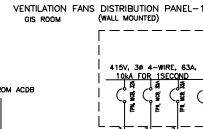
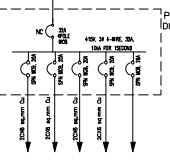
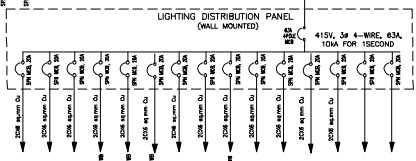
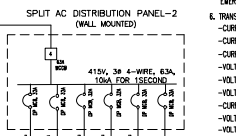
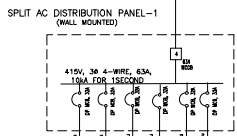
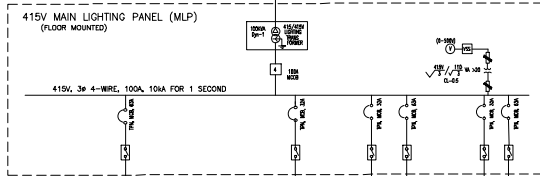
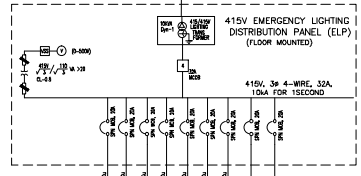
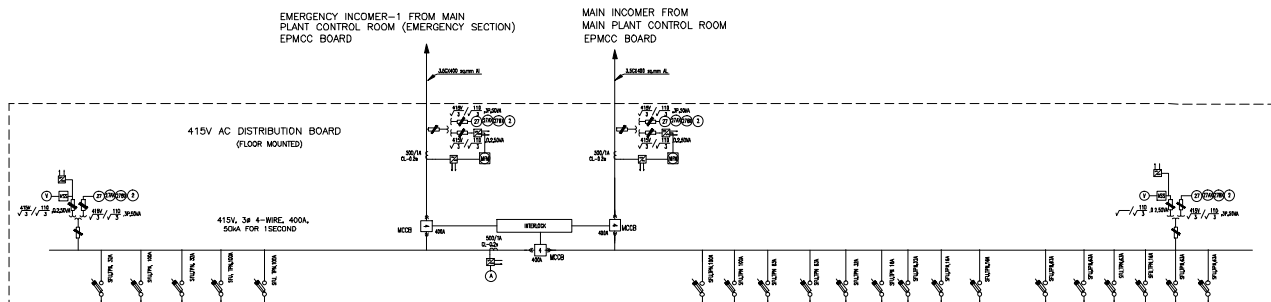
Core No.	Current Ratio	Accuracy Class	Min. Burden	Min kVp	Max RCT at 75 Deg	Max Im at kVp /2	Purpose
1	500 / 1	PS	-	700 V	5 Ohms	30 mA	87O
2	500 / 1	PS	-	700 V	5 Ohms	30 mA	87I , REF
3	300 / 1	0.2s	30 VA	-	-	-	Metering (Tariff)
4	500 / 1	PS	-	700 V	5 Ohms	30 mA	SPARE
5	500 / 1	PS	-	700 V	5 Ohms	30 mA	87B

Core No.	Current Ratio	Accuracy Class	Min. Burden	Min kVp	Max RCT at 75 deg	Max Im at kVp / 2	Purpose
1	2000 / 1	FS	-	2000V	20 Ohms	30 mA	87B52
2	2000 / 1	FS	-	2000V	20 Ohms	30 mA	87B11
3	2000 / 1	SP20	15 VA	-	-	-	51, 50N, 50Z
4	2000 / 1	0.2s	30 VA	-	-	-	Metering Ammeter
5	2000 / 1	FS	-	2000 V	20 Ohms	30 mA	SPARK

TITLE	SLD FOR 66KV GIS
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SHEET: 02 OF 02	SCALE:	REV.02
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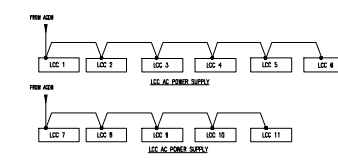
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- DUAL OUTPUT TRANSducer
- MULTI FUNCTION METER WITH RS485 PORT FOR SAS INTERFACE
- CONTROL FUSE
- 4 POLE MOULDED CASE CIRCUIT BREAKER (MCB) WITH THERMAL AND MAGNETIC ELECTRONIC RELEASE
- 4 POLE MOULDED CASE CIRCUIT BREAKER (MCB) WITH EARTH LEAKAGE PROTECTION (300 mA)
- SWITCH FUSE UNIT
- MCB
- CONTACTOR
- ELCB- EARTH LEAKAGE CIRCUIT REAKER
- 27,27AX,27BX : INSTANTANEOUS UNDERVOLTAGE PROTECTION
- 96 : EARTH LEAKAGE
- 59 : DC INSTANTANEOUS OVERVOLTAGE RELAY
- 2 : TIMER
- V : VOLTMETER
- A : AMPMETER
- VSS : VOLTAGE SELECTOR SWITCH
- TPN : THREE POLE WITH SEPARATE NEUTRAL LINK
- DP : DOUBLE POLE
- SPN : SINGLE POLE WITH SEPARATE NEUTRAL LINK

- NOTES:**
- NO TWO AC SOURCE SHALL BE PARALLELED AT ANY STAGE.
 - IN THE ABSENCE OF NORMAL / MAIN INCOMER SOURCE EMERGENCY INCOMER SUPPLY SHALL BE STARTED AND BUS COUPLER OF EMERGENCY INCOMER SHALL BE OPENED.
 - DC SUPPLY OF GS LOC SHALL BE TAKEN FROM RESPECTIVE RELAY PANEL.
 - STATUS OF ALL INCOMERS INCLUDING EMERGENCY AND BUSCOUPLER MCB OF MAIN AC DC BOARDS SHALL BE AVAILABLE FOR SCADA (ECS) SYSTEM. SUITABLE AUX. CONTACTS TO BE PROVIDED.
 - FOLLOWING ALARMS SHALL BE AVAILABLE FOR SCADA (ECS) SYSTEM.
 - MAIN INCOMER SUPPLY FAILURE / OFF OF 415V AC BOARD.
 - EMERGENCY INCOMER SUPPLY FAILURE / OFF OF 415V AC BOARD.
 - TRANSFORMERS (OF 4-20MVA) FOLLOWING SHALL BE AVAILABLE.
 - CURRENT IN MAIN INCOMER OF 415V AC BOARD
 - CURRENT IN EMERGENCY INCOMER OF 415V AC BOARD
 - CURRENT IN EMERGENCY AND MAIN BUS COUPLER OF 415V AC BOARD
 - VOLTAGE OF MAIN INCOMER OF 415V AC BOARD
 - VOLTAGE OF EMERGENCY INCOMER OF 415V AC BOARD
 - VOLTAGE OF EMERGENCY AND MAIN BUS OF 415V AC BOARD
 - CURRENT IN MAIN INCOMER 1 AND 2 OF 110V DC BOARD & BUS COUPLER
 - VOLTAGE OF MAIN INCOMER 1 AND 2 OF 110V DC BOARD
 - VOLTAGE OF BUS SECTION-1&2 OF 110V DC BOARD
 - NECESSARY CONTACTORS SHALL BE PROVIDED IN AC AND DC DISTRIBUTION BOARDS SUCH THAT 110V DC CRITICAL LIGHTING PANEL SHALL TURNED ON AFTER FAILURE OF MAIN AND EMERGENCY LIGHTING SUPPLY.
 - INCOMER AND BUS COUPLER MCB SHALL BE SUITABLE FOR REMOTE CONTROL FROM SAS.
 - LOADING OF NEW SHALL BE IN BIDDERS SCOPE.
 - (DIGITAL INPUT) -> (DIGITAL OUTPUT) LIST AS BELOW:

Signal List	DI/DO SAS Interface
415V ACB Emergency Incomer Open	DO
415V ACB Emergency Incomer Close	DO
415V ACB Main Incomer Open	DO
415V ACB Main Incomer Close	DO
415V ACB Bus coupler Open	DO
415V ACB Bus coupler Close	DO
415V ACB Emergency Incomer ON	DI
415V ACB Emergency Incomer OFF	DI
415V ACB Main Incomer ON	DI
415V ACB Main Incomer OFF	DI
415V ACB Bus coupler ON	DI
415V ACB Bus coupler OFF	DI
110V DCB-1 L/V operated	DI
110V DCB-1 O/V operated	DI
110V DCB-1 U/V operated	DI
110V DCB-2 L/V operated	DI
110V DCB-2 O/V operated	DI
110V DCB-2 U/V operated	DI
 - TRANSFORMERS SHALL BE DUAL OUTPUT TYPE.
 - 415 V ACB accuracy class - CT input -0.25, PT input- 0.2
 - 415 V ELOB, Lighting panel accuracy class - PT input - 0.5



REFERENCE DRAWING	KEY SINGLE LINE DIAGRAM : DRG. NO. 0-381-21-02259		
PROJECT:-	1X51 MW COMBINED CYCLE COGENERATION CAPTIVE POWER PLANT		
OIL AND NATURAL GAS CORPORATION LTD. AT HAZIRA PLANT, GUJARAT.			
CONSULTANT:-	FIGHTNER Consulting Engineers (India) Private Limited, Bangalore.		
BHARAT HEAVY ELECTRICALS LTD. TRANSMISSION PROJECTS DIVISION	जगत् / NAME	हस्ता / SIGN.	दि
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अनुपात / SCALE	कौटु / CARD CODE		
	ड्राइंग / DRAWING NO. TB-0-383-316-002 पृष्ठ / SHEET No. 02 पृष्ठ / SHEET No. 02		

REV.	DATE	ALTERED CHECKED APPROVED	MM/AA	W/AS
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100	18.02.16	APPROVED	AS	

S/L	ITEM DESCRIPTION	KV	QTY. IN NOS.	SYMBOL
1.	2 CORE METERING CURRENT TRANSFORMER,1 PH.	66	06	◆
2.	2 CORE METERING POTENTIAL TRANSFORMER,1 PH.	66	06	●
3.	CABLE SEALING END , 1PH.	66	12	●
4	BUS POST INSULATOR , 1PH.	66	06	⊙
5.	GAS INSULATED SUBSTATION	66	01	

S. NOS.	DESCRIPTION	UNIT	VALUES
1.	NOMINAL SYSTEM VOLTAGE	kV	66
2.	HIGHEST SYSTEM VOLTAGE	kV	72.5
3.	BASIC IMPULSE LEVEL	kVP	325
4.	POWER FREQUENCY WITHSTAND	kVrms	140
6.	CREEPAGE DISTANCE. (MINIMUM)	mm/kV	31
7.	SYSTEM FAULT LEVEL FOR 3 SEC	KA	40

S. NOS.	DESCRIPTION	UNIT
1.	PHASE TO PHASE	mm 750
2.	PHASE TO EARTH	mm 630
3.	SECTION CLEARANCE	mm 3000
4.	HEIGHT OF JACK BUS FROM PLINTH LEVEL(EXISTING)	mm 11000
5.	PLINTH HEIGHT FROM GROUND LEVEL	mm 200

—	PRESENT BHEL SCOPE
----	FUTURE/EXISTING SCOPE
✕ ✕	FENCE
—□—	TENSION STRING INSULATOR
○	SUSPENSION STRING INSULATOR
□	COLUMN WITH PEAK
⊗	LIGHTNING MAST

9.000M WIDE EXISTING ROAD N: 690.000

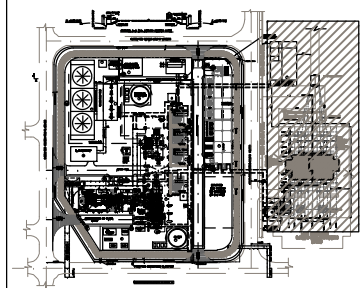
EXISTING CABLE RACK (1650MM)
EXISTING DRAIN TRENCH (400MM)

**MAIN SUBSTATION
EXISTING MAIN SUBSTATION
(MRSS)**



NOTE :-



1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED.
2. LNE-1 & 2, GTG-1 TR., GTG-2 TR. WILL BE CONNECTED TO GIS THROUGH 66KV CABLE VIA USE.
3. EQUIPMENT CONNECTION IS SINGLE HUNG CONDUCTOR EQUIVALENT TO RCSR DOG CONDUCTOR.
4. ALL EQUIPMENTS STRUCTURE SHALL BE LATTICE TYPE.
 - a. * - EXISTING LNE & ISOLATORS, BIL IN LINE/GT BAYS SHALL BE USED WITHOUT ANY RELOCATION.
5. ** - EXISTING METERING CT, METERING PT STRUCTURE & FOUNDATION SHALL BE USED FOR MOUNTING OF BIL PROVIDED NEW METERING CT & PT.
6. ** - EXISTING EQUIPMENTS & FOUNDATION SHALL BE USED FOR NEW SETUP SHALL BE DISMANTLED BY BHEL AFTER TESTING AND COMMISSIONING OF GIS.
7. 66KV SURGE ARRESTORS FOR GTG-3 TR., GTG-4 TR., SAT-1, SAT-2 & GTG-1 TR. WILL BE PROVIDED IN GIS (INDOOR).
8. LOCATION OF CABLE TRENCH SHOWN IS TENTATIVE.




KEY PLAN

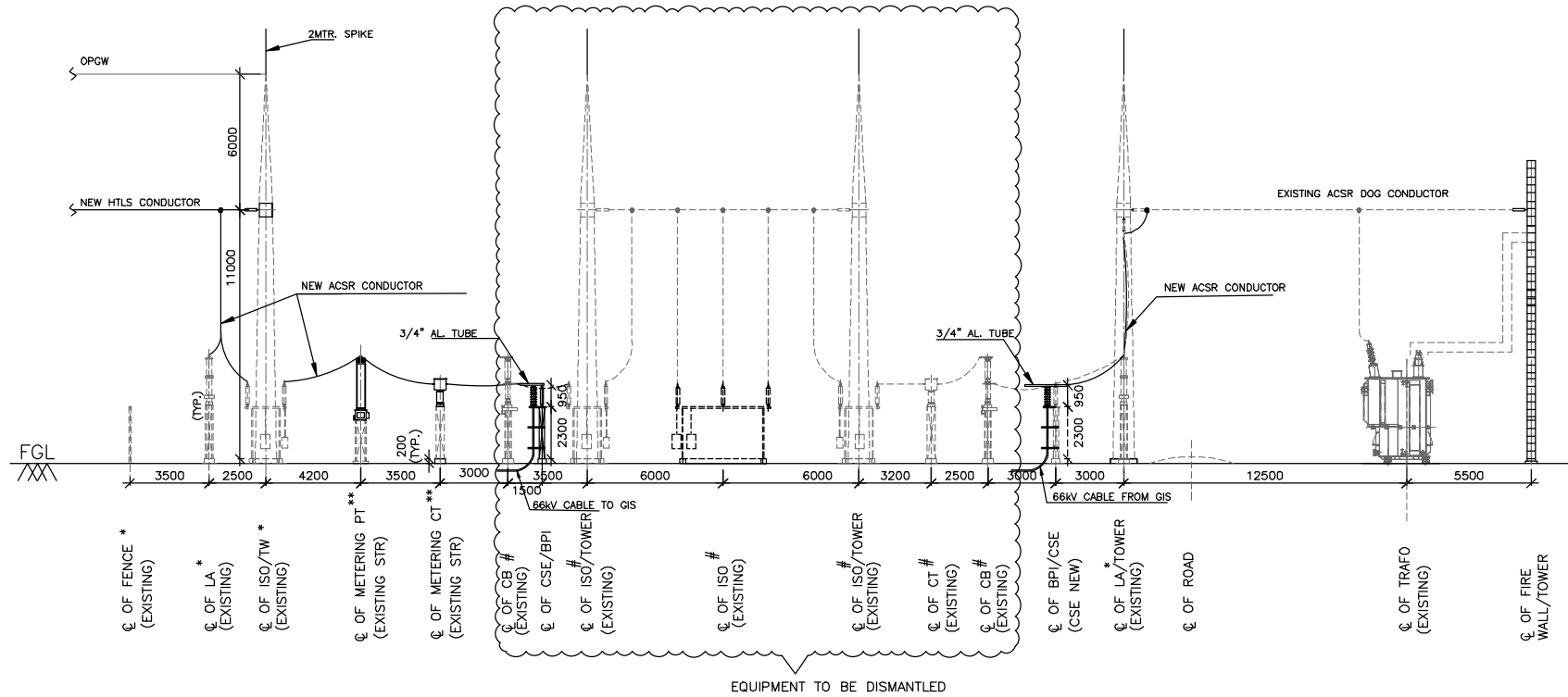
REFERENCE

1. SINGLE LINE DIAGRAM DRG. NO. TB-0-383-510-001
2. PLOT PLAN DRAWING NO. 0-381-01-01570
3. 66KV SWITCHYARD LAYOUT DRAWING NO. 2033-00-50-00-A0-401
3. CONCEPTUAL LAYOUT FOR GIS BUILDING DRAWING NO. TB-3-316-007

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	<p>भारत भारी बिजलीय निगम भारत भारी बिजलीय निगम Bharat Heavy Electricals Limited, TRANSMISSION DIVISION</p> <table><thead><tr><th>Sl. No.</th><th>Sl. No.</th><th>Sl. No.</th><th>Sl. No.</th><th>Sl. No.</th></tr></thead><tbody><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr><tr><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td></tr><tr><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td></tr><tr><td>16</td><td>17</td><td>18</td><td>19</td><td>20</td></tr><tr><td>21</td><td>22</td><td>23</td><td>24</td><td>25</td></tr><tr><td>26</td><td>27</td><td>28</td><td>29</td><td>30</td></tr><tr><td>31</td><td>32</td><td>33</td><td>34</td><td>35</td></tr><tr><td>36</td><td>37</td><td>38</td><td>39</td><td>40</td></tr><tr><td>41</td><td>42</td><td>43</td><td>44</td><td>45</td></tr><tr><td>46</td><td>47</td><td>48</td><td>49</td><td>50</td></tr><tr><td>51</td><td>52</td><td>53</td><td>54</td><td>55</td></tr><tr><td>56</td><td>57</td><td>58</td><td>59</td><td>60</td></tr><tr><td>61</td><td>62</td><td>63</td><td>64</td><td>65</td></tr><tr><td>66</td><td>67</td><td>68</td><td>69</td><td>70</td></tr><tr><td>71</td><td>72</td><td>73</td><td>74</td><td>75</td></tr><tr><td>76</td><td>77</td><td>78</td><td>79</td><td>80</td></tr><tr><td>81</td><td>82</td><td>83</td><td>84</td><td>85</td></tr><tr><td>86</td><td>87</td><td>88</td><td>89</td><td>90</td></tr><tr><td>91</td><td>92</td><td>93</td><td>94</td><td>95</td></tr><tr><td>96</td><td>97</td><td>98</td><td>99</td><td>100</td></tr></tbody></table>					Sl. No.	Sl. No.	Sl. No.	Sl. No.	Sl. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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शीर्षक/TITLE LAYOUT PLAN & SECTION FOR BSEK S/S ONGC NAKHRA			इन्जीन. ऑ. / DRAWING NO. TD-0-000-010-000	
			पृष्ठ क्र./ SHEET NO. 01	कुल पृष्ठ./NO. OF SHEET 01

FIRST ANGLE PROJECTION (ALL DIMENSIONS ARE IN MM.)



SECTION-AA
(66kV GTG-1.2 BAY IN SWITCHRAD)

PROJECT:- 1X51 MW COMBINED CYCLE COGENERATION CAPTIVE POWER PLANT



OIL AND NATURAL GAS CORPORATION LTD.
AT HAZIRA PLANT, GUJARAT.

CONSULTANT:-

FICHTNER
Consulting Engineers (India) Private
Limited, Bangalore.



भारत हेवी इलेक्ट्रिकल्स लिमिटेड
भारत भारी बिजली कम्पनी लिमिटेड
BHARAT HEAVY ELECTRICALS LTD.
TRANSMISSION PROJECTS DIVISION

REVISION	DATE	BY	CHKD	APPD	REVISION	DATE	BY	CHKD	APPD
01	09.11.15	MM/AS	MM/AS	MM/AS	02	28.06.16	MM/AS	MM/AS	MM/AS

REVISION

DATE

BY

CHKD

APPD

REVISION

DATE

BY

CHKD

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REVISION

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CHKD

APPD

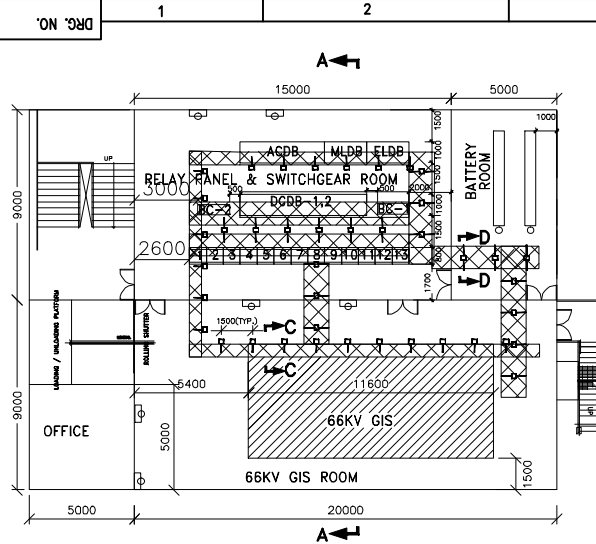
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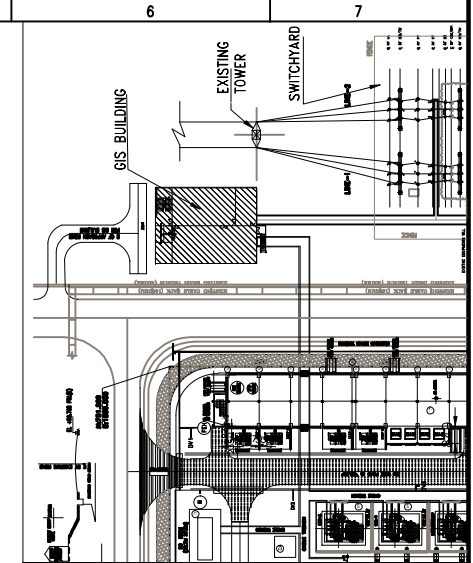
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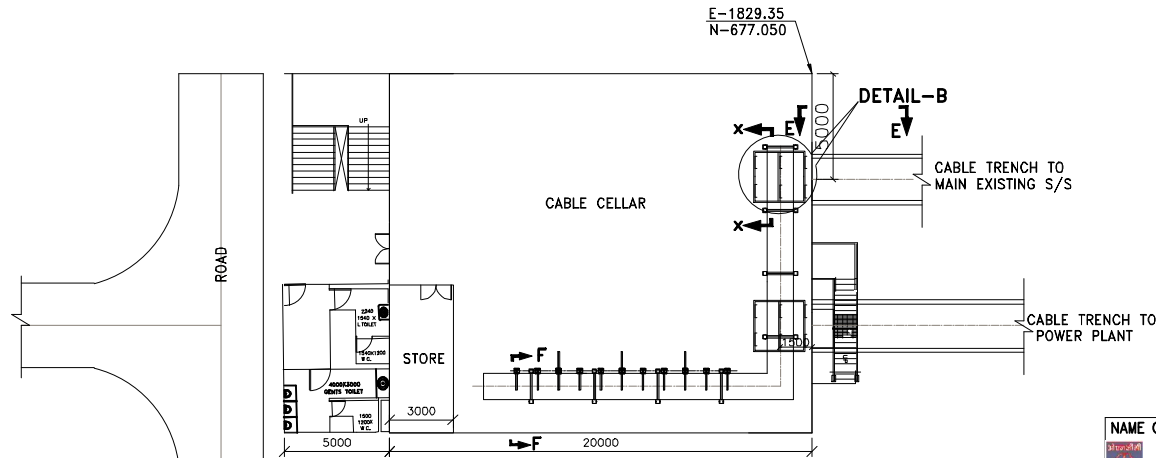
FIRST ANGLE PROJECTION (ALL DIMENSIONS ARE IN MM)



CONTROL ROOM BUILDING PLAN, FIRST FLOOR



KEY PLAN



CONTROL ROOM BUILDING PLAN,
GROUND FLOOR

NOTE:-

1. ALL DIMENSIONS ARE FROM THE INSIDE FACE OF THE WALLS .
2. WHEREVER CUTOUT IS PROVIDED FOR FUTURE PANELS SAME SHOULD BE COVERED, SO AS TO FULLY FLUSH WITH THE FINISHED FLOOR .
3. WHERE BEAMS ARE CROSSING THE PATH OF CABLE TRAYS AN INSERT PLATES SHOULD BE EMBEDDED IN THE BEAM ALSO.
4. AUXILIARY POWER CABLES SHALL BE LAID IN TOP TIERS AND CONTROL CABLES IN BOTTOM TIERS,
5. ALL OTHER DETAILS PERTAINING TO CIVIL WORKS SHALL BE REFLECTED IN THE RESPECTIVE CIVIL DRAWINGS .
6. PANEL SUPPORT ANGLES/CHANNELS SHALL BE PROVIDED BY BHEL (CIVIL CONTRACTOR).

REFERENCE:-

1. CONCEPTUAL LAYOUT FOR GIS BUILDING : TB-3-383-316-007

NAME OF PROJECT/CUSTOMER



OIL AND NATURAL GAS CORPORATION LTD.
COMBINED CYCLE CAPTIVE POWER PLANT AT HAZIRA UNIT, GUJARAT

NAME OF CONSULTANT

FITCHNER CONSULTING ENGINEERS INDIA PVT LTD

BHARAT HEAVY ELECTRICALS LIMITED
TRANSMISSION BUSINESS GROUP

CARD CODE

TITLE

INDOOR CABLE TRENCH LAYOUT GIS BUILDING

NEXT SHEET

02

SHEET No.

01

SCALE

W.O. No 80003

DRG. No.

TB-3-383-316-004


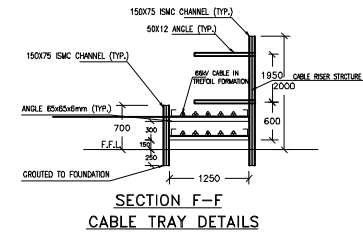
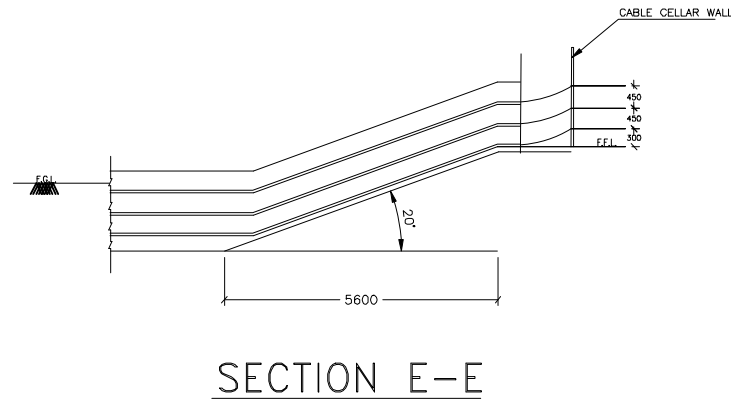
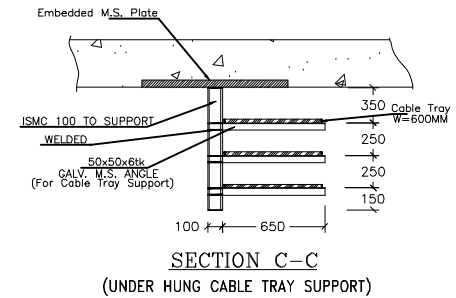
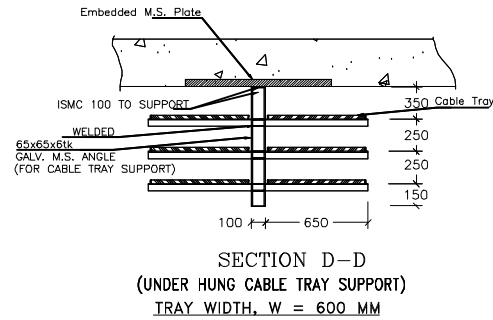
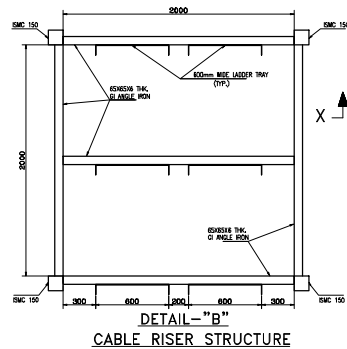
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										DISTRIBUTION OF PRINTS		
										DEPT.	CODE	
										TBEM	422	



DEPT. CODE
TBEM 422




LADDER TRAY

1. CONCEPTUAL LAYOUT FOR GIS BUILDING : TB-3-383-316-007

OIL AND NATURAL GAS CORPORATION LTD.
COMBINED CYCLE CAPTIVE POWER PLANT AT HAZIRA UNIT, GUJARAT

FITCHNER CONSULTING ENGINEERS INDIA PVT LTD

REV.	DATE	ALTD.	CHD.	APPD.	REV.	DATE	ALTD.	CHD.	APPD.		NAME	SIGN.	DATE	<div><div>बीएचईएल</div><div></div></div>	
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SIGN.					SIGN.									DEPT.	CODE
														TBEM	422



BHEL

BHARAT HEAVY ELECTRICALS LIMITED
TRANSMISSION BUSINESS GROUP

CARD CODE

TITLE

INDOOR CABLE TRENCH LAYOUT GIS BUILDING

NEXT SHEET	—
SHEET No.	02

	SCALE
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W.O. No 80003

DRG. No.	TB-3-383-316-004
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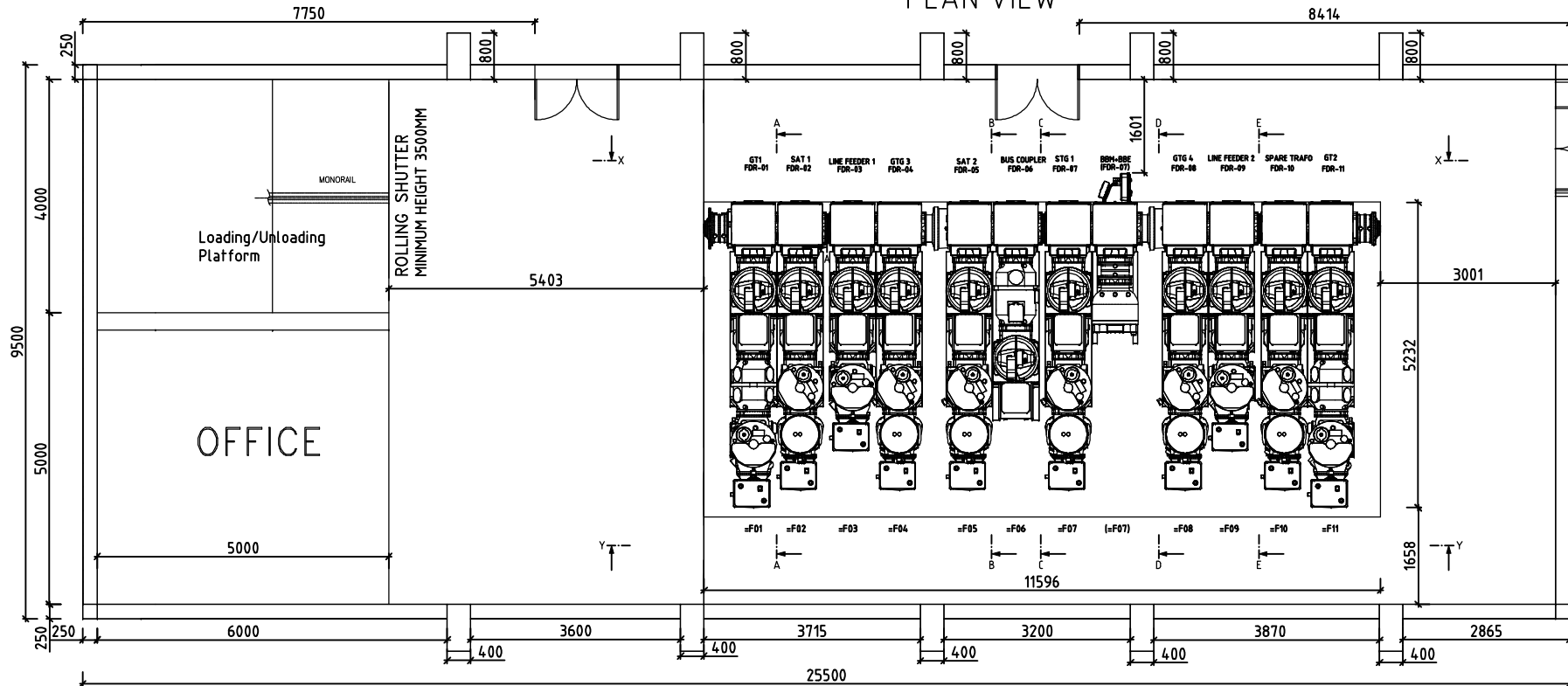
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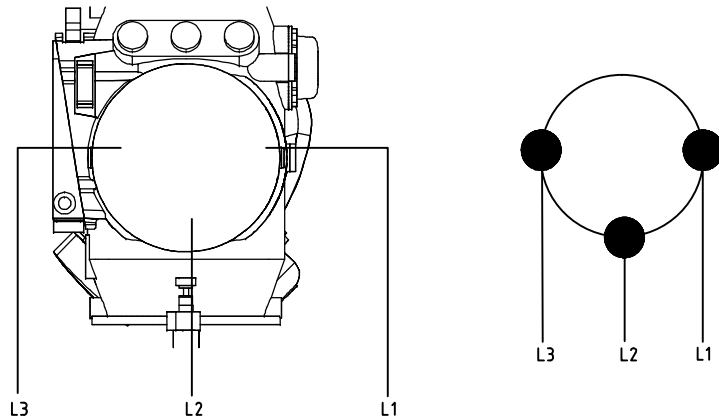
SL.NO.	DOCUMENT TITLE	DOCUMENT REF. NO.	PAGES	DATE
1.	66kV GIS LAYOUT (PLAN VIEW)	(D)-G7177D-AF137-V021-D_REV 01	2	30.05.2016

	ONGC Ltd. 66kV GIS for COMBINED CYCLE CAPTIVE POWER PLANT at HAZIRA PLANT, GUJRAT
	BHARAT HEAVY ELECTRICALS LTD. TRANSMISSION PROJECTS DIVISION NOIDA LOA NO. MR/MM/OTP/CCPP/HAZIRA/264/2012-13/105AC12001 DTD. 31.03.2015

PLAN VIEW



PHASE ALLOCATION DRAWING



In accordance with the standard IEC 61936-1 chapter 3.2.1 it is obligatory for the user to comply all requirements which concern an enclosed electrical operating area.

For ventilation of SF6 switchgear hall pay attention to IEC 61936-1, section 8.8.2 and to national valid instructions of accident preventions at SF6 switchgear.

Description:
PLAN AND PHASE ALLOCATION VIEW

Building according to customer's drawing number: TB-3-383-316-007

FOR APPROVAL

DO NOT SCALE WORKING DIMENSIONS

SWITCHGEAR EXTERNAL COLOR RAL:7032

Reference Drawing:

1	G71770-AF137-S005	66kV GIS SINGLE LINE DIAGRAM
2	G71770-AF137-V021	66kV GIS LAYOUT (PLAN VIEW)
3	G71770-AF137-V023	66kV GIS LAYOUT (SECTION VIEW)

D	Building & Office dimension modified	28/05/2016	RA
C	-T2 location modified for GT bays	19/05/2016	RA
B	Bay sequence modified	16/05/2016	RA
A	Cable end view added in sheet 2 Column location proposal added, doors location modified	12/05/2016	RA
0	First issue	06/05/2016	RA
Rev	Remark	Date	Name

OIL AND NATURAL GAS CORPORATION LTD. AT HAZIRA PLANT, GUJARAT.

LOA NUMBER : MR/IM/OTF/CCPP/HAZIRA/284/2012-13/105AC12001 DT.31/03/2015

EPC CONTRACTOR: BHARAT HEAVY ELECTRICALS LTD. TRANSMISSION PROJECTS DIVISION
PO NUMBER : 278P336 PO DATE : 26/04/2016

FICHTNER
Consulting Engineers (India)
Private Limited, Bangalore.

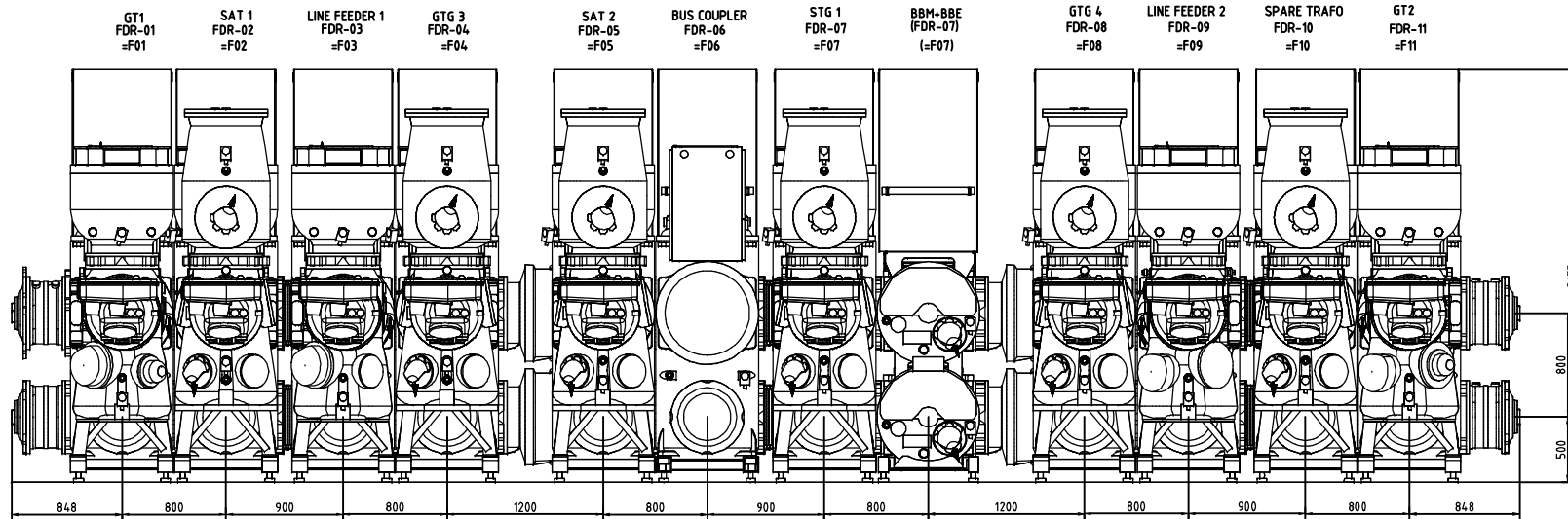
PROJECT:-
1x51 MW COMBINED CYCLE
COGENERATION CAPTIVE POWER PLANT

EQUIPMENT MANUFACTURER:
SIEMENS

DRN.	CHKD	APPD	DATE	TITLE
NAME	CHKD	DATE		66kV GIS LAYOUT (PLAN VIEW)
RA	SM	DATE		

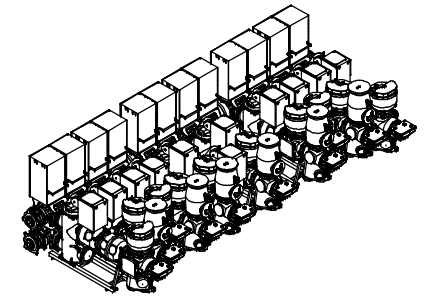
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VIEW Y-Y

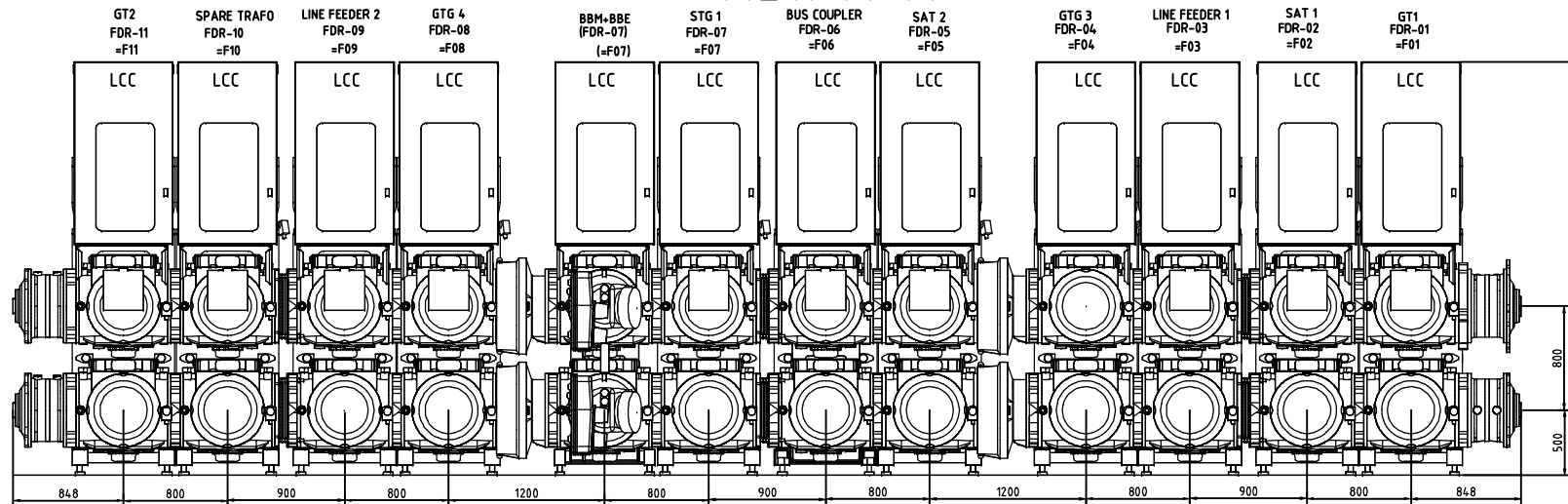


BUSBAR I

BUSBAR II

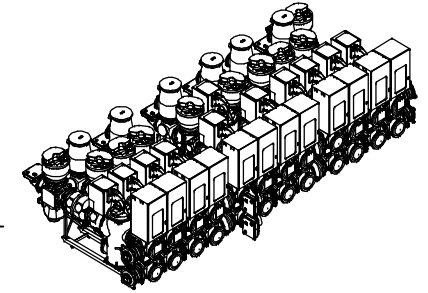


VIEW X-X



BUSBAR I

BUSBAR II



Rev	Remark	Date	Name
D	Building & office dimensions modified	28/05/2016	RA
C	-T2 location modified for GT bays	19/05/2016	RA
B	Bay sequence modified	16/05/2016	RA
A	Cable end view added in sheet 2 Column location proposal added, doors location modified	12/05/2016	RA
0	First issue	06/05/2016	RA

OIL AND NATURAL GAS CORPORATION LTD.
AT HAZIRA PLANT, GUJARAT.
LOA NUMBER : MR/IM/OTF/CCPP/HAZIRA/284/2012-13/10SAC12001 DT.31/03/2015

EPC CONTRACTOR: BHARAT HEAVY ELECTRICALS LTD. TRANSMISSION PROJECTS DIVISION
PO NUMBER : 278P338 **PO DATE :** 28/04/2016

FICHTNER
Consulting Engineers (India)
Private Limited, Bangalore.

PROJECT:-
1x51 MW COMBINED CYCLE
COGENERATION CAPTIVE POWER PLANT
EQUIPMENT MANUFACTURER
SIEMENS

DRN.	CHKD	APPD	DATE	TITLE
NAME	CHKD	DATE		66kV GIS LAYOUT (PLAN VIEW)
RA	SM	28/05/2016		
DOC NO.:	NUMBER (H-671770-AF137-V021-0)	SHEET: SHEET	2 OF 2	REV. D

FOR APPROVAL

DO NOT SCALE WORKING DIMENSIONS

Description
GENERAL ARRANGEMENT

Building according to customer's drawing
number: TB-3-383-316-007

In accordance with the standard
IEC 61936-1 chapter 3.2.1 it is
obligatory for the user to comply
all requirements which concern an
enclosed electrical operating area.

For ventilation of SF6 switchgear hall
pay attention to IEC 61936-1,
section 8.8.2 and to national valid
instructions of accident prevention
at SF6 switchgear.

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