1. INTRODUCTION

Oil and Natural Gas Corporation Limited (ONGC) is engaged in exploration and exploitation of hydrocarbon in Western Offshore field in the Arabian Sea on the continental shelf of Western India. The field is well developed with an extensive infrastructure of Wellhead Platforms, Process Platforms and Pipelines. With the ageing field, condition of some of its existing Pipelines has deteriorated. ONGC is intends for replacement of these Pipelines in phased manner. In addition, it is planning to lay some new lines for better management of the field along with Topside's modification.

Under Pipeline Replacement Project (PRP)-VI, ONGC have issued addendum as additional scope of work for Topsides and Submarine Pipelines modification work i.e., Evacuation of Oil from Panna to MUT under PRP-VI.

Panna-Mukta Offshore Oil & Gas production field is situated in the Arabian Sea, about 45 nautical miles off the west coast of Mumbai. The water depth varies from 36 meters to 67 meters. Panna field is spread over about 450 sq. kms., while Mukta field is spread over about 777 sq. kms.

Supreme offshore Ltd. (SOL)'s responsibility as EPC Contractor includes the following:

- Project Management
- Surveys, decommissioning, Design Engineering, Procurement, Fabrication, Transportation, Hook-up, Testing, Pre-commissioning & Commissioning (wherever applicable)

ONGC has awarded Supreme offshore Ltd. (SOL) the Contract to carry out the Design, Engineering, Procurement, Construction and Installation for this Project.

2. PARTIES INVOLVED

OWNER / COMPANY	Oil and Natural Gas Corporation Limited (ONGC)
CONTRACTOR	Supreme Offshore Construction & Technical Services Ltd

2.1.1 Detailed Scope of Work

2.1.1.1 Structural strengthening & Deck Extension.

1. Installation of deck extension for battery bank container
2. Deck Strengthening for HT Container
3. Deck Strengthening for MOL Pumps
4. Deck Strengthening for Booster Pumps

2.1.1.2 Demolition

1. Demolition of Booster Pump with associated piping
2. Demolition of existing wet oil tank with associated piping.

2.1.1.3 Booster Pump (P-3170, P-3180 & P-3190)

1. Installation of 3 no`s of booster pumps completed

2. Hook up of balance piping work & instruments associated with Booster pumps (suction line, discharge line)

2.1.1.4 **MOL Pump (P-3270, P-3280 & P-3290)**

1. Installation of 3 no`s of MOL pumps

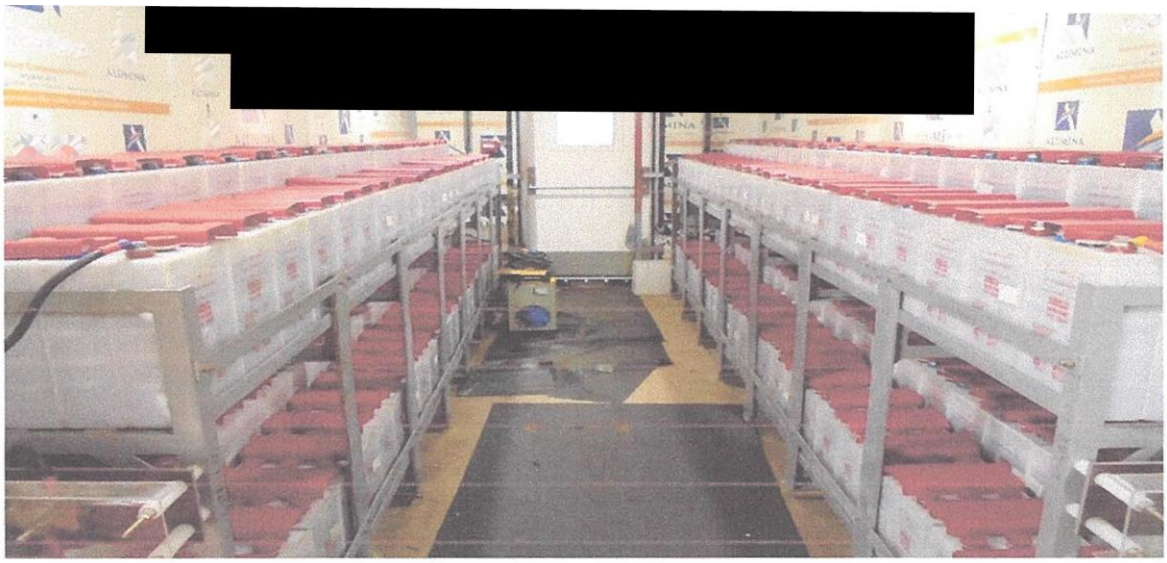
2. Hook up of balance piping work & instruments associated with MOL pumps (suction line, discharge line) completed

3. Commissioning of all the Pumps

8.1.2.3. Pressurized HT Container:

1. Installation of HT Container & Battery bank container .

2. Installation of HT panel, cable laying, cable tray installation, Instruments & Commissioning activities of electrical and instrument items



BALANCE TOPSIDE WORKS FOR PIPELINE REPLACEMENT PROJECT VI (BTWPRPVI)

Date: 10th JUNE 2023

SITE COMPLETION CERTIFICATE

Customer	: ONGC
Contract No.	: MR/ES/MMBTWPRPVI/NOM/22/P851S22007
Project	: BALANCE TOPSIDE WORKS FOR PIPELINE REPLACEMENT PROJECT VI (BTWPRPVI)
Platform	: PPA PLATFORM
Contractor	: SUPREME OFFSHORE CONSTRUCTIONS & TECHNICAL SERVICES LTD
Barge	: SHIVANSH SHAMBHAVI / GOODMAN

THIS IS TO CERTIFY THAT ALL THE TOP SIDE MODIFICATION WORKS WHICH INCLUDED THE FABRICATION, INSTALLATION, TESTING, PRE-COMMISSIONING, COMMISSIONING FOR THE NEW FACILITIES MOL PUMPS 3 NOS (P-3270, P-3280 & P-3290), BOOSTER PUMPS 3 NOS (P-3170, P-3180 & P-3190),MODIFICATIONS IN PIPING OF TREATER TRAIN A&B, NEW METERING SKID/SYSTEM, MODIFICATION IS COSV SYSTEM INCLUDING PSVs & PCVs, MODIFICATION IN EXISTING HV & LV SYSTEM FOR SUPPLY OF POWER TO NEW FACILITIES, 3.3 KV HT PANEL, NEW 20KVA UPS SYSTEM, MONORAIL WITH HOIST, DECK EXTESION FOR BATTERY ROOM, HT CONTAINER FOR HOUSING HT PANEL, UPS PANEL, DBs AND F&G DETECTORS, F&G PANEL, BATTTERY CONTAINER WITH BATTERY BANKS, CLEAN AGENT SYSTEM FOR HT & BATTERY CONTAINER (NOVAC SYSTEM), ANNUNCIATOR PANEL, DCS SYSTEM PANEL, ESD MODIFICATION, SHUTDOWN WORK RELATED TO ENTIRE FACILITIES WITH STRUCTURAL, PIPING, MECHNICAL, E&I ACTIVITIES FOR ALL THE ABOVE ITEMS, WELDING OF GOLDEN JOINT AT PPA FOR 12" NEW RISER HAS BEEN SUCCESSFULLY COMPLETED AT PPA PLATFORM AS PER THE BID SCOPE TO THE ENTIRE SATISFACTION OF ONGC.

APPROVED PRE-ENGINEERING SURVEY REPORT:
PRE-CONSTRUCTION SURVEY REPORT:
APPROVED P&ID
WELL FLUID TRANSPORTATION FROM PANNA TO BCPA3 UTILISING NEW BOOSTER, MOL PUMPS AND ACCESSORIES COMMENCED FROM 16:00HRS, 3RD JUNE 2023 FURTHER FLOW DIVERTED TO MUT LINE FROM BCPA3 VIA OL-7 2215HRS, 4th JUNE 2023

PUNCH POINT LIST OF BALANCE WORK IS ENCLOSED: ANNEXURE-I, ANNEXURE-II & ANNEXURE-III

* Refer Punch Points from Page No: 01 to 10

Supreme Offshore Constructions & Technical Services Limited Mumbai

CONTRACTOR (SUPREME OFFSHORE)

MANOJ YADAV
11/06/23

G. HARI PANDU RANGA RAO
11.06.2023

ONGC TH

Reviewed
11/06/2023
(K.R. Singh)

ONGC CA

ANNEXURE- I

PROCESS RELATED PENDING POINTS RELATED TO PRP-VI-COMMISIONING

COSV:

1. COSV PT-1091 & PIC-340 reading showing error of 3 psi.
2. I/V's of COSV PSV, PCV-340, PCV-341 & BDV-343 I/V is very hard to operate (almost stuck condition)

Metering Skid Issues:

1. Meter-2(FCQ-3260) transmitter not available
2. Meter-1(FCQ-3261) showing erratic values
3. Water cut meter is not working
4. Meter is resetting at 0545 hrs in the morning instead of 0600 hrs
5. VRV (vapor release valve) in suction strainer of both meter (FCQ-3260/3261) failed during Operation. Currently blinding done. To be rectified & drain to be connected to CCD.

DCS:

1. New F&G detectors graphics are not integrated to Detronics graphics.
2. 18 no of detectors are not available, installation of the same pending.
3. SOE not coming in HIMA alarm station.
4. Few newly installed detectors are in LON fault/ sensor faulty, need to be attend.

MOL PUMPS:

1. MOL pumps-3270/3280/3290 recycle FCVs (PP-FCV-3270/3280/3290) found fluctuating rapidly during running condition. To be tuned properly. Currently, D/S of FCV valve throttled for running the pump.
2. MOL pumps-3270/3280/3290 recycle FCVs (PP-FCV-3270/3280/3290) feedback not coming in DCS.
3. MOL pump 3290 discharge ESD Pressure transmitter (PP-PZT-3291) reading is not inline with other PT's. Need to be rectified.
4. All MOL pump suction strainer DPT tags (PP-PDI-3274/3284/3294) readings to be cross checked.
5. MOL pump 3290 suction ESD Pressure transmitter (PP-PZT-3297) reading is not inline with other PT. Need to be rectified.
6. All MOL pumps discharge orifice plate flow meters (PP-FI-3270/3280/3290) reading to be made available. As recirculation FCV operation is based on this flow meter.
7. MOL pump 3280 suction pressure transmitters (PP-PZT-3287 and PP-PT-3286 are having a difference of 10 psig.
8. Access Platform Required for MOV Operation and Strainer cleaning for all MOL pumps

New Booster Pumps:

1. All booster pump suction strainer DPT tags (PP-PDI-3174/3184/3194) reading to be cross checked.
2. As per approved philosophy, oil departing line SDV (XSDV-360) tripping not given in logic in case of Train-A & Train-B tripped (or Level-2 PSD).
3. No monorail provided for Booster pump 3190.
4. Access Platform Required for MOV Operation and Strainer cleaning for all pumps.

PPA-BCPA3 PIG Launcher:

1. Pig barrel I/V or Kicker valve passing.

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Manoj 11/06/23 (ABS)

11/06/2023 (K.R.Sinha)

HT CONTAINER:

Handrails along with access monkey ladder to be installed above the HT container and Battery bank.

HOT OIL LINE:

Demolition of Hot Oil line & Oil diverted line is pending.

SPARES AND DOCUMENTATION:

Calibration certificates of gauges/PSV/Hydro testing certificates/ Datasheets & Performance curve/ SOPs for operating MOL/Booster pumps need to be submitted.

All Commissioning spares/ 1 year insurance spares if any as per contract to be handed over to ONGC.

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G.H.P.R.Rao ABS 11-05-2023

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Reviewed

11/06/2023 (V. R Sinha)

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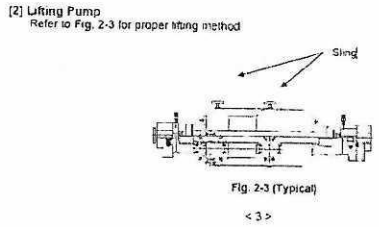
MECHANICAL PENDING POINTS RELATED TO PRP-VI- EQUIPMENT COMMISSIONING

Operation, Engineering and design related:

1. No monorail arrangement in place to lift and remove MOL pumps (Ref Figure from OEM Manual)



   02 Nos Chain pulleys are provided above MOL pumps which are not accessible due to height and surrounded by pipelines.
2. Old monorail is there for 02 Nos booster pumps, provision for monorail is not there for 3rd pump.
3. All pumps are with single isolation. In case of maintenance of MOV plant shutdown will be required.
4. Canopy required for UCP of MOL Pumps
5. MOL Seal oil bladder is clamped with strap type which is prone to wear out quickly. Proper support clamps to be installed
6. Pipe obstruction in motor side monorail is there, so motor cannot be removed.
7. Portable platform is required for operating MOL pumps bladder maintenance and to operate isolation valves
8. Seal cooler motor canopy is insufficient, may lead to water ingress. So, large canopy need to be provided
9. No access for MOL pump maintenance, very congested place. Slid to be made free by relocating JBS and piping's.
10. Provided skids of MOL pumps is insufficient considering oil spillage (narrow drain channels and small drain line)

Spare and consumables related:

11. Special OEM tools and tackles to be provided for doing maintenance of MOL and Booster pumps
12. O&M, Parts and Overhaul manual to be provided along with BOM and available spares in hard copy.
13. Lubrication list needs to be provided along with stock.

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11.06.2023

11/06/2023

11/06/2023
(K.R.Sivha)

Instrumentation Observation: Major pending points at System

MOL; 3270, 3280 & 3290 Booster; 3170, 3180 & 3190

1. Purge panel alarm and bypass function check still pending.
2. Emergency tripping and shutdown should be "Fail safe". Presently it is used NO contact instead of NC. Due to this Pump not tripping, even PLC panel power fail.
3. There is discrepancy in Colour coding (Green/Red) of Indication in UCP graphics in itself and DCS Graphics also.
4. System 1 (Vibration monitoring system) installation and & checking pending.
5. Unit need to be change from KG to PSI in all UCP
6. P-3270: VE-3270-5, VE-3270-4, VE-3270-7, VE-3270-10 not showing reading in UCP Graphics.
7. Permissive indication feedback status in graphics not changing at the time of unit trip.
8. All 3 MOL DPT need to be recalibrate.
9. In all UCP panel local graphics trip and shutdown signal to be differentiate.
10. Some Power Cables are terminated without Lugs in UCP panel. Need to be checked.

Metering System:

- 1 no oil flow Meter FT-3260 found faulty need to be replaced.
- Meter 1 &2 FCQ data not showing correctly.
- Flowmeter Recalibration and validation, after Booster and MOL line up in Trunk line is pending. Meter accuracy need to be revivified against actual flow.
- Water Cut meter showing -1000. Need to be recalibrate.

Oil Trunk line:

- MOL pump SDV PST logic and function in auto and manual mode is pending.
- SOV-360: SOV found not working, replaced with existing critical spare of Panna. New spare SOV to be provided by project team

F&G System:

- Newly supplied Annunciation panel commissioning pending along with its mapping in control room S3 System graphics.
- Battery room detector s installation pending.
- 18 nos of Detectors installation and commissioning is still pending. Some of the Field Instrument Tags are mismatched, needs to be corrected
- At F&G panel there is no redundant DC to DC converter. Redundant Power convertor to be provided.

DCS System: FO cable is touching in panel door, need to be shifted and secured properly inside the system Cabinet

ESD system:

GA and Modified IO wiring diagram yet to be provided.

SOE System:

Newly tags are not configured in SOE (Sequence of Event Logger). As per HIMA service engineer, it is not part of HIMA system even not in scope of HIMA.

~~*I-vision SCADA:*~~

Supreme Offshore Constructions & Technical Services Limited ★ Mumbai

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Mario Pras 11/06/23 ABS

11/06/2023 (K.R.Sil)

Electrical Observation: Major pending points at System

1. Sealing of PQ & PPA MCC HT side MCT block to be done.
2. Cross ferruling of HT and LT feeders must be done and the same needs to be incorporated in as built drawing.
3. Some Earthing Point not connected of All HT Motors. It should be connected.
4. Tagging of all power cable and control cable.
5. LT feeders needs to be prepared with spares provided by M/s Supreme, presently old electrical spares are used.
6. Proper laying of MOL Pump 3270 HT Power Cable.
7. Tagging should be provided of all HT /LT booster motors.
8. UPS1, 2 and UPS bypass feeders breaker upstream (PQ MCC-E Panel) rating is 63A (Breaker setting is 44A) downstream breaker at PRP-VI HT panel is 100A (UPS Panel inside incomer), Breaker setting is 85A has to be resolved as per Upstream and downstream ratings.
9. Structure earthing to be provided for all UPS Panel in HT container.
10. MOL pump motor feeder relays are not motor protection relay-Rotor locked and number of cold and hot starts permissive are not available in THIS RELAY (P3F30).
11. No proper sealing of LT all LT feeders associated with PRP-VI project due to modification by the vendor. It may cause compromisation in safety system inside switchgear room.
12. There is no power terminal block in LT feeder at PPA MCC. Presently they used control terminal block. Power terminal block required before run.
13. At least one Double door entry with one single door emergency exit should be provided in switchgear as per contract (only single door in present HT switchgear).
14. Specifications of laptop for relay to be cross checked with tender document.
15. HT BREAKAR DOOR HANDLE (ONLY ONE AVILABLE NEEDED 4 FOR ALL DOOR)
16. OPEN CLOSE HANDLE (ONLY 1 AVILABLE)
17. ANALOG METERS NOT PROVIDED IN HT PANEL.
18. LADDER SHOULD BE PROVIDED TO ACCES HT PANEL CONTROLL WIRING CABINET
19. TOOL BOX TO BE PROVIDED.
20. KEY TO INDIVISVAL PANEL SHOULD BE PROVIDED.
21. Lighting transformer not provided. (Documents to be checked)
22. Anti-seize to be provided at all threaded parts (DB, Bolts & glands)
23. Canopy should be properly covered for all field DB,s.
24. SLD to be provided in HT & LT.
25. Double earthing to provide for all equipment's.
26. All DB's Load list and marking/ tagging to be provide in DB's.
27. Lock chain arrangement to be provided for all doors.
28. Monkey ladder to be provided for HT and battery bank container.
29. Battery room exhaust should not be bellow, need to be changed with duct.
30. Document's to be checked for Hoist for MOL PUMP/Motor maintenance.
31. HT Hand Gloves and Arc flash suit along with rescue kit to be provided.
32. Portable Fire extinguisher along with stand to be provided inside the HT Switch gear.
33. MSDs to be placed with laminated sheet inside the battery room.
34. Battery room inside Battery isolator tagging to be provided.
35. Pagging system to be provide in Battery room and HT container.

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(M. Rasil)

As per existing philosophy, Trunk line PT set points need to be mapped in SCADA system for the ease of operation while plant revival. As per HIMA service engineer, it is not part of HIMA system even not in scope of HIMA.

Field General Observation.

1. Some of the Field Instrument Tags are mismatched, needs to be corrected.
2. Capillary tube support & tray to be provided. Process &instrument both side tag to be provided.
3. Cable tag is missing in field cables, cable tag to be provided with JB no.
4. Field Instruments Calibrations and testing certificate need to submit along with datasheet.
5. In some JB and DB Earthing is still not there.
6. SS tube support clamp found metal to metal contact to lead to corroded and punctured tube. Proper clamp to be provided
7. SOP and need to be stick at all the MOL and Booster in laminated form.
8. Panel light missing in Panel DCS-201. Panel fan and tube power supply to be provided from UPS.
9. Un-used cable entry to be plugged at DCS and F&G Panel. Multiple cable entry to be properly traced and sealed.
10. Earthing and Shield sleeves to be shrinked properly.
11. In Network Switch, un-used port to be plugged.
12. Fuse to be installed in all terminal blocks.
    Canopy to be provided for Field Instruments and UCP Panel.
    JB was hanging on gas detector, a dedicated support to be provided to the JB.
13. Spare cables are not crimped with ferrule Tags, need to be terminated in spare TB's in all panel.
14. SS Cable tie need to be provided with proper routing.
15. Old annunciator panel and strobe light was dismantled for commissioning of new battery room. Need to be relocate properly.

Documentation & Handing Over material:

16. System override procedure need to be demonstrated.
17. All equipment operation and maintenance training to be provided.
18. Commissioning &maintenance spares and BOM to be provided.
19. As built copy of All UCP, DCS ,ESD ,Fire and gas & Metering skid panel drawing, IO data base, Cause and effect, and control philosophy be provided .Also laminated wiring diagram to be kept in panel
20. Licence software with Key and laptop of F&G, MOL, Booster pump, Bentley Nevada and flow meter to be provided.
21. Any other related documents necessary in Operation & Maintenance also to be provided.
22. Trex HART Communicator and other calibration instruments to be handover as per scope of work.

The above mentioned points are based on system and field observations till 05/06/2023. It may further increase as the system checks and operation is still under progress.

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G.A.P.R. Rao
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(K.R Sirka)

36. SOP of racking/rack out of HT VCB, SOP for relay setting, fault checking and resetting along with breaker earthing should be provided on all panel. The same needs to be displayed in all the HT panel.
37. Relay setting parameters should be displayed in individual feeders along with FLA
38. SOP for change over in between UPS-1 & UPS-2 and between UPS and Bypass and also sop for its HMI installed in Panel.
39. Relay coordination needs to be provided before no load run test of motor, as it is mandatory for safety of electrical equipment.
40. Laminated As built Control and Power Drawing needs to be provided inside in all the panel in A3 paper.
41. Exhaust needs to be provided in battery room.
42. Stencil of tag name/number should be provided in all feeders, motors and DBs.
43. 2 set of Tools for HT breaker rack in rack out and earthing of HT panel needs be provided.
44. SLD and danger sign board needs to be provided in HT SWGR room.
45. Canopy should be provided to LCP available in field.
46. Emergency light and exit light needs to be installed.
47. Portable FLP lights needs to be provided in HT container, Battery room, PPA SWGR and PQ SWGR.
48. Proper Earthing and dressing Earthing cable of LT Booster motors.
49. Proper sealing of all LT Booster motors terminal box.
50. Terminal plate stopper required in all LT feeders (PQ MCC and PPA MCC).
51. HT switch gear HVAC Drawing required.
52. Structure earthing to be provided for all UPS Panel in HT container.
53. No redundancy available for DC 24V convertor in DB 306.
54. ESD stop command to MOL /Booster pump and ESD/FSD start permissive in MOL/Booster pump
55. Petroleum jelly to be applied to all battery terminals
56. Indication for 24VDC supply healthiness in MPR of booster feeder
57. Cable to connect to laptop from relays to be provided by supreme (Moxa converter cable for booster relay & printer cable for Schneider relay.
58. Mod bus connection needs to be provided from HT Bus to DCS. Special Note: Along with main breaker status, DC power supply Healthy/failure status of opening and closing coil of all motor and incoming feeder should be displayed in DCS.
59. Lighting arrangement to be made near booster & MOL pump area, outside and above HT container and battery room.
60. Relay modification drawing of 52-4 (input/output Abb relay) not available, to be provided by ABB. SOP for fault reset, setting adjustment , fault record
61. MOL & Booster Auxiliary Seal oil cooler fan Motor body double earthing to be provided.
62. UPS battery bank- 1 and 2 , damaged terminals should be replaced.
63. Power distribution box is open, acrylic sheet to be fitted
64. Marking of All Motor Tag MOL/Booster and auxiliaries
65. MOL pump motor cable is in stressed condition.
66. Time sync of UCP of both booster and MOL with actual real time to be matched.
67. Current reading in UCP &LCP of MOL to be verified.
68. Ammeter of MOL pump to be replaced with sufficient range and marking.
69. Interlocking of Sequential start of seal oil fan and MOV of all Booster and MOL pump to be verified.
70. Rubber mat to be checked as per latest electrical standard (BPB).

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ABS TPI
11.06.2023

11/06/23

11/06/2023
(V. R Sivil)

71. Stand for manuals n drawing
72. UPS DB Indication lamp numbering required
73. Unused gland holes to be sealed
74. Space heater inside ups distribution DB to be checked
75. MCB tagging should be done inside UPS Power DB.
76. Current and voltage and other electrical reading in UCP display to be checked
77. HVAC system installation along with control system and feeder panel is pending
78. Bill of material of Hitachi UPS panel with Part no to be provided
79. Sticker for Battery Bank marking are only up to 200 only. 2 sets of sticker marked 200 to 282 to be provided
80. UPS Panel door keys to be provided.
81. Soft copy of UPS manual in PDF format to be provided
82. SOP for parallel operation of UPS Battery bank to be provided
83. Approved modified drawing of HT panel PQ and PPA both
84. Relay Coordination along with generator VCB
85. UPS manual Quality Assurance plan(QAP) is not signed by Anyone
86. Maintenance chapter is missing in manual provided for Hitachi UPS
87. All signed documents to be submitted
88. All booster/MOL UCP Power DBs to be checked as these are not closing properly.
89. Verification of spare, tool, special toll, document/drawing & safety items etc handover and scope of work as per final tendor documents is pending.
90. lighting in pig launching area.

06/06/23 06/06/23 06/06/23 V.K.Saini 6/6/23 06/06/23 06/06/23

I/C MECH. I/C ELEC. I/C INST. PM PANNA MM PANNA OIM PANNA

OIM-PANNA
B&S Asset ONGC,
Mumbai

Supreme Offshore Constructions & Technical Services Limited Mumbai

G.H.P.R.Rao
ABS-TPI
11.06.2023

11/06/2023

11/06/2023
(K.R.Sinha)

ANNEXURE-II		
HT CONTAINER		
1	ALL INSTRUMENT AND ELECTRICAL CABLE TAG TO BE PROVIDED AT BOTH SIDE	
2	SPARE MCT FRAME FILLING WORK IS BALANCE	
BATTERY CONTAINER		
1	SPARE MCT FRAME FILLING WORK IS BALANCE	
BOOSTER AREA		
1	TOCH UP PAINTING OF JB SUPPORT AND INSTRUMENT SUPPORT IS BALANCE	
2	CANOPY TO BE PROVIDED FOR UCP PANEL OF BOOSTER PUMP 3170, 3180, 3190	
3	CABLE DRESSING TO BE CARRIED OUT FOR INSTRUMENT CABLE, JB	
4	PROTECTION TO BE PROVIDED FOR CABLE TRAY SHARP EDGES	
5	CAPILLARY TUBE DRESSING TO CARRIED OUT PROPERLY FOR INSTRUMENT	
6	UNUSED GLAND ENTRY NEED TO BE BLIND FOR ALL JB, UCP, DB	
MOL AREA		
1	TOCH UP PAINTING OF JB SUPPORT AND INSTRUMENT SUPPORT IS BALANCE	
2	CABLE DRESSING TO BE CARRIED OUT FOR INSTRUMENT CABLE, JB	
3	ALL INSTRUMENT CABLE , JB CABLE DRESSING PROPERLY	
4	PROTECTION TO BE PROVIDED FOR CABLE TRAY SHARP EDGES	
5	CAPILLARY TUBE DRESSING TO CARRIED OUT PROPERLY FOR INSTRUMENT	
6	UNUSED GLAND ENTRY NEED TO BE BLIND FOR ALL JB, UCP, DB	
METERING AREA		
1	TOCH UP PAINTING OF JB SUPPORT AND INSTRUMENT SUPPORT IS BALANCE	
2	CABLE DRESSING TO BE CARRIED OUT FOR INSTRUMENT CABLE, JB	
PIPING & STRCTURAL		
1	JACK SCREW TO BE INSTALLED AS PER ISOMETRIC DRAWING	
2	COLOUR BAND, STENCILING AND FLOW DIRECTION TO BE DONE AS PER SPECIFICATION.	
3	MODIFICATIONS OF LINE ARE INCORPORATED IN AS-BUILT DRAWING.	
4	SAFETY INSULATION TO BE DONE AS PER ISOMETRIC DRAWING.	
5	GREASE TO BE APPLIED ON ALL STUD BOLTS IN FLANGE JOINTS.	
6	WORKING PLATFORM TO BE PROVIDED FOR MOV OPERATION AND STRAINER CLEANING FOR ACCESS	
7	LIFTING ARRANGEMENT FOR MAINTENANCE PURPOSE TO BE PROVIDED FOR THE BOOSTER PUMP P3190 AREA	
8	MANUAL HOIST (CHAIN BLOCK) TO BE PROVIDED AT MOL 3270 AREA	
9	LOCATION FOR CA SYSTEM OF HT CONTAINER TO BE VERIFIED CONSIDERING THE LOAD.	

Note:- Engg review and procurement inspection are not in TPI (ABSIV) scope. Manoj 11/06/2023

Supreme Offshore Constructions & Technical Services Limited, Mumbai

G.A.P. R. RAO
ABS-TPI
11-06-2023

MANOJ YADAV (ABS)
Manoj
11/06/2023

Rao
11/06/2023
(K. R. Siva)

Annexure-III

1. Approved SAT procedure of MOL & Booster pump was not available at site.
2. Procurement and inspection report of Container Door was not available at PPA to be reviewed at onshore.
3. All in process activity & test reports such as fit up, weld visual, NDT, pressure test, and installation reports of Mechanical and E&I items to be reviewed at onshore due to unavailability at site, PPA.
4. Load test report and pressure test report of Container are not available at site for verification to be reviewed at onshore.
5. HVAC system and 19 Nos F&G detectors are pending for installation at site.
6. PS status of all install items has not checked to be reviewed at onshore.
7. Procurement and Release note status of items to be reviewed at onshore.
8. Containers Release Note status to be reviewed at onshore.
9. The documents which are not available at PPA such as IMIR, onshore punch point, offshore material inward inspection to be reviewed at onshore.
10. The documents which are not signed by CA due to accommodation issue and timely barge demob to be reviewed at onshore.

Supreme Offshore Constructions & Technical Services Limited Mumbai

G.H.P.R. Rao. ABS-TPI 11-06-2023

Manoj 11/06 ABS INDUSTRIAL VERIFICATION INDIA

11/06/2023 K.R Sinha