OIL INDIA LIMITED

(A Government of India Enterprise)
P.O. Duliajan – 786602, Assam, India
Website: www.oil-india.com

Corrigendum No. 5 to IFB No. CPG2023P20

Engineering, Fabrication and Construction, Testing and Commissioning of Modular Field Gas Gathering Station at Baghjan, Assam

1. This Corrigendum is issued to notify the following:

a) In view of queries received from bidders, the final EPMC/OIL's responses to the queries are generated. All the bidders are requested to refer to **Annexure- I** attached herewith.

b) Summary of modification of terms & conditions and schedules in various sections of the bidding document is attached herewith as **Annexure–II.**

c) List of approved manufacturers of the critical electrical components/ items is attached herewith as **Attachment–I.**

d) Revised Single Line Diagram is attached herewith as **Attachment–II.**

e) Revised BEC/BRC is attached herewith as **Attachment–III.**

f) Revised SOR/P is attached herewith as **Attachment–IV.**

2. All other terms and conditions of the tender remain unaltered.

3. All the prospective bidders are requested to regularly visit OIL's Website: www.oil-india.com and e-procurement portal https://etender.srm.oilindia.in/irj/portal for further announcements/latest information related to this tender.

4. Bidder to submit this Corrigendum No. 05 along with **Annexure – I to II and Attachments I-IV** duly signed & stamped in all pages as token of acceptance and shall upload this document in the un-priced folder of the e- bid**.**

Annexure – I

OIL's/ EPMC's response to Bidder's queries to various sections of Tender documents.
TABLE- I

Sl. No	File Name / Page No.	Tender Description	Tender Clause	Bidder's Queries	Consultant/OIL's Response
1	Volume 1, Part 3, Section II, Page No.125 of 278	Sample Testing	11. Guarantee from EPC Contractor	Quote OIL of its own will periodically collect samples from the site and test it in OIL's laboratory at Duliajan. In case of any major difference in the readings of on-line system and on-site sample test readings, the results of the sample tested at OIL's own laboratory at Duliajan will be considered as final and binding. Unquote Bidder wish to highlight here that, the result can differ if the testing is carried out by different makes of instruments and if the calibration is not identical. If the On-Site Sample testing instrument should be of the same make and model and should be calibrated as that of the on-line system. Hence, Bidder proposes to amend the clause as follows: OIL of its own will periodically collect samples from the site and test it in OIL's laboratory at Duliajan. In case of any major difference in the readings of on-line system and on-site sample test readings, the results of the sample tested at OIL's own laboratory at Duliajan will be considered as final and binding. The on-site sample testing instruments shall be of similar make, model and calibrated as same as that of the on-line sampling system. Bidder requests to confirm.	Not agreed This clause is applicable in case there is a **MAJOR DIFFERENCE** in on-line measurement and on-site sample test. Both the measurement system shall be compatible to avoid big gap between two measurements. Same Make, model etc is not envisaged.

2	Corrigendum 1_CPG2023P20, Page 6/7 of 58	Mandatory Spares	Item #10	As per the description provided, the EP Price shall include supply of 2 Year Mandatory Spares. Bidder requests OWNER to define or provide a list of mandatory spares to be supplied as part of the EPC Scope. Note – Spare philosophy document is not available with the tender package.	Yes, the EPC price shall include 2 yrs mandatory Spares for running the plant as per recommendations of the OEM. The EPC Contractor shall submit a list of Operation and Maintenance spares required for Two Year Normal Operation. Also, a list of O&M spares for 10 (ten) years (indicating the price against each spare) shall be submitted to OIL with necessary specifications enabling OIL to procure directly in future. Also refer point No.30 of Corrigendum-III and point no.16 of Annexure-I of Corrigendum-I for better understanding.
3	Corrigendum 1_CPG2023P20, Page 10 of 58 Page 27 of 58	Chemicals and consumable for commissioning	Item #4 Item #77	Bidder understands and assumes that Fuel Gas, Nitrogen or any such item required for the commissioning of the packages viz; Captive Power Plant, Fuel Gas shall be free supplied by OIL. Please confirm our understanding. Further, the first fill, chemicals, consumables etc required for commissioning of the facilities will be supplied by Bidder till commissioning and Performance Test only. After completion of performance test, any chemicals, consumables required shall be supplied by OIL. Please confirm our understanding.	Bidder understanding is correct. Fuel gas and nitrogen required for start-up shall be supplied by OIL. Bidder understanding is correct. Supply of all chemicals for commissioning and performance test are in the bidder scope.

4	Corrigendum 1_CPG2023P20, Page 15 of 58	Facilities to OIL / EPCM	Sl no #23	Bidder requests OWNER to provide the details of requirements such as type, size and specifications of accommodation / office facilities including food and other amenities to be provided by Bidder / Contractor. Owner is requested to provide the Security specifications to be followed for the OWNER/EPCM and for Contractor, if any specific	Please refer point no. 23 of Annexure-II of Corrigendum-I. Site office facilities required for owner and EPCM shall be in the scope of EPC Contractor. Additionally, accommodation including food and other amenities for the Owner (as and when required) / EPMC (during entire project execution) at site shall be arranged by EPC Contractor. The above arrangements will be of temporary nature for the project execution period only. Please refer clause no. 3.0 and note (Execution methodology) of Terms of Reference (Vol-I part-3, section-II).
5	Corrigendum 1_CPG2023P20, Page 29 of 58	Item #85	Sl no #85	Bidder assumes that, by erecting a temporary fence (to the minimum extent required near the EPS), the entire FGGS area will remain as Green Field Area and Permit System will be as per Green Field Area. Please confirm our understanding.	Bidder's understanding is correct. The entire FGGS area will remain as Green Field Area. The successful bidder shall erect a temporary barricade in the opening in the wall from the main gate to the north east corner alongside the existing road. Such temporary barricading shall be sufficiently strong with brick wall (approx 2 feet from ground) and CGI sheet above the brick wall, as required. The work for diversion of the natural drain will be outside the boundary wall and will be in bidder's scope.
6	Corrigendum 1_CPG2023P20, Page 48 of 58	Statutory Permits	Sl no #163	Bidder assumes and understands that, all or any permits or consent or approvals to be obtained by and in the name of OWNER will be obtained and an uninterrupted and unrestricted access to the Project site / facilities will be provided by OIL. Only construction / erection related permits to be obtained by Contractor. Please confirm.	EPC Contractor shall facilitate all statutory approvals/ consents/ permits to be taken in the name of the owner. The project site will be a green field with unrestricted access. OIL shall issue necessary permit as deemed fit. Also, Refer clause 4.1 of Terms of Reference of Volume-I of the Tender document.
	Technical Tender_FI	SCOPE OF	2.0	HAZOP, QRA, ERA, SIL study, EERA study, Disaster Management Plan and EIA study of FGGS. Bidder understand	Bidder to understand that all the Safety studies conducted was for Basic Engineering stage.

7	NAL-1, Page 28 of 2248	WORK		that Safety studies included in Bidder's scope is as follows: 1. HAZOP – FEED HAZOP is already carried out by OIL and Detailed Engineering HAZOP is in Bidder Scope 2. QRA – QRA is already carried out by OIL and hence not in the scope of Bidder 3. SIL – SIL study is part of the Bidder Scope 4. EERA Study – Bidder assumes and understands that Escape, Evacuation and Rescue Assessment (EERA) study is same as that of HAZID and included in Bidder's Scope 5. Disaster Management Plan – Disaster Management Plan is already conducted by OIL and not part of Bidder's Scope EIA study – EIA Study is already been completed by OIL and hence not included in Bidder's Scope.	Bidder to note that safety studies listed are required to be conducted during the EPC Phase and the EPC contractor has to include the recommendations in detailed engineering as well as execution.
8		Impact of excess oxygen scavenger on treated water disposal wells		As per the scope description "Review the impact of excess oxygen scavenger on treated water disposal wells" is in the scope of Bidder. Presently there are no details available to carry out or review this requirement; hence this scope will be carried out by Bidder / Contractor during Detailed Engineering. Impacts if any due to this review will be considered as change of scope. Bidder requests OWNER to confirm.	This clause stands deleted.
9	Technical Tender_FI NAL-1, Page 85 of 2248	Flare Dispersion Study	FGGS-BJN-PRO-PID-1001	As per the scope description "Flare Dispersion Study and as per P&IDs Depressurisation studies are part of the Bidder Scope. Presently there are no details available to carry out these studies, hence this scope will be carried out by Bidder/ Contractor during Detailed Engineering. Impacts if any due to these studies will be considered as change of scope. Bidder requests OWNER to confirm.	Confirmed as below: Flare dispersion study and depressurisation study shall be carried out by EPC contractor during Detailed Engineering. Required data in terms of Well fluid data and the Process configuration required are well defined in the Basic engineering documentation. Verification of Basic Engineering prior to bid is in the scope of EPC Contractor. Hence, no change of scope will be allowed.

10	**CORRIGENDUM No. 01, IFB No. CPG2023P20** / ELECTRICAL DESIGN BASIS, Page No. 31 of 44 (1289 of 2248)	BUS DUCT	BUS DUCT "Consultant/ OIL's Response: There is no separate datasheet/ specification has been prepared and for basic details refer **clause 11.10** in electrical design basis. This shall be as per international codes and standards.	As per Client's clarification (S. No. 101), Bus Duct type mentioned in Electrical design Basis (FGGS-BJN-ELC-DBM-6000) (**Clause No. 11.10**) is "**Non-phase segregated**, self-cooled type, sandwiched type" but Bus Duct type mentioned in SLD (FGGS-BJN-ELC-DIA-6000 -02/06) is "**Sandwich type**". Kindly clarify which type required.	Please refer Annexure-B of Attachment-II of this Corrigendum.
11	Technical Tender_Final-9, Page No.1550/ 2248	SLD Bus Coupler Rating		Kindly note that, in worst condition also bus coupler will only see only Gas Generator Full Load Current (i.e. Approx. 2500A). Hence, bidder recommends considering Bus Coupler current rating as 3200A matching with incomer breaker. Request to kindly confirm our understanding.	Bus coupler current rating shall be equal to the incomer. Bidder shall follow the updated SLD attached as Annexure-B of Attachment-II of this Corrigendum.
12	Technical Tender_Final-9, Page No.1555/ 2248	SLD Bus Coupler Rating		Kindly note that, in worst condition also bus coupler will only see only 800A current (Incomer breaker rating). Hence, bidder recommend considering Bus Coupler current rating as 630A (80% of Incomer breaker rating) as standard practice. Request to kindly confirm our understanding.	Bus coupler current rating shall be equal to the incomer. Bidder shall follow the updated SLD attached as Annexure-B of Attachment-II of this Corrigendum.

13	Corrigendum #3		Plot plan	As per the revised Overall Plot Plan Rev.1 issued vide the Corrigendum #3, there is an exhaust of the Captive Power Plant. Based on the preliminary review the exhaust will be of about 25 to 35 M high. Bidder assumes that OWNER has carried out the studies including QRA and the exhaust is properly placed. However in the event of Execution HAZOP or other studies, if any changes in the location of the Exhaust or other methods to be adopted for the exhaust, the same shall be considered as change of scope. Bidder requests OWNER to confirm.	Safety studies like HAZOP, QRA etc are in the EPC contractor scope. Changes to be made consequent to the safety study recommendations are in the scope of the bidder and it is confirmed that these shall not be considered as change of scope.
14	Volume II, Technical Page 189 of 2248	Data Sheet for Flare Package Doc. No. FGGS-BJN-PRO-DST-2409, Page No. 2 of 7 Smokeless Requirement	3	Bidder assumes that, due to inherent nature of flare gas, any type of external assistance shall not be needed. Further flare shall be self-smokeless. Please confirm our understanding.	Confirm that the enclosed ground flare system shall be smokeless. Non-requirement of external assistance to be confirmed during detailed engineering.
15	Volume II, Technical Page 190 of 2248	Data Sheet for Flare Package Doc. No. FGGS-BJN-PRO-DST-2409, Page No. 3 of 7 Noise level	6	Due to background noise, purge noise etc sterile radius noise will be in the range of 75-90 db as against the 40 db specified, which is impossible to achieve. Bidder requests Owner to accept the sterile are noise to be within 75-90 db.	As per the stipulations 75-90 db is applicable 1m away from the equipment. 40 db is for the sterile area.
16	Volume II, Technical	FGGS-BJN-PRO-PFD-2401 Rev0 Enclosure Ground Flare Chamber		Based on the combined flow (of both HP & LP flares), 330.7 TPH, it is not feasible to contain the fumes within the enclosure chamber. Hence it is recommended to have two dedicated enclosure chambers, one each for HP & LP Flares. Please review and confirm.	Reviewed and Confirmed as below: One enclosed, non luminous Ground Flare Package shall be provided with two separate set of burners for HP & LP gases. Burner configuration to be appropriately selected to achieve proper combustion.

17	Volume II, Technical	'P&ID No. FGGS-BJN-PRO_PID-3302 Pump Requirement for Safety shower/Eye Wash and Potable Water Distribution		Bidder Observation: Pump Required for Safety shower / Eye Wash and Potable Water Distribution in Plant to maintain required pressure of 3.0 kg/cm2(g) Similarly Pump Required for Service water for distribution. Please advise the Pump requirement capacity and head for both Treated Water and Service Water.	Service water and potable water shall be supplied from the overhead storage tanks which are supported at minimum of 20ft. However, to maintain required pressure of 3.0KSC(g) for Safety shower / Eye wash, pumps required for potable water distribution shall be included by bidder. The required capacity and head for the same shall be finalised by the EPC Contractor during detailed engineering. Service water distribution is to be from the overhead tanks.
18	Volume II, Technical	DWG No. FGGS-BJN-PIP-LAY-5000 QRA Study		Bidder request to share the QRA study report / recommendations.	QRA study report is in the scope of the EPC Contractor.
19	Volume II, Technical	DWG No. FGGS-BJN-PIP-LAY-5000 Flare KOD Pumps		Bidder recommendation that LP and HP Flare KOD pump shall be outside sterile radius. Please advice for the same. As per plot plan the both pumps located close to Flare system.	As shown in the layout, the pumps of the Flare KODs are located about 20mts from the outer enclosure of the Enclosed ground flare. Radiation zone & sterile radius applicable for the enclosed ground flare need to be finalised during detailed engineering by the EPC Contractor.
20	Volume II, Technical	'P&ID No. FGGS-BJN-PRO_PID-3101 LIT - 3104 and LIT - 3017 shown as GWR		Bidder Request that Raw effluent as it is prefer for DP type LT. Both LIT can be DP type instead of GWR to have cost effective solution.	GWR as shown in the P&ID are to be provided.

21	Volume II, Technical	P&ID No. FGGS-BJN-PRO_PID-3103 LIT - 3114 and LIT - 3116 shown as GWR		Bidder Request that treated Water as it is prefer for DP type LT. Both LIT can be DP type instead of GWR to have cost effective solution.	GWR as shown in the P&ID are to be provided.
22	Volume II, Technical	P&ID No. FGGS-BJN-PRO_PID-3201 CBD oil recycle Pump - P3201 A B. Flowrate - 8.0 m3/h Diff. Pressure - 812 kPa		As per Tie-In List - TP -3201 Pressure requirement is 23 - 25.8 kg/cm2(g). For the same submerged pump is not feasible. Please confirm the pressure required at TP - 3201	Confirmed as below: The CBD Pump discharge shall be connected to the existing LP manifold at EPS with back pressure of 5KSC(g). The pressure requirement mentioned in the Tie-in list stands corrected.
23	Volume II, Technical	'P&ID No. FGGS-BJN-PRO_PID-2201 Pressure Reducing Station for FG		Bidder request for Pressure Reducing Station for FG specifications.	Refer process data sheet of Gas Dehydration Package FGGS-BJN-PRO-DST-2202_ 0 for FG details.
24	Volume II, Technical	'P&ID No. FGGS-BJN-PRO_PID-3201 CBD vessel V-3201		Bidder request for confirmation of Nitrogen Blanketing of CBD vessel V-3201 is required. Please confirm.	Nitrogen Blanketing is not envisaged for CBD Vessel.

25	Volume II, Technical	'P&ID No. FGGS-BJN-PRO_PID-3301 DM Water requirement		Bidder request for confirmation of DM Water requirement.	Confirmed that DM water is not required. Please refer data sheet FGGS-BJN-PRO-DST-3303_0 for WATER TREATMENT PACKAGE for water requirement.
26	Volume II, Technical	Existing Flare Back Pressure		Bidder request for existing flare back pressure required. As after the connection with new header it should not affect the existing Flare network during the venting of new system.	HP flare gas pressure coming from existing EPS is 30 KSC and LP flare gas pressure is 3 KSC.
27	Volume II, Technical	'P&ID No. FGGS-BJN-PRO_PID-2401 PSV Relief Load Summery		Bidder request for PSV relief load summery prepared for FGGS.	PSV relief load summary shall be prepared by EPC contractor during detail engineering. However, Relief valve calculation Report FGGS-BJN-PRO-RPT-1004 prepared will be shared with EPC Contractor on award of work order.
28	Volume II, Technical	'Process Design Basis Additional points are also to be included for future provision.		Bidder request for quantity and load on the Flare header.	For LP flare header total flare load is taken as 2.5MMSCMD and for HP flare header total flare load is taken as 3.5MMSCMD. However, EPC contractor will have to carry out depressuring and blow down study to finalise the quantity and load required on the LP&HP flare header during detailed engineering. For future provision, please refer P&ID (Doc No. FGGS-BJN-PRO-PID-2401).
29	Volume II, Technical	'P&ID No. FGGS-BJN-PRO_PID-2401 In OIL, the flare header/ sub header is generally of Carbon steel		Bidder Request for SOP for depressuring is followed. Kindly share.	SOP for depressuring is to be developed by EPC contractor in consultation with OIL/PMC during detailed engineering.

		only. Safe Operating Procedure (SOP) is followed during operation, which ensures that depressuring is done safely.			
30	Volume II, Technical	Process Data Sheets for Instruments		Bidder request for PDS of instruments, Shut Down valve, Control valve, BDVs.	Process data for all instruments are provided in the respective instrument data sheets which may be referred.(Volume-II, Technical Tender Final-11) Also, please refer point no. 47 and attachment-I of Corrigendum-III.
31	Volume II, Technical	'P&ID No. FGGS-BJN-PRO_PID-1001 Ball valve type for main flow line.		Bidder envisaged that sand may come along with NAG and associated water as Sand probe provided at the upstream of heater. Kindly confirm the possibility of sand carry over with the gas. As per VMS we have followed the soft seated valves ball valves for the NG lines. Kindly confirm.	Possibility of sand carryover cannot be ruled out. For any indication of sand ingression observed in the sand probe, corresponding well flow will be optimized. However, the valve internals shall be reviewed to withstand sand ingression, if any.
32	Volume II, Technical	'FGGS-BJN-PRO-PHL-1001	Section 6.16 ,Page 26 of 42, Captive Power Plant	Kindly confirm the availability of Fuel gas from EPS for Power for Black start during the start up and emergency situation.	During start-up & emergency situation, FG will be supplied by OIL from EPS.
33	Volume II, Technical	'FGGS-BJN-PRO-PHL-1001	Section 6.16 ,Page 26 of 42,Captive Power Plant	Bidder request to provide detail of CPP equipment load for power consumption.	Please refer point No.56 below.
34	Volume II, Technical	P&ID No. FGGS-BJN-PRO_PID-1001		As per VMS reduced bore valve selection is used. Kindly confirm.	Confirmed that VMS is to be followed.

		Ball valve bore type for main flow line.			
35	Volume II, Technical	'FGGS-BJN-PIP-LAY-5000 Provisions in P&IDSs for future facilities.		As per plot plan Area for gas sweetening plant need to be kept for future provision. As per tender P&IDs Bidder understand that future facilities and its requirement need not be taken acre by Contractor.	Bidder understanding is correct. All the future facilities and its requirements need to be considered in terms of space requirement and tie-in provisions given in P&IDs which is to be ensured by EPC contractor during detailed engineering.
36	Volume II, Technical	'FGGS-BJN-PRO-PHL-1001 Page 7of 42	Section 4.5,	Maximum expected water content of1.5% and free water of 10 KLPD maximum from one well. Confirm sand carry over with water is possible as it will lead to major change in valve internal and also for Pumps internal.	Refer to point no.31 mentioned above.
37	Volume II, Technical	'FGGS-BJN-PRO-DST-1201 FGGS-BJN-PRO-DST-1203 MOC of Production Separator & HP Separator		Bidder request to re-consider the MOC. MOC specified in PDS is CS with SS 316L cladding / overlay. As no H2S is envisaged and consideration of maximum of 2.25% CO2 , hence MOC - CS shall be acceptable for the service. Kindly confirm.	Maximum of 2.25% CO2 is expected and with the moisture content in the fluid, corrosion is expected and hence confirmed that no change in MOC from the tender specification is acceptable for the service.
38	Volume II, Technical	Phase a- I and Phase - II Tie-in points details.		In P&ID's, the details of tie in points and the hardware to be provided for the interface between Phase-1 and Phase-2 not defined. Please advise.	Isolation valves to facilitate the tie-in connections have been provided in the P&ID. EPC Contractor shall provide any additional hardware for the interface between Phase-1 and Phase-2 during detailed engineering.
39	Volume II, Technical	Metering Skid		Bidder request to confirm the location of the metering skid. Whether it is part of GDU package or near to battery limit and in safe zone. Kindly confirm.	Metering is part of GDU package for flow measurement only. There will be no custody transfer at the installation & hence no separate custody transfer metering skid is envisaged.

40	Volume II, Technical SDVs	Instrumentation Scope of Work SDVs		SDVs (Tag no. SDV-1001 to SDV-1025) are shown in tender PIDs (FGGS-BJN-PRO-PID-1001,FGGS-BJN-PRO-PID-1002, FGGS-BJN-PRO-PID-1003), but these SDVs are not found in tender Instrument Index, I/O List & Instrument datasheets.	Refer Point 47 of Corrigendum –III and attachments.
41	Volume II, Technical Page 1272 & 1968 of 2248	Instrumentation Scope of Work Choke Valves (Motor Operated)		a) Pressure drop is mentioned as 0.2 kg/cm2 in choke valve datasheet (tender doc. no. FGGS-BJN-INT-DST-7021) but actually it is around 175 kg/cm2. Client to confirm. b) Actuator power supply is mentioned as 110V AC UPS in choke valve datasheet but in electrical design basis (cl. 8.4.R), it is mentioned as 415V AC 3 phase. Client to confirm.	a) The bidder understanding that the Pressure drop in the Choke valve is 175kg/cm2 is correct. b) Since the Choke valves are Motor Operated, the Bidder understanding of Actuator power supply being 415Vac 3 phase is correct.
42	Volume II, Technical	Instrumentation Scope of Work Control Valves		a) Pressure drop is mentioned as 0.2 kg/cm2 or 0.5 kg/cm2 in all 27 no. control valve datasheets which can't be correct. Client to confirm. b) LCV-3104/3105/3106 are shown as Ball valves in the P&ID FGGS-BJN-PRO-PID-3101 but these are Globe valves in instt. Datasheets. Client to confirm.	a) Confirmed that the Pressure drop for gas application shall be 0.2~0.5kg/cm2. b) Confirmed that the mentioned LCVs are all Globe valves.
43	Volume II, Technical	Instrumentation Scope of Work Guided Wave RADAR vs DP Type LT		a) LIT-2401/2403/2404 are shown as DP type level transmitters in P&ID FGGS-BJN-PRO-PID-2401 as well as Instt. Index and DCS I/O list but mentioned as 'Guided Wave RADAR' in instt. Datasheets. Client to confirm. b) LIT-2406 is shown as DP type LT in the P&ID and DCS I/O list but mentioned as 'Guided Wave RADAR' in instt. Datasheets and Instt. Index. Client to confirm.	Confirmed. The mentioned LTs shall be GWR type as shown in the datasheets.
44	Volume II, Technical Page 1273 of 2248	Instrumentation Scope of Work E & I Interface		a) As per Electrical Design Basis (cl. 8.8), motor feedback signals are on soft serial link from MCC marshalling to DCS but as per DCS I/O list, these are hardwired. Client to confirm b) As per Electrical Design Basis (cl. 8.8), selection of Local/Remote is from DCS i.e. DO signal from DCS to MCC with no Local/Remote selector switch at LPBS/MCC but in DCS I/O list, this signal is mentioned as DI meaning signal from	The connection between MCC and DCS shall be serially linked.

				Local/Remote switch at LPBS/MCC to DCS. Client to confirm.	
45	Volume II, Technical	Instrumentation Scope of Work Miscellaneous		a) LIT-3203/3204 are mentioned as 'Internal Displacer Type Servo Operated' in the P&ID FGGS-BJN-PRO-PID-3202 (note 3) but these are 'Guided Wave RADAR' in instt. Datasheets. Client to confirm b) As per P&IDs, electric heater temperature is controlled by DCS (TIC) and, therefore, an AO signal is shown from DCS to electric heater control panel. But there is no such AO signal in DCS I/O list. Client to confirm c) LIT-9502 non-contact type RADAR LT is shown in P&ID FGGS-BJN-PRO-PID-9501 but not there in Instt. Index. Client to confirm.	a) The mentioned LTs shall be GWR type. b) Bidder understanding is correct. The said details shall be updated during the Detailed engineering stage by EPC Contractor. c) It shall be updated during the detailed engineering stage by EPC Contractor.
46	Volume II, Technical, Page No. 1570 of 2248	Instrumentation Design Basis Comprehensive AMC (Annual Maintenance Contract)	Clause 1.0	Client to re-confirm the requirement of post warranty comprehensive five (05) years AMC(Annual Maintenance Contract) for the entire Instrumentation and Control system including the package PLC's as this PWCAMC cost will be typically 50% of total I&C cost.	This shall be confirmed during detailed engineering by EPC contractor. AMC is not in the scope of the EPC Contractor. Bidder to provide an indicative price for 05 years of AMC for the entire Instrumentation and Control system including the package PLC.
47	Volume II, Technical, Page No.1581 of 2248	Instrumentation Design Basis Comprehensive AMC Spares	Clause 2.4.1.j	Client to re-confirm the requirement of spares for Two years comprehensive AMC. If required, client to provide the spare details.	Please refer to point 30 of Corrigendum III. AMC is not in the scope of the EPC Contractor. Bidder to provide an indicative price for 05 years of AMC.
48	Volume II, Technical	FGGS-BJN-PIP-LAY-5000 Flow lines from/ to EPS	Plot Plan	In the overall plot plan, 2 nos. of flowlines are shown from/ to EPS. There is no mention of these lines in any other document. The size and elevation of these lines are not known. Client to provide the data if it is part of scope.	Out of the 20 flow lines, 18 Nos are from east side of FGGS and 2 Nos are from south side of FGGS as indicated in the plot plan. Tie in points shall be down stream of Insulation joint (above ground) near the boundary. Size is indicated in P&ID. (Doc NO. FGGS-BJN-PRO-PID-1001/1002)

49	Volume II, Technical	Flare lines from EPS		2 nos. flare lines, 12" and 16" are coming from EPS. The elevation of these lines is not known. The elevation of these lines will have a major impact on the elevation of FGGS racks. Client to provide the elevation of these flare lines to workout the flare elevation on racks.	The existing flare lines of EPS are at the ground level.
50	Volume II, Technical	FGGS-BJN-PRO-PID-1001 Metal to metal valve		In the flowlines a sand probe is shown. Bidder understands that this is provided only to ensure that there is no sand in the service. The valves used in these lines have a seat of RPTFE. Bidder understands that NO metal seated valves are required. Client to confirm.	Bidder's understanding is not fully correct. Sand probe is provided to ensure that there is no sand in the service. However, possibility of sand carryover cannot be ruled out. For any indication of sand ingression observed in the sand probe, corresponding well flow will be optimized. However, the valve internals shall be reviewed to withstand sand ingression, if any.
51	Volume II, Technical	FGGS-BJN-PRO-PID-2201 GDU		The details of GDU are not available. The scope division with vendor may have a significant impact on layout and material.	Scope division with vendor shall be decided by EPC contractor during detailed engineering.
52	Volume II, Technical	FGGS-BJN-PRO-PID-1205 4" lifting gas		The TP of 4" lifting gas is not provided in any of the documents. Bidder has considered the TP at compound wall in south east corner of plot. Client to confirm.	Tie-in point shall be on the pipe rack at FGGS/ EPS boundary.
	Volume I, Commercial,Page No. 207 – 209 of 278	Schedule of Payment ANNEXURE- IIB to SCC		This is with reference to the response to Sl. No. 65 of corrigendum No.1. Please note that presently 45% is for procurement activities, of which 10% payment is allocated to "total plant ready for commissioning". Hence, 4.5% of overall contract price (45% * 10% = 4.5%) is payable only after mechanical completion. So effectively, 40.5% of EPC price is payable on receipt of materials. Whereas, EPC bidder has to shell out almost 65% - 70% payment to vendors for supply of all project permanent materials. This results in 25% - 30% funding to be arranged by EPC Contractor. Moreover, 15% payment (Sr. No. 13 & 14 of A) SCHEDULE OF	Tender conditions remain unchanged.

53				PAYMENTS document) of Construction scope is held back until the completion of the project. Hence, further 6% of EPC price is realizable only upon completion. Similarly, 20% of PROJECT MANAGEMENT and ENGINEERING price is realizable only upon completion of job. Hence, further 2% of EPC price is realizable only upon completion In addition, 5% payment is allocated for PGTR. **Therefore, the EPC CONTRACTOR will realize only 80.5% of total EPC price even after the PLANT is achieved Mechanical Completion.** Please note that such high percentage of funding is difficult for most EPC Contractors. This results in huge negative cash flow and substantial interest outflow, thereby increasing the finance cost significantly. Moreover, arranging working capital is also a huge task under present conditions prevailing in banking sector. Hence bidder humbly request COMPANY to review the payment terms once again and revise the same considering the factors mentioned above. Our suggestion is as follows: **a. PROJECT MANAGEMENT and ENGINEERING : 10%** **b. PROCUREMENT : 65%** **c. CONSTRUCTION, INSTALLATION AND COMMISSIONING : 22.5%** **d. PGTR : 2.5%**	
	Volume I, Commercial, Page No.229 of 278	Vendor Selection Criteria	2.3.4 e)	Please refer the Vendor Selection Criteria Clause No 2.3.4 EXPERIENCE CRITERIA PACKAGE “ e) The supplier shall have engineered, manufactured, packaged, installed and commissioned at least two (2) similar or higher capacity ground flare system for onshore and same (2 packages) shall have been operating successfully / satisfactory for a period of at least three years in India.	Please refer point No. 18 of Annexure I of Corrigendum I.

54				Bidder has received offers for Flare Package from Internationally renowned manufacturers as well as local vendors. Bidder has noticed that most of the vendors have not supplied ground flares in India. However, these vendors are registered with EIL for Design, Manufacture and Supply of Flares. Please note that EIL vendor list doesn't have separate category for Ground Flares. Hence, bidder requests COMPANY to allow Reputed Flare manufacturers who are appearing EIL Vendor List to supply flares for this project irrespective of whether they had supplied ground flares in India or not in past. This would enable COMPANY to have good quality products at competitive price. Kindly review our request and confirm acceptance of the same.	
55	General			Bidder understand that chemical cleaning not to be considered for this project Please confirm If it is to be considered request to provide the specification for the same.	Proper cleaning is required to ensure that equipment and piping are free of grease, grit, dirt. Scales, paint, oil, dust, rust etc. Chemical cleaning would be required in the project, for example for packages like the GDU and the specification would be provided by the technology suppliers. Bidder has to ensure that the cleaning of equipment and piping shall be in accordance with the OEM/licensor requirement as applicable.
56	Corrigendum 3 Annexure II (point No 12) Page no 31 of 40		Generator power factor 32/58	From the statement, we understand that the requirement of gas genset output @ 0.9 p.f is 1500 KWe net of Genset auxiliaries at given site condition and gas composition. Hope our understanding is correct. OIL to confirm.	Original tender condition will prevail (ref page 1512 of 2248). The power rating at site conditions is 1500 KWe & net power output at alternator terminal is 1875 kVA at 0.8 pf net of Genset auxiliaries at given site condition and gas composition. Refer the updated SLD attached as Annexure-B of Attachment-II along with this Corrigendum. Corrigendum-3 Table-II (point No 12) stands deleted.

57	Corrigendum No 3, Page no 31 of 40 Volume I commercial, page 229 of 278		Vendor Selection Criteria/ Equipment Qualification Criteria (EQC) (Gas Engine Generator) & Corrigendum -3 (Point No-14)	From the given clarification, we understand that to meet Indian conditions, the gensets should have experience of operation in hot tropical countries. Genset having operational experience in countries with moderate climate shall not be considered. We also understand the EQC of the offered genset should match the Voltage and Frequency. From the given conditions we understand the EQC of offered genset parameters like climate conditions, voltage, frequency should match that of Indian condition. Reference of gensets already installed in India only shall be accepted. Hope our understanding is correct. From the proposed revision, we also understand that offered Genset having same rating or higher rating shall be accepted but the model designation, speed, bore, stroke, displacement, No. of cylinder, Natural gas operation and Electrical design have to be identical. OIL to confirm.	Original Tender condition 4.1.1 will prevail (ref page 229 & 230 of 278) which is as under. The vendor for the complete unit shall be an OEM /authorized packagers/ authorized dealer of modular Gas Engine driven Generating Set with acoustic enclosure. The OEM/ authorized packagers/ authorized dealer of the proposed Gas Engine Generator shall have the adequate engineering, manufacturing, fabrication & testing facilities for the same. The Gas Engine Generator model offered shall be from regular manufacturing range of the manufacturer, brand new and shall meet the following minimum service and manufacturing experience requirements. The offered Gas Engine Generator package shall be of identical in type i.e. Model designation, Rating, Speed, Bore, Stroke, Displacement, No of Cylinder, Natural Gas Operation, Electrical Design etc. as compared to at least TWO UNITS designed, manufactured, tested and supplied from the proposed manufacturing plant. At least ONE of these units should be operating successfully in an onshore installation in India for at least 5 years intermittently or 8000 hrs continuously (including normal maintenance shutdowns such as filter/lube oil replacement etc.) as on the date of bidding with an additional clause of 30 years future design service life as on the date of commissioning at site. The electrical efficiency of offered gas genset should not be less than 40% at site rated output at given gas composition and site conditions. Corrigendum-3 Table- II (Point No-14) stands deleted.

58	Volume-II, Technical	GDU Package		Bidder request for confirmation for Glycol Drain Drum, Glycol Drain Drum Pump and Glycol Drain Filter shall be required for Draining the glycol in operation and maintenance from respective GDU package.	Confirmed as below: Requirement for Draining glycol in operation & maintenance is to be confirmed by the Package Vendor.
59	Volume-II, Technical	GDU Package		Bidder request for confirmation of Product Specification: Design Gas flow, MMSCMD 2 X 2.5 * Temperature deg C : 30 Pressure ,KSC(g) minimum/ normal/maximum : 23 / 25 / 30 Water Dew Point at 25 KSC(g) : 0 deg °C□ Suspended particle size, : microns <10 TEG Carryover (m3/MMSCM) : Max 0.1	Bidder understanding is correct except the below mentioned specification: Water dew point at 25 KSC (g) is ≤ 0 deg C. Refer Process data sheet of Gas Dehydration Package FGGS-BJN-PRO-DST-2202_ 0 for the details.
60	Volume-II, Technical	GDU Package		Bidder request for specific requirement / figures for TEG losses during operation.	Specific requirement/figures for TEG losses during operation is to be specified by the Package Vendor and to be confirmed by the EPC contractor during detail engineering stage.
61	Volume-II, Technical	Standard for fire fighting		Bidder request for confirmation for HSE / FFE standard applicable for FGGS & Gas Processing Facilities shall be OISD-STD-116 or OISD-STD-189. Kindly confirm.	Fire water system has to be as per OISD-STD-189 & OISD Std. 116 (for process areas). Also, NFPA 20 for system & equipment, wherever applicable.
62	Volume-II, Technical	Fire Water Demand Storage		Bidder request for confirmation Fire Water Demand Storage required for 2 hours or 4 hours	Fire water demand storage shall be required for 4 hours operation and the same shall be confirmed by EPC Contractor during detail engineering.
63	Volume-II, Technical	Fire Water Diesel Driven Pump		Bidder request for confirmation of Fire Water Diesel Driven Pump shall be rated for 120% or 110% max. flowrate.	Fire Water Diesel Driven Pump shall be capable of discharging 150% of its rated capacity at minimum 65% of the rated head. Shut off head shall not exceed 120% of the rated head for the Pump.
	Volume-II, Technical	Container layout for: a) Ware House (12.20 x 4.90 x		In the contract documents, details of items required inside building is given.	The EPC contractor shall submit the details of items to OIL/EPMC before ordering the material to

64		2.60m) – 01 No. b) Work Shop (12.20 x 4.90 x 2.60m) – 01 No. c) Gate Cabin (9.158 x 2.438 x 2.60m) – 01 No. d) Bunkers (6.10 x 2.50 x 2.60m) – 03 Nos		Contractor understands that these will be decided by client after the job completion.	the site.
65	Volume-II, Technical	Container layout for: a) Ware House (12.20 x 4.90 x 2.60m) – 01 No. b) Work Shop (12.20 x 4.90 x 2.60m) – 01 No. c) Gate Cabin (9.158 x 2.438 x 2.60m) – 01 No. d) Bunkers (6.10 x 2.50 x 2.60m) – 03 Nos		In line with the T.Q for Sl. No 1, Contractor understands that its scope is restricted to the supply of empty containers only. The supply of items inside the Containers is in client scope.	EPC contractor shall supply the items inside the containers as deemed fit.
66	Volume-II, Technical Page 1327 of 2248	Inspection & Testing of Gas generators (page 1327 of 2248)		Inspection & testing of Gas gen sets- kindly confirm modalities for inspection	Inspection & testing of all the four units will be done at OEM's works as per OEM's ITP in presence of OIL representative after receiving advance notice from MPC. Rest will be as per tender.

Annexure – I

Annexure – II

SUMMARY OF MODIFICATION OF TERMS & CONDITIONS AND SCHEDULES IN VARIOUS SECTIONS OF THE BIDDING DOCUMENT

TABLE- II

SL. NO	RFQ SECTION	CLAUSE	SUBJECT	TYPE	EXISTING CLAUSE	MODIFIED CLAUSE
1	Vol-II, Technical	Electrical Design basis Clause 4.0 Page no.1263 of 2248	JPEC standards	Modification	JPEC standards and shall conform to the statutory regulations applicable in the country.	Relevant standards and shall conform to the statutory regulations applicable in the country.
2	Vol-II, Technical	Electrical Design basis Clause 4.2 Page no.1264 of 2248	OISD standards	Modification	STD-149- Design aspects for safety in electrical systems.	RP-149- Design aspects for safety in electrical systems.
3	Vol-II, Technical	Electrical Design basis Clause 6.1 Page no.1265 of 2248	Design ambient maximum temperature	Modification	Design ambient temperature Maximum, 40 ^{o}C	Design ambient temperature Maximum, 45^{o}C
4	Vol-II, Technical	Electrical Design basis Clause 6.2 Page no.1266 of 2248	Design temperature	Modification	All electrical equipment and systems shall be designed for a rated output in an ambient temperature of 40 ^{o}C.	All electrical equipment and systems shall be designed for a rated output in an ambient temperature of 45 ^{o}C.
5	Vol-II, Technical	Electrical Design basis Clause 7.3 Page no.1268 of 2248	CMRS	Modification	CMRS & CCE - Central Mining Research Station & Chief Controller of Explosives (Indian).	CIMFR& CCE - Central Institute of mining and Fuel Research & Chief Controllerof Explosives (Indian).
6	Vol-II, Technical	Page no.1269 of 2248		Modification	OMR – 2014	OMR - 2017

7	Vol-II, Technical	Electrical Design basis Clause 8.1.f Page no.1270 of 2248	DGMS Approval	Deletion	All electrical equipment like motors, starters, junction box, Push button station, light fitting, cable to be used in Hazardous area Zone I and II, Gas groups IIA and IIB of oil mines should be approved by DGMS (India).	
8	Vol-II, Technical	Electrical Design basis Clause 8.2 Page no.1270 of 2248	Critical Power UPS	Modification	It is arranged through uninterrupted power supply system. Critical power shall feed the following type of loads, at least for 12 hrs whenever GG power is not available. The critical loads shall be of following types:	It is arranged through uninterrupted power supply system. Critical power shall feed the following type of loads, at least for 2 hrs whenever GG power is not available.
9	Vol-II, Technical	Electrical Design basis Clause 8.3 Page no.1271 of 2248	Generator rating	Modification	**Generator (with Gas fuel)** Generator rating/Voltage/Power factor : 1500kW/ 415V/ 0.9 **Generator (with Diesel fuel)** Generator rating/Voltage/Power factor: 600kW/ 415V/ 0.9	**Generator (with Gas fuel)** Generator rating/Voltage/Power factor:1500kWe/1875kVA / 415V / 0.8 **Generator (with Diesel fuel)** Generator rating/Voltage/Power factor:750kVA / 415V / 0.8
10	Vol-II, Technical	Electrical Design basis Clause 8.4 Page no.1272 of 2248	Utilization voltage and operating philosophy	Modification	**N.** Lighting for non-hazardous area-440 V AC 3 ph (through 415/440, 3-ph lighting transformer with neutral solidly earthed.) **O.** Convenience outlets for non- hazardous area-440 V AC 3 ph (through 415/440,3-ph lighting transformer with neutral solidly earthed.)	**N.** Lighting for non-hazardous area-415 V AC 3 ph (through 415/415, 3-ph Isolation transformer with neutral solidly earthed.) **O.** Convenience outlets for non- hazardous area-415 V AC 3 ph (through 415/415,3-ph Isolation transformer with neutral solidly earthed).
11	Vol-II, Technical	Electrical Design basis Clause 8.5 Page no.1272 of 2248	Frequency	Modification	Frequency – 50Hz $\pm$5 %	Frequency – 50Hz $\pm$3 %
12	Vol-II, Technical	Electrical Design basis Clause 9.2 Page no.1274 of 2248	Cable sizing and voltage drop criteria	Deletion	The cables shall be sized subject to the following minimum sizes. Electrical power cables : 2.5mm2(Cu) Electrical control cables : 1.5mm2(Cu)	
13	Vol-II, Technical	Electrical Design basis Clause 9.8.15 Page no.1276 of 2248	Capacitor banks	Modification	Capacitor banks shall be utilized in the major load centres to increase power factor to minimum 0.95.	It shall be obligatory to control harmonics of load at levels prescribed by the IEEE STD 519-1992.

14	Vol-II, Technical	Electrical Design basis Clause 9.8.16 Page no.1276 of 2248	Lux level	Modification	Reference will be made to IS-3646 part II for deciding lux levels in various areas.	Reference will be made to OISD-RP-149 for deciding lux levels in various areas.
15	Vol-II, Technical	Electrical Design basis Clause 9.8.21 Page no.1277 of 2248	UPS	Modification	UPS power is envisaged for critical instrumentation and control loads. Battery backup for UPS backed loads will be considered for 12 hours. UPS Power Supply will be derived from parallel redundant UPS with static bypass, for feeding critical loads and Control Panels located at Control Room. The UPS will be fed from two sources of power, one from generator incomer PCC/PMCC and another from DG set. UPS Power is distributed through UPSDB`s located near load centres. 230V, AC UPS Power Supply System with 12 hours back up consists of the following equipment.	UPS power is envisaged for critical instrumentation and control loads. Battery backup for UPS backed loads will be considered for 2 hours. UPS Power Supply will be derived from parallel redundant UPS with static bypass, for feeding critical loads and Control Panels located at Control Room. The UPS will be fed from two sources of power, one from generator incomer PCC/PMCC and another from DG set. UPS Power is distributed through UPSDB`s located near load centres. 230V, AC UPS Power Supply System with 2 hours back up consists of the following equipment.
16		Clause 9.8.22		Modification	1 hr. back up SMF VRLA	2 hr. back up Ni. Cd.
17	Vol-II, Technical	Electrical Design basis Clause 9.8.27 Page no.1277 of 2248	Generator Control System	Deletion	Power reserve monitoring	
18	Vol-II, Technical	Electrical Design basis Clause 11 Page no.1278 of 2248	Electrical equipment	Modification	If not specifically mentioned therein, a maximum ambient temperature of 40°C and an altitude not exceeding 1000 meters above mean sea level shall be taken into consideration.	If not specifically mentioned therein, a maximum ambient temperature of 45°C and an altitude not exceeding 1000 meters above mean sea level shall be taken into consideration.
19	Vol-II, Technical	Electrical Design basis Clause 11.1 Page no.1278 of 2248	Captive power plant	Modification	Gas Engine Generator Set (GEG) (Configuration - 3x100%) (3W+1S), 1500 kW (site rating), 415V AC, 50 Hz, 3 Phase, 3 Wire, 0.9 PF with associated electrical instrument and control, accessories etc.	Gas Engine Generator Set (GEG) (Configuration - 3x100%) (3W+1S), 1500kWe/1875 kVA (site rating), 415V AC, 50 Hz, 3 Phase, 3 Wire with associated electrical instrument and control, accessories etc.

20	Vol-II, Technical	Electrical Design basis Clause 11.3.3 Page no.1281 of 2248	PCC/ PMCC / MCC / Switchgear panels	Modification	These shall be indoor type, dust and vermin protected. Ingress protection shall be minimum IP-54.	These shall be indoor type, dust and vermin protected. Ingress protection shall be minimum IP-42.
21	Vol-II, Technical	Electrical Design basis Clause 11.3.5 Page no.1282 of 2248	PCC/ PMCC / MCC / Switchgear panels	Modification	There will be two identical incomers for panels (MCC/PCC/PMCC), with 415V (Ue), 690V (Ui), 36 kA or above breaking capacity rated three pole fixed type Moulded case circuit breaker, (electronic/ microprocessor controlled) with adjustable settings with separate earth leakage module.	There will be two identical incomers for panels if defined in SLD (MCC/PCC/PMCC), with 415V (Ue), 690V (Ui), with rated breaking capacity, three pole fixed type Moulded case circuit breaker, (electronic/ microprocessor controlled) with adjustable settings with separate earth leakage module.
22	Vol-II, Technical	Electrical Design basis Clause 11.3.7 Page no.1282 of 2248	Description of Starter/feeder panels	Modification	Each motor starter shall be provided with one no. 415V(Ue), 600V(Ui), min. 36 kA breaking capacity, three pole MCCB fitted with inbuilt thermal overload, short-circuit releases with adjustable settings for current and with Rotary Handle operating mechanism.	Each motor starter shall be provided with one no. 415V(Ue), 600V(Ui), min. rated breaking capacity, three pole MCCB fitted with inbuilt thermal overload, short-circuit releases with adjustable settings for current and with Rotary Handle operating mechanism.
23	Vol-II, Technical	Electrical Design basis Clause 11.3.10.d Page no. 1283 of 2248	Description of Starter/feeder panels	Deletion	Two nos. of such feeders shall be accommodated in each panel. Such feeders will have two isolation MCCBs, i.e., one incomer for feeding the transformer, the other on the outgoing (secondary) side of the transformer. One no. isolation transformer (415 V/415 V, delta/star-neutral) shall be included in the scope of supply.	
24	Vol-II, Technical	Electrical Design basis Clause 11.3.13 Page no.1284 of 2248	Motor feeders	Deletion	Unless otherwise specified motors shall be designed for DOL starting.	
25	Vol-II, Technical	Electrical Design basis Clause 11.4 Page no.1284 of 2248	Motor	Modification	Space heater: For motors rated 15 KW or above.	Space heater: For motors rated 75 KW or above.
26	Vol-II, Technical	Electrical Design basis Clause 11.4.9	Motor	Deletion	Motors above 30 kW shall be provided with 2 phase space heating arrangement.	

		Page no.1285 of 2248				
27	Vol-II, Technical	Electrical Design basis Clause 11.6.5 Page no.1286 of 2248	UPS & Battery bank	Modification	For UPS, SMF VRLA type Lead Acid battery shall be used. The UPS shall be provided with a Battery backup time of 12 hours.	For UPS, Ni Cd battery shall be used. The UPS shall be provided with a Battery backup time of 2 hours.
28	Vol-II, Technical	Electrical Design basis Clause 11.6.7 Page no.1286 & 1287 of 2248	UPS (for communication, Instrumentation and Control application)	Modification	time : 12 hours for full rating of UPS Battery type : Sealed Maintenance Free (SMF), VRLA	Time: 2 hours for full rating of UPS Battery type: Ni Cd battery
29	Vol-II, Technical	Electrical Design basis Clause 11.7.3 Page no.1287 of 2248	DC System	Modification	One (1) 100%, 110V adequately rated Lead-acid battery bank (SMF VRLA type) with 1 x 100% Float and Float cum Boost charger and DC switchboard will be provided separately.	One (1) 100%, 110V adequately rated Ni Cd battery bank with 1 x 100% Float and Float cum Boost charger and DC switchboard will be provided separately.
30	Vol-II, Technical	Electrical Design basis Clause 11.7.6 Page no.1287 of 2248	DC System	Modification	Battery with adequate rated Capacity with 1 Hour backup will be considered. Battery shall be sized to cater to the following loads duty cycle Momentary load for 1 minute	Battery with adequate rated Capacity with 2 Hour backup will be considered. Battery shall be sized to cater to the following loads duty cycle Momentary load for 1 minute
31	Vol-II, Technical	Electrical Design basis Clause 11.7.7 Page no.1287 of 2248	DC System	Modification	DC supply system shall be provided with charger, SMF batteries, Lead acid and DC distribution board.	DC supply system shall be provided with charger, Ni Cd batteries, and DC distribution board.
32	Vol-II, Technical	Electrical Design basis Clause 11.7.8.a Page no.1287 of 2248	DC System	Modification	Output: 110V DC (1 hour battery backup)	Output: 110V DC (2 hour battery backup)
33	Vol-II, Technical	Electrical Design basis Clause 11.8 Page no.1288 of 2248	Cables and wires	Modification	The power cable shall be PVC insulated, PVC sheathed, armoured copper conductors. Control cables shall be PVC insulated, PVC sheathed armoured copper conductor.	The power cable shall be XLPE insulated, PVC sheathed, armoured copper conductors. Control cables shall be XLPE insulated, PVC sheathed armoured copper conductor.
34	Vol-II, Technical	Electrical Design basis Clause 11.8	Cables and wires	Deletion	The minimum size for power & control cables shall be as follows: Power cable (Copper) - 2.5 mm2	

		Page no.1288 of 2248			Control cable (Copper) - 1.5 mm2	
35	Vol-II, Technical	Electrical Design basis Clause 11.10 Page no.1289 of 2248	Bus duct	Information point	BUS DUCT	Busduct is required for Generator to generator breaker.
36	Vol-II, Technical	Electrical Design basis Clause 12.4 Page no.1294 of 2248	General notes regarding lighting	Deletion	Lighting Lux level for the following area has been modified as: UPS room : 150-200 L Control Room : 400 L Switchyard : 50-100 L	
37	Vol-II, Technical	Electrical Design basis Clause 12.9 Page no.1297 of 2248	DGMS Guidelines for lighting system	Modification	Oil Mines Regulations, 1984 state that the lighting systems installed in the mine shall comply with the provisions of the Indian Electricity Rules, 1956.	Oil Mines Regulations, 2017 state that the lighting systems installed in the mine shall comply with the provisions of the CEA Regulation 2010
38	Vol-II, Technical	Electrical Design basis Clause 13 Page no.1298 of 2248	Earthing & Lightning Protection	Modification	Motor 5.5KW to 30 Motors 37 KW and above - 16 mm (5/8")Wire Rope Pipe racks, Vessels & Heat Exchangers - 10 mm (3/8") Wire Rope Lighting, Power & Instrument Panels - 10 mm (3/8") Wire Rope Street Light Poles - 10 mm (3/8") Wire Rope Lighting Transformer - 16 mm (5/8") Wire Rope	Motor 5.5KW to 37 KW – (GI Strip of suitable size) Motors 37 KW and above – 25 x 5 mm strip Pipe racks, Vessels & Heat Exchangers - 25 x 3 mmstrip Lighting, Power & Instrument Panels - 10 mm Wire Street Light Poles - 10 mm Wire Lighting Transformer - GI Strip
39		Clause 5.1.1		Modification	415 Volts +/- 5%, 3 phase, 50 Hz +/- 5% (3 wire)	415 Volts +/- 5%, 3 phase, 50 Hz +/- 3% (3 wire)
40	Vol-II, Technical	Specification for Natural Gas Generator Clause 5.2 Page no.1311 of 2248	Noise requirements	Modification	The noise (sound) level of the completed package system covered by this natural gas-generator specification shall not exceed 85 dBA when measured 1 meter from the package and/or equipment.	The noise (sound) level of the completed package system covered by this natural gas-generator specification shall be asper CPCB norms.
41	Vol-II, Technical	Specification for Natural Gas Generator	Noise requirements	Modification	Container shall have acoustic treatment to reduce sound pollution to the optimum level (i.e. 85 dBA or as per. CPCB norms,	Container shall have acoustic treatment to reduce sound pollution to the optimum level (As per CPCB norms)

		Clause 6.1.g Page no.1311 of 2248			whichever is applicable, at one (1) meter distance from container).	
412	Vol-II, Technical	Specification for Natural Gas Generator Clause 6.1.g Page no.1313 of 2248	Base plate	Modification	Base plate	Base frame
43	Vol-II, Technical	Specification for Natural Gas Generator Clause 13 Page no.1327 of 2248	Tools and spare parts	Modification	The Vendor shall also include 2 years operational spare parts along with the commissioning spare parts for gen set.	The Vendor shall also include 2 years maintenance spare parts along with the commissioning spare parts for gen set.
44	Vol-II, Technical	Specification for Natural Gas Generator Clause 13 Page no.1327 of 2248	Tools and spare parts	Addition	Vendor shall include all critical items like control system cards, relays, control fuse, indication lamps in the spares offered by them.	
45	Vol-II, Technical	Specification for Natural Gas Generator Clause 15.1 Page no.1328 of 2248	Gas Engine Generator Test	Modification	The routine load test and fuel consumption test for the complete Gas engine Generator shall be done for following duration:	The routine load test and fuel consumption test for the complete Gas engine Generator shall be done at factory for following duration:
46	Vol-II, Technical	Specification for Diesel Generator Clause 7.6 Page no.1343 of 2248	Noise requirements	Modification	The Vendor shall state in his enquiry the consideration included in his design to meet the noise requirements specified in the relevant Standard IS 12065. The noise (sound) level of the completed package system covered by this generator specification shall not exceed 82 dBA when measured one meter from the package and/or equipment in accordance with general specification for equipment noise level FGGS-BJN-MEQ-SPC-4007.	The noise (sound) level of the completed package system covered by this specification shall be asper CPCB norms.
47	Vol-II, Technical	Specification for Diesel Generator Clause 8.1 Page no.1343 of 2248	General conditions	Deletion	The generator set shall have a prime duty rated output as stated in the purchase documents at 0.9 power factor lagging.	
48	Vol-II, Technical	Specification for Diesel Generator Clause 10.2 Page no.1349 of 2248	Design	Modification	Cables shall be rated at the required voltage with a minimum of 0.6/1kV.	Cables shall be rated at the required voltage with a minimum of 1.1kV.

49	Vol-II, Technical	Specification for Diesel Generator Clause 13 Page no.1351 of 2248	Alternator	Modification	The Alternator shall be of Rated KVA output at 0.9 power factor and suitable for 3 phase, 4 wire, 415 volts, 50 HZ system rated confirming to IS 13364 -2	The Alternator shall be of Rated KVA output at 0.8 power factor and suitable for 3 phase, 4 wire, 415 volts, 50 HZ system rated confirming to IS 13364 -2
50	Vol-II, Technical	Specification for Electric Heat Tracing Page no.1369 to 1381 of 2248	Specification	Deletion	Specification has been deleted.	
51	Vol-II, Technical	Specification for Electric Motor rated up to 200kw Clause 3.2 Page no.1403 of 2248	Indian Standards	Modification	IS-325- Three-phase induction motors	IS/IEC 60034 : Rotating electrical machines : Part 1 Rating and performance IS/IEC 12615 - 2018 : Line Operated Three Phase AC Motors (IE Code) “Efficiency Classes And Performance Specification”
52	Vol-II, Technical	Specification for Switchgear And Motor Control Centers Clause 5.1 Page no.1413 of 2248	Electrical Systems Source	Modification	415 V±10%, 3 phase, 4 wire, 50 Hz±5%, neutral solidly earthed	415 V±10%, 3 phase, 3 wire, 50 Hz±3%, neutral resistance earthed
53	Vol-II, Technical	Specification for Switchgear And Motor Control Centers Clause 6.1 Page no.1414 of 2248	Materials	Modification	Control wiring shall be 1.5mm2 minimum stranded, tinned copper having a moisture resistant and flame retardant insulation.	Control wiring shall be 1.5mm2 minimum stranded, tinned copper having a moisture resistant and flame retardant insulation. However, for CT min of 2.5 mm2 shall be used
54	Vol-II, Technical	Specification for AC UPS Clause 3.3 Page no.1429 of 2248	OISD Standards	Modification	OISD -STD-149- Design aspects for safety in electrical systems.	OISD -RP-149- Design aspects for safety in electrical systems.
55	Vol-II, Technical	Specification for Hazardous Area Classification Page no.1444 to 1447 of 2248	Table for selection of equipment for hazardous and environmental conditions	Deletion	Ex (de)	
56		Page no 1447 of 2248	Table Sl. No. 20, 21	Deletion	Ex (e)	
57	Vol-II, Technical	Specification for Tank Internals Page no.1500 to 1509	Specification	Deletion	Specification has been deleted.	

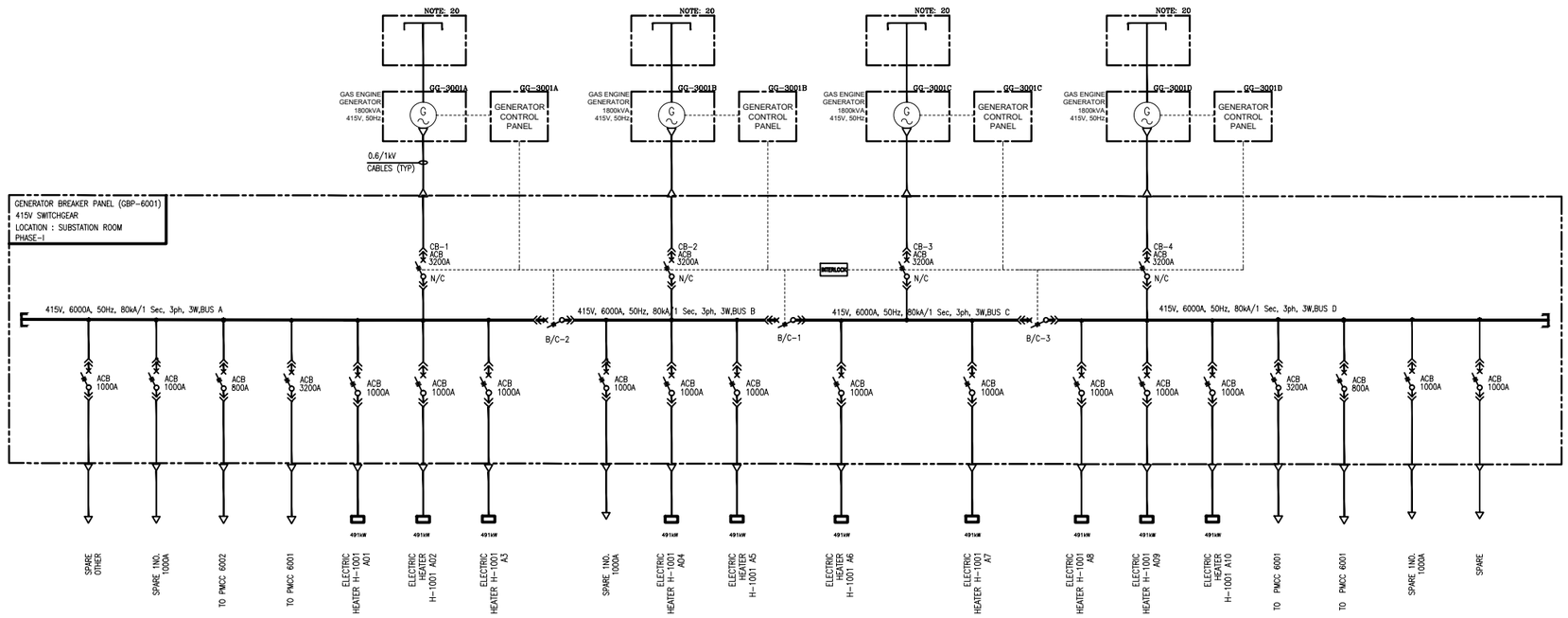
		of 2248				
58	Vol-II, Technical	Specification for Cable and cable glands Clause 6 Page no.1422 of 2248	Construction	Modification	Insulation: XLPE, 600/1000V Grade, for power and control	Insulation :XLPE,1100V Grade, for power and control
59	Vol-II, Technical	Electrical Design basis Clause 13.1 Page no.1300 of 2248	Earthing Material	Addition	Design and installation of lightning protection shall be as per IEC-62305. However, DGMS & OISD requirements for lighting protection shall also be complied.	
60	Vol-II, Technical	Electrical Design basis Clause 12.4.b Page no.1293 of 2248	Normal 240VAC lighting system	Modification	HPMV/Metal Halide lamps shall generally be used for outdoor plant lighting. Keeping in view the restrike time lag of these lamps and to avoid complete darkness in case of voltage dip/brown out/black out condition LED lamps may be judiciously distributed throughout the plant area. LED lamps may be considered to achieve this objective.	LED lamps shall generally be used for outdoor plant lighting.
61	Vol-II, Technical	Electrical Design basis Clause 13 Page no.1298 of 2248	Earthing & Lightning Protection	Addition	Lightning protection system shall be provided for equipment, structures, tankages, buildings etc. as per OISD Std.180 and IS/IEC 62305 with independent earthing system of earth resistance less than 5 ohms. Calculations for positioning of the air-terminations towards lightning protection in the installation shall be done utilizing the rolling sphere method as given in the IS/IEC 62305-3 & 4 with due approval from OIL.	
62	Vol-II, Technical	Specification for Switchgear and Motor Control Centers Clause 7.3 Page no.1415 of 2248	Compartments	Addition	All major/critical Switchgear panels shall have Arc Flash Protection (in line with NFPA 70E of USA) system using dedicated arc flash monitoring and protection relay, optical sensors etc.	
63	Vol-II, Technical	Specification for Natural Gas Generator Clause 6.8.b Page no.1313 of 2248	Engine Cooling System	Deletion	The dry type cooling tower (remote mounted) shall be sized for the maximum ambient temperature. Separate HT and LT circuit shall be considered for engine jacket and auxiliary cooling.	

64	Vol-II, Technical	Single Line Diagram Page no.1550 of 2248	SLD	Modification	Please refer **Attachment–II** of Corrigendum No. 5.	
65	General				The above-mentioned changes shall be applicable to all specification and datasheet which is part of the tender. The above changes supersede the tender documents.	
66	General		List of approved manufacturers of the critical electrical components/ items.	Addition	Please refer **Attachment–I** of Corrigendum No. 5.	
67		1512 of 2248	Data sheet Sl. No. 17	Modification	1875 kVA at 0.8 pf	Minimum 1875 kVA at 0.8 pf with higher rating up to 10% acceptable.
68		1518 of 2248	Data sheet Sl. No. 5.0	Modification	750KVA at 0.8 pf	Minimum 750KVA at 0.8 pf with higher rating up to 10% acceptable.
69	Volume-I, Commercial	BEC/BRC		Modification		Modified BEC/BRC is attached as **Attachment–III**
70	Volume-I, Commercial	SOR/P		Modification		Modified SOR/P is attached as **Attachment–IV**

Attachment – I

List of approved manufacturers of the critical electrical components / items:

1	3 Phase Induction Motor (Flameproof / non FLP)	Crompton Greaves / Siemens / Marathon / Bharat Bijlee / ABB / GE
2	Electric Heaters (Flameproof)	Klopper Germany / Ex Heat / Sandvik Asia / Escorts Limited
3	Air Circuit Breaker (ACB)	Schneider / Siemens / ABB / Legrand / L&T
4	MCCB	Schneider / Siemens / ABB / Legrand / L&T
5	Soft Starter	Schneider / Siemens / ABB
6	Contactor	Schneider / Siemens / ABB / Legrand / L&T
7	Control MCBs	Schneider / Siemens / ABB / Legrand / L&T
8	Current Transformer (CT)	AE / Kappa / Siemens
9	Digital Multifunction Meter	Swift-Encore / Siemens /Schneider / Rishab. Accuracy class shall be 0.5 or better.
10	CBCT and ELR	Schneider / Legrand / GIC
11	Intrinsically Safe Barrier (ISB)	PEPPERL + FUCHS
12	Timer	Schneider / Siemens / ABB



NOTES

1. AMONG ON-LINE GENETS, NEUTRAL OF ONE GENERATOR SHALL ONLY BE EARTHED . SUITABLE CONTROL LOGIC WITH CONTRACTORS SHALL BE DEVELOPED
2. GEN BREAKER PANEL SHALL BE WITH SYNCHRONIZING, LOAD SHARING FACILITY AS WELL AS PROTECTION,METERING AND ALARMS
3. GENERATORS ARE PLANNED WITH N+1 PHILOSOPHY
4. MORE THAN 2 GENERATORS NOT TO BE PARALLELED
5. EXHAUST SYSTEMS SHALL BE DESIGNED AS PER CPCB NORMS
6. ALL DG SHALL BE WITH AUTISTIC ENCLOSURE
7. ALL ACBS TO BE WITH BUILT IN MICROPROCESSOR BASED RELEASES
8. SLD SHALL BE REVIEWED DURING DETAILED DESIGN AND UPDATED BASED ON ACTUAL PROCESS CONDITIONS, EQUIPMENT SIZING AS WELL AS VENDOR DATA
9. UTILITY CONNECTION IS NOT ENVISAGED
10. CABLE SIZING AND INSTRUMENTATION INTERFACE SHALL BE DEVELOPED DURING DETAILED DESIGN PHASE
11. ALL NATURAL GAS GENERATORS ARE OF CONTINUES DUTY TYPE
12. LOADS INDICATED FOR PACKAGES ARE PRELIMINARY AND SHALL BE UPDATED BASED ON ACTUAL PACKAGE DATA
13. HSD YARD FOR GENERATORS TO BE CONSIDERED .DETAILS TO BE DEVELOPED DURING DETAILED DESIGN
14. THE SWITCHGEAR SHALL BE CAPABLE TO CONNECT WITH DCS SYSTEM THROUGH SERIAL LINK AND HARDWIRED (INCLUDES METERING & PROTECTION ELEMENTS).
15. SWITCHGEAR VENDOR SHALL PROVIDE FULL DETAILS RELATED TO INSTALLATION, FABRICATION, DIMENSION AND ARRANGEMENT.
16. SWITCHGEAR SHALL HAVE 30% SPARE FEEDERS AND 30% SPACE FEEDER. SPACE SHALL BE KEPT IN THE SUBSTATION FOR ADDING MINIMUM OF TWO VERTICAL PANELS
17. CONNECTION FROM MOTOR FEEDER TO DCS NOT SHOWN .THIS SHALL BE DEVELOPED DURING DETAILED DESIGN.
18. THE PHASE-II WILL BE OPTIONAL FOR THE EPC CONTRACTOR AND OIL WILL CONFIRM.
19. THE ELECTRICAL & INSTRUMENTATION CONNECTIONS BETWEEN PCC AND ITS ASSOCIATED EQUIPMENTS SHALL BE CONTRACTOR SCOPE OF WORK FOR EFFECTIVE OPERATION OF THE SYSTEM.
20. NERS PROVIDED SHOULD BE TO RESTRICT CURRENT AS PER CEA REGULATION 100.
21. DIFFERENTIAL PROTECTION IS NOT NORMALLY REQUIRED FOR GENERATOR RATING APPLICABLE FOR THIS PROJECT.HOWEVER IF OEM RECOMMENDS DIFFERENTIAL PROTECTION THE SAME SHALL BE PROVIDED.
22. VENDOR TO DEVELOP SCHEME ACCORDINGLY BASED ON OPERATING PHILOSOPHY AND TAKE APPROVAL FROM OWNER.
23. B/C-2,B/C-3 ARE NORMALLY CLOSED AND PROVIDED FOR SWITCHGEAR OPERATION.HOWEVER VENDOR SHALL DEVELOP INTERLOCK TO ENSURE THAT MORE THAN 2 GENSETS WILL NOT FEEDING ANY OF THE BUSBARS.
24. NOTE: BUS COUPLER B/C-1 IS NORMALLY OPEN(NO).WHEN B/C-1 IS CLOSED,ONLY 2 GENERATORS SHOULD BE RUNNING.INTERLOCK IS REQUIRED FOR INCORPORATING THIS PHILOSOPHY

DRAWING No.	REFERENCE DRAWINGS
FGGS-BJN-PRO-SCH-1003	EQUIPMENT LIST
FGGS-BJN-ELC-SCH-6000	ELECTRICAL LOAD SUMMARY

REV	DATE	DESCRIPTION	BY	CHK	APP	DWN
A	18.05.19	ISSUED FOR REVIEW AND APPROVAL	AS	KPS	MKV	
B	13.07.19	ISSUED FOR APPROVAL	AS	KPS	MKV	
0	16.07.19	ISSUED FOR ITB	AS	KPS	MKV	
1	20.09.19	RE ISSUED FOR ITB	AS	KPS	MKV	

SCALE: NTS

DRAWN	AS	DATE:	16.07.19
CHECKED	KPS	DATE:	16.07.19
APPROVED	MKV	DATE:	16.07.19
OWNER			

OIL INDIA LIMITED

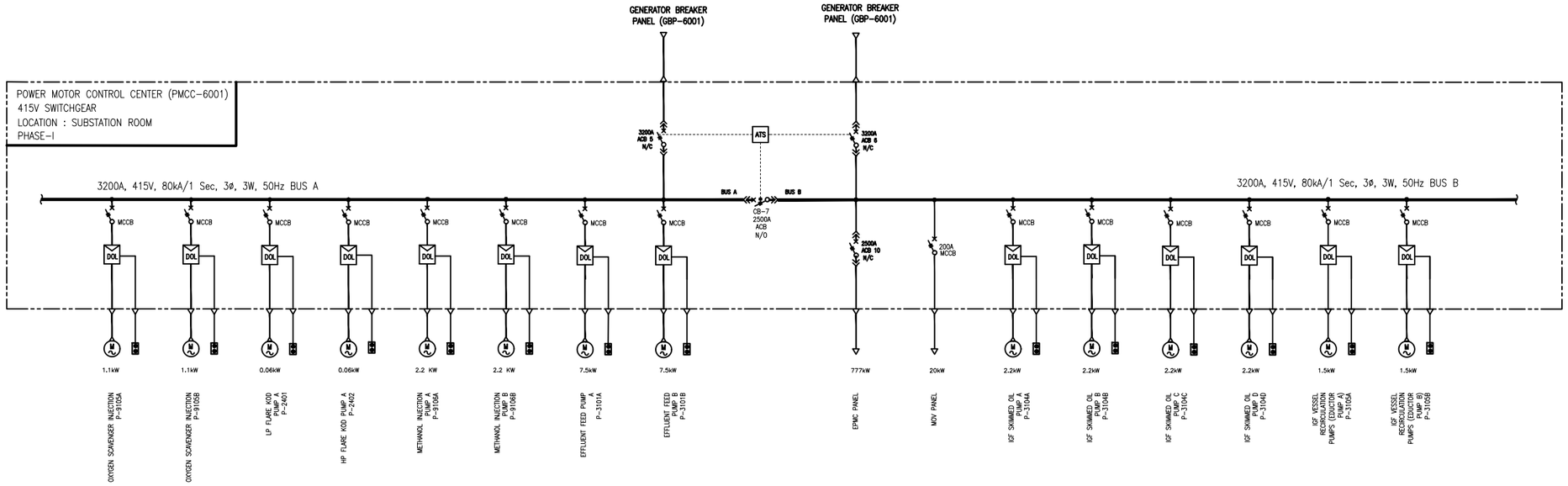
JAYATHE PETROTECH ENGINEERS AND CONSULTANTS PVT LTD

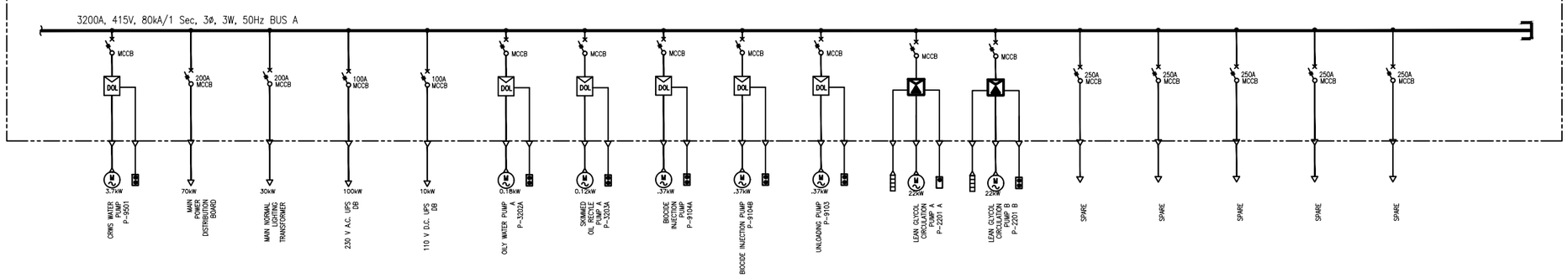
ENGINEERING & PROJECT MANAGMENT CONSULTANCY FOR CREATION OF FIELD GAS GATHERING STATION (FGGS) AT BAGHJAN IN UPPER ASSAM

SINGLE LINE DIAGRAM

CADD NUMBER	DRAWING NUMBER	SHT. No.	REV
FGGSBJN600001.dwg	FGGS-BJN-ELC-DIA-6000	01/05	01

FORM A3.DGN





DRAWING No.	REFERENCE DRAWINGS
FGGS-BJN-PRO-SCH-1003	EQUIPMENT LIST
FGGS-BJN-ELC-SCH-6000	ELECTRICAL LOAD SUMMARY

REV	DATE	DESCRIPTION	BY	CHK	APP	DWN
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OWNER			

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JAYATHE PETROTECH ENGINEERS AND CONSULTANTS PVT LTD

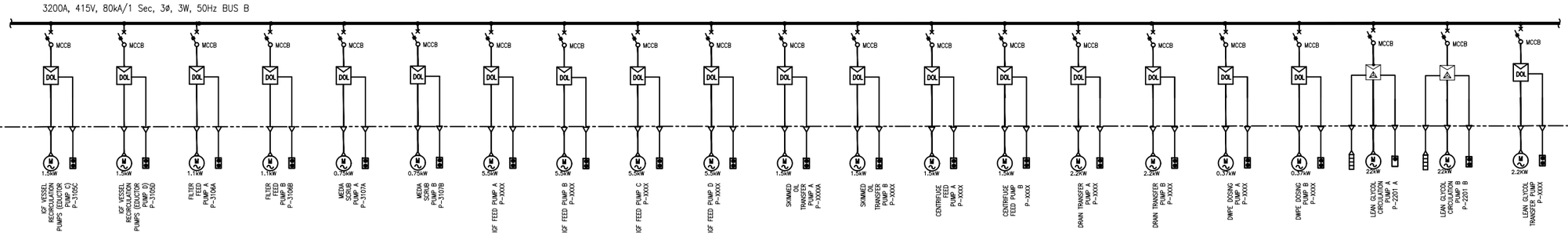
ENGINEERING & PROJECT MANAGMENT CONSULTANCY FOR CREATION OF FIELD GAS GATHERING STATION (FGGS) AT BAGHJAN IN UPPER ASSAM

SINGLE LINE DIAGRAM (PHASE-I)

CADD NUMBER	DRAWING NUMBER	SHT. No.	REV
FGGSBJN600002.dwg	FGGS-BJN-ELC-DIA-6000	02/05	01

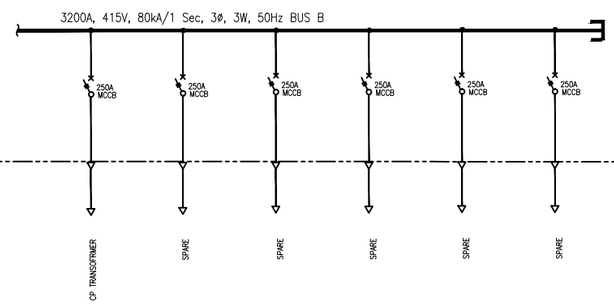
FORM_A3.DGN

POWER MOTOR CONTROL CENTER (PMCC–6001)
415V SWITCHGEAR
LOCATION : SUBSTATION ROOM
PHASE–I



POWER MOTOR CONTROL CENTER (PMCC–6001)
415V SWITCHGEAR
LOCATION : SUBSTATION ROOM
PHASE–I

POWER MOTOR CONTROL CENTER (PMCC–6001)
415V SWITCHGEAR
LOCATION : SUBSTATION ROOM
PHASE–I



DRAWING No.	REFERENCE DRAWINGS
FGGS–BJN–PRO–SCH–1003	EQUIPMENT LIST
FGGS–BJN–ELC–SCH–6000	ELECTRICAL LOAD SUMMARY

REV	DATE	DESCRIPTION	BY	CHK	APP	DWN
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B	13.07.19	ISSUED FOR REVIEW AND APPROVAL	AS	KPS	MKV	
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1	20.09.19	RE ISSUED FOR ITB	AS	KPS	MKV	

SCALE: NTS

DRAWN	AS	DATE:	16.07.19
CHECKED	KPS	DATE:	16.07.19
APPROVED	MKV	DATE:	16.07.19
OWNER			

CLIENT: OIL INDIA LIMITED

ENGINEERING: JAYATHE PETROTECH ENGINEERS AND CONSULTANTS PVT LTD

ENGINEERING & PROJECT MANAGMENT CONSULTANCY FOR CREATION OF FIELD GAS GATHERING STATION (FGGS) AT BAGHJAN IN UPPER ASSAM

SINGLE LINE DIAGRAM (PHASE–I)

CADD NUMBER	DRAWING NUMBER	SHT. No.	REV
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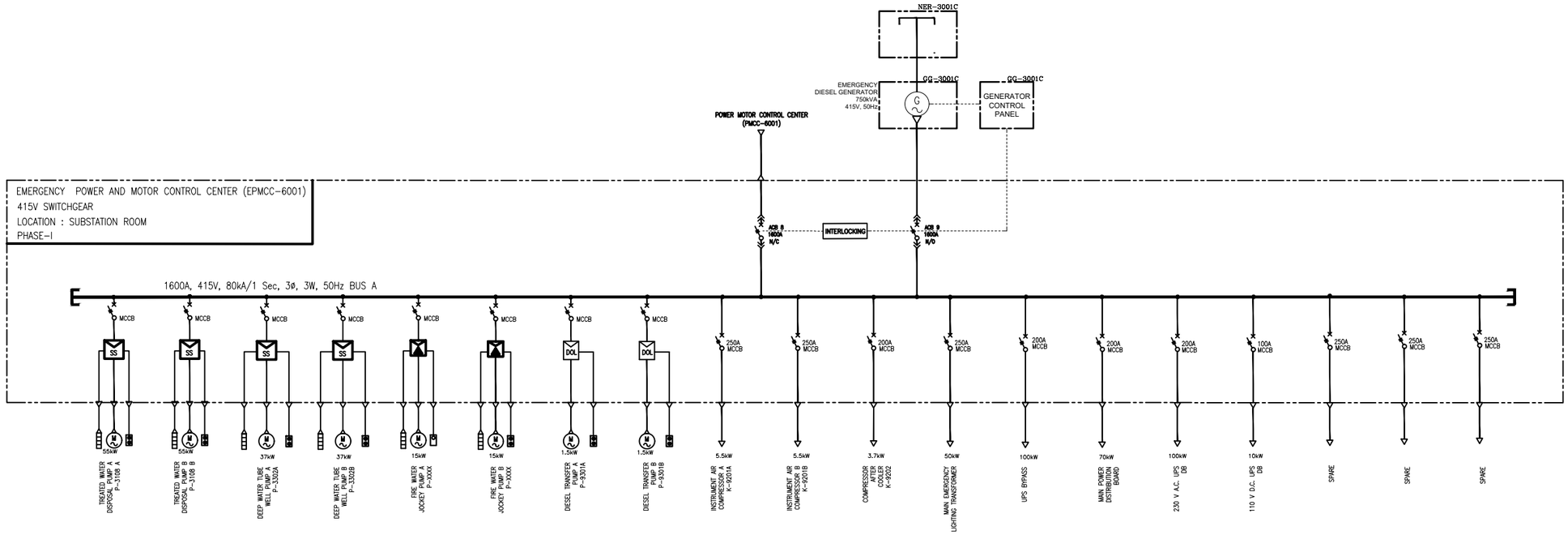
FORM_A3.DGN



DRAWING No.	REFERENCE DRAWINGS
FGGS-BJN-PRO-SCH-1003	EQUIPMENT LIST
FGGS-BJN-ELC-SCH-6000	ELECTRICAL LOAD SUMMARY

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1	20.09.19	RE ISSUED FOR ITB	AS	KPS	MKV	

SCALE: NTS

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CHECKED	KPS	DATE:	16.07.19
APPROVED	MKV	DATE:	16.07.19
OWNER			

OIL INDIA LIMITED

JAYATHE PETROTECH ENGINEERS AND CONSULTANTS PVT LTD

ENGINEERING & PROJECT MANAGMENT CONSULTANCY FOR CREATION OF FIELD GAS GATHERING STATION (FGGS) AT BAGHJAN IN UPPER ASSAM

SINGLE LINE DIAGRAM (PHASE-I)

CADD NUMBER	DRAWING NUMBER	SHT. No.	REV
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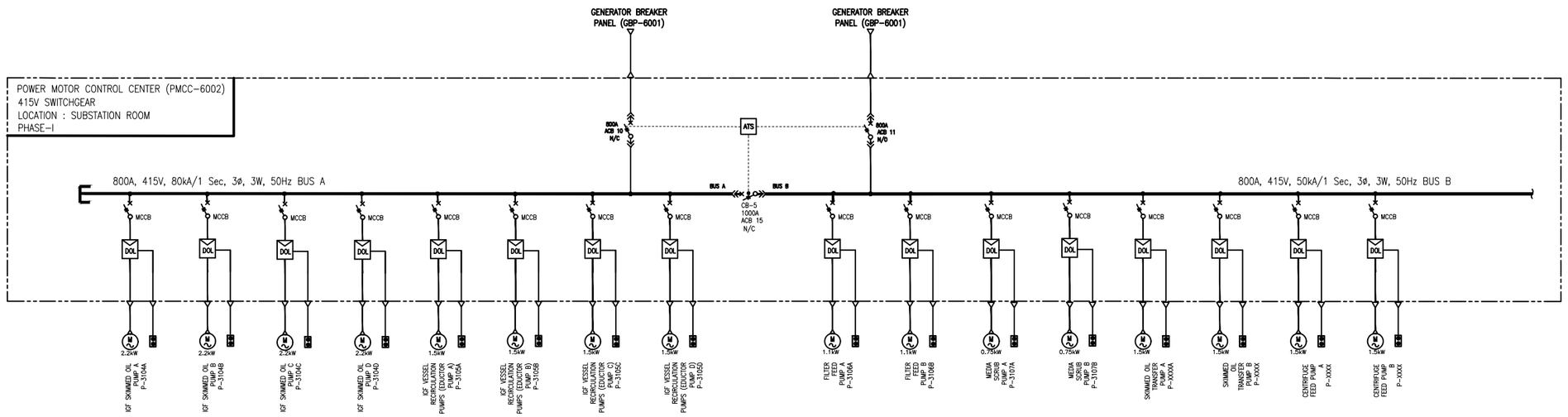
FORM A3.DGN



DRAWING No.	REFERENCE DRAWINGS
FGGS-BJN-PRO-SCH-1003	EQUIPMENT LIST
FGGS-BJN-ELC-SCH-6000	ELECTRICAL LOAD SUMMARY

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OIL INDIA LIMITED

JAYATHE PETROTECH ENGINEERS AND CONSULTANTS PVT LTD

ENGINEERING & PROJECT MANAGMENT CONSULTANCY FOR CREATION OF FIELD GAS GATHERING STATION (FGGS) AT BAGHJAN IN UPPER ASSAM

SINGLE LINE DIAGRAM (PHASE-I)

CADD NUMBER	DRAWING NUMBER	SHT. No.	REV
FGGSBJN600002.dwg	FGGS-BJN-ELC-DIA-6000	05/05	01

FORM A3.DGN

Attachment – III

VOLUME-1 PART – 2

BID EVALUATION CRITERIA (BEC)

PREAMBLE:

The bid shall conform generally to the specifications and terms and conditions given in this bid document. Bids shall be rejected in case the services offered do not conform to the required parameters stipulated in the technical specifications. Notwithstanding the general conformity of the bids to the stipulated specifications, the following mandatory requirements will have to be particularly met by the Bidders without which the same will be considered as non-responsive and rejected. All the documents related to BEC must be submitted along with the Techno-Commercial Bid.

1. TECHNICAL CRITERIA:

The Bidder shall meet all the following requirements:-

1.1 The bidder must be in the business of Construction of Field Gas Gathering Station (FGGS) or Oil Collecting Station (OCS) or Group Gathering Station (GGS) or Crude Oil Refinery or Petrochemical Processing Plants or Natural Gas Processing Plants in hydrocarbon sector (except hydrocarbon pipeline job) in EPC mode.

1.2 Such EPC Projects/jobs/work(s) referenced for qualification in Para 1.1 above must involve Detailed Engineering, Procurement, Fabrication, Construction, Erection & Commissioning works.

1.3 Experience of having successfully executed one similar job as mentioned above in Para 1.1 of value not less than **Rs.189.07 Crore** or **US$ 27.01 Million** (1USD=INR70.00) by the bidders in the last 07(seven) years to be reckoned from the original Bid Closing date. The project, for which the above experience is claimed, should have been satisfactorily completed and/or handed over/ commissioned prior to the date of bid closing.

1.4 Documentary evidence in support of the above jobs in the form of Contract/Work Order and the Job Completion Certificates from the clients /Certificate of Final Payment of jobs successfully completed are to be submitted failing which the offers will be rejected. The bidder shall give information on each individual work executed during the past 7 (seven) years, ending original bid closing date, indicating the following details in the Job Completion Certificate.

- Brief Description of Work
- Value of Contract
- Completion time as stated in Contract (months)
- Actual Completion time (months)
- Month/Year of completion
- Reasons for delay, if any

- Name & postal address of the client
- Contact person

1.5 Bids from Consortium and Joint Venture (JV) are not permitted against this tender.

1.6 **Engineering and Design Capability:** The bidder should have design and engineering capability for such EPC job either in-house or through Third Party. The bidder should provide their in-house set up for design and engineering with the details of their personnel who are on regular pay roll of the bidder. The CV of all such personnel should also be submitted with the bid. In case of Design and Engineering by Third party, credential of the Third party along with a commitment letter from the third party is to be submitted along with the bid.

1.7 **Project Management:** The bidder should provide along with the bid the details of the project management, inspection & expediting & quality management team of the bidder who will be involved in managing the planning, execution of the project activities and supervising the construction work progress at site meeting all the quality requirements. The bidder should provide their in house set up for project management, inspection & expediting & quality management team with the details of their personnel who are on regular pay roll of the bidder. The CV of such personnel should also be submitted with the bid.

1.8 Bidder will have to provide an undertaking that the list of manpower earmarked for this project will be associated with the project till project completion and in case of inevitable situation the replacement should be made with approval of client by personnel of same experience or more.

1.9 Bidder should submit the list of software's available with them for carrying out engineering & Project planning and reporting. However, the following minimum engineering software's required for carrying out detail engineering has to be owned by bidder and license copy details of the same in name of bidder must be submitted to OIL along with bid. List is as enclosed. Otherwise these software may be hired/outsourced by the bidder. For hired/outsourced software, the Bidder shall submit commitment letter from the supplier agency on the availability of the software licence:

- ✓ 3D modelling (piping, electrical, instrumentation & Structural)-PDMS V12.1 or equivalent
- ✓ Process Simulation Software like HYSIS V10.0 or equivalent
- ✓ 2D drawings - AUTOCAD or equivalent
- ✓ Electrical Power system study – ETAP or equivalent
- ✓ Structural analysis and design-STAAD PRO or SAACS or equivalent

- ✓ Pipe stress analysis – CAESAR II V7.3 or equivalent
- ✓ Pressure Vessel design calculation - PVElite 2016 or equivalent
- ✓ Project management tool - MS Projects or Primavera P6 or TIEM chart or better.

2. FINANCIAL CRITERIA:

a) **Annual Turnover of the Bidder**: The bidder must have Annual Financial Turnover of atleast INR **94.54 Crore** or **US$ 13.505 Million** (1USD=INR 70.00) in any one of the preceding 03 (Three) Financial/Accounting Year(s) from the Original Bid Closing Date (BCD) as per the Audited Annual Reports.

b) **Net Worth:** The financial Net Worth of the bidder must be **Positive** and should be atleast **INR 28.36 Crore** or **US$ 4.052 Million** (1 USD = INR 70.00) as per the immediate preceding audited financial result to be considered from the original Bid Closing Date (BCD).

Note 1: Net worth shall mean: " Share capital + Reserves created out of profits and securities Premium - account (excluding re-valuation reserves) – deferred expenditure - Miscellaneous Expenditure to the extent not written off and carried forward Loss - Reserves created out of write back of depreciation and amalgamation.

c) **Working Capital Requirement:** The Working Capital of the Bidder must be at least **INR 28.36 Crore** or **US$ 4.052 Million** (1USD=INR70.00) as per the immediate preceding audited financial result to be considered from the original Bid Closing Date (BCD). In case the Working Capital is short the bidder can supplement the same through line of credit from a scheduled commercial bank having Net Worth more than INR 100 Crore as per enclosed format **(Annexure-1) .**

In the event of award, the contractor shall open a project specific account in a nationalized bank located in the vicinity where the project is executed. The contractor shall deposit an amount equal to 10% of the annualized contract value within 15 days from the date of issue of LOA. All payment against the contract shall be remitted to the project specific account. Any withdrawal from this account shall be only after the first payment against the contract is made by OIL. At any point of time the minimum balance after first remittance by OIL against invoice from the contractor shall remain 5% of the annualized contract value.

In addition to above the bidder should submit a financial resource/ cash flow plan for execution of this contract.

Note 2: Working Capital shall mean "Current Assets minus Current liabilities" as per latest year's audited consolidated annual Financial Statements.

d) **Bid Capacity:** The bidding capacity of the contractor should be equal to or more than **INR189.07 Crore or US$ 27.010 Million** (1USD=INR70.00). The bidding capacity shall be worked out by the following formula:

Bidding Capacity = [A x 1.5] - B

Where,

A = Maximum annual turnover in any one of the preceding three financial years

B = Commitments in next twelve months from the date of expiry of the bid validity as per enclosed format for **Annexure-2.**

e) **Debt Equity Ratio:** Debt equity ratio of the bidder should not be more than 2:1 as per immediate preceding audited financial year result. Debt equity ratio shall mean long term Borrowings/ Net-worth.

ln case the financial statements submitted by the bidder are in currencies other than INR, BC selling rate declared by State Bank of India prevailing on one day prior to original bid closing date shall be considered for converting it into INR.

Note 3: For proof of Annual Turnover & Net Worth the following document must be submitted along with the bid:-

(i) A certificate issued by a practicing Chartered/Cost Accountant (with Membership Number and Firm Registration Number), certifying the Annual turnover & Net worth as per format prescribed in prescribed in **Sub- Proforma J2** of Tender.

AND

(ii) Audited Balance Sheet along with Profit & Loss account.

Note 4: In case the bidder is a Central Govt. Organization/PSU/State Govt. Organization/Semi-State Govt. Organization or any other Central/State Govt. Undertaking, where the auditor is appointed only after the approval of Comptroller and Auditor General (CAG) of India and the Central Government, their certificates may be accepted even though FRN is not available. However, the bidder is to provide documentary evidence for the same.

Note 5 :ln case the financial statements submitted by the bidder are in currencies other than INR ,the B.C Selling market rate of exchange declared by State Bank of India, Kolkata CAG Branchprevailing on one day prior to bid closing date shall be considered for converting it into INR.

3. <u>DOCUMENTARY EVIDENCES TO BE SUBMITTED BY THE BIDDERS IN SUPPORT OF THEIR BIDS:</u>

Bidders must furnish documentary evidences in support of fulfilling the entire above requirement as under:

a) Contract/Work Order and job Completion Certificate or any other documents from their clients which can substantiate their claim towards experience.
b) Company Profile, address, concerned person and his/her contact details, organizational set up with details of professional technical and financial capabilities of client with reference to Para 3(a).
c) Documents in the form of copies of relevant pages of Contract and Completion Certificate or final bill payment documents etc. or any other documents issued by their clients in support of executing the job as mentioned in the Scope of Work/Terms of Reference/Technical Specification of the bidding document, during last 7 years prior to the bid closing date of the tender.
d) Bidder will have to submit Project Execution & Management/ Planning & Scheduling methodology for the project.
e) Proposed Overall Project Schedule (from the date of LOA till 'final commissioning and handover in line with project duration specified in the tender) in network form showing all the details.
f) Organizational set up for Planning, Scheduling, Procurement & Project Management, Construction Management, Quality Management, Inspection & expediting and Monitoring & Control at EPC Contractor's Design Office and Site Office.
g) Resource Deployment plan to meet the project plan as per schedule.
h) Health, Safety and Environment (HSE) policies, implementation procedures in line with internationality accepted practices and statistics covering the last five (5) years.
i) LTIFR track record for last three (3) years.
j) List of policies, procedures and quality assurance & quality control practices currently in place for execution of similar work.

All documents submitted with bid must be self-certified by the bidder's authorized person signing the bid and duly authenticated as mentioned elsewhere in the bidding document.

In case Bidder has executed and completed a Composite work in a single contract which includes the qualifying work(s) stated under Clause No. 1.3 in (BEC) above, then value of such qualifying work(s) out of total value of composite work shall be considered for the purpose of evaluation.

For qualification based on composite works, in the event the value of the qualifying work(s) cannot be ascertained from the Work Order/ Completion

Certificate submitted by bidder, Copy of Schedule of Rates/Prices (SOR/P), Copy of relevant pages of contract, Copy of relevant pages of final bill certified by their OWNER for establishing requirement of BQC or written letter from their Owner specifying the nature of work with quantities and values shall be submitted for qualification.

Note:

1. Bidder shall furnish documentary evidence i.e. copies of Work Orders/ relevant pages of Contract/SOR/P, Completion Certificate, from the Company of work executed, annual reports containing audited balance sheets and profit & loss accounts statement in the first instance itself, in support of their fulfilling the qualification criteria. The Company reserves the right to complete the evaluation based on the details furnished without seeking any additional information.
2. A job executed by a bidder for its own plant/projects cannot be considered as experience for the purpose of meeting requirement of BQC of the tender. However, jobs executed for Subsidiary/Fellow subsidiary/Holding Company will be considered as experience for the purpose of meeting BQC subject to submission of tax paid invoice(s) duly certified by Statutory Auditor of the bidder towards payments of statutory tax in support of the job executed for Subsidiary/Fellow subsidiary/Holding Company. Such bidders shall submit these documents in addition to the documents specified in the bidding documents to meet BQC.
3. A job completed by a bidder as a sub-contractor or Consortium partner shall be considered for the purpose of meeting the experience criteria of BQC subject to submission of following documents in support of meeting the "Bidder Qualification Criteria":
   a) Copy of Work Order along with SOR/P issued by the main Contractor in the case of sub-contractor/client in the case of Consortium partner along with Consortium agreement and job matrix.
   b) Copies of Completion Certificates from the end User/Owner and also from the main Contractor. The Completion Certificates shall have details like Work Order No./date, brief scope of work, ordered & executed value of the job, completion date etc.
4. All documents submitted by bidder towards meeting BQC shall be furnished in a separate booklet titled 'Documentation against BQC (Experience and Financial)' with proper index.

5. Submission of authentic documents is the prime responsibility of the Bidder. Wherever the Company has concern or apprehension regarding the authenticity/correctness of any document, OIL reserves the right of getting the document cross verified from the document issuing authority.

6. In absence of requisite document, the Company reserves the right to reject the bid without making any reference to the bidder.

7. All documents submitted by bidder towards meeting the Bid Qualifying Criteria shall be submitted in original physical form on or before the due date and time.

4. COMMERCIAL – BID SUBMISSION

4.1 Bids shall be submitted under single stage two Bid system i.e. Technical Bid and Priced Bid separately in the OIL's e-Tender portal. The Technical Bid is to be uploaded as per Scope of Work & Technical Specification of the tender in **"Technical RFx Response" Tab** and Priced Bid uploaded in the **"Notes & Attachments" Tab.** Bids shall be rejected outright if the prices are indicated in the technical bids. Bids not conforming to this two bid system shall be rejected outright.

4.2 Except for the provisions of escalation provided elsewhere in the bidding document, bidder shall offer firm prices. Price quoted by the successful bidder must remain firm during the execution of the contract and not subject to variation on any account unless mentioned otherwise in the bidding document.

4.3 Bids with shorter validity will be rejected as being non-responsive.

4.4 Bid Security in Original shall be furnished as a part of the Technical Bid and shall reach office of ED-Projects, Project department Oil India Ltd at Duliajan on or before 12.45 Hrs. (IST) on the bid closing date. A scanned copy of the Bid Security shall however be uploaded in OIL's E-Procurement portal along with the Technical Bid. The amount of Bid Security shall be as specified in the Forwarding Letter of the Bid Document. Bid without proper & valid Bid Security will be rejected.

4.5 The Integrity Pact must be uploaded in OIL's E-Procurement portal along with the Technical Bid digitally signed by the same signatory who digitally signed the Bid i.e. who is duly authorized to sign the Bid. If any bidder refuses to sign Integrity Pact or declines to submit the Integrity Pact, their bid will be rejected.

4.6 Physical Bids, if any received from the bidders, shall not be considered and will be rejected.

4.7 Bids submitted after the Bid Closing Date and Time will be rejected.

4.8 Bids received through the e-procurement portal shall only be accepted. Bids received in any other form shall not be accepted.

4.9 The bid documents are non-transferable. Bid can only be submitted in the name of the bidder in whose name the User ID and Password have been issued. Unsolicited bids will not be considered and will be straightway rejected.

4.10 Bids shall be typed or written in indelible ink and shall be digitally signed by the bidder or his authorized representative.

4.11 Any physical documents wherever called for, submitted by bidders shall contain no interlineations, white fluid erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such

correction shall be initialed by the person or persons who has/have digitally signed the Bid.

4.12 Any Bid containing false statement will be rejected.

4.13 Bidders must quote clearly and strictly in accordance with the price schedule outlined in "SCHEDULE OF RATES/PRICE, Form SOR/P" of Bid Document; otherwise the Bid will be summarily rejected.

4.14 Bidders shall quote directly and not through their Agent/Representative/Retainer/Associate in India. Bids submitted by Indian Agent/ Representative/Retainer/ Associate on behalf of their foreign principals will not be considered and will be rejected straightway.

4.15 Bidder must accept and comply with the following clauses as given in the Bid Document in toto failing which bid will be rejected –

i) Performance Guarantee Clause
ii) Force Majeure Clause
iii) Tax Liabilities Clause
iv) Arbitration Clause
v) Acceptance of Jurisdiction and Applicable Law
vi) Liquidated damage and penalty clause
vii) Safety, Environment & Labour Law
viii) Termination Clause
ix) Integrity Pact
x) Purchase preference policy-linked with Local Content (PP - LC) notified vide Letter No. O-27011/44/2015-ONG-II/FP dated 25.04.2017 of MoP&NG

5. PRICE BID EVALUATION (Part of BEC) :

The bids conforming to the technical specifications, terms and conditions stipulated in the bidding document and considered to be responsive after subjecting to Bid Rejection Criteria will be considered for further evaluation as given below:

5.1 If there is any discrepancy between the unit price and the total price, the unit price will prevail and the total price shall be corrected. Similarly, if there is any discrepancy between words and figure, the amounts in words shall prevail and will be adopted for evaluation.

5.2 For conversion of foreign currency into Indian currency for evaluation of BidsB.C Selling market rate of exchange declared by State Bank of India, Kolkata CAG Branch, one day prior to the date of priced bid opening shall be considered.

5.3 The bidders must quote their charges/rates in the manner as called for vide "Schedule of Rates/Price (Form SOR/P) as per Part-3, Section III, **Annexure II**

5.4 The Contract will be signed with successful bidder for Engineering, Procurement, Construction & Commissioning, successful PGTR and handing over of the FGGS Plant to the Company (OIL).

5.5 **For evaluation of Bids to ascertain Inter se ranking, the<u>Lump sum price quoted by the Bidders</u> in the Schedule of Rates/Prices of Form SOR/P, comprising the price of Supplies & Services {Total of (I+II)} in Phase-1 and the <u>Lump sum Price</u> quoted by the Bidder in Phase-2 shall be considered. The evaluated price of the Bidders shall be without GST.**

5.6 **The EPC Price shall be calculated as follows :-**

a) Lump sum Price indicated in the Schedule of Rates/Prices of Form SOR/P comprising the price of **Supplies & Services {Total of (I+II)} in Phase-1**

b) Lump sum price quoted by the bidder as indicated 5.5 above is **exclusive of GST.**

c) **The GST:** The GST amount which is the resultant figure (the Quoted Price of the Bidder x* the Prevailing Rate of GST as at Bid Closing Date to be considered for purpose of award.

d) **Total Lump sum EPC Price = 5.6(a) + 5.6(c) and shall form the Total Contract Value (Price) of the Phase-1 only.**
X* is the multiplication sign

6. <u>GENERAL:</u>

6.1 In case bidder takes exception to any clause of bid document not covered under BEC, then the Company (OIL) has the discretion to load or reject the offer on account of such exception if the bidder does not withdraw/modify the deviation when/as advised by the Company (OIL). The loading so done by the Company (OIL) will be final and binding on the bidders. To ascertain the inter-se-ranking, the comparison of the responsive bids will be made subject to loading for any deviation. The Commercial Bids shall be evaluated taking into account the rates quoted in the Price Bid Format.

6.2 To ascertain the substantial responsiveness of the Bid, the Company (OIL)reserves the right to ask the bidder for clarification in respect of clauses covered under BEC also and such clarifications fulfilling the BEC clauses in toto must be received on or before the dead line given by the Company (OIL) failing which the offer will be summarily rejected.

6.3 If any of the clauses in the BEC contradicts with other clauses of the Bid Document elsewhere, then the clauses in the BEC shall prevail.

7. CUSTOMS DUTY:

The supplies under this Contract shall be carried out in PEL/ML areas of the Company (OIL) which have been issued or renewed after 01/04/1999 and therefore, Customs Duty on the imports under this Contract presently shall be Nil for items falling under list of . Bidders should take note of the same while quoting. No Customs Duty is therefore considered for evaluation of bids.

8. PURCHASE PREFERENCE CLAUSE:

8.1 PURCHASE PREFERENCE TO MICRO AND SMALL ENTERPRISES – Not Applicable.

8.2 PURCHASE PREFERENCE LINKED WITH LOCAL CONTENT:
Purchase preference policy (linked with Local Content) (PP-LC) notified vide letter no.O-27011/44/2015-ONG/II/FP dated 25.04.2017 of MoPNG. Refer Instruction To Bidders (ITB) for details of the PP-LC

9. OTHER CONFIRMATIONS FROM BIDDER:

While submitting his bid, bidder will have to provide categorical confirmation to below requirements; otherwise his bid will be rejected.

9.1 The successful Bidder is required to open a 'separate Current Account' with any Scheduled/Nationalized bank in District of Tinsukia /Dibrugarh preferably at Duliajan wherein all receipts and payments in respect of the Contract are to be routed through this account only.

9.2 The RA bil1s of the contractor will be processed when the monthly bank account statement is submitted to OIL along with the bill and it is established that the withdrawn money has been utilized only for the project work. Along with each RA bill the EPC Contractor will have to submit the proof of payments being made to its sub-vendors and sub-contractors.

9.3 If during the course of the project execution, it is established that the project progress is getting affected due to non-payment by EPC to its sub-vendors and sub-contractors then OIL will have the right to make direct payments to these sub-vendors and sub-contractors from EPC contractor RA bill final payable amount (after effecting statutory deductions as applicable) at total and risk and cost of EPC.

9.4 The bidder will not be able to use this account for entering into any type of mortgage/loan/factoring arrangement with other financial institutions during the course of the contract execution with OIL without the written consent of OIL

ANNEXURE-1 TO BEC

Format for Line of Credit from Scheduled Commercial Bank
Confirmation from the Bank for the availability of unutilized line of credit:

We ..... (Name of bank) having our registered office at .... hereby confirm the company M/s ..... (Bidder) having registered office at ..... is having account with our bank. Presently the credit limits of the company are as under:

Item	INR
Sanctioned Line of Credit	
Utilized Line of Credit	
Balance Line of Credit	

We further confirm that we are Scheduled Commercial Bank having Net Worth more than INR 100 Crore.

Authorized Signatory of Bank

ANNEXURE –2 TO BEC

DECLARATION BY BIDDER REGARDING CONCURRENT COMMITMENT

I/We ---------- age------- son of---------- ------ do hereby solemnly affirm and declare as follows for and on behalf of the Firm

LIST OF EXISTING COMMITMENT AND ONGOING WORKS

Sr. No.	Name of Works	Client Name & Address	Work Order Value (INR)	Work executed till date of submission of bid (INR)	Amount of balance work which may fall for execution during the period of 12 months from the date of expiry of the bid validity INR)
1	2	3	4	5	6 (4-5)
	Balance commitments in 12 months from the date of expiry of the bid validity				(INR)
	It is certified that the above particulars furnished are true and correct.If any information given is found to be misleading at a later date OIL will have the authority to take necessary action as per provision of the Contract and as per laid down procedure of the Company (OIL).				

SIGN AND STAMP OF BIDDER (AUTHORISED SIGNATORY HAVING POWER OF ATTORNEY)

Note: Accuracy level of balance commitments as per total of column 6 above should be within +/- 10%

END OF VOLUME-1PART-2

&&&&

VOLUME1 Part-3

SECTION - III

ANNEXURE- II to Special Conditions of Contract

PREAMBLE TO SCHEDULE OF RATES/PRICE

1. The project will be executed in two phases. Phase-1 will be mandatory and Phase-2 will be optional based on requirement from OIL. The bidder shall quote the LUMPSUM PRICE for the TWO PHASES separately.

2. Bidder's quoted prices shall be strictly as per various FORMS included under Schedule of Rates/ Prices. Bidder shall quote LUMPSUM PRICE for entire scope of work including Pre-Engineering Survey, Detailed design/ engineering based on Design Basis, Scope of work & Functional specification, Procurement, Manufacturing & Delivery, Fabrication and supply, site grading and leveling, Construction (Civil and Structural),Transportation, Erection / Installation, Piping, Hook-up to the systems, Painting, Instrumentation, Electrical works, Testing, Pre-commissioning and Commissioning after successful completion of 3 months continuous Performance Guarantee Test Run (PGTR) of the total System and other works as indicated above and the quote shall be **inclusive of all taxes**, duties, octroi, cess, etc **except GST.** This LUMPSUM PRICE may also be referred as Engineering, Procurement, Construction & Commissioning Basis (EPC) and EPC shall include supply of 2 years mandatory spares.

3. The price quoted shall be lump sum price on turnkey basis. Unless the basic parameter changes or additional/ extra requirements are made, total payments to be made to the contractor shall be limited to lump sum price indicated, irrespective of the progressive payments made during execution based on the split up of price.

Obligation of the Contractor is not limited to the quantities that the Contractor may either indicate in the Schedule of Breakup of Lump sum Prices along with his bid or in further detailed break of lump sum prices furnished after award of work. Contractor shall carry out entire scope of work/supplies as detailed in various sections/volumes of the Bidding Document within the quoted EPC Price (Contract Price).

4. Lump sum prices quoted by the Bidder shall include cost of any other supplies/work(s) not specifically mentioned in the Bidding Document but necessary for the efficient, trouble free operation of the Plant and to make this package job complete.

5. Bidder to note that the Lumpsum Price as stated in Schedule of Rates/Price (Form SOR/P) shall be considered and shall form the Total Price payable under the Contract as the **LSTK/EPC Price before GST.** The GST computed as per **Para 6.5(d)** of Price Bid Evaluation of BEC shall be added to the quoted LSTK/EPC Price to ascertain the Total Contract Value (Price).The Spares for start-up/commissioning and mandatory spares required are in CONTRACTOR's scope and are included in their above quoted EPC Prices.

6. Bidder shall also furnish the Cost Break up of Schedule of Rates/Price as per Annexure-A **which will not be used for Price Evaluation purpose**.

7. Bidder shall indicate foreign currency considered by them for overseas components.

8. Bidder shall ensure that Lump sum prices quoted include the complete scope of supply/work in totality as below :

i) **Engineering including but not limited to -**

a) Pre-Engineering Survey, Soil testing. Topographical survey & Report Generation
b) EERA, QRA, HAZOP and SIL study
c) Detailed engineering including preparation of PFD/UFD, plot plan, simulation, heat & mass balance, hazardous area identification, equipment & piping layout diagram, stress analysis, mechanical design, piping design, civil engg. design, electrical & instrumentation engg. design, Engineering drawings for all items, based on Design Basis, Scope of work & Functional Specifications, Detailed fabrication drawings, MTO etc, for all Equipments/ Vessels and package systems.
d) Provision of necessary supports for obtaining statutory approvals for individual equipment / instrument.
e) Submission of list of BOM (Bill of materials) in soft and hard form against all materials & equipments installed at the FGGS along with quantities, manufacturer details, technical specifications etc.
f) Submission of as built live 3D computer animated walkthrough model of the FGGS (30%, 60%, 90%).
g) Submission of Quality assurance, Quality Control, Quality Plan and Inspection plan.
h) Submission of HSE Plan.

ii) **Procurement and Supply including but not limited to -**

a) Procurement of all materials whatsoever required for the fabrication, site inspection, supply of equipment along with associated piping, instrumentation. Structural platforms, ladders / stairs, support etc. within the specified battery limits and delivery of the complete system at site.
b) Procurement and supply of package systems.
c) Procurement and supply of Mandatory spares.

d) Fabrication of all items covered in Bid Package including Surface Preparation and Painting.
e) Packing, Transportation and supply of all items to site.
f) Inspection and expediting for procurement
g) Supply of All special tools and tackles as required and recommended by bidder

iii) **Construction,Fabrication,Erection/Installation and Commissioning) including but not limited to -**

a) Unloading of all materials, storage at site in a safe place and in-situ transportation.
b) Construction supervision and assistance in project management
c) All site work including site grading and leveling, earth-filling, Construction (Civil and Structural), Site welding, Erection / Installation, Piping, Hook-up to the systems, Painting, Instrumentation, Electrical works and Testing including third party inspection (TPI).
d) Pre-commissioning and Commissioning after successful completion of 3 (three) months continuous Performance Guarantee Test Run (PGTR)
e) Operator training and technical support during test run

9. Title of material other than finished goods shall not be transferred by Contractor to OIL at the time of supply and brought to site and shall only be deemed to be transferred by Contractor upon final completion. Only capital goods/ finished goods which are sold & consigned to OIL and for which Form-C shall be issued by OIL, Contractor shall supply the title to OIL, at the stage of ex-works.

ANNEXURE- II to Special Conditions of Contract

SCHEDULE OF RATES/PRICES
Form SOR/P

Sr. No.	Description	Unit	Total Quoted Price = (i + ii)	
			Amount in Foreign Currency (FC) (i)	Amount in Indian Rupees (INR) (ii)
I. COST OF SUPPLIES: Phase-1				
1	**i) Total Cost of Supplies / Material** covering procurement, Fabrication and supply for the complete project on EPC basis for entire scope of Project as given in bidding document including customs duty,inland freight, insurance and all other applicable taxes and duties **but excluding GST.** **Note 1: While quoting the Bidder should refer to Schedule of Payments.** **2. Total CIF Indian Port value of imported items included in price of supplies/ material under (1) above**	Lumpsum		
II. COST OF SERVICES: Phase-1				
2	**Total Cost for Engineering** inclusive of all applicable Taxes, duties except GST	Lumpsum		
3	**Total Cost of Services** for entire Work including Construction, Fabrication, Erection, Installation & Commissioning and Performance Guarantee Test Run (PGTR), inclusive of all applicable Taxes & duties except	Lumpsum		

	GST			
III. Phase-2:				
4	**Complete supply of materials, services, erection & commissioning of equipment for additional train of 2.5 MMSCMD gas including indirect Bath heater, Seperator, piping and instrumentation and integration & hook up with the control room.** inclusive of all applicable Taxes, duties except GST **Note: The quoted price will be for evaluation purpose only. The contract will be awarded with the quoted price for Phas-1 only. Looking into the field development plan of Baghjan gas field, OIL will award the Phase-2 job by January 2021.**	Lumpsum		
5 A	**TOTAL Amount quoted in Foreign Currency (1+2+3+4)**			
5 B	**TOTAL Amount quoted in Indian Currency (1+2+3+4)**	Column Total		

Note: 1. The price quoted shall be inclusive of all applicable Taxes, duties except GST

2. For any particular item, the bidder can quote either in INR or in Foreign currency or in Both in case there is a mix of indegeneous and overseas componenet within that item.

3. The bidder shall mention the foreign currency quoted by them in the offer.

4. The bidder shall quote both in words and figure for all items as well as the total value.

ANNEXURE- II to Special Conditions of Contract

A) SCHEDULE OF PAYMENTS : FOR PHASE-1 ONLY

Progressive Payments to the Contractor shall be made for the activities as stated below to the extent of weightages mentioned against each on basis of total EPC price.

SL No		Description of Work	Wt %	Payment limited to
A		PROJECT MANAGEMENT and ENGINEERING		10% of EPC Price
1		Submission and Approval of Project schedule, WBS breakup (Bar Chart with weighted percentage (breakup uptoLevel-4), Billing Schedule, communication matrix, responsibility matrix for the whole project), Project Organograms with supporting documents, all Quality and HSE documents	10%	
2		Construction of Site office, storage yard, Fabrication yard etc and physical mobilization of equipments/Tools and tackles required for construction and ready to start site work to the entire satisfaction of EPMC/ OIL.Details of facilities and equipments/tools etc. to be submitted and shall be agreed by EPMC/ OIL.	10%	
3		Engineering- Submission ofIFA documents (Issuedmfor approval), approval under code-2 by EPMC/OIL and presentation of Computer animated AEC Walkthrough.	30%	
4		Engineering- EERA, QRA, HAZOP study, SIL study etc. for GGS and close-out	10%	
5		Engineering- Submission of AFC/IFC (Approved for Construction/ Issued for Construction) documents under code-1	20%	
6		Engineering- Submission of As-Built documents, Operation and Maintenance manual	10%	
7		Engineering-Completion of all works in all respects and against issuance of completion certificate.	10%	

SL No		Description of Work	Wt %	Payment limited to
B		**PROCUREMENT**		**45% of EPC Price**
8	**<u>Procurement:</u>** **8.1.** Placement of Purchase Orders (List of raw materials for major items/critical items, Package systems, Miscellaneous items and Bar chart with weighted percentage will be agreed after award of contract and receipt of BOM) **against submission of Bank Gaurantee (BG).** **8.2.** Verification of materials by OIL/EPMC or 3rd party and certification(List of raw materials for major items/critical items, Package systems, Miscellaneous items and Bar chart with weighted percentage will be agreed after award of contract and receipt of BOM) **against submission of Bank Gaurantee (BG).** 8.3. Ready for Delivery of items (List of raw materials for major items/critical items, Package systems, miscellaneous items and Bar chart with weighted percentage will be agreed after award of contract and receipt of BOM). **Note: However, the party may claim the entire payment under Para 8.1, 8.2 & 8.3 above after completion of job as per Para 8.3 against proof of shipment / dispatch of materials.**	15% 15% 20%	
9	Procurement- Delivery of items at site with relevant/document test certificate (List of raw materials for major items/critical items, Package systems, Miscellaneous items and Bar chart with weighted percentage will be agreed after award of contract and receipt of BOM) Against certification by OIL/EPMC	40%	
10	Completion of erection/ construction activities (Hydro test and pre- commissioning) and total plant ready for commissioning	10%	

SL No		**Description of Work**	**Wt %**	**Payment limited to**
C		**CONSTRUCTION, INSTALLATION AND COMMISSIONING**		**40% of EPC Price**
11		Construction- Fabrication of all items, NDT, Radiography, 3rd party inspection, Hydro test, Surface Preparation and Painting as certified by EPMC/3rd party on pro-rata basis as per the approved schedule of activities	30%	
12		Construction- All site work including site grading and leveling, earth filling, Construction (Civil and Structural) and Site welding, Erection / Installation, Piping, Hook-up to the systems, Painting, Instrumentation, Electrical works and Testing as certified by EPMC/OIL on pro-rata basis as per the approved schedule of activities.	55%	
13		Construction- Systems hydro test and pre-commissioning as certified by EPMC/OIL on pro-rata basis as per the approved schedule of activities. Organizing training for OIL's personnel for Operation and Maintenance of the plant.	5%	
14		Successful Commissioning of Baghjan FGGS.	10%	

SL No		Description of Work	Wt %	Payment limited to
D		**PGTR**		**5% of EPC Price**
15		PGTR- as certified by EPMC/ OILon pro-rata basis as per the approved weighted Billing schedule.	60%	
16		PGTR-Successful Trail run of the Baghjan FGGS.	40%	

B) NOTES TO PAYMENT SCHEDULE

i. A weighted Billing Schedule covering all the Project activities shall be generated in line with the Payment Schedule and based on the approved weighted Bar chart- L4 schedule. The Billing schedule shall be agreed upon by EPMC/OIL. The Billing schedule shall be updated from time to time as per the approved BOM and the weightages shall be revised accordingly.

ii. Payment shall be made for Sl. No. 1, 2 4, 6 & 7 upon completion of these activities and acceptance by EPMC/OIL.

iii. Monthly Payment shall be made for Sl. No. 3 & 5 on prorata basis depending upon progress of each event as per approved Billing schedule.

iv. Monthly payment for Sl. No. 8, 9, 10 shall be made on the basis of physical progress of the work of each activity as per approved Billing schedule.

v. Monthly payment for Sl. No. 11 & 12 shall be made on the basis of physical progress of the work of each activity as per approved Billing schedule.

vi. Payment shall be made for Sl. No. 13 & 14 upon completion of these activities and acceptance by EPMC/OIL.

vii. Payment for Sl. 15 shall be made on monthly installments basis depending upon job progress as per approved Billing schedule.

viii. Payment for sl. 16 shall be after successful completion of 3 months of uninterrupted trouble free operation of the plant to the desired performance level & handing over FGGS to OIL.

ix. Payment to Phase-2 will be decided at the time of awarding the Phase-2 part of the contract.

Construction of Group Gathering Station(GGS) at Baghjan, Assam **ANNEXURE-A1**

COST BREAK-UP

			Ex-Works Price/ FOB Price	Ex-Works Price/ FOB Price	Site work	Installation & Commissioning	Taxes, duties, levies considered by bidder other than GST	Total Price	Total Price	CIF (Indian) port component involved in Total Price for issue of Essentiality Certificate	CIF (Indian) port component involved in Total Price for issue of Essentiality Certificate
S No.	**System / Descriptions**	**Estimated Quantity**	**In INR**	**Foreign currency .....**				**Total INR**	**Total Foreign Currency .....**	**INR**	**Foreign Currency .....**
1	**2**	**3**	4 (i)	4 (ii)	5	6	7	8 (i)	8(ii)	9 (i)	9(ii)
A.0	**MECHANICAL EQUIPMENTS**										
A.1	**INLET MANIFOLD SYSTEM**										
A.2	**ELECTRICAL HEATING SYSTEM**										
A.3	**NAG SEPARATION AND STABILIZATION SYSTEM**										
A.4	**MULTIPHASE FLOW METER**										
A.5	**KOD & GAS METERING SYSTEM**										
A.6	**EFFLUENT TREATMENT SYSTEM**										
A.7	**FIRE FIGHTING SYSTEM**										

A.8	FUEL GAS TREATMENT SYSTEM										
A.9	INDUSTRIAL & POTABLE WATER SUPPLY SYSTEM										
A.10	HP/LP FLARE SYSTEM										
A.11	CLOSED DRAIN SYSTEM										
A.12	INSTRUMENT AIR / UTILITY AIR SYSTEM										
A.13	POWER HOUSE/ ELECTRICAL SYSTEM										
A.14	CHEMICAL INJECTION SKIDS										
A.15	CAPTIVE POWER PLANT										
B.0	PIPING AND VALVES										
C.0	STRUCTURALS WORKS										
D.0	CIVIL WORKS										
E.0	ELECTRICAL WORKS										
F.0	INSTRUMENTATION and TELECOM WORKS										
G.0	MISCELLANEOUS (PH -1)										
H	PHASE-2 WORKS										
H.1	INDIRECT BATH HEATERS										
H.2	NAG SEPARATION AND STABILIZATION SYSTEM										
H.3	PIPING AND VALVES										
H.4	STRUCTURALS WORKS										
H.5	CIVIL WORKS										

H.6	**ELECTRICAL WORKS**										
H.7	**INSTRUMENTATION WORKS**										
H.7	**MISCELLANEOUS (PH-2)**										