Amendment no. 3 to tender no. SKI9804P19/08 for FLAME PROOF ELECTRIC MOTOR DRIVEN PROGRESSIVE CAVITY POSITIVE DISPLACEMENT SCREW PUMP FOR BOWSER LOADING PURPOSE, Quantity= 28 nos.

- 1.0 Bid Closing Date against tender no. SKI9804P19/08 has been extended till 01.02.2019.
- **2.0** Clause no. 1.0 i.e. scope of supply and 8.0 i.e. prime mover of annexure –AAA (detailed material description) has been amended as under:

SI No	Description	Detail Specification
(Clause)		
1.0	Scope of supply:	FLP ELECTRIC MOTOR DRIVEN Progressive Cavity SCREW PUMP set complete with Flexible coupling, Safety Relief
		valve, Flexible Hose for suction (Length: 2 M) & delivery end (Length: 3 M) with ANSI B 150 class end connections,
		complete set mounted on robust constructed self- loading OIL FIELD Skid for frequent inter location movement.
8.0	Prime mover:	The pump shall be directly coupled with suitable FLP Electric Motor.
		Details of Motor:
		The motor shall have the following specifications.
		Type:
		1. The motor shall be 3 phase, squirrel cage, AC Induction motor conforming to BIS 325
		2. The motor shall be FLAMEPROOF type, suitable for installation in Zone 1 area and Group IIA and IIB type gas. The
		motor shall be certified by CIMFR (Central Institute of Mining and Fuel Research) or any other NABL accredited Govt. approved test laboratory.
		Rated output: To be provided by the bidder (The motor rating shall be so designed that it is minimum 15% higher
		than the respective absorbed power required for full rated capacity load handling). Pump and motor calculations
		to be submitted with the offer.
		Enclosure: FLP, TEFC with Degree of protection = IP55 or better
		Insulation: Vacuum pressure impregnated, Class F with winding temperature rise limited to value specified for

class B insulation

Cooling: Self air cooled through internal bi-directional fan of motor

Site Condition: Suitable for 45 deg. C max, 5 deg. C min., 150 m Alt, 95% RH

Voltage: Motor shall be suitable for 415 +- 10% volts, 3 Phase, 50 cycles, AC supply and should withstand high voltage fluctuation.

Frequency: 50 Hz +- 3%

No of phases: Three

RPM: To match driven load

Duty : Continuous (S1)

Mounting: Horizontal, foot mounted

Bearing: Ball/Roller bearing at DE & NDE

Type of Drive: Direct Coupled

Rotation: Bi-directional

Starting: Suitable FLP Type Starter (DOL type for motors up to 12.5 HP; YD type for motor above 12.5 HP) shall be supplied along with the motor.

Switching: 15 Starts /Hr.

Terminal Box: FLP Cable termination box with brought out terminals suitable for terminating PVCA copper cables of proper size as per rating of motor and cable entry holes (01 no. for DOL; 02 no's for YD starter). The brought out terminals shall be of brass and mounted on non-hygroscopic insulation (FRP or DMC) suitable for tropical climate.

Glands: Adequate nos (depending on type of starter) of FLP, weatherproof, heavy duty nickel plated brass glands shall be supplied with the motor. The FLP glands shall be suitable for installation in Zone 1 area and Group IIA and

IIB type gas. The glands shall be certified by CIMFR (Central Institute of Mining and Fuel Research) or any other NABL accredited Govt. approved test laboratory.

Earthling: Two no's of earthing studs to be provided on both sides of the motor. Earthing system for the motor shall be as per the IS: 3043.

Lifting Eye: One no. lifting hook shall be provided for lifting the motor.

Markings: Name plate details with name of manufacturer, frame size, rated voltage, rated output, current, frequency, type of duty, class of insulation, no. of phases, speed in rpm at rated output, degree of protection, winding connections, amb temp, bearing sizes, lubricant, lubrication material and year of manufacture

- Test laboratory certification details

Paint: Two coats of DA grey paint

Ref BIS: IS325, IS2148, IS5572, IS9570 with latest amendments

Make: Bharat Bijlee/ Crompton Greaves/ KEC/Siemens/NGEF / Marathon Electric.

General Notes on motor:

1. Motor shall be tested as per BIS and test certificates shall be furnished with the supply.

2. The FLP motor and the FLP gland(s) must be suitable for installation in Zone 1 area and Group IIA and IIB type gas. These must be certified by CIMFR (Central Institute of Mining and Fuel Research) or any other NABL accredited Govt. approved test laboratory. Copies of test certificates for the FLP motor, FLP Starter and FLP cable glands must be furnished with the offer. Without these documents the offer shall NOT be considered for evaluation. The motor(s) shall be guaranteed for 1 (one) year from the date of supply. Guarantee cards shall be duly signed and stamped by the supplier and shall be provided along with the supply.

Documents (Electrical Items):

1. Bidder shall furnish every detail of the electrical items in their offer as per the above specifications IN THE SAME ORDER. All of the above shall form part of the order. Hence any deviations must be clearly mentioned which shall be securitized for acceptability. Specific type and make of components should be mentioned clearly. No deviation shall be allowed at the time of supply and in such case the order will be cancelled without any liability to OIL. In case of such cancellation OIL may recover from the bidder the cost incurred by oil in processing the tender till the time of cancellation.

- 2. All electrical items shall be procured from OEM or their authorized dealers only. In case of dealers copies of valid dealership certificates shall be furnished with the offer without which the offers shall not be considered for evaluation.
- 3. The following documents shall be submitted with the offer
 - # GA and dimensional drawing of all electrical equipment.
 - # Technical details of the Motor.
 - # Copies of test certificates of the FLP Motor, Starter and Cable Gland
- 4. Four bound sets of the following documents, shall be submitted with the supply
 - # Approved GA and dimensional drawing of all equipment.
 - # Technical details of the Motor.
 - # Copies of laboratory test certificates for flameproof items.
 - # Electrical Circuit Diagram / Schematic Drawing of the Starter.
 - # List of recommended spares for two years.
 - # All test certificates.
 - # Guarantee Certificates

Transportation (Electrical Item):

During transportation all electrical equipment are to be suitably packed to avoid water ingress and transit damage.

3.0 All other terms and Conditions remain unchanged.