OIL INDIA LIMITED
(A Govt. of India Enterprise)
P.O. Duliajan-786602, Assam
E-mail:material@oilindia.in, **Fax No.**91-374-2800533

ANNEXURE-I

Tender No. : DID3900L17/L5
Tender Date : 21.02.2017

Item No./ Mat. Code	Material Description	Quantity	UOM
10 0C000161	A. APPLICATION AND DETAILED TECHNICAL SPECIFICATIONS NGRs are used in industrial Power Systems for resistance grounding of star connected generators and transformers. NGR is connected between ground and neutral of transformers, generators, busbars and grounding transformers. NGR limits the faults current to value enough to operate protective relays, thereby preventing unwanted damage to the system. B. CONSTRUCTION The NGR unit shall consist of two parts: 1) the resistor grid enclosed in a metallic enclosure, and 2) the NGR monitoring system, enclosed in a separate chamber of the same enclosure/panel. 1) Resistor and resistor enclosure a) Resistor assembly The resistive element/grid material shall be low temperature coefficient, resistor grade stainless steel, resistor grade 1JR (or Cu-Ni, Ni-Cr or Fechral) of sufficient mass to withstand the rated current and prescribed duty. The resistive element/ resistor grid shall be made of unbreakable, corrosion proof jointless elements wire wound around a ceramic (or micanite) core supported on a porcelain pad. The resistors shall be mounted in heavy gauge corrosion resistant support frames, using stainless-steel hardware. The entire resistor assembly shall be mounted and supported on glazed insulators rated for the system voltage. All resistor terminals and interconnections between resistor units shall be stainless-steel using stainless steel hardware including lock washers. High current connections shall be spot or TIG welded as appropriate. Connections between resistors and bushings shall be solid copper or stainless steel bars. The unit shall be designed to permit the expansion of supporting rods when submitted to high operating temperatures. With lower quality resistance material (high temperature coefficient), the change in resistance value will be excessive. This may result in insufficient fault current to actuate the earth fault detection relay and the fault will stay on the system and eventually destroy the resistor and whatever distribution equipment it is protecting. Resistor grid assembly mounting structure shall be properly supported to absorb vibration and stress during faults and transit. Neutral cable shall be brought to one terminal of the NGR unit. The other end of the NGR unit shall be suitable for connection to ground through earth electrode. These end connections of the resistor unit will be brought out to terminal box or through top or side mounted high voltage bushings. Stand -off / support insulators shall be ceramic or epoxy resin cast. The resistor grid shall be suitable for Rated Voltage : 415/#3 Volts Rated Current : 750 mA	2	NO

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	Rated Resistance : 330 Ohms Time Rating : 10 Sec. Temperature Rise : 375 Deg. C. Location : Indoor Tolerance : + / - 10 % Degree of Protection: IP -33 Applicable Standard: IEEE -32: 1972 b) Resistor enclosure panel Resistor grid assembly shall be housed in an enclosure made of heavy gauge sheet steel (= 2mm), self supporting and floor mounted, cubicle type, indoor, dust and vermin protected. Enclosure shall be supported on steel support channels, suitable for fixing with grouting bolts. Sheet steel shall be used on a rigid framework of suitably sized steel angles and channels, welded or bolted together with stainless-steel hardware. Front of the panel shall be hinged on the left side to serve as an inspection and service door, fitted with clamps and special non-deteriorating neoprene gaskets. Enclosure shall be provided with bolt-on louvered covers (fitted with fine wire mesh inside) on sides for circulation of air. The top of the enclosure shall be embossed with stiffening ribs. Lifting lugs shall be provided on the top of panels. Bottom shall be elevated to minimum 6 inches/15 cms above the base of the unit. Bottom shall be screened for maximum cooling of resistors. Suitable earthing studs are to be provided on two sides. Protection rating of the enclosure shall be IP 42, using roof shaped louvers shielded with wire mesh (inside). A durable corrosion resistant nameplate permanently attached to one side cover shall show the manufacturer and the complete rating. Clear warning labels (danger, high voltage, earthing etc.) shall also be fixed at appropriate places. Enclosures shall be suitably cleaned, primed and powder coated/ spray painted, colour of paint light gray to shade 631 as per IS: 5. One strip type panel heater shall be installed in the resistor panel. The heater shall be provided with a adjustable setting thermostat. Limiting Dimensions (L X B X H) = 600 mm x 500mm x 600 mm 2) NGR monitoring system NGR monitoring system shall be placed above the resistor enclosure. Sufficient physical gap (minimum 10 cms) shall be allowed so that air will circulate freely above the resistor enclosure. Dimensions of the panel for NGR monitoring will be same as the resistor enclosure. Functioning of the NGR MONITORING system is as follows: Ground-fault protection, coordination, and annunciation systems depend on the integrity of the NGR. If the NGR fails, these systems become inoperative. In addition, an open NGR causes the system to become ungrounded and exposure to transient overvoltages is possible. Monitoring of the NGR shall include the following considerations: 1) Monitoring the NGR connections to the neutral and to the ground bus- for		

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	continuity (as resistors are unlikely to fault on short circuit) 2) Monitoring the neutral/NGR current through a residual current CT provided in the NGR path 3) Monitoring the neutral-to-ground voltage 4) Audio- visual annunciation of ground fault and NGR fault The NGR monitor shall measure changes in NGR resistance, current in the neutral and neutral-to-ground voltage. The NGR monitor shall coordinate these three measurements and operate output contacts when an NGR fault or a ground fault is detected. NGR monitor shall respond to fundamental-frequency current and voltage, and it is not influenced by harmonics. The output contacts shall be used to operate alarms (buzzer) and visual annunciation devices. Potential free output contacts (minimum 02 pairs) shall also be provided for future use, such as tripping of main breakers etc. Main components of the NGR monitoring system shall include, but not limited to, the following: a) Monitor for Ground Fault & NGR (with band pass filter for frequencies other than 50 Hz) b) Coupling device/sensing resistor for NGR Monitor c) Residual current sensing C. T. for NGR Monitor d) Output relay with sufficient nos. of potential free NO and NC contacts e) Alarm indicator & operator panel with visual annunciation (with LED lamps) for NGR fault and ground fault and buzzer f) Incoming 230/240 V, 50 Hz AC supply with sufficiently rated HRC fuse for power supply to monitor panel NGR monitoring system shall be housed in an enclosure made of heavy gauge sheet steel (= 2mm), self supporting, cubicle type, indoor, dust and vermin protected. The enclosure shall be supported on steel support angles/channels, suitable for fixing (with nuts and bolts) on top of the NGR housing panel. At least 6 (six) inches gap shall be maintained between the top of the NGR housing and bottom plate of the NGR monitoring system panel, for maintaining air flow. Sheet steel shall be used on a rigid framework of suitably sized steel angles and channels, welded or bolted together with stainless-steel hardware. Front of the monitoring panel shall be hinged on the left side for easy access to the components inside and fitted with clamps and special non-deteriorating neoprene gaskets. The top of the enclosure shall be slightly overhung and sloped. It shall be embossed with stiffening ribs. Lifting lugs shall be provided on the top of panels. Suitable earthing studs are to be provided on two sides. Protection rating of the enclosure shall be minimum IP 53. A durable corrosion resistant nameplate permanently attached to one side cover shall show the manufacturer and the complete rating. Clear warning labels (danger, high voltage, earthing etc.) shall also be fixed at appropriate places. Enclosure shall be suitably cleaned, primed and powder coated/ spray painted, colour of paint light gray to shade 631 as per IS: 5.		

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	The buzzer and LED indication lights/test/reset buttons shall be mounted on the front door. Suitable engraved, corrosion resistant legends shall be used for each component/function. Monitor windows for remote indicator alarm and operator panel will also be mounted on the door. As the components of NGR monitoring system shall be wired up to the NGR, steel rigid conduits shall be used to run the signal cables from NGR to monitoring panel. It may be noted that residual current transformer (for sensing NGR current) and coupling device/sensing resistor may be required to be installed in the NGR panel for maximum effectiveness. Conversely, neutral cable shall be first routed through the monitoring panel and then to NGR. In such a case, the monitoring panel shall be provided with suitable bushings/ terminal box (as given in the description for NGR panel) for termination of the neutral cable. Elements connected to the NGR are subject to line-to-neutral ground-fault voltages and must be evaluated in all failure modes. Coupling devices must not transfer hazardous voltages to associated monitoring equipment. Atmospheric electrical conditions, such as the presence of charged clouds, can affect an electrical substation feeding overhead lines. An NGR monitor used in this application must be immune to these conditions. The measurements made by an NGR monitor can be useful when evaluating system problems. An analog signal can be used to provide local earth-leakage-current metering. An NGR monitor with a communications interface can allow data access with a local PC or with a network. NGR Monitor panel Limiting Dimensions (L X B X H) = 600 mm x 500mm x 600 mm Technical data for NGR monitoring panel components: Components like NGR monitor, coupling device and current transformer shall be of one make only for compatibility, from either of the following manufacturers. 1) Bender, USA, 2) Startco/Littelfuse, Canada (Littelfuse SELCO- India), 3) i-Gard, Canada a) Monitor: (Model nos.: Bender- "RC48N" / Startco- "SE-325" / i-gard- "Sigma") Supply voltage 230-250 VAC, 50 Hz Response value, voltage measurement adjustable from 20 V to 400V Response value, residual current adjustable from 0.1 A to 10 A Response delay adjustable 0.1 s to 2 s Switching elements (alarm relay) 2 Form C contacts Rated contact voltage AC 250 V / DC 300 V Limited making capacity AC/DC 5 A Switching elements (GFA, NRA) 1 N/O contact each Rated contact voltage AC 250 V / DC 300 V Limited making capacity AC/DC 5 A		

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	Test of the electromagnetic compatibility (EMC) Immunity according to IEC 62020 Emissions according to EN 50081 Emissions according to EN 55011/CISPR11 Class A b) Coupling device/sensing resistor for NGR Monitor: As per manufacturer's design and catalogue c) Residual current sensing C. T. for NGR Monitor Internal dia: >= 70 mm Rated voltage: >800 V Rated primary residual current: 10 A Rated secondary residual current: 0.01 A d) Output relay with sufficient nos. of potential free NO and NC contacts The relay shall be used for initiating audio-visual alarm (or shutdown of the main breaker of generator or transformer). Relay shall be contactor type. No plug-in type relay shall be used. The make of the relay shall be Telemecanique (model TeSys, D or K model)/ GE / Siemens/Legrand/L & T/ABB/Indo-Asian e) Alarm indicator & operator panel with visual annunciation for NGR fault and Ground fault and buzzer Suitable alarm indicator and operator panel with LED indication lamps for Ground fault and NGR fault annunciation and push buttons for test and reset functions along with buzzer shall be installed in the monitor panel. Visual annunciation for NGR fault and ground fault will be through LEDs (labeled "NGR Fault" and "Ground Fault"). LEDs shall be of suitable voltage, size 22.5 mm. Make-Siemens/ L&T/ BCH/ Binay/ Telemecanique. Audio annunciation will be through a buzzer mounted inside the monitor panel. Buzzer shall be suitably rated for continuous duty. Buzzer supply shall be of suitable AC voltage. Make- Siemens/Schneider/BCH/L & T. LEDs and Buzzer shall be mounted on the front door of the monitor panel. Test and reset buttons on the front door of monitor panel shall be provided for testing of the NGR and GFA test circuits from the NGR monitor. Test and reset buttons make-Siemens/Schneider/BCH/L & T. Reset button will silence the buzzer, but the LEDs will remain on till the time fault is detected and cleared. The indication LEDs and test and reset push buttons on the front door shall be in addition and external to the G/F & NGR monitor (which may have these functions built-in). f) Incoming 230/240 V, 50 Hz AC supply with HRC fuse base and link for power supply to monitor panel Power supply to the monitor panel shall be through suitably rated HRC fuse link, MCB and transformers (if required to step down to the voltage level of monitor panel components supply). Separate circuits through fuses shall be used for the monitor and audio-visual annunciation panel. Moulded HRC fuse holders with suitably rated fuse links; make-GE/Telemecanique. MCB make: Legrand, Telemecanique, Havells. Control		

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	transformer make: AE/L&T/Kappa. Separate isolation fuse link and an MCB shall be provided for switching power supply to NGR space heater. Space heater shall be controlled through an adjustable thermostat. 3) General: a) Control wiring shall be done with 1.5 sq mm, flexible copper, 1100 V grade PVC insulated wires approved by ISI, TAC, FIA. All wiring will have tinned copper lugs & terminal blocks as required. Wiring for the residual current CT shall be done with 2.5 sq mm, flexible copper, 1100 V grade PVC insulated wires approved by ISI, TAC, FIA & have copper lugs. Colour code for wires shall be followed as per IS. Ferrules shall be provided for identification of cables. Make of cables: Finolex, Havells, L&T or other reputed make. b) All components shall be labeled for easy identification with metallic embossed identification tags. c) Panels shall be duly tested as per IS: 8623 at manufacturer's works and routine test certificate shall be submitted at the time of final inspection.		
	INSTALLATION & COMMISSIONING		
10	INSTALLATION & COMMISSIONING 1. Installation and Commissioning of the NGR units shall be carried out by the supplier as per NEC, ISI, IE Rules (now superseded by CEA Rules) at OIL's field area around Moran, Assam (India). Services of qualified and competent personnel of supplier are essential during commissioning of the sets. All tools, instruments, test kits, drill machine, vice, hardware, clamps etc. required for the job shall be provided by the supplier. Operational tests of all devices including their settings shall also be carried out during commissioning job by the supplier. Accommodation and travel to site for supplier's all persons shall be arranged by supplier. 2. Party shall carry out all installation jobs which encompass all activities including placing and grouting of the NGR unit at the site, all cabling jobs including terminations at generator/busbar neutral, at the incoming end of NGR and outgoing end to earth electrode from the NGR, all earthing jobs installing of earth electrode, earthing of panels, making of earth pits (as per OIL design) and earth pit enclosure etc. OIL shall supply insulated cables, GI Straps, earth electrodes, lugs and glands and make road crossings with pipes, cable trenches as required for the complete installation and commissioning work. Any other item required for the job but not specified shall be supplied by party without any cost to OIL. 3. All working persons of the commissioning party shall possess valid electrical license issued by licensing board, Assam. 4. The NGR units will be treated as installed and commissioned successfully after successful testing of the unit at OIL's field sites with available load and submission of all documents as per Para B.2 under "B. DOCUMENTS" of electrical specifications and supply of all spares as mentioned under Para "D. SPARES" of electrical specifications.	1	AU

Standard Notes: **(1) VALIDITY : Your offer must be valid for 75 days from the date of bid opening, offer with inadequate validity will be rejected.**

(2) The offer should be submitted in Duplicate.

(3) Any sum of money due and payable to the contractor (including Security Deposit refundable to them) under this or any other contract may be appropriated by Oil India Limited and set-off against any claim of Oil India Limited (or such other person or persons contracting through Oil India Limited) for payment of a sum of money arising out of this contract or under any other contract made by the contractor with Oil India Limited (or such other person or persons contracting through Oil India Limited).

(4) In the event you authorize your dealer/stockist/channel partner to quote on your behalf, the dealer/stockist/channel partner while submitting bid should mention on the body of the envelope that they are submitting bid on your behalf. In the event the dealer/stockist/channel partner do not mention the name of their OEM/principal on the body of the envelope, the offer shall be treated as unsolicited offer and will not be considered for opening. The dealer/stockist/channel partner should take note of above while submitting bid on behalf of their OEM/principal.

(5) For order with F.O.R. Destination term, 100% payment against despatch documents will not be entertained. In this regards please refer payment terms in ANNEXURE-MM/TENDER/LP/01/06.

(6) To evaluate the inter-se ranking of the offers, Assam Entry Tax on purchase value will be loaded as per prevailing Government of Assam Guidelines as applicable on bid closing date. Bidders may check this with the appropriate authority while submitting their bids.

(7) Bidder must mention page no./nos. in every pages of their offer.

(8) Bidders should submit their bids (preferably in tabular form) explicitly mentioning compliance / non compliance to all the NIT terms and conditions of NIT.

(9)Bidder should clearly mention their name and address on the outside of the envelope containing their offer.

(10)Bidders to note that Govt. of India under Micro, Small and Medium Enterprises Development (MSMED) Act 2006, has proclaimed the Public Procurement Policy, 2012 with effect from 1st April, 2012 in respect of procurement of goods and services, produced and provided by micro and small enterprises, by its Ministries, Departments and Public Sector Undertakings for promotion and development of Micro and Small Enterprises. A new Clause on applicability of Public Procurement Policy for procurement of goods from Micro, Small and Medium Enterprises(MSME) in the tender is furnished vide Amendment to General Terms and Conditions for E-PROCUREMENT LCB TENDERS (MM/LOCAL/E-01/2005). Bidders are requested to take note of the same and to submit their offers accordingly.

(11) **Performance Security:**
The successful bidder shall submit Performance Security @10% of PO value within 30 days of receipt of the formal purchase order failing which OIL reserves the right to cancel the order. Bidders should undertake in their bids to submit Performance Security as stated above.
The Performance Security shall be in any one of the following forms :
(a) A Bank Guarantee in the prescribed OIL's format valid for 3(three) months beyond the Warranty period indicated in the Purchase Order /contract agreement.
(b) A Cashier's cheque or Demand Draft with validity of minimum 90 days or as per RBI's guidelines, drawn on "Oil India Limited" and payable at Duliajan, Assam.

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The Performance Security for capital nature items like plant and machinery etc. shall be valid for 12 months from the date of commissioning plus 3(three) months or 18 months from the date of shipment/despatch plus 3(three) months whichever concludes earlier. However, for consumables like chemicals, cement, tubular etc. the Performance Security shall be valid for 12 months from the date of shipment/despatch plus 3(three) months.

The validity requirement of Performance Security is assuming despatch within stipulated delivery period and confirmation to all terms and conditions of order. In case of any delay in despatch or non-confirmation to all terms and conditions of order, validity of the Performance Security is to be extended suitably as advised by OIL.

(12) Materials to be delivered at **OIL INDIA LIMITED, MORAN, ASSAM.** The bidder should clearly mention the delivery destination in the offer; otherwise the offer will be rejected.

Special Notes : A.a) Bidder must be an OEM (NGR panel designer & manufacturer) or an authorized agent/dealer of the manufacturer. Authorized agent/ dealer shall submit valid authorization/ dealership certificate along with the bid. Bids unaccompanied with the relevant credentials are liable to be rejected.

b) As the panel housing NGR panel and protection circuits are to be chemically treated and powder coated, bidder shall also submit credentials establishing availability of minimum Seven Tank Chemical Treatment plant, powder coating facilities and oven for finishing at the manufacturer's works.

c) Bidder must quote for both (i) supply and (ii) installation/ commissioning of the NGR units. NGR panel shall be installed and commissioned by the supplier at OIL's designated places. Supplier will be intimated two weeks in advance for commissioning. Board, lodging and transportation of commissioning personnel will be in the scope of the supplier. Bidder shall quote commissioning charges separately.
All necessary manpower, tools and tackles, instruments etc. shall be in the scope of the supplier.

d) Bidder shall have type test certificates for the following tests for their designed and supplied switchboard/ PCC/ PMCC/NGR panels as per IS: 8623 (with latest amendments) from a test house/ laboratory accredited by National Accreditation Board for testing and calibration Laboratories (NABL), India.
i) Short time current withstand test (50 kA for 1 second)

e) Prices of spares shall be considered along with the prices for NGR units for evaluation of the bids.

Bidder shall submit documentary evidence such as copy of purchase order, completion of installation and satisfactory operation certificate and other necessary details and documents as credentials along with the offer for items (a) & d) above.

f) Quotations are to be sent to Chief Engineer-Electrical (Moran) for technical scrutiny.

g) Packing shall be done properly to avoid transit damage and water/ moisture ingress.

B. DOCUMENTS

1. The following Documents / drawings shall be submitted with the offer:

a) GA drawing of the NGR with enclosure and NGR monitoring panel

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b) Technical literature of NGR and NGR monitoring system
c) Confirmation that the party agrees to all the points mentioned under electrical specification of the NGR system. / Bidder shall mention any deviations or other items/ points not indicated /included in the specifications but deemed necessary for design, Installation and commissioning for efficient control and operation of the NGR and NGR monitoring panel. Acceptance of deviations shall be at discretion of OIL. Type and make of components shall be as per tender.

d) Documents/credentials as per Special Notes Clauses A. (a),(d), (e) & (f) above.

2. The successful bidder shall obtain approval for the following drawings / documents prior to manufacturing of panels within 30 days of placement of order:

a) Documentary evidence from the manufacturer/s of NGR and NGR monitoring system (if separately procured) confirming that the system supplied will meet all specifications as mentioned in the order.
b) Detailed GA drawings for NGR, NGR enclosure and monitoring panel
c) Detailed power & control wiring diagram
d) Component layout drawing showing all components
e) Bill of materials of all components.

3. Three sets per NGR system of following documents shall be submitted in bound form:
a) As built final GA drawings
b) As built detailed power & control wiring diagram
c) Scheme and component layout plan of the unit showing all parts/components
d) Bill of materials of all components
e) Technical literature/catalogues of NGR and components of NGR monitoring panel
f) O&M manual for NGR and Monitoring panel.
g) All test certificates (Routine Test certificates/reports) from manufacturers of the NGR as well as NGR monitoring system for tests carried out to establish compliance with the declared parameters.

C. GENERAL NOTES FOR ELECTRICAL ITEMS AND WORKS:

1. In case of an order the complete electrical specification as mentioned in the tender shall be mentioned in the order. However, deviations from tender specifications, if mentioned by bidder in their offer and if accepted by OIL in writing, shall also be mentioned in the order.
2. In the event of an order the bidder will submit all documents as per Para B.1 under "B. DOCUMENTS" for OIL's approval.
3. The manufacture of the unit shall start only after written approval of the drawings/ documents (as per Para B.1) by OIL.
4. In case party cannot submit documents complying with all points mentioned in the order the order will be cancelled without any obligation on part of OIL.

D. SPARES

Following spares shall be supplied by the party along with the NGR units. The costs of these spares shall be separately quoted and costs will be used for evaluation of bids.

1. Monitor for Ground Fault & NGR- 01 (one) no.
2. Coupling device/sensing resistor for NGR Monitor- 01 (one)no.
3. Residual current sensing C. T. for NGR Monitor - 02(two)nos.
4. Output relay with NO and NC contacts- 01 (one) no.
5. Colour LEDs (complete) set for "NGR Fault" and "Ground Fault" indication- 4 (four) no.

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each

E. INSPECTION AND TESTING

All the routine tests of the NGR monitor and NGR monitoring panel shall be witnessed by OIL engineers at manufacturer's works. The routine test will include the following minimum tests/measurements: -
1. Physical checks & Operation check of all components
2. HV test of monitoring panel
3. Insulation tests (before and after HV tests).

Intimation for inspection for each item must be sent to OIL at least 30 days in advance.
Any modification suggested during inspection, to comply with order specs, shall be carried out by supplier at no additional cost. Supplier shall affect dispatch of the unit to OIL, Moran only on receipt of OIL's dispatch advice. However inspection will be at OIL's discretion.

F. COMMISSIONING

1. Installation and Commissioning of the NGR units shall be carried out by the supplier as per NEC, ISI, IE Rules (now superseded by CEA Rules) at OIL's field area around Moran, Assam (India). Services of qualified and competent personnel of supplier are essential during commissioning of the sets. All tools, instruments, test kits, drill machine, vice, hardware, clamps etc. required for the job shall be provided by the supplier. Operational tests of all devices including their settings shall also be carried out during commissioning job by the supplier. Accommodation and travel to site for supplier's all persons shall be arranged by supplier.

2. Party shall carry out all installation jobs which encompass all activities including placing and cement grouting of the NGR unit at the site, all cabling jobs including terminations at generator/transformer/busbar neutral, at the incoming end of NGR and outgoing end to earth electrode from the NGR, all earthing jobs installing earth electrode, earthing of the NGR panels, making of earth pits (as per OIL design) and earth pit enclosure (either pre-cast RCC or brick-laid with cement/mortar with cover) etc.

Chemical earth electrodes shall be used for obtaining as minimum earth resistance as possible. PVC insulated aluminium cables shall be used for connection of the neutral point at the NGR unit to the earth electrode. All cables, lugs, glands and other cabling accessories required for earthing shall be supplied by the party.

OIL shall make road crossings with pipes, cable trenches as and when required for the installation and commissioning work.
Any other item required for the job but not specified shall be supplied by party without any cost to OIL.

3. All working persons of the commissioning party shall possess valid electrical licenses/permits issued/vetted by the Licensing board, Assam.

4. The NGR units will be treated as installed and commissioned successfully after successful testing of the unit at OIL's field sites with available load and submission of all documents as per Para B.2 under "B. DOCUMENTS" of electrical specifications and supply of all spares as mentioned under Para "D. SPARES" of electrical specifications.

G. GUARANTEE

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NGRs and monitoring panels shall be guaranteed for 12 months after commissioning or 18 months after supply, whichever is earlier.

H. DELIVERY:

Materials are to be supplied by the supplier within 4 months after receipt of LOA/firm order. Supplier has to complete installation and commissioning jobs for all items within 3 months, on intimation of site clearance by OIL.

I. Bidders response sheet attached to be filled up by all bidders for evaluation purposes.

J. EXPERIENCE OF BIDDER:

1) The bidder should have experience of successfully executing of one similar order to Central Govt./State Govt./ PSU in the last 5 years as on bid closing date. Documentary evidence to be provided, otherwise offer shall be rejected.

"Similar order" is defined as supply and commissioning of at least 1 (one) no. of NGR unit (NGR with monitoring system)

2) Bidder shall have designed, engineered, manufactured and supplied at least one no. 415 VAC PCC/PMCC/MCC/NGR panel with short circuit breaking capacity of 50 kA for 1 second in the last 5 (five) years as on bid closing date. The panel must have proven track record of operating satisfactorily for a period of at least 1 (one) year as on bid closing date.
Documentary evidence to be provided, otherwise offer shall be rejected.

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Bid Closing On : **30.03.2017 at 13:00 hrs.(IST)**
Bid Opening On : **30.03.2017 at 13:00 hrs.(IST)**

Tender issued to following parties only:

Slno	V_Code	Vendor Name	City/Country
1	200311	VENUS CONTROLS & SWITCHGEAR PVT. LT	KOLKATA
2	202289	U.K. ENTERPRISE	GUWAHATI
3	203062	GLOCON	TINSUKIA
4	204092	S P ENTERPRISES	KOLKATA
5	204509	RIGHILL ELECTRICS PVT LTD.	BHOPAL
6	204819	PYROTECH ELECTRONIC PVT LTD	NEW DELHI
7	209918	NATIONAL SWITCHGEARS	CHENNAI