



ASSAM ELECTRICITY GRID CORPORATION LIMITED

Regd. Off.: BIJULEE BHAWAN (FIRST FLOOR) PALTANBAZAR; GUWAHATI - 781001
CIN: U40101AS2003SGC007238

PHONE: 0361-2739520 FAX NO.0361-2739513
Web: www.aegcl.co.in Email: managing.director@aegcl.co.in

No AEGCL/MD/Tech-644/PSDF/PLCC/Package A/16

Dtd: 01 .11.2017

AMMENDMENT-I and Time Extension-IV

IFB no. AEGCL/MD/Tech-644/PSDF/PLCC/Package A/IFB
BID IDENTIFICATION NOS. AEGCL/MD/PSDF-014/PLCC(Package-A)

&

IFB no. AEGCL/MD/Tech-644/PSDF/PLCC/Package B/IFB
BID IDENTIFICATION NOS. AEGCL/MD/PSDF-014/PLCC(Package-B)

The bids identified against the above referred IFBs and Bid identification nos. is amended to the following extent -

1. Section-1, Instructions to Bidders, APPENDIX TO ITB - 2

The Clause '1.3 Time Schedule' is amended to read as follows:

"Time to complete Works from the Commencement Date specified in **Article 3** of the Contract Agreement for determining time for completion the works is **12 (Twelve) months (6 months for supply and 6 months for erection, testing and commissioning)**. Bids not meeting the above time schedule shall be rejected. However, no credit will be given for earlier completion. "

2. Section-1, Instructions to Bidders, APPENDIX TO ITB - 2

A new sub clause is added to the Clause 2.3 which read as follows:

"2.3.4 The Bidder must be a manufacturer of Digital PLCC Panel and Protection Coupler having production facility in India. For other equipments and accessories, in case the bidder is not a manufacturer, bidder has to take vendor approval from the purchaser by submission of Manufacturer's Authorization, Type Test Reports and Performance reports from their Vendors."

3. Section-3, Purchaser's Requirements

The text appearing at Sl. (c) of Clause 3.1.1 is amended to read as follows:

"The works to be done in the grid sub-station shall be as per Price Schedule and shall also include the related following services :

- Construction of the new foundation for the above equipment, required if any.
 - Supply, erection, testing & commissioning of new equipment
- Any additional materials required for successful completion and commissioning of the works required under the bid document shall be inclusive in the offer of the bidder. The materials required may include
- i) Control cables, optical fibre for new equipment etc as per the standard specification will have to be supplied and laid as and where applicable.



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- ii) Multi core copper cable as per standard specification for connection between CVT HF point and LMU earth
- iii) Data Cables as per the standard specification
- iv) Telephone cables as per the standard specification
- v) AC/DC Cables as per the standard specification
- vi) The supply and laying of CAT 6(Anti-rodent) Cable form Panel to Gateway along with two nos. of RS 485 convertors, one at each end shall be in the scope of the contractors."

4. Section-3, Purchaser's Requirements

The text appearing in the 2nd paragraph at Sl. (d) of Clause 3.1.1 is amended to read as follows:

"The repairing, if not being dismantled, of the existing foundation of equipment and structures (like grouting, etc.) as well as all other civil works as and where required will have to be done by the bidder and the same shall be considered included in the scope of work of bidder. The payment of such works shall be done as per unit Price Schedule."

5. Section-3, Purchaser's Requirements

The Clause 3.7.2 is amended to read as follows:

"The Bidder will have to impart training of above PLCC equipment, particularly digital PLCC and Protection Coupler to at least 2 engineers of each circle(total 5 nos of Circles) of AEGCL **Free of Cost** so that the new incumbents get **acquainted with the new technology and can supervise these individually.**"

6. Section-3, Purchaser's Requirements

The Clause 3.11.1 is amended to read as follows:

"This specification provides for design, engineering, manufacture, stage testing, inspection and testing before dispatch, packing and delivery at destination of Line Trap along with all accessories specified herein. The line trap to be inserted into high voltage A.C transmission lines to prevent undue loss of carrier signal power, typical in the range 90KHz to 500KHz (tuning to the desired frequency, as per planning, shall be made possible), under all power system conditions and to minimize interference from carrier signalling systems on adjacent transmission lines.

7. Section-3, Purchaser's Requirements

The text appearing at Sl. (11) of Clause **3.11.3 PRINCIPAL TECHNICAL PARAMETERS** is amended to read as follows:

		132KV	220KV
11.	Blocking Band frequency range	90- 500 KHz	90- 500KHz



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8. Section-3, Purchaser's Requirements

The text appearing at Sl. (16) of Clause 3.11.3 PRINCIPAL TECHNICAL PARAMETER S is amended to read as follows:

		132KV	220KV
16.	Minimum value of power frequency spark over voltage (Dry and wet) of protective device (Gapless)	6.75 KV rms	13.5 KV rms

9. Section-3, Purchaser's Requirements

A new sub-clause is added at Sl no. (c) of Clause 3.11.6 which read as follows:

The supply and installation of suspension insulators for hanging Line Traps shall be in the scope of bidder.

10. Section-3, Purchaser's Requirements

The Clause 3.13.1 is amended to read as follows:

"General

Power Line Carrier (PLC) System will primarily be used for tele-protection, voice & data communication. The new Power Line Carrier (PLC) circuits in conjunction with existing OPTICAL communication network shall connect the new SAS networks (IEC61850) of existing and new 132 and 220 KV substations of AEGCL via GATEWAY to the nearest Wideband nodes to SLDC, Kahilipara for data communication. Digital PLCC equipment shall be procured under this project. A number of RTUs are spread over several grid substations of AEGCL. DPLC shall be applied in analog mode via FSK channels or in digital mode via the implemented data pump to transmit RTU information. Data transmission through RTU in bandwidth less than 8 kHz shall be applied in point-to-point or point-to multipoint applications (e.g. polling SCADA)."

11. Section-3, Purchaser's Requirements

The Clause 3.13.8 is amended to read as follows:

"The PLC equipment shall support DPLC (Digital PLC) and APLC (Analog PLC) mode of operation in the same platform, software programmable via PC/Notebook . 2 (two) nos of LAPTOPS shall be supplied for each package (Package-A & Package-B) totalling 4(four) nos with requisite software ". For mixed mode (analog+digital), minimum 8(eight) Khz bandwidth shall be available.

12. Section-3, Purchaser's Requirements

The Clause 3.13.16 is amended to read as follows:



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"Transmit output power shall be user-programmable through software upto 40/50 W (Peak Envelop Power), 80/100 W PEP transmit power, as an option . The output power shall be reducible in steps of 1 dB via user interface program (HMI)."

13. Section-3, Purchaser's Requirements

The Clause 3.13.50 which reads as follows is deleted:

"In a substation, selected compressed voice channels shall be through connectable on a digital basis to other PLC terminals/links."

14. Section-3, Purchaser's Requirements

The Clause 3.13.70 which reads as follows is deleted:

" 3.13.70 Three Ethernet/IP ports - electrical 10/100 Mbit/s, auto sensing - shall be available as an option. Preferably, a fourth port with exchangeable SFP transceivers for optical connection shall be provided."

15. Section-3, Purchaser's Requirements

The text appearing in 7th paragraph under heading '**Loop testing**' in Clause 3.14.1 is amended to read as follows:

"The DPC shall be housed in the offered PLCC Panel."

16. Section-3, Purchaser's Requirements

The text appearing in Clause 3.14.4 is amended to read as follows:

Up to two independent tele-protection systems shall be configurable, each operating in its respective channel for single- or dual-channel PLC configurations.

17. Section-3, Purchaser's Requirements

The text appearing in Clause 3.14.5 is amended to read as follows:

1(one) no of tele-protection coupler shall support the transmission of up to 4(four) independent and simultaneous commands for protection of 132 kV and 220 KV single circuit line. 2(two) nos of tele-protection couplers shall support the transmission of up to 8(eight) independent simultaneous commands for protection of 220 KV double circuit lines in inter circuit coupling arrangement. These shall be programmable individually for permissive tripping or direct tripping (inter tripping).

18. Section-3, Purchaser's Requirements



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The text appearing at under following headings of Clause **3.14.19 PRINCIPAL TECHNICAL REQUIREMENTS OF TELE PROTECTION COUPLER** are amended to read as follows:

Number of units	<ol style="list-style-type: none">1) 1(one) no of standalone digital tele-protection coupler having 4(four) commands shall be fitted in single DPLC panel for protection of 132 KV & 220 KV single circuit line.2) 2(two) nos of standalone digital tele-protection couplers(4 commands each) totalling 8(eight) commands shall be fitted in single DPLC panel for protection of 220 KV double circuit line.
Number of commands	4 simultaneous commands (for 132kV & 220 KV single circuit line) and 8 simultaneous commands(for 220kV double circuit lines) , simultaneously transmitted, individually configurable for permissive or direct tripping.

19. Section-3, Purchaser's Requirements

A new sub clause is added under Clause 3.14 which read as follows:

"3.14.20 Digital Protection coupler should have optical backup through E1/ 2 mbps interface over G.703.6 protocol".

20. Section-5, Special Conditions of Contract

The sub clause 5.13.1 under Clause **5.13.0** is amended to read as follows:

"5.13.1. "Purchaser" shall have the right to increase the ordered quantity by 10% within 50 days of the period of completion and the same shall be carried out at the same rates /prices and terms and conditions stipulated

in the order except in regard to completion schedule, which shall be mutually agreed upon in case of enhancement of the ordered quantity."

21. Section-5, Special Conditions of Contract

The Clause 5.20.2 is amended to read as follows:

"The arbitration shall be conducted as per provisions of the prevailing Indian Arbitration Act, shall be held at Guwahati or any other place as may be decided by the Purchaser. The decision of the majority of Arbitrators shall be final & binding upon the parties and the expenses of the arbitration shall be paid as may be determined by the Arbitrator. However, any dispute arising out of this contract will first be discussed and settled bilaterally between Purchaser and the Supplier."

22. Section -2 Bidding Forms

3 Price Schedules with amended BoQ uploaded in the e-tender website. Interested bidders may download the revised price schedules from the website.



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23. Section -6 Contract Forms

The text appearing in **Article 3.2 Completion Time** (Reference SCC Clause 5.6.2) of form no **2. Contract Agreement** is amended to be read as follows:

"The whole scope under this Contract shall be completed **within 12(Twelve) months** from Contract Commencement Date with following schedule: "

All other terms and conditions shall remain same.

Note: *Additional documents for PLCC Links and PLCC Network map have also been uploaded in the e-tenders website for the reference of the bidders.*

The tender submission deadline is extended upto 12:00 Hrs. of 13.11.2017

The tender opening date is 14:00 Hrs of 13.11.2017.

Sd/-

Chief General Manager
Assam Electricity Grid Corporation Ltd
Bijulee Bhawan, Paltanbazar, Guwahati – 1