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CORRIGENDUM

Tender Notice Ref.: IIP/PUR/1/19-20/726/PG/AFLAD/PO:

SUB: Amendment in Specification (Revised Specifications) for Battery Emulator (Programmable DC Power Supply)

and Extension of Due Date

With reference to above tender for Battery Emulator (Programmable DC Power Supply), please note that <u>we have</u> revised the specifications of the above tender (as per attached Annexure) and due date for submission of tender is <u>extended upto 03.03.2020, 3:00P.M.</u> which will be opened on **04.03.2020** at **3:00 P.M.**

Sd/-

(Controller of Stores & Purchase)

Technical Specification of Battery Emulator with regenerative feature

The required battery emulator must emulate as source and sink with regeneration feature. It should have both the CC and CV functional modes. It must also have bi-directional power transfer, seamless switch between source and sink. It should meet the following specifications.

General Specifications :

Input supply voltage : 3 phase 415Vac±10%

Frequency : 50Hz±3HzOutput voltage range : 0-150Vdc

- Output current Range : Max.300A continuous and Max. peak 360A

- Power rating : ≥54kW

- Voltage accuracy : ±0.1% Full scale

- Voltage ripple :≤ 1%
- Line and load regulation :≤ 1%

Filters : AC input and DC output
 Operating temperature : 0°C ~ 45°C and Noise : ≤ 70dB

Current ripple : <u><1</u> Amp
 Input power factor :>0.98
 Data Frequency :≥ 1ms

- AC mains and DC output contactor to be provided. Galvanic isolated ports.

- Software : Real time operation and data acquisition through software

- Should be able to operate either from buttons/keyboard with front display and also from Windows-10 based PC via CAN/Ethernet/USB/ RS232/RS485 for interfacing, BMS integration.

Safety features:

- Proper input and output electrical safety switches /breakers should be provided
- Reverse polarity protector
- Phase change/Phase fail safety error / alarm
- Over temperature protection
- Input over voltage and under voltage protection
- DC output over voltage protection
- Emergency shut button,
- Earth fault detection and Galvanic isolation to mains
- Soft start feature
- Enclosure as per standard safety & EMC standards, IP-20 or better.

Indications:

- Input/output voltage, current output, Error / alarms.

Other requirement

- List of clients for the last three years where the same model was supplied.
- Any up-gradation in software should be free of cost.
- Should be compatible with latest operating software.
- Must provide operation & service manual and all calibration certificates of the hardware.
- Maintenance support for next 10 years. Installation, commissioning and training at site.