



**NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA-769008(ODISHA)**
An Institute of National Importance under Ministry of Education, GOI

NOTICE INVITING TENDER

Tender Notification No: NITR/PW/EE/2021/244

Dated: 22/02/2021

The National Institute of Technology, Rourkela invites bids from the eligible bidders for procurement of **Grid Simulator** , at Dept. of Electrical Engineering, NIT Rourkela.

Last date of Submission of Bid : 01/03/2021 by 11:00 AM

Opening date of Techno-commercial & Financial Bid : 02/03/2021 at 11:00 AM

For Details: https://nitrkl.ac.in/OldWebsite/Jobs_Tenders/9Equipment/Default.aspx

Contact:

Prof. Monalisa Pattnaik
Department of Electrical Engineering
National Institute of Technology
Rourkela-769008, Odisha
Email: pattnaikm@nitrkl.ac.in
Phone: 0661 2462423

Bidding through: <https://eprocure.gov.in/eprocure/app>

Sd/-
Registrar



NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA – 769 008, ODISHA

(SINGLE TENDER NOTICE NO: NITR/PW/EE/2021/244

Date: 22/02/2021

Procurement of Grid Simulator at NIT Rourkela

| Sl. No. | Description of Goods/Service | Quantity |
|---------|--|----------|
| 01. | A) Grid Simulator (As Per the Specification mentioned in Annexure-II) | 01(One) |

- Quantity Required** : As mentioned above (all information provided in the technical specification)
- Delivery** : Within **90 days** from the date of purchase order
- Last date of submission of Bid** : **01/03/2021** by **11:00 AM**
- Opening date of Techno-commercial & Financial Bid** : **02/03/2021** at **11:00 AM**
- The firm should not have been black listed at any time.
- The submission of following bids by the tenderer should be through <https://eprocure.gov.in/eprocure/app> Please follow the guidelines as per the portal.

Procurement of Grid Simulator at Department of Electrical Engineering, NIT Rourkela.

(SINGLE TENDER NOTICE NO: NITR/PW/EE/2021/244 Date: 22/02/2021)

Due on **01/03/2021** by **11:00 AM**

- Liquidated damage clause** will be charged for any delay in supply of goods.
- The validity of the tender shall be **90 days** from the date of opening of techno-commercial and financial bid
- Detailed advertisement including all tender documents is also available in our website at http://nitrkl.ac.in/OldWebsite/Jobs_Tenders/9Equipment/Default.aspx.
- NIT reserves the right to qualify or deny prequalification of any or all applicant without assigning any reasons.

(REGISTRAR)
NIT, Rourkela
Fax No- 0661-2462022
Ph. No -0661-2462021

SPECIFICATIONS OF GRID SIMULATOR

- it should be compatible, Controllable & triggered by Matlab-Simulink based Real Time Simulator
- It should be useful for Renewable Energy Integration Studies (Grid Connected) & PHIL Applications)
- It should be Bi-directional & have Four Quadrant Operation.
- It should be able to source & sink Power in a controllable mode

- Input Voltage : 3-phase, 415V, 50Hz
- Input Voltage Tolerance : +10%, -15%
- Input Frequency : 50Hz
- Input Frequency Tolerance : ±3%
- I/P Current Max : 17.5A
- I/P Power Factor : 0.95 & higher at Rated conditions
- Output Voltage : 3-phase, 4 wire, isolated 415V
- Output Apparent Power : 11.25KVA
- Output power : 9 kW
- Max Output Current : 15.6A
- Output Frequency : 50HZ, ± 2Hz
- Switching Frequency : 2 to 8 kHz
- Ambient Temperature : 10-45°C (It is designed to work at 50 Deg)
- Humidity : 95% RH or less (no condensation)
- Device : IGBT
- Grid Side Inverter Control : DSP based Field oriented control
- Grid side Test points : 3 voltages & currents
- Output side Test Points : 3 voltages & currents
- Protection : Input Under voltage
Input Over voltage
Input over current
Input short circuit
Output under voltage
Output over voltage
Output over current
Output short circuit
Over temperature