

# **SOUTH BIHAR POWER DISTRIBUTION COMPANY LIMITED**

(A Govt. of Bihar undertaking)

(DEPARTMENT OF PROJECT-I URBAN)

CIN No.:U40109BR2012SGC018890



*Illuminating lives...*

## **Expression of Interest (Eoi)**

EOI No/NIT No-.49/PR/SBPDCL/2026.

Proposal for Digital Substation for outdoor Substation on Pilot Basis using Micro CRP (Outdoor Bay Control and Protection Unit) & with Local SCADA and integration with Remote SCADA (Central SCADA-Patna) by using IEC104/IEC61850 Protocol with 5 years FMS( Facility Management Services).

**South Bihar Power Distribution Company Limited**  
**3<sup>rd</sup> Floor,Vidyut Bhawan-III, Jawaharlal Nehru Marg, Patna-800021**

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**The Timeline for the above EOI is as follow:**

<b>Submission Start Date:-</b>	<b>23.06.2026 , 11:30 Hrs onwards</b>
<b>Submission Due Date:-</b>	<b>14.07.2026, up to 17:30 Hrs</b>
<b>EOI Opening Date:-</b>	<b>16.07.2026, up to 11:30 Hrs onwards</b>
<b>Pre-EOI Discussion</b>	
<b>Pre-EOI Query Submission Type:-</b>	<b>Through email Till 26.06.2026</b> <a href="mailto:cep1urbaninp@gmail.com">cep1urbaninp@gmail.com</a>
<b>Pre-EOI Discussion Date:-</b>	<b>25.06.2026 , 11:30 Hrs</b>
<b>Venue Details:-</b>	<b>Conference hall, Third floor , Vidyut Bhawan -3, Bailey Road , Patna - 800021</b>
<b>The detailed EOI documents can be downloaded from website <a href="http://www.eproc2.bihar.gov.in">www.eproc2.bihar.gov.in</a> .</b>	

The EOI document can be downloaded from website [www.eproc2.bihar.gov.in](http://www.eproc2.bihar.gov.in) .Submission of EOI must be accompanied with receipt of payment towards EOI documents failing which the EOI shall be summarily rejected.

## **1. Introduction and background**

South Bihar Power Distribution Company Limited (SBPDCL) SBPDCL , a fully owned subsidiary Company of BSPHCL is engaged primarily in the business of distribution and retail supply of electricity and registered office at Vidyut Bhawan, Bailey Road, Patna-800021, Bihar.

SBPDCL currently operates 632 Nos. of PSS. Most PSS have outdated equipment, space constraints in control rooms, old CRP/VCB, damaged cable trenches, and non-communicable relays. Digitization is proposed to enhance reliability, improve safety, enable real-time monitoring, and reduce space requirements.

South Bihar Power Distribution Company Limited (SBPDCL) intends to implement digitization of one 33/11 kV outdoor Power Sub-Station, namely Gardani Bagh PSS, on a pilot basis. The project aims to upgrade the existing conventional substation to a Digital Substation (DS) using Micro CRP (Outdoor Bay Control & Protection with Local SCADA and its integration with Remote SCADA (Central SCADA-Patna) through IEC104/IEC61850 with 5 years FMS( Facility Management Services).

## **2. Time line:-**

2.1 Last date of submission of Expression of Interest (EOI) is 14.07.2026 upto 05:30PM.

2.2 The proposal in all respects as specified in the EOI ,must be submitted through e-procurement mode only.

2.3 The proposal received after due date/time shall not be considered under any circumstances canvassing in any form will result in the disqualification of the bidder.

2.4 The Performance Bank Guarantee shall be submitted within 07 days of issuance of the work order.

2.5 The contract agreement shall be executed within 15 days of issuance of the work order after completion of necessary formalities.

## **3. Scope of Work**

The Scope involves Design, Engineering, Supply, Installation, Testing and Commissioning on a turnkey basis for Digitization of Substation at existing Gardani Bagh PSS, Patna and integration with SCADA on a pilot basis.

Following are the key modifications will be carried out to implement the Digital Substation:

1. A Micro CRP, which has all functionalities like, control, protection, metering, remote communication, remote control and so on, is to be installed without replacing old CRP (Control relay panel). This micro-CRP will be installed below outdoor CT(Current Transformer) or Outdoor CB( Circuit Breaker).All these units will be communicating over IEC104 protocol but it can be connected on IEC104/ IEC61850

protocol in future capability and connected in ring topology to connect to RTU(Remote Terminal Unit) using CAT6 Cable.

2. An Indoor wall mounted RTU panel along with RTU and switch will be installed in control room. Only RTU and local HMI (Human Machine Interface) will be installed in the control room from where the operator can monitor and control the PSS. This RTU will communicate with SCADA system over IEC104 protocol.
3. Local HMI installed in control room for local monitoring and control. Local operators can view all alarms, real-time condition of all the equipment's in PSS.
4. Only AC, DC and communication cable will be laid from micro-CRP to control room. DI/DO signals are directly connected from CB to micro-CRP. CT and PT cables are also connected to micro-CRP.
5. A very few cables laying work will involve, the cable trench will be replaced with HDPE pipe/DWC Pipe.

#### **4. Price Schedule/BOQ**

a) The proposed schedule of items and quantities for the Digital Substation of the Pilot Substation at Gardani Bagh PSS, as per the Single Line Diagram (SLD), is enclosed as Annexure-I (Format of Price Schedule) along with the SLD.

b) The bidders shall quote for the entire Supply and installation services. The total price shall include all the contractors obligations mentioned in or to be reasonably inferred from the documents attached in respect of the design, engineering, manufacture including procurement, delivery, construction, installation and completion of Digital Substation. This includes all requirements under the bidders responsibility for testing, pre-commissioning and commissioning of the plant. This shall also include the operation, maintenance and training services and such other items and services as per requirement.

c) Bidder shall give a breakdown of the prices in the manner and details called for in the price schedules as per Annexure-I.

d) The prices quoted by the bidder shall be fixed during the contract and not subject to variation.

#### **5. Qualifying Requirements (QR) for Bidders (Digital Substation)**

##### **5.1 Eligibility**

The Bidder must satisfy the following criterion: The Bidder shall demonstrate proven experience in design, engineering, supply, erection, testing, and commissioning of 33/11 kV or higher voltage outdoor substations or bays, including integration of Substation Automation System (SAS) through IEC104/IEC61850.

##### **5.2. Technical Experience**

The Bidder shall have successfully completed at least one (1) project involving a 33/11 kV or higher voltage Grid Substation (GSS) with an integrated Substation Automation System (SAS) through IEC104/IEC61850 within the past ten (10) years prior to the date of bid opening.

### 5.3.OEM Support

If the Bidder is an EPC contractor, the following documents must be submitted:

- a) A valid Manufacturer Authorization Form (MAF) from the OEM of the Bay Control and Protection Unit (BCPU), Remote Terminal Unit (RTU), and SCADA system. The EPC contractor shall propose only one OEM for the MAF.
- b) The OEM shall have supplied, designed, engineered, and executed digitized 33/11 kV or higher voltage substations through IEC104/IEC61850 for a minimum of fifty (50) outdoor substations, including integration with the control centre utilizing outdoor BCPU panels. The systems must be successfully commissioned and operational. The system shall use latest digital technology, minimize cabling requirements, without necessitating replacement of existing CRP panels, and shall require no control room other than for HMI and RTU.
- c) Written confirmation of OEM support for engineering, integration, and after-sales services must be provided.

### 6. Payment and others terms

Payment term shall be as given below:

- i). 10% advance against **ABG (Advanced Bank Guarantee)** of 110% of Advance amount as per mutually agreed format valid till completion of work.
- ii). 50% with 45 days from date of receipt of material at site and submission all documents as per dispatch instruction and certified invoice.
- iii). 20% against completion of erection against certified invoice.
- iv). 20% after completion of successful acceptance testing, commissioning and handing over of complete systems duly certified by SBPDCL Engineer in-Charge(ESE,ESC/PESU W).
- v). GST - Extra as per actual at the time of dispatch. Current GST rate to be mentioned.
- vi). **Payment** will be made by PESU (West) Circle.
- vii). Any activities other than mentioned in Scope of work above if required to complete the job shall also be done by SEIL.
- viii). **Delivery** - Material shall be ready for dispatch within 5 weeks from date of award and installation, testing and commissioning within 3 weeks.
- ix). **Warranty** - 60 (Sixty) months date of commissioning/66 months from date of supply whichever is later.
- x). **Performance Guarantee:** Bidder shall submit applicable Performance Bank Guarantee within 15 days of issuance of work order. The PBG shall be valid upto successful completion of warranty period plus one month.PBG applicable shall be 10% of work order.PBG shall be released after completion of claim period .[claim period shall be upto one year beyond validity period].
- xi). **FMS (Facility Management Services)**  
FMS will be provided for five years from date of commissioning and training shall be provided to SBPDCL's officials .FMS scope includes as follow:

- a. Remote support for any operational and maintenance problem
  - b. Yearly one visit by our expert and training on BCPU (bay control protection unit) and RTU as per requirement.
  - c. Any additional bay will be added free of cost in local software
  - d. Any equipment malfunction root cause analysis.
  - e. Any other issues to be resolved by Bidder.
- xii) SBPDCL may invoke Performance Bank Guarantee for non performance/Delay.
- xiii) **Penalty / Liquidated Damage:** - For delay in execution LD @0.5% per week of contract value upto maximum 10% of contract value shall be imposed. Any LD/Penalty shall be recovered from Bills/Performance Guarantee. In case any damage or loss occurs to SBPDCL property/equipment while carrying out the work in the PSS, the Bidder shall repair/rectify/replace the same and/or compensate SBPDCL, at its own cost and to the satisfaction of Engineer-in-Charge..

## **7. Time of Completion**

**The time of completion of pilot project is 2 months from issue of work order.** The delivery as per scope shall commence from the date of acceptance of work order from SBPDCL .

Deliveries shall be completed within 5 weeks from the date of award and installation, testing and commissioning within 3 weeks thereafter subject to availability of clear site fronts from SBPDCL. Inspection of materials by SBPDCL is not envisaged due to project timelines.

## **8. Event of Default and Subsequent Termination**

An Event of Default shall be deemed to have occurred if:

- a) The Bidder fails to perform or comply with any material obligation under the Contract Agreement and such failure continues unremedied for a period of fifteen (15) business days following receipt of written notice of such default from SBPDCL;
- b) The Bidder becomes the subject of an Insolvency Event; or
- c) Any representation or warranty made by the Bidder under the Agreement proves to be untrue in any material respect at the time it was made; it shall constitute an Event of Default. Upon occurrence of an Event of Default, SBPDCL shall have the right to terminate the Contract by giving written notice to the Bidder, without prejudice to any other rights or remedies available to SBPDCL under the Contract or applicable law.

## **9. Governing Law and Jurisdiction.**

All disputes and differences arising between the Parties under the Contract, relating to its construction, meaning, effect, or the obligations, rights, and liabilities of the Parties, shall be referred to arbitration. The dispute shall be referred to a sole arbitrator appointed mutually by both Parties. Failing such mutual appointment, the arbitrator shall be appointed in accordance with the procedure prescribed under the Arbitration & Conciliation Act, 1996. The decision of the arbitrator shall be final and binding on both Parties. The arbitration proceedings shall be conducted in the English language, and each Party shall bear its own costs. The seat and venue of arbitration shall be Patna, Bihar. The

Courts at Patna shall have exclusive jurisdiction to deal with all matters arising out of or in connection with the arbitration, in accordance with law. This Contract Agreement, and all matters arising out of or in connection with it, shall be governed by and construed in accordance with the laws of India. Subject to the arbitration clause, the Courts at Patna shall have exclusive jurisdiction to adjudicate any dispute arising under this Contract, and no other Court or Arbitrator shall have jurisdiction.

**Note**-SBPDCL reserves the right to accept or reject any or all EOIs without assigning any reason thereof.