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Award

Low Voltage Distribution System Analysis Tool

Northern Powergrid

F15: Voluntary ex ante transparency notice

Notice identifier: 2023/S 000-020073

Procurement identifier (OCID): ocds-h6vhtk-03e171

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Section I: Contracting authority/entity

I.1) Name and addresses

Northern Powergrid

Lloyds Court 78 Grey Street

Newcastle Upon Tyne

NE1 6AF

Contact

James Bell

Email

james.bell@northernpowergrid.com

Telephone

+44 7731024333

Country

United Kingdom

Region code

UK - United Kingdom

Internet address(es)

Main address

www.northernpowergrid.com

I.6) Main activity

Electricity

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

Low Voltage Distribution System Analysis Tool

II.1.2) Main CPV code

- 48100000 - Industry specific software package

II.1.3) Type of contract

Supplies

II.1.4) Short description

Northern Powergrid intends to award a contract the provision of a Low Voltage Distribution System Analysis Tool.

The requirement is to replace existing low voltage network assessment methods with a digital tool that can reduce the time required (and therefore resource and cost) for studies,

whilst also improving the accuracy, quality and consistency of the studies undertaken.

II.1.6) Information about lots

This contract is divided into lots: No

II.1.7) Total value of the procurement (excluding VAT)

Value excluding VAT: £656,000

II.2) Description

II.2.3) Place of performance

NUTS codes

- UK - United Kingdom

II.2.4) Description of the procurement

The tool is required to provide the below functionality:

• Be cloud hosted and expandable, future phases of this tool will be used to address new business requirements.

• Allow system designs and planning for low voltage networks (voltage up to and including 1000 V, which includes primarily underground cables and overhead lines rated at 400 V)

• Able to import network data and display on a geographic map background – noting that this import and modelling consist of millions of nodes and millions of branches. It must also allow the user to enter network components such as busbars, loads and cables as schematic symbols or directly onto a map or building layout drawing.

• Able to assess all low voltage networks including three-phase, split-phase and single-phase with an option for three-phase connections to be balanced or unbalanced. The phasing of the network should be easily identifiable by the user.

• Provide assessment for the following modules; thermal studies, voltage drop/rise, fault level, flicker, motor studies, cable sizing and LV fuse sizing.

• Use UK industry standard statistical calculations (i.e., ACE 49) to analyse aggregated demand taking in account of customer profiles.

• Provide the capability to assign an MPAN class/Elexon profile for each customer, modelling both a winter peak scenario and summer minimum scenario.

• Allow single line diagram view to visualise, model and analyse the low voltage networks.

• Ability to add LCTs (i.e. HP, EV & PV) onto an existing or new connection with the option to amend the diversified demand values for the additional equipment.

• Allow distributed connections along the same conductor.

• Ability to upgrade transformers and LV cables if asset replacement work is required as part of a reinforcement or a new demand/generation scheme.

• Ability to highlight and override any data issues which may affect the network assessment being complete.

• The technical results must be available in a report style format which can be downloaded in both a PDF and excel (XLS) formats.

II.2.11) Information about options

Options: No

II.2.13) Information about European Union Funds

The procurement is related to a project and/or programme financed by European Union funds: No

Section IV. Procedure

IV.1) Description

IV.1.1) Type of procedure

Award of a contract without prior publication of a call for competition in the cases listed below

- The procurement falls outside the scope of application of the regulations

Explanation:

The delivery of this tool is required by October 2023 to ensure the tool is in place to meet the expected rise in demand and generation requests, driven by decarbonisation.

Northern Powergrid is operating within strict budget and timescale constraints for the delivery of the requirement. Our market analysis has identified no other suitable tool currently available on the market that can meet the full list of functional requirements listed above, within the timescales and costs identified. Most notably, we have taken into account that we would require vendors to be able to integrate with our LV spatial database consisting of millions of assets and then undertake statistical calculations using the method outlined in ACE 49.

IV.1.8) Information about the Government Procurement Agreement (GPA)

The procurement is covered by the Government Procurement Agreement: Yes

Section V. Award of contract/concession

Title

Low Voltage Distribution System Analysis Tool

A contract/lot is awarded: Yes

V.2) Award of contract/concession

V.2.1) Date of conclusion of the contract

13 July 2023

V.2.2) Information about tenders

The contract has been awarded to a group of economic operators: No

V.2.3) Name and address of the contractor/concessionaire

EA Technology Limited

Capenhurst Technology Park, Capenhurst, Chester, Cheshire, CH1 6ES

Chester

Country

United Kingdom

NUTS code

- UK - United Kingdom

The contractor/concessionaire is an SME

Yes

V.2.5) Information about subcontracting

The contract/lot/concession is likely to be subcontracted

Section VI. Complementary information

VI.3) Additional information

The delivery of this tool is required by October 2023 to ensure the tool is in place to meet the expected rise in demand and generation requests, driven by decarbonisation.

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VI.4) Procedures for review

VI.4.1) Review body

Northern Powergrid

Lloyds Court, 78 Grey Street

Newcastle upon Tyne

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