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Planning

## **1MW bi-directional DC power supply unit**

University of Strathclyde

F01: Prior information notice

Prior information only

Notice identifier: 2021/S 000-008307

Procurement identifier (OCID): ocds-h6vhtk-02a7e4

Published 20 April 2021, 10:25am

### **Section I: Contracting authority**

#### **I.1) Name and addresses**

University of Strathclyde

40 George Street, Procurement Department

Glasgow

G1 1QE

#### **Email**

[david.waddell@strath.ac.uk](mailto:david.waddell@strath.ac.uk)

#### **Country**

United Kingdom

#### **NUTS code**

UKM82 - Glasgow City

#### **Internet address(es)**

Main address

<http://www.strath.ac.uk/>

Buyer's address

[https://www.publiccontractsscotland.gov.uk/search/Search\\_AuthProfile.aspx?ID=AA00113](https://www.publiccontractsscotland.gov.uk/search/Search_AuthProfile.aspx?ID=AA00113)

## **I.2) Information about joint procurement**

The contract is awarded by a central purchasing body

## **I.3) Communication**

Additional information can be obtained from the above-mentioned address

## **I.4) Type of the contracting authority**

Body governed by public law

## **I.5) Main activity**

Education

## **Section II: Object**

### **II.1) Scope of the procurement**

#### **II.1.1) Title**

1MW bi-directional DC power supply unit

Reference number

UOS-18750-2020

#### **II.1.2) Main CPV code**

- 31174000 - Power supply transformers

#### **II.1.3) Type of contract**

Supplies

#### **II.1.4) Short description**

The University is seeking notes of interest for the supply, delivery, installation and commissioning of a 1MW bi-directional DC power supply unit.

#### **II.1.5) Estimated total value**

Value excluding VAT: £600,000

#### **II.1.6) Information about lots**

This contract is divided into lots: No

### **II.2) Description**

#### **II.2.3) Place of performance**

NUTS codes

- UKM82 - Glasgow City

#### **II.2.4) Description of the procurement**

The University seeks notes of interest for participation in pre-tender activities for the supply, delivery, installation and commissioning of a 1MW bi-directional DC power supply unit.

The University anticipates that the supplied goods will conform to the below requirements:

3. The power supply unit shall be rated at 1MW and is capable of bi-directional power flow at the full power rating.
4. The supply to the unit shall be 50Hz, 415V AC, three phase, neutral and earth.
5. The unit shall supply the following DC outputs:
  - a. Unipolar: 0 – 1.5kV (floating), 667A
  - b. Unipolar: 0 – 3kV, 333A
  - c. Bipolar: 0 – +/-1.5kV, 333A
6. The unit shall be modular and capable of supplying at least ten pieces of equipment under test (e.g. inverters, batteries) simultaneously at the channel's fully rated power at 1.5kVdc.
7. The unit shall have the following external user control modes:
  - a. Aurora protocol from a real-time digital simulator (RTDS).
  - b. Proprietary software for setting DC supply output and running output profile scripts such as ramps, PV array simulation, battery simulation.
  - c. +/-10V set points.
  - d. 4-20mA set points.
8. The unit shall have a Modbus interface for monitoring and basic controls including but not limited to:
  - a. Unit start up and shut down.
  - b. Output voltage setpoint.
  - c. Key external and internal voltages and currents.
  - d. Alarms and resets.
9. The unit shall incorporate integrated instrumentation with the following requirements:
  - a. External and internal electrical parameters logged at a minimum of 10kHz.

b. Logs can be exported into CSV and binary formats.

10. The unit shall be supplied with an integrated cooling solution. If liquid cooling is required, the supplier shall provide a complete liquid cooling system in their offer.

11. The successful supplier is expected to provide a minimum 12 month warranty and post-commissioning technical support.

#### **II.2.14) Additional information**

Interested suppliers are asked to register their interest within 5 working days of the publication of this notice to be engaged in pre-tender activity.

#### **II.3) Estimated date of publication of contract notice**

10 May 2021

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### **Section IV. Procedure**

#### **IV.1) Description**

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

The procurement is covered by the Government Procurement Agreement: Yes

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### **Section VI. Complementary information**

#### **VI.3) Additional information**

Interested suppliers should note that this procurement exercise is a re-tender of the non-awarded lots from our earlier open procurement exercise detailed in the contract notice titled "PNDC Propulsion & Power Train Accelerator ", which was issued on 08/01/2021.

NOTE: To register your interest in this notice and obtain any additional information please visit the Public Contracts Scotland Web Site at

[https://www.publiccontractsscotland.gov.uk/Search/Search\\_Switch.aspx?ID=651270](https://www.publiccontractsscotland.gov.uk/Search/Search_Switch.aspx?ID=651270).

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