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Planning

PRO004738-Works-Contract- MBC Biomethane and CO2 Plant

United Utilities Water Limited

F04: Periodic indicative notice – utilities

Periodic indicative notice only

Notice identifier: 2023/S 000-024928

Procurement identifier (OCID): ocds-h6vhtk-03f69b

Published 24 August 2023, 11:51am

Section I: Contracting entity

I.1) Name and addresses

United Utilities Water Limited

Lingley Mere Business Park

Warrington

WA5 3LP

Contact

Colette Conroy

Email

Colette.Conroy@uuplc.co.uk

Telephone

+44 7825849053

Country

United Kingdom

Region code

UKD - North West (England)

National registration number

02366678

Internet address(es)

Main address

<https://www.unitedutilities.com>

Buyer's address

<https://uk.eu-supply.com/ctm/Company/CompanyInformation/Index/43984>

I.3) Communication

Additional information can be obtained from the above-mentioned address

I.6) Main activity

Water

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

PRO004738-Works-Contract- MBC Biomethane and CO2 Plant

II.1.2) Main CPV code

- 45251240 - Landfill-gas electricity generating plant construction work

II.1.3) Type of contract

Works

II.1.4) Short description

UU (United Utilities Water Limited) UU are proposing to install new Gas to Grid upgrading plant with a Biomethane / CO2 carbon capture (liquified) that takes all the on-site generated gas (~ 6000nm3/hr) from our existing Anaerobic digestion storage for export into the gas network.

Developing our future strategy we are undertaking pre-market research to understand market offerings for the following services

UU are interested in understanding how this model can be delivered, and the best technical solution

Responses detailing variations of the above services are welcome.

II.1.5) Estimated total value

Value excluding VAT: £30,000,000

II.1.6) Information about lots

This contract is divided into lots: No

II.2) Description

II.2.2) Additional CPV code(s)

- 45222110 - Waste disposal site construction work

- 45251141 - Geothermal power station construction work
- 45251220 - Cogeneration plant construction work
- 45252122 - Sewage digesters
- 45255800 - Gas-production plant construction work

II.2.3) Place of performance

NUTS codes

- UKD - North West (England)

II.2.4) Description of the procurement

UU (United Utilities Water Limited) UU are proposing to install new Gas to Grid upgrading plant with a Biomethane / CO₂ carbon capture (liquified) that takes all the on-site generated gas (~ 6000nm³/hr) from our existing Anaerobic digestion storage for export into the gas network.

UU are interested in understanding how this model can be delivered, and the best technical solution

Developing our future strategy we are undertaking pre-market research to understand market offerings for the following services

Our initial design for the main plant items include the following Responses detailing variations of the above services are welcome.

- Dual stream 'Amine solution' Chemical wash plant
 - o 6000Nm³/hr of biogas treatment for export to local gas network
 - o Pre-treatment conditioning of biogas (VOC / Siloxane / H₂S removal)
 - o Analytical monitoring / control of gas quality to ensure product is suitable for export
- Grid Export Unit (GEU) – kiosk based solution
 - o Arrangement of valves & pipework for the provision of
 - o Isolation / diversion of the gas between export point & flare stack
 - o Biogas flare stack for emergency burning of surplus gas

- o Analytical monitoring / control of gas quality to ensure product is suitable for export
- Remote Operating Valve (ROV) assembly – kiosk based solution
- o Arrangement of valves & pipework for the provision of
- o Valve isolation system to prevent the export gas in the event of quality / gas network issues
- o Analytical monitoring / control of gas quality to ensure product is suitable for export
- CO₂ capture / recovery Plant (off- gas product of the Chemical Wash Plant)
- o Liquification & storage
- o Vehicle export (tanker) loading / filling facility
- Propane storage facility
- o 48Tonnes of liquid propane storage
- o injection to Biomethane export pipeline
- o injection / purge points biomethane pipework
- o injection purge points on H₂ boiler feed main
- o Fire suppression system
- Dual fuel boiler (H₂ and natural gas)
- o 9000T steam/hr @ 190oC
- o Boiler feed water conditioning unit
- o Housing for boiler
- H₂ import pipeline to dual fuel boilers
- o 1km x 400mm² @ 2bar pipeline direct buried (gas main)
- o H₂/natural gas conversion of 2 x 9000T/hr steam boilers
- o H₂ ring main in boiler house

- New electrical feed.
- o 2MVA 6.6kV/415V 3 phase transformer
- o HV Ring main unit (RMU)
- o HV joints / infrastructure interventions
- o New LV intake board (Form 4) 3 tier system / ACB's / distribution
- o HV / LV earthing

II.2.14) Additional information

This notice is a request for information only at this stage.

If you have experience in this area please could you provide at a minimum the following information and submit to the United Utilities CTS Procurement Team mailbox:

CTSProcurement@uuplc.co.uk

- Company Name
- Contact details, including location telephone and e-mail address, main point of contact and position in Company

II.3) Estimated date of publication of contract notice

6 November 2023

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: No

Section VI. Complementary information

VI.3) Additional information

the response deadline is 22 September 2023