

ISG206/02 – NON-STANDARD BM UNIT APPLICATION FOR USKMOUTH BIOFUEL POWER STATION

MEETING NAME ISG 206

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Purpose of paper Decision

Classification Public

Summary Uskmouth Power Company Ltd (Uskmouth) has applied for a non-standard BM Unit for its Uskmouth biofuel power station at Newport. We invite the ISG to approve the application.

1. Background

- 1.1 Uskmouth¹ has constructed an 18MW biofuel power station at a site located in Nash, Newport in South Wales. The biofuel power station consists of 14 Generating Units (GU) (ten 1.5MW, three 2MW and one 1.9MW, each with a power factor of 0.8). The site is connected to the Transmission System at 132kV.
- 1.2 The biofuel power station is designed to be operated as a single unit to provide balancing, ancillary and other commercial services to the Transmission Company under a Balancing Services contract. Whilst it is in theory possible to individually control the generators and inverters, a control scheme exists to manage the site Imports/Exports to deliver the response service. Therefore, in effect, the site operates as a single unit.
- 1.3 Uskmouth (the Lead Party for the BM Unit) has been granted a generation licence and is seeking to register one Metering System under the Central Volume Allocation (CVA) arrangements in a single BMU (Attachment A).
- 1.4 Note that although Uskmouth's BSCP15/4.13 form (Attachment A) requests that this application is confidential, Uskmouth has agreed to it being considered in the public session with the removal of contact information and password from the BSCP15/4.13 form.
- 1.5 Uskmouth has submitted electrical single line diagrams (SLD) to support this application (Attachments B and C). Attachment B shows the arrangement of all 14 GUs. Attachment C shows that the Settlement Meter is not at the Defined Metering Point (DMP); as a result, Uskmouth is seeking a Metering Dispensation (D/486).
- 1.6 Uskmouth confirmed that there is no Licensed Distribution System Operator (LDSO) back up supply on site. Note that the 11kV connection to 'SP' stands for Simec Power¹, i.e to the Uskmouth bio-diesel Generating Plant.
- 1.7 Attachment C also shows an additional asset that is not a part of this application (the Pellet plant) and has not been built yet. Uskmouth are planning return to ISG to ask for approval of a change to the BM Unit configuration once the Pellet plant is constructed (currently scheduled to be built within next two years).

2. Non-standard BM Unit application

¹ Simec Power are the owner and the operator of the existing Uskmouth Power Station, and the new Uskmouth biofuel power station, and will be registering this new BM Unit under their Lead Party Id of USKMOUTH (Uskmouth Power Company Limited)

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- 2.1 Uskmouth is seeking approval for a non-standard BM Unit for the biofuel power station at Newport as it consists of multiple small biofuel GUs. As the biofuel power station is designed to be operated as a single unit, there is only one control system that controls the output and the input.
- 2.2 According to BSC Section K3.1.4, each individual GU could be registered as a standard BMU (per K3.1.4(a)). As summarised below, Uskmouth believes there are good reasons why it would be appropriate to combine all the importing and exporting Plant and Apparatus for the plant into a non-standard BMU.
- 2.3 Uskmouth believes that should a BM Unit be required for each GU, then the Applicable Balancing Services Volume Data would have to be calculated by the Transmission Company individually for each of the 14 required BM Units and applied to each BM Unit individually as part of the Settlement process, which would be an administrative burden for all parties involved.
- 2.4 Metering Equipment would be required to be installed on all 14 GUs. This would be costly, would require one or more Metering Dispensations due to metering not being at the DMP, and would decrease precision in the values as estimates would need to be made for the electrical losses between the Metering Equipment and the DMP.
- 2.5 In accordance with K3.1.6, the Panel may determine a configuration of Plant and Apparatus that satisfies the requirements or most nearly achieves the objectives reflected in the requirements of K3.1.2 - i.e. a non-standard BM Unit. Uskmouth has made the following arguments in relation to the requirements in K3.1.2:
 - 2.5.1 Under Section K, paragraph 3.1.2(a), responsibility for the Plant and Apparatuses' Imports and/or Exports must lie with one Party. For this BM Unit, there is one Party, Uskmouth Power.
 - 2.5.2 Under Section K, paragraph 3.1.2(b), the Imports and/or Exports to/from the Plant and Apparatus comprised in the BM Unit must be capable of being controlled independently of any other BM Units'. Uskmouth confirmed that the imports and exports to plant and apparatus comprised in the BM Unit will be controlled independently of any other imports and exports to plant and apparatus comprised in another BM Unit.
 - 2.5.3 Under Section K, paragraph 3.1.2(c), a BM Unit must have Metering Equipment which is installed pursuant to Section L and conforming to the appropriate Code of Practice (CoP) that registers quantities of electricity Imported and Exported only by the Plant and Apparatus comprised in the BM Unit and no other Plant or Apparatus. Uskmouth has confirmed that.
 - 2.5.4 Under Section K, paragraph 3.1.2(d), the BM Unit shall not comprise Plant and Apparatus whose Imports and Exports are measured by both CVA Metering System(s) and SVA Metering System(s). Uskmouth has confirmed that the Plant and Apparatuses' Imports and Exports will only be measured by CVA Metering Systems.
 - 2.5.5 Under Section K, paragraph 3.1.2(e), a BM Unit must be the smallest aggregation of Plant and/or Apparatus that satisfies paragraphs K3.1.2(a), (b) and (c). Although in theory each GU can be individually controlled and therefore would be the smallest aggregation of Plant and Apparatus to satisfy paragraph K3.1.2(a), (b) and (c), in practice there is only one control system and the Uskmouth power station is contracted to provide ancillary services to the Transmission Company as a single unit.

3. Transmission Company and ELEXON comments

- 3.1 The Transmission Company has reviewed this non-standard BM Unit application and does not have any objections to it.
- 3.2 ELEXON recommends that the ISG agree on this application on the basis that:
 - the responsibility for the flows of electricity associated with the BM Unit lie with one Party, (Section K 3.1.2 (a));

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- The Plant and Apparatus associated with the Uskmouth power plant is capable of independent control from any other Plant and Apparatus (Section K3.1.2(b)) not in the proposed BM Unit;
- all volumes flowing from and to the BM Units will be captured by compliant Metering Systems, subject to D/486, and these volumes will be determined separately from volumes to and from other BM Units (Section K 3.1.2 (c));
- the BM Unit does not comprise CVA and SVA Metering Systems that measure the same Imports or Exports at any one time (Section K 3.1.2 (d)); and
- although the BM Unit would not be the smallest aggregation of Plant and Apparatus that satisfies K3.1.2 (a)-(c) (Section K3.1.2(e)), the Uskmouth power plant is designed to operate as a single unit.

4. Recommendations

4.1 We invite you to:

- a) **APPROVE** the non-standard BM Unit for the Uskmouth biofuel power station.

Appendices

Appendix 1 – BM Unit Configurations

Attachments

Attachment A – Uskmouth biofuel power station non-standard BM Unit application form BSCP15/4.13

Attachment B (CONFIDENTIAL) – Uskmouth Biofuel Power Station Single Line Diagram

Attachment C (CONFIDENTIAL) - Uskmouth Transformer and Banking Schematic

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APPENDIX 1 - BM UNIT CONFIGURATIONS

The BSC states that a BM Unit shall comprise Plant and/or Apparatus for who's Exports and/or Imports a Party is responsible (Section K3.1.1).

A BM Unit must satisfy the following conditions (K3.1.2):

- responsibility for the BM Unit would lie with one Party;
- it would be capable of independent control;
- it would be visible to the Settlement Administration Agent (SAA) as a metered quantity separately from anything that is not included in the BM Unit;
- the BM Unit does not comprise of CVA and SVA Metering Systems that measure the same Imports or Exports
- it would be the smallest aggregation of Plant and Apparatus that satisfies the first three bullet points above.

The BSC also sets out a number of standard configurations of BM Units (Section K3.1.4), including:

- a single Generating Unit (GU), Combined Cycle Gas Turbine (CCGT) or Power Park Module (PPM),
- a Combined BM Unit,
- the Imports through the station transformers of a Generating Plant or premises, which are directly connected to the Transmission System, at a single Boundary Point.
- directly connected premises which are connected at one boundary point only

The BSC states that a Registrant and/or Central Data Collection Agent (CDCA) / Central Registration Agent (CRA) can apply to the Panel for a non-standard BM Unit configuration in the following circumstances (K3.1.5):

- the Plant / Apparatus does not fall into a category listed in section K3.1.4 or the CDCA / CRA considers that there is reasonable doubt that this is the case;
- the Plant / Apparatus does fall into a category listed in K3.1.4 but the responsible Party considers that a different configuration would satisfy the requirements set out in K3.1.2; or
- there is more than one set of Exports/Imports at a CVA boundary Point and more than one Party is responsible for these.