

TRADING UNIT APPLICATION – HINKLEY POINT B AND C POWER STATIONS

MEETING NAME ISG

Date of meeting 3 March 2020

Paper number 227/02

Owner/author Mike Smith

Purpose of paper Decision

Classification Public

Summary EDF Energy Nuclear Generation Ltd has submitted a Trading Unit Application to comprise the BM Units associated with Hinkley Point B and C Power Stations within a Class 1 Trading Unit. We invite the ISG to approve a Class 6 Trading Unit for the BM Units associated with the Hinkley Point B and Hinkley Point C Power Stations with an Effective From Date of 'on or after' 1 April 2020.

1. Background to Trading Unit Application

- 1.1 **Hinkley Point B Power Station** - The two Generating Units (Gen 7 and Gen 8) associated with Hinkley Point B Power Station connect directly to the 400kV Transmission System at National Grid Electricity Transmission Ltd (NGET's) 400kV substation. The 400kV substation is located within the Hinkley Point B Power Station site. The Generating Unit connections are made via two 400/23kV generator transformers (GTx 7 and GTx 8). The Generating Units (and associated unit transformers) are registered in Settlement as Balancing Mechanism (BM) Units, T_HINB-7 and T_HINB-8 (Attachment F).
- 1.2 Two supergrid transformers (SGT5 and SGT6), located within the 400kV substation, feed NGET's adjacent 275kV substation, which is located at the Hinkley Point A Power Station site, via two underground cables.
- 1.3 The station loads associated with the Hinkley Point B Power Station are supplied via two dedicated 275/11kV station transformers (STx 3 and STx 4) and two shared 275/11kV station transformers (STx 1M and STx 2M), which connect into the 275kV substation. The station demand for the Hinkley Point B Power Station is registered in Settlement as a (demand) BM Unit, T_HINB-D (Attachment F).
- 1.4 The BM Units associated with the Hinkley Point B Power Station (T_HINB-7, T_HINB-8 and T_HINB-D) are currently comprised within a Class 1 Trading Unit (Trading Unit name: 'Hinkley Point B Power Station'). The Lead Party associated with these BM Units is EDF Energy Nuclear Generation Ltd (BSC Party ID: BEGL001).
- 1.5 **Hinkley Point C Power Station** - Hinkley Point C Power Station is currently being constructed and the construction demand is supplied from the same two shared 275/11kV station transformers (STx 1M and STx 2M) as the Hinkley Point B (and A) Power Station. The demand associated with Hinkley Point C Power Station construction supplies is registered in Settlement as a (demand) BM Unit, T_HPC_CES (Attachment F).
- 1.6 T_HPC_CES is currently a Sole Trading Unit. The Lead Party associated with this BM Unit is currently EDF Energy Customers Ltd (BSC Party ID: LENCO) and it has agreed to transfer the BM Unit to EDF Energy Nuclear Generation Ltd from the Effective From Date of the proposed new Trading Unit (see Section 2).
- 1.7 A new 400kV substation will be built at Hinkley Point C Power Station for the connection of its generators and operational station load (Attachment E). New Meters and BM Units will be registered for Hinkley Point C Power Station, when required, and the Trading Unit arrangements will be reviewed to meet the timescales for the back-feed and generation at Hinkley Point C Power Station.

TRADING UNIT APPLICATION – HINKLEY POINT B AND C POWER STATIONS

2. Trading Unit Application

- 2.1 EDF Energy Nuclear Generation Ltd has submitted a Trading Unit Application (including supporting information) to combine the BM Units associated with Hinkley Point B and C Power Stations within a Class 1 Trading Unit (Attachments A-F).
- 2.2 EDF Energy Customers Ltd, as Lead Party of the Hinkley Point C Power Station BM Unit, supports the Trading Unit Application and it has agreed to transfer the BM Unit to EDF Energy Nuclear Generation Ltd from the Effective From Date of the proposed new Trading Unit (proposed Trading Unit name: 'Hinkley Point B and C Power Stations').
- 2.3 EDF Energy Nuclear Generation Ltd believes the Trading Unit could be considered a Class 6 Trading Unit if the line diagram arrangement (Attachment F) is considered materially different from that for a Class 1 Trading Unit (as illustrated in section 4.2.1 (B) of BSCP31).
- 2.4 EDF Energy Nuclear Generation Ltd has requested an Effective from Date for the proposed new Class 1 Trading Unit of 'on or after' 1 April 2020 (Attachment A).

3. NETSO's view

- 3.1 We circulated the Trading Unit Application and associated document (Attachments A-F) to the National Electricity Transmission System Operator (NETSO) and asked it to confirm if the metering arrangements are compatible with transmission service charging and are operationally acceptable.
- 3.2 The NETSO confirmed it has no concerns from a Transmission Charging perspective.

4. ELEXON's view

- 4.1 We believe that the electrical arrangements of the BM Units associated with Hinkley Point B and C Power Stations, when taken together, do not match the diagrammatic representation of a Class 1 Trading Unit in section 4.2 of BSCP31 (i.e. a Power Station¹ with optional demand fed from within the Power Station System).
- 4.2 We recommend that the nominated BM Units be treated as a Class 6 Trading Unit on the basis that the nominated BM Units are not electrically configured in the same manner as those of a Class 1 Trading Unit because, while the BM Units associated with Hinkley Point B Power Station are electrically configured in the same manner as those of a Class 1 Trading Unit, the nominated BM Units are associated with two separate Power Stations, not one.
- 4.3 We support the Trading Unit Application for the BM Units associated with Hinkley Point B and Hinkley Point C Power Stations to form a Class 6 Trading Unit.

5. Recommendation

- 5.1 We invite you to:
 - a) **DETERMINE** if the Trading Unit Application demonstrates (to the ISG's reasonable satisfaction) sufficient similarities with sites which would satisfy those conditions for a Class 1 Trading Unit such that it would be unreasonable to not treat the nominated BM Units as a single (Class 6) Trading Unit; and

¹ The Grid Code defines a Power Station as 'An installation comprising one or more Generating Units or Power Park Modules (even where sited separately) owned and/or controlled by the same Generator, which may reasonably be considered as being managed as one Power Station'.

TRADING UNIT APPLICATION – HINKLEY POINT B AND C POWER STATIONS

- b) **APPROVE** the Trading Unit Application from EDF Energy Nuclear Generation Ltd to form a Class 6 Trading Unit comprising the BM Units associated with the Hinkley Point B and Hinkley Point C Power Stations with an Effective From Date of 'on or after' 1 April 2020.

Appendices

Appendix 1 - BSC requirements (for BM Units and Trading Units)

Attachments

Attachment A – Trading Unit Application (BSCP31/4.3) and BM Unit Details (BSCP31/4.5)

Attachment B – Attachment 4 (redacted version) - EDF Energy Nuclear Generation Limited letter

Attachment C – Attachment 5 (redacted version) - EDF Energy Customers Limited letter

Attachment D (CONFIDENTIAL) – Attachment 1 - Supporting evidence for application

Attachment E (CONFIDENTIAL) – Attachment 2 - Illustrative plan of transmission connections

Attachment F (CONFIDENTIAL) – Attachment 3 - SLD showing Settlement Meters & BM Units

For more information, please contact:

Mike Smith, Metering Analyst

mike.smith@elexon.co.uk

020 7380 4033

TRADING UNIT APPLICATION – HINKLEY POINT B AND C POWER STATIONS

Appendix 1 – BSC requirements (for BM Units and Trading Units)

[Section K](#) of the Balancing and Settlement Code (BSC) sets out the basis for establishing and registering BM Units and assigning those BM Units to Trading Units.

The Party responsible for the Exports from and/or Imports to Plant and Apparatus connected to the Transmission System or a Distribution System is required to establish and register BM Units which comprise that Plant and Apparatus.

The criteria for establishing what configuration of Plant and Apparatus constitutes a BM Unit are set out in K3.1.

Certain configurations of Plant and Apparatus are deemed to satisfy the criteria set out in K3.1.2 and constitute a single BM Unit, e.g.:

- any Generating Unit, Combined Cycle Gas Turbine (CCGT) Module, or Power Park Module whose Export Metering System(s) is or are registered in the Central Meter Registration Service (CMRS), i.e. as a Central Volume Allocation (CVA) Metering System; and
- the Plant and Apparatus which comprises part of, and which Imports electricity through the station transformers of, a Generating Plant, whose Import Metering System(s) is or are registered in CMRS.

By default a CVA registered BM Unit is a Sole Trading Unit, however Section K4 allows a Party to apply to have a combination of such BM Units belong to a particular class of Trading Unit. There are six classes of Trading Unit and these are described in Section K, Annex K-2 and [BSCP31](#) 'Registration of Trading Units':

- Classes 1 to 3 relate to BM Units associated with a generating station and demand;
- Class 4 relates to Exempt Export BM Units in the same Grid Supply Point Group;
- Class 5 relates to Interconnector BM Units; and
- Class 6 relates to those BM Units which do not fit into any of the other classes.

Having more than one BM Unit within a Trading Unit allows all the BM Units in the Trading Unit to be treated the same for:

- Transmission Loss Multipliers (TLMs);
- Production/Consumption flag;
- certain BSC costs; and
- Balancing Services Use of System (BSUoS) charges.

BSCP31 sets out the application process for registering these six classes of Trading Units and requires certain evidence, information and documents to be provided for each application.

The Imbalance Settlement Group (ISG) approves Trading Unit Applications to form Class 1, 2, 3, 5 or 6 Trading Units. ELEXON can approve a Trading Unit Application to form a Class 4 Trading Unit. To do so ELEXON confirms that all the nominated BM Units are Exempt Export BM Units and are all located in the same Grid Supply Point (GSP) Group.