ELEXON

CP Progression Paper

Creation of a new Interconnector Fuel Type for the Greenlink Interconnector

Contents

About This Document

You can find the definitions of the terms and acronyms used in this document in the BSC Glossary

This document provides information on a new Change Proposal (CP) and outlines our proposed progression timetable for this change, including when it will be issued for CP Consultation in the next suitable Change Proposal Circular (CPC) batch.

We are presenting this paper to the ISG on 6 February 2024 to capture any comments or questions from Committee Members on this CP before we issue it for consultation.

There are three parts to this document:

- This is the main document. It provides a summary of the solution, impacts, anticipated costs, and proposed implementation approach, as well as our proposed progression approach for this CP.
- Attachment A contains the CP proposal form.
- Attachment(s) B contain(s) the proposed redlined changes to deliver the CP solution.

Committee

Imbalance Settlement Group

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1. Summary

Why change?

The Greenlink Interconnector is currently under construction and due to be commissioned for operation by mid-September 2024.

Changes are needed to the Insights Solution to ensure data relating to the new Greenlink Interconnector is provided to market participants alongside existing data relating to Settlement arrangements in the Great Britain (GB) electricity market.

The BSC requires a separate 'Fuel Type Category' to be defined for each Interconnector for reporting purposes. It also requires the BSC Panel to approve all new fuel type categories. Therefore, for the Greenlink Interconnector data to be published on the Insights Solution, BSC Central System changes are needed, as is BSC Panel approval for this new 'Fuel Type Category'.

Solution

The solution requires the new Fuel Type Category to be recognised within BSC and the Code Subsidiary Documents (CSDs) and the data reported through the BMRS service as defined in BSC Section V 'Reporting'[1], Balancing Mechanism Reporting Agent (BMRA) Service Description[2] and the BMRA User Requirements Specifications[3].

The service is currently fulfilled by the existing BMRS application and the replacement BMRS application labelled the 'Insights Solution'[4].

The Insights Solution will fully replace the legacy BMRS application in May 2024 and fulfil Elexon's obligation under the BSC to act as the Balancing Mechanism Report Agent (BMRA) by collecting, displaying and providing wholesale market data.

Impacts and costs

The Elexon central cost is estimated at approximately £65,000.

This CP will impact NGESO who will be required to provide data for the new Greenlink Interconnector. Market participants consuming data from the Insights Solution will need to be aware of the addition of the new Interconnector as it may require changes to their reporting system consuming the data via Insights endpoints.

Implementation

This CP is proposed for implementation on 01 August 2024 as a non-standard Release. This will ensure that the reporting changes are made prior to the new Greenlink Interconnector becoming commercially operational by mid-September 2024.

Not sure where to start?

We suggest reading the following sections:

- Have 5 minutes? Read section 1
- Have 15 minutes? Read sections 1, 4, 5 and 6
- Have 30 minutes? Read all sections
- Have longer? Read all sections and the annexes and attachments

[1] https://bscdocs.elexon.co.uk/bsc/bsc-section-v-reporting
[2] https://bscdocs.elexon.co.uk/service-descriptions/balancing-mechanism-reporting-agent-service-description
[3] https://bscdocs.elexon.co.uk/service-descriptions/balancing-mechanism-reporting-agent-service-description
[4] https://bmrs.elexon.co.uk/

2. Why Change?

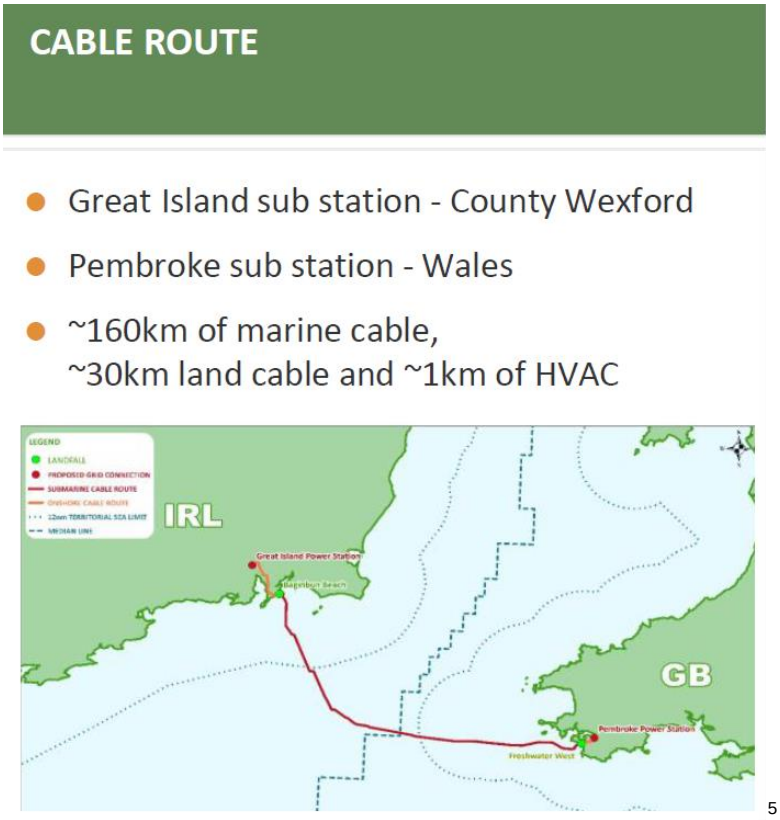
What is the issue?

The new Greenlink Interconnector is being constructed to connect the existing grids in Ireland and Great Britain. It is necessary to make BSC Central System changes to the Insights Solution to add a new Interconnector fuel type, before the Interconnector becomes operational, in order that the Interconnector data can be published in a transparent manner.

Background

Electricity Interconnectors are the physical links which allow the transfer of electricity across country borders. There are currently operational Interconnectors linking the GB System to Ireland, France, Belgium and the Netherlands

Greenlink is a subsea and underground electricity interconnector cable (with associated converter stations) linking the existing electricity grids in Ireland and Great Britain and has a nominal capacity of 500MW. Greenlink will provide a new grid connection between EirGrid's Great Island substation in County Wexford (Ireland) and National Grid's Pembroke substation in Pembrokeshire (Wales). The power will be able to flow in either direction, depending on supply and demand in each country.



[5]

BSC Section Q 'Balancing Mechanism Activities'[6] requires that a separate 'Fuel Type Category' is defined for each Interconnector. These fuel types are then published on the BMRS platform and reflected within the BSC Code Subsidiary Documents (CSDs) New

[5] Visualization provided by John Rooney at SONI
[6] https://bscdocs.elexon.co.uk/bsc/bsc-section-q-balancing-mechanism-activities

Electricity Trading Arrangements (NETA) Interface Definition and Design (IDD) Document Part 1 – Interfaces with BSC Parties and their Agents[7] and NETA IDD Part 1 spreadsheet[8].

BMRS/Insights Solution

Elexon is currently modernising its technology and building a cloud based solution for its BSC Agents' systems as part of Elexon Kinnect. As part of the programme, Kinnect Insights Solution (Insights) is being implemented to deliver all report and publication capabilities from the legacy BMRS platform.

The Insights Solution will fully replace the legacy BMRS application in May 2024 and fulfil Elexon's obligation under the BSC to act as the Balancing Mechanism Report Agent (BMRA) by collecting, displaying and providing wholesale market data.

BMRS is the primary channel for providing operational data relating to Settlement arrangements in the Great Britain (GB) Electricity Market. It has over 100,000 users and around six million hits daily on its Application Programming Interfaces (APIs). Market participants use the data on the BMRS to inform trading decisions and understand market dynamics. The BMRS receives, stores and publishes data relating to the Interconnectors to GB.

Additional Fuel Types

In accordance with BSC Section Q, the BSC Panel are required to approve new external Interconnectors as new Fuel Type Categories following any necessary consultation with industry.

Separately, a CP is required to gain approval for the BSC CSD amendments and system changes to the BMRS to enable the publication of the Interconnector data through a Fuel Type Category.

[7] https://bscdocs.elexon.co.uk/interface-definition-documents/neta-interface-definition-and-design-document-part-1-interfaces-with-bsc-parties-and-their-agents
[8] https://bscdocs.elexon.co.uk/interface-definition-documents/neta-interface-definition-and-design-part-1-spreadsheet

3. Solution

Proposed solution

A new ‘Fuel Type Category’ will be created for the Greenlink Interconnector and the data will be subsequently published on the Insights Solution.

The NETA IDD Part 1 Document and Spreadsheet documentation will require updating with the new Fuel Type Category. This will be designated as INTGRNL.

Data submission/receipt

National Grid ESO will need to amend its Balancing Mechanism (BM) Systems and Electricity Balancing System (EBS) to include the relevant new Interconnector data in the flows submitted to the Insights Solution.

Elexon will need to amend its flow loaders, which is the coding that reads the flows incoming from National Grid ESO, to include the new Interconnector’s data in BSC Central System databases. Therefore, flow loaders for FUELINST, FUELHH, UOU2T14D, UOU2T52W, UOU2T3YW, FOU2T14D, FOU2T3YW and FOU2T52W (as displayed on the table below) will be modified to recognise the INTGRNL Interconnector Fuel Type.

Flow Type ID	Flow Description	Receipt Frequency
FUELINST	Instantaneous Generation by Fuel Type	Every 2 minutes
FUELHH	Half-Hourly Generation by Fuel Type	Every 30 minutes
FOU2T14D	National Output Usable by Fuel Type, 2-14 days ahead	Daily
FOU2T3YW	National Output Usable by Fuel Type, 2-156 weeks ahead	Hourly
FOU2T52W	National Output Usable by Fuel Type, 2-52 weeks ahead	Hourly
UOU2T14D	National Output Usable by BM Unit and Fuel Type, 2-14 days ahead	Daily
UOU2T52W	National Output Usable by BM Unit and Fuel Type, 2-52 weeks ahead	Once a week
UOU2T3YW	National Output Usable by BM Unit and Fuel Type, 2-156 weeks ahead	Hourly

Data publication

The source files above (Generation by Fuel Type, Generation Forecasts and Interconnector Flows) will be updated to include Greenlink.

The Insights Solution fulfils the BMRS/Insights publishing obligations and will make the data available on the website, APIs and the Insights Real-time Information Service (IRIS).

Proposer's rationale

The Proposer states that this change should be made to allow for the Greenlink Interconnector to participate in the GB electricity market.

This CP ensures that market participants will have access to market data for a new Interconnector. Once the BSC Panel approve the new Fuel Type Category, NGESO and Elexon will have an obligation to publish related data from the approved Implementation Date. This CP will allow for this requirement to be met.

Proposed redlining

Attachment B contains the proposed redlining to the NETA IDD: Part 1 Documentation – Interfaces with BSC Parties and their Agents.

The redlining to the NETA IDD Part 1 spreadsheet will be developed in parallel to the BSC Central System changes as part of the implementation phase of this CP. The spreadsheet is updated as part of the design phase, which is initiated following approval.

4. Impacts and Costs

BSC Party & Party Agent impacts and costs

The implementation of this CP will require NGESO to send data for the new Greenlink Fuel Type Category to the BMRA. This will subsequently be published on BMRS/Insights, meaning that BMRS/Insights users could be impacted by the provision of additional data.

BSC Party & Party Agent Impacts	
BSC Party/Party Agent	Impact
NGESO	Low - NGESO will be required to send data for the new Greenlink Fuel Type Category
BMRS/Insights Users	Low - Market participants consuming the data from BMRS/Insights will need to be aware of the addition of a new Interconnector Fuel Type Category

Central impacts and costs

Central impacts

Changes are required to Insights to receive data for the new Greenlink Interconnector and subsequently make this available to market participants.

The NETA IDD: Part 1 Document and Spreadsheet will be updated with the proposed Fuel Type Category name for the Greenlink Interconnector (INTGRNL).

Please note that the NETA IDD: Part 1 Spreadsheet is not being consulted upon as part of this CP consultation. Due to design and development work that must be undertaken before the IDD spreadsheet can be produced, this document will be drafted to reflect the solution as described in the CP, and will be sent for industry consultation as part of a Release Circular prior to the Implementation Date.

Central Impacts	
Document Impacts	System Impacts
• NETA IDD Part 1 Document • NETA Interface Definition and Design (IDD) Part 1 Spreadsheet	• Insights Solution

Impact on BSC Settlement Risks

Impact on BSC Settlement Risks
No impacts on the BSC Settlement Risks have been identified.

Impact on Market-wide Half Hourly Settlement (MHHS)

Impact on MHHS
No impacts on MHHS have been identified.

Central costs

The central implementation costs for this CP is estimated at approximately £65,000. This includes the costs to amend the Insights Solution and to implement the changes to the IDD documentation.

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5. Implementation Approach

Recommended Implementation Date

This CP is proposed for implementation on 1 August 2024 as a non-Standard BSC Release. This will ensure that the reporting changes are made prior to the Greenlink Interconnector becoming commercially operational by mid-September 2024.

6. Proposed Progression

Progression timetable

BSC Section Q6.1.18 reserves the right for the Panel to approve Fuel Type Categories relating to further Interconnectors without making changes to the BSC itself.

However, as BSC Central System changes are required to enable the BMRS/Insights to publish data relating to the new Fuel Types, along with changes to associated documentation, a CP must also be progressed. BSC Panel approval will be sought for both the addition of the Interconnectors as Fuel Type Categories, and for this CP, as part of this CP Assessment Report for efficiency purposes. The joint approval approach has been used for previous CPs of this nature.

The table below outlines the proposed progression plan for this CP:

Progression Timetable	
Event	Date
CP Progression Paper presented to ISG for information	6 February 24
CP Consultation	12 February – 08 March 24
CP Assessment Report presented to ISG to seek feedback	2 April 24
CP Assessment Report presented to Panel for decision	11 April 24
Proposed Implementation Date	1 August 24 (Non-Standard Release)

CP Consultation questions

We intend to ask the standard CP Consultation questions for this CP. We do not believe any additional questions need to be asked for this CP.

Standard CP Consultation Questions
Do you agree with the proposed solution?
Do you agree that the draft redlining delivers the proposed solution?
Will this CP impact your organisation?
Will your organisation incur any costs in implementing this CP?
Do you agree with the proposed implementation approach for this CP?

7. Recommendations

We invite you to:

- **NOTE** the proposed progression timetable for the CP; and
- **PROVIDE** any comments or additional questions for inclusion in the CP Consultation; and
- **NOTE** that, following CP Consultation, this CP will be presented to:
    - The ISG on 2 April 2024 to seek feedback;
    - and Panel on 11 April 2024 for decision