
Balancing and Settlement Code (BSC) P475: Allowing All Storage Sites to set and fix their own Production/Consumption Flags

Decision The Authority¹ determines that this modification should be made²

Target audience National Grid Electricity System Operator (NGESO), Parties to the BSC, the BSC Panel and other interested parties

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Background

Section K3 of the BSC mandates that each Balancing Mechanism (BM) Unit must have either a Production or Consumption status to ensure accurate allocation of energy flows. Storage assets differ fundamentally from traditional generation and consumption assets because they can operate in both modes – importing and exporting energy. This dual capability means that BM Units containing storage assets can flip between being classified as Production (P) and Consumption (C). If a storage unit's P/C status flips unexpectedly, it can result in an imbalance that may not be detected immediately. This issue is particularly problematic for operators who rely on Meter Volume Reallocation Notifications (MVRNs)³ to allocate energy to different BSC Parties. For example, if the P/C status is incorrect at time of a MVRN or bilateral agreement, it can lead to an unexpected contract cancellation – which will result in both parties being left with unexpected energy volumes in their account. This can have substantial

¹ References to the “Authority”, “Ofgem”, “we” and “our” are used interchangeably in this document. The Authority refers to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day to day work. This decision is made by or on behalf of GEMA.

² This document is notice of the reasons for this decision as required by section 49A of the Electricity Act 1989.

³ A Meter Volume Reallocation Notification (MVRN) is a process used in the Balancing and Settlement Code framework to reallocate metered volumes of electricity between different parties. This process allows the energy generated or consumed by a Balancing Mechanism (BM) Unit to be transferred from one Party’s account to another. MVRNs have to be set up between a Production BM Unit and a Production account or a Consumption BM Unit and a Consumption account. MVRNs are crucial for accurate energy trading and settlement, as they ensure that the correct amounts of electricity are attributed to the appropriate accounts, thereby facilitating balanced and fair trading between market participants..

financial implications for BM Unit Lead Parties⁴ because if it has not been accounted for when lodging credit, it may result in a party going into Credit Default.⁵

The current manual workaround operated by Elexon, which involves notifying BM Units of impending flips, is not a sustainable long-term solution, especially given the anticipated growth in large storage facilities.

This code modification would impact storage units which are over 50MW (defined as Large Storage Units). Storage units under 50MW can set their P/C flag via the Exempt Export process.⁶ Given the forecasted growth in large storage facilities, the need for a robust and sustainable solution to address the flipping risk is clear.

What causes a Large Storage Site to flip flags incorrectly?

The Production or Consumption status is calculated depending on the Demand Capacity (DC) and Generation Capacity (GC) values of the unit. As storage assets import and export similar amounts, the magnitude of their GC and DC are similar. The change of the value between GC and DC from a positive number to a negative number (or vice versa), can cause the BM Unit to flip between P and C statuses.

The modification proposal

P475 was raised by HD143OCK (the Proposer) on 6 June 2024. The solution is designed to help reduce issues which arise from unexpected changes to flag status for storage units in the BM. P475 aims to modify the BSC to allow storage BM Units, above 50MW, to set their P/C flag themselves; this would prevent involuntary flipping of the flag status and remove the need for Elexon to manually notify BM Units of impending flag status changes. To implement this,

⁴ A BM Unit Lead Party refers to the Party registered or to be registered in respect of the BM Unit pursuant to BSC Digital Code [Section K3](#) and [K8](#).

⁵ In accordance with [BSC Section M: Credit Cover and Credit Default - Elexon Digital BSC](#)

⁶ Storage Units less than 50 MW can either be registered in the Supplier Volume Allocation Market and therefore have a fixed P/C status of C, or be registered in the Central Volume Allocation Market as an individual BM Unit flagged as licence exempt, which in turn allowed them to fix their P/C Flag. Both these options prevent the flipping issue.

amendments would be made to Section K of the BSC and updates applied to BSC Procedure (BSCP) 15⁷ and associated processes.

The modification would:

- Enable storage BM Units to fix their P/C flag at the time of first registration or change it once registered to BSCP 15;
- Add definitions for storage BM Unit and further definitions for Consumption BM Unit and Production BM Unit into Section X-1 of the BSC; and,
- Extend BSC Section K3.5.5 to cover storage BM Units as well as Exempt Export BM Units.⁸

As part of the implementation of P475, Elexon would put an article in Newscast⁹ to inform users that all storage and pumped storage BM Units have the ability to choose their P/C flag. Elexon would also re-assess the BM Units that are eligible to choose their P/C flag and attempt to contact the relevant BSC Parties via email. The Newscast article and emails would explain that, once the Modification is implemented, these BM Units could choose their P/C flag and how to do this.

BSC Panel¹⁰ recommendation

At a meeting on 8 August 2024, the BSC Panel agreed that P475 better facilitates Applicable BSC Objective (c) and (d).

⁷ BSCP 15 defines the key interfaces, interdependencies and timetable for the registration and de-registration of BM Units by a Party. Further information can be found here: BSCP 15: [BSCP 15: BM Unit Registration - Elexon Digital BSC](#).

⁸ The Lead Party of an Exempt Export BM Unit must choose to set the BM Unit's P/C Flag to either P or C. In other words, it must choose a fixed P/C Status of either Production or Consumption for the BM Unit. To have an Exempt Export BM Unit, the Lead Party must apply for Exemptable Status using BSCP 15.

⁹ A newsletter that features information that will keep you in touch with the industry and BSC activities on a weekly basis.

¹⁰ The BSC Panel is established and constituted pursuant to and in accordance with Section B of the BSC and [Standard Special Licence Condition C3 of the Electricity Transmission Licence](#).

- (c) promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity
- (d) promoting efficiency in the implementation and administration of the balancing and settlement arrangements

The Panel agreed that P475 was neutral against all other Objectives and that it should be submitted to Ofgem for decision. Therefore, the panel recommended the approval of P475.

Our decision

We have considered the issues raised by the modification proposal and the Final Modification Report (FMR) dated 9 August 2024. We have considered and taken into account the responses to the industry consultation which are attached to the FMR.¹¹ We have concluded that:

- implementation of the modification proposal will better facilitate the achievement of the applicable objectives of the BSC;¹² and,
- directing that the modification be made is consistent with our principal objective and statutory duties.¹³

Reasons for our decision

We consider this modification proposal will better facilitate BSC objectives (c) and (d) and have a neutral impact on the other applicable objectives.

(c) promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity

¹¹ BSC modification proposals, modification reports and representations can be viewed on the [Flexon website](#).

¹² As set out in [Licences and licence conditions | Ofgem](#)

¹³ The Authority's statutory duties are wider than matters which the Panel must take into consideration and are detailed mainly in the Electricity Act 1989.

The Proposer believes P475 will better facilitate Applicable BSC Objective (c) as, by allowing storage BM Units to fix their P/C status, P475 reduces the financial risks associated with flipping, thereby fostering a more stable and predictable trading environment which enhances competition.

We agree that this will improve operability for large storage BM units, as it puts the Lead Party in control of their flag status, and leads to fewer flips. With fewer flips to the BM Units, it reduces the chances that electricity contracts are left unfulfilled, which benefits all parties. This facilitates a more stable environment for BMUs which will promote greater competition in line with Objective (c).

(d) promoting efficiency in the implementation and administration of the balancing and settlement arrangements

The Proposer believes P475 will better facilitate Applicable BSC Objective (d) as fixing the P/C status eliminates the need for manual intervention by Elexon to manage flipping, thus streamlining the process and increasing efficiency in the administration of BSC arrangements.

We agree that with the expected increase in Large Storage Units operating within the BM, it would be unsustainable for Elexon to continue the manual flipping procedure. P475 will therefore enable more efficient administration of the BSC arrangements, and will also ensure a more robust and reliable framework for managing large storage assets.

Decision notice

In accordance with Standard Condition C3 of the Transmission Licence, the Authority hereby directs that modification proposal BSC P475: 'Allowing all storage sites to set and fix their own Production/Consumption flags' be made.

Maryam Khan

Head of Electricity Security and Market Management.

Signed on behalf of the Authority and authorised for that purpose

24th September 2024