

Modification proposal:	Balancing and Settlement Code (BSC) P348 and P349: 'Provision of gross BM Unit data for TNUoS charging' (P348) and 'Facilitating Embedded Generation Triad Avoidance Standstill' (P349)		
Decision:	The Authority ¹ directs that modification P348/P349 be made ²		
Target audience:	National Grid Transmission Plc (NGET), Parties to the BSC, the BSC Panel and other interested parties		
Date of publication:	22 June 2017	Implementation date:	22 February 2018

Background

Transmission Network Use of System (TNUoS) charges³ recover the costs of constructing, operating and maintaining the transmission system. 'Embedded generation' (EG) is generation connected to a distribution network. Larger embedded generation (100MW plus) is 'licensable' and subject to generation transmission charges. Smaller embedded generation (under 100MW) normally contracts through a supplier and is treated as negative demand for transmission charging purposes, including TNUoS. For example, a supplier's transmission charges for a given Grid Supply Point (GSP) group, will be based on its net demand, with the half hourly metered embedded generation being netted off the gross demand.

'Embedded benefits' are the payments which smaller EG get, and the charges they do not have to pay, compared to larger (over 100MW) EG on the distribution system and transmission connected generators. 'Embedded benefits' come in the form of both payments that smaller EG receive for helping suppliers⁴ to avoid transmission charges (or payments they receive directly from National Grid), and also avoided transmission generation charges that these generators do not pay. Suppliers pay embedded generation for the role they play in reducing this charging liability, meaning embedded generation can be paid in excess of £45/kW (the level of the TNUoS cost-recovery charge, the TNUoS Demand Residual (TDR)). In recent years the TDR has been rising, having increased from about £10/kW to £30/kW from 2005 to 2014. It is forecast to rise to £69.59/kW by 2021/22. The TDR payment is one of a range of embedded benefits which smaller EG can receive.

Two Connection Use of System Code (CUSC) modifications, CMP264⁵ and CMP265⁶, were raised to make changes to the TNUoS charging arrangements. Specifically, they sought to remove the netting of output from embedded generators⁷ from gross demand, when calculating the locational and wider half hourly (HH) demand TNUoS charges. These CUSC modifications required consequential BSC modifications to ensure that National Grid has the correct data to calculate TNUoS charges and to deliver the CMP264 or CMP265 solution.

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 TNUoS charges are split between generation and demand and are levied on a £/kW basis and comprise a 'locational' element which reflects the long-term impact that network users have on the transmission system, and a 'residual' element which ensures that the transmission owners recover their costs in full.

⁴ During the CMP264/5 workgroups, National Grid estimated a 7.5GW of smaller EG runs during winter peak periods. In addition, the more EG that is used to offset charges, the smaller the demand charging base, which leads to higher user charges.

⁵ <http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP264/>

⁶ <http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/CUSC/Modifications/CMP265/>

⁷ In this context, embedded generators are defined as sub-100MW generators connected to the distribution system

P348 is the consequential BSC modification which accompanies CMP265, 'Gross charging of TNUoS for HH demand where embedded generation is in the Capacity Market'. P349 is the consequential modification which accompanies CMP264, 'Embedded Generation Triad Avoidance Standstill'. These two CUSC modifications were run as combined work groups with many of the proposals raised addressing the defect of both CMP264 and CMP265 CUSC modifications. Similarly, the P348 and P349 work groups were run in conjunction with each other. Both P348 and P349 have the same proposed solution, and an alternative modification each.

The modification proposal

P348 and P349 seek to facilitate the implementation of CMP265 or CMP264 respectively. The modifications seek to ensure that National Grid receives the data it requires to calculate both indicative and actual TNUoS charges under a scenario where any of the CUSC proposals or Working Group Alternative CUSC Modifications (WACMs) is approved.

P348 was raised by EDF on 1 July 2016. P348 seeks to enable the Supplier Volume Allocations Agent (SVAA) to provide gross export and gross import to National Grid to reflect changes made to the TNUoS charging methodology made under the CUSC modification CMP265, in order for National Grid to calculate TNUoS charges.

P349 was raised by ScottishPower on 4 July 2016 and seeks to facilitate the delivery of CMP264. P349 was originally proposed on the assumption that implementation of CMP264 would require both Supplier Volume Allocation (SVA) and Central Volume Allocation (CVA) metered data for 'new' embedded generators⁸ to be provided to National Grid to allow it to calculate TNUoS charges according to changes made to the TNUoS charging methodology under CMP264.

P348 and P349 were originally raised to support the defects of CMP265 and CMP264 originals only, and, as set out above, the original proposed BSC modifications differed in scope from each other. However, over time and due to the CUSC and BSC modification workgroups running concurrently, the reporting requirements for both the CMP264 and CMP265 Originals, and the 23 unique CUSC WACMs, converged. Due to this, the BSC workgroup decided to develop common BSC options which would satisfy the reporting requirements for all, or a majority, of the CUSC options. The three options are set out in full in the Final Modification Report (FMR) and in brief below:

- **Option 1 (P348 Alternative Modification)**
 - This modification satisfies the reporting requirements for CMP264 and CMP265 originals and all relevant WACMs.
 - This modification requires the SVAA to calculate values for both 'Affected'⁹ and 'Grandfathered' export volumes from individual metering system metered data.
 - This is a centralised function whereby the SVAA carries out the function alongside its normal settlement function.

- **Option 2 (P348 and P349 Proposed Modification)**
 - This modification would only satisfy the reporting requirements for CMP264 and CMP265 WACMs 1-11. These are WACMs where all embedded generators, irrespective of their commissioning date or holding of a Capacity Market

⁸ 'New' embedded generators are those generators who commission after a set date, defined in the CUSC legal text for the relevant CUSC proposal or WACM

⁹ The definition for 'Affected' and 'Grandfathered' embedded generators is specific to the CUSC modification proposal and can be found in the FMR. 'Affected' embedded generators generally describes the parties to which the new arrangements would apply. A 'Grandfathered' embedded generator is a generator to which the changes would not apply, meaning they would continue to receive the TNUoS triad embedded benefit.

- (CM)/Contract for Difference (CfD) contract, move to the same level of TDR payment.
 - This modification is a simplified SVAA option where National Grid is only sent gross half hourly (HH) embedded export and gross HH demand associated with the individual Supplier Balancing Mechanism Units.
 - The data for this can be calculated from existing settlement data. National Grid will also be provided with three years of historical data.
- **Option 3 (P349 Alternative Modification)**
 - This modification satisfies the reporting requirements for CMP264 and CMP265 originals and all relevant WACMs.
 - This option creates a process for the SVAA within current processes by introducing new Measurement Classes and Consumption Component Class (CCC) IDs to identify those generators classed as either 'Affected' or 'Grandfathered' embedded generators.

The proposers agreed to adopt 'Option 2' as their proposed modification for both P348 and P349, however, due to the fact that it only satisfies the reporting requirements for CMP264 and CMP265 WACM1-11, agreed to adopt both 'Option1' and 'Option 3' as alternative modifications.

The proposers for P348 and P349 both consider that the proposals will better facilitate applicable BSC objectives (a) and (c).¹⁰ The proposer for P348 also considers that the proposal will better facilitate BSC objective (f).¹¹

BSC Panel¹² recommendation

The BSC Panel met on the 11 May 2017 to consider the P348 and P349 draft modification reports. Due to Ofgem having not made a final decision on the CUSC modifications CMP264 and CMP265, the BSC Panel provided conditional recommendations dependent on an Ofgem decision.

The full details of the conditional voting and recommendations can be found in the Final Modification Reports (FMRs) for P348¹³ and P349¹⁴. A decision has now been reached on the CUSC modifications. We have today issued our decision to approve CMP264/265 WACM4. As such, only the relevant BSC Panel recommendations are stated below.

At the BSC Panel the BSC Panel unanimously agreed that that P348 and P349 Proposed Modification would better facilitate the BSC objectives and the Panel therefore recommended its approval.

The BSC Panel provided further recommendation in regards to a potential decision from Ofgem to approve CUSC CMP264 WACM4 or CMP265 WACM4, aligned with our minded to position:

¹⁰ (a) the efficient discharge by the licensee of the obligations imposed upon it by this 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 of the balancing and settlement arrangements

¹¹ (f) Implementing and administrating the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation

¹² 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 available at: www.epr.ofgem.gov.uk

¹³ <https://www.elexon.co.uk/mod-proposal/p348/>

¹⁴ <https://www.elexon.co.uk/mod-proposal/p349/>

*'If the Authority approves either of CUSC CMP264 WACM 4 or CMP265 WACM 4, **AGREE** that the P348/349 Proposed Modification **DOES** better facilitate Applicable BSC Objective (a).'*

One Panel member considered that all three BSC options are detrimental to BSC objective (d). However the panel agreed that if CMP264 WACM4 or CMP265 WACM4 was approved, then the benefit in respect of BSC objective (a) would outweigh any potential detriment against objective (d).

Our decision

We have considered the issues raised by the modification proposals and the FMRs dated 22 May 2017. We have considered and taken into account the responses to the industry consultations which are attached to the FMRs¹⁵. We have concluded that:

- implementation of the modification proposal under both P348 and P349 (option 2 as described above)¹⁶ will better facilitate the achievement of the applicable objectives of the BSC;¹⁷ and
- directing that the modification be made is consistent with our principal objective and statutory duties.¹⁸

Reasons for our decision

We consider the modification proposal for P348/P349 will better facilitate BSC objective (a), has a small detrimental impact on BSC objective (d) and is neutral to all other BSC objectives.

We consider the small detrimental impact on objective (d) to be significantly outweighed by the positive impacts we have assessed against the other BSC objectives. In particular, we consider that the additional costs and complexity of administering the BSC are warranted in light of CUSC modifications CMP264 and CMP265 and the requirement on NGET to discharge its obligations under the licence, further to objective (a).

(a) the efficient discharge by the licensee of the obligations imposed upon it by this licence

WACM4 under CMP264 and CMP265 requires additional reporting requirements to National Grid, from the SVAA. Specifically, the reporting of gross HH embedded export and gross HH demand associated with the individual Supplier Balancing Mechanism Units. Without the changes made under the BSC, this would not be possible. P348/P349 proposed solution (option 2 above and as described in more detail in the FMRs) ensures that National Grid will be provided with the correct data to allow them to calculate TNUoS charges. The proposed solution under P348/P349 also allows the SVAA to pass on an extract of historical data to allow National Grid to calculate TNUoS charges more accurately.

The proposed solution under P348/P349 also ensures that the data is passed onto National Grid at least cost, when compared to both of the alternatives proposed. Whilst

¹⁵ BSC modification proposals, modification reports and representations can be viewed on the Elexon website at www.elexon.co.uk

¹⁶ For the avoidance of doubt – identical legal drafting changes are proposed to give effect to P348 and P349, as set out in annex A to their respective FMRs.

¹⁷ As set out in Standard Condition C3(3) of NGET's Transmission Licence: <https://epr.ofgem.gov.uk>

¹⁸ 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 BSC Panel raised the concern that the proposed solution comes at a cost of c.£117k, we consider the benefits outweigh this small additional cost under the BSC.

We note that the workgroup unanimously agreed that the P348/349 proposed solution better meets applicable BSC objective (a). We also note that the BSC panel unanimously agreed that if CMP264 WACM4 or CMP265 WACM4 were approved by Ofgem, then the P348/349 Proposed solution does better facilitate BSC Objective (a).

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

P348/9 proposed solution will result in some implementation and administration costs to Elexon and National Grid, as well as generators and suppliers. These are set out in the Workgroup's Industry Impact Assessment, its consultation responses, and the FMR. While it was not possible to quantify all of these costs, on balance, we estimate the additional consumer benefit brought about by implementation of CMP264 and CMP265 WACM4 will outweigh the cost to impacted parties to implement.

In addition to this, P348/349 proposed solution is the least cost option, when compared to the two alternative modifications. We consider that there will be a marginally detrimental effect on applicable objective (d) because P348/349 proposed solution would add some cost and a modest level of additional complexity to the arrangements. But as set out above, we consider this is significantly outweighed by the benefits.

Decision notice

In accordance with Standard Condition C3 of NGET's Transmission Licence, the Authority hereby directs that modification proposal BSC P348: '*Provision of gross BM Unit data for TNUoS charging*' and P349 '*Facilitating Embedded Generation Triad Avoidance Standstill*' proposed solution be made.

Frances Warburton
Partner – Energy Systems

Signed on behalf of the Authority and authorised for that purpose