

## P371 'Levelling the playing field - Inclusion of Spin-Gen, Non-BM Fast Reserve and Non-Tendered Fast Reserve actions into the calculation of the Imbalance Price and extension of the cash-out price arrangements to Fast Reserve'

This Modification Proposal aims to include the price of Spin Gen, Non-Balancing Mechanism (BM) Fast Reserve and Non-Tendered Fast Reserve actions into the calculation of the Imbalance Price. The aim is to correct the calculation of the Imbalance Price; guarantee fair and harmonised treatment of all services which cost should be included; provide greater transparency and, ultimately, ensure National Grid's compliance with the Balancing Services Adjustment Data Methodology Statement (BSAD).



ELEXON recommends P371 is progressed to the Assessment Procedure for an assessment by a Workgroup

This Modification is expected to impact:

- BSC Parties
- The Transmission Company
- The Settlement Administration Agent (SAA)
- The Balancing Mechanism Reporting Agent (BMRA)



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## About This Document

This document is an Initial Written Assessment (IWA), which ELEXON will present to the Panel on 13 September 2018. The Panel will consider the recommendations and agree how to progress P371.

There are two parts to this document:

- This is the main document. It provides details of the Modification Proposal, an assessment of the potential impacts and a recommendation of how the Modification should progress, including the Workgroup's proposed membership and Terms of Reference.
- Attachment A contains the P371 Proposal Form.

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# 1 Why Change?

## Background

Imbalance Pricing (also known as 'cash out') is a key part of the wholesale trading arrangements in Great Britain.

The wholesale electricity market is set up so that BSC Parties that require electricity for their customers (Suppliers) enter into contracts with organisations that produce electricity (Generators).

For any given half hour Settlement Period, Parties may trade with each other up to the start of the relevant Settlement period. However Parties need to submit Physical Notifications (PNs) for each Settlement Period (half hour trading period) so that the Electricity System Operator (ESO – National Grid) can understand the overall imbalance of the Transmission System. This is done at a point one hour beforehand, known as Gate Closure. At this point the PNs become Final Physical Notifications (FPNs). After Gate Closure, Parties must try to adhere to the FPNs submitted to the ESO. They should only deviate from their FPN at the instruction of the ESO.

Parties will aim to balance their position for a given Settlement Period at this time such that the amount of energy they generate or buy matches the amount of energy they consume or sell. However, there are circumstances where this does not happen, such as a Generator experiencing an unexpected outage that does not allow them to generate the expected amount of energy, or a Supplier over- or under-estimating the amount of demand their customers actually use. This leaves the Party in a position of imbalance.

Following the end of a Settlement Period, ELEXON will compare the volume of energy each Party contracted (traded) with its Metered Volumes for the Settlement Period, accounting for any balancing actions. Any surplus or shortfall that the Party has is paid for using the relevant imbalance price.

The System Sell Price (SSP) and the System Buy Price (SBP) are the 'cash-out' prices or 'imbalance prices' that are used to settle the difference between the contracted generation or consumption and the amount that was actually generated or consumed in each half hour trading period. These two types of cash-out prices are defined as follows:

- SSP is **paid to** BSC Trading Parties who have a net surplus of imbalance energy (the Party generated or bought more energy than it consumed or sold); and
- SBP is **paid by** BSC Trading Parties who have a net deficit of imbalance energy (the Party consumed or sold more energy than it generated or bought).

These prices are designed to incentivise Parties to balance their position.

However as there is a single price calculation; SBP will equal SSP in each Settlement Period. ELEXON apply these prices to Parties' imbalances to determine their Trading Charges.

## Electricity Balancing Significant Code Review

In August 2012, Ofgem launched its [Electricity Balancing Significant Code Review \(EBSCR\)](#) to look at imbalance prices, in order to address long-standing concerns that it had raised in 2010 within its [Project Discovery](#) report. In particular, Ofgem expressed concerns that imbalance prices are not creating the correct signals for the market to balance, which



### Imbalance Pricing

The Imbalance Price is used to settle energy imbalance volumes. At the end of a Settlement Period, BSC Systems compare a Party's contracted (traded) volume with the metered volume of energy used in the Settlement Period. If a Party is in imbalance of its contracted volume, then it will be subject to imbalance charges.



### Physical Notification

A notification made by (or on behalf of) the Lead Party to the Transmission Company under the Grid Code as to the expected level of Export or Import, as at the Transmission System Boundary, in the absence of any Acceptances, at all times during that Settlement Period

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could increase the risks to future electricity security of supply and undermine balancing efficiency, unnecessarily increasing costs.

Upon completion of the SCR, the Authority issued a direction to the Transmission Company to raise an SCR Modification Proposal to progress the outcomes. On 30 May 2014, National Grid raised [P305 'Electricity Balancing Significant Code Review Developments'](#).

## Modification P305

P305 aimed to address the fact that previous methods for pricing reserve costs into cash-out did not accurately reflect the real-time value of this reserve and excluded the cost of some reserve products altogether. As such, by including Non-BM STOR utilisation costs into the cash-out calculation, cash-out prices were expected to be more reflective of the ESO's energy balancing costs. This was deemed important given the increasing usage of Non-BM STOR by the ESO. The Regulator was therefore keen on P305 being able to ensure cash-out prices better reflect both the cost to consumers of energy imbalances and the value they assign to secure electricity supplies during tight margins. P305 included the introduction of the Reserve Scarcity Pricing (RSP).

## Reserve Scarcity Price

The RSP function is a pricing mechanism designed to respond to system scarcity so that Short Term Operating Reserve (STOR) Actions better reflect prevailing market conditions. The pricing function produces the RSP that rises as the system gets tighter (i.e. the gap between available and required generation narrows).

The RSP is calculated for each Settlement Period as the product of a measure of system reliability called Loss of Load Probability (LoLP) and the Value of Lost Load (VoLL).

## Short Term Operating Reserve (STOR)

In addition to balancing actions called upon in the balancing mechanism, the ESO can enter into contracts for capacity to deliver when called upon. These additional sources of power are referred to as reserve. Most of the reserve that the ESO procures is called STOR.

The ESO procures STOR ahead of time via a competitive tender process. Under STOR contracts, availability payments are made to the balancing service provider in return for the capacity being made available to the ESO during specific times (STOR Availability Windows). When STOR is called upon, the ESO pays for its use at a pre-agreed price (its Utilisation Price). Some STOR is dispatched in the balancing mechanism (BM STOR) while some is dispatched separately (Non-BM STOR).

## Fast Reserve

Fast reserve provides rapid and reliable delivery of active power through increasing output from generation or reducing consumption from demand sources.

Similarly to STOR, Fast Reserve is contracted from providers in advance of delivery. The availability of capacity is procured at a pre-agreed utilisation price, which risks not reflecting the value of such capacity to the market at times of scarcity.



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### Fast Reserve

Fast Reserve is an energy balancing service used to control frequency changes that might arise from sudden, and sometimes unpredictable, changes in generation or demand. The service is open to Balancing Mechanism (BM) and Non-BM providers.

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## System v Energy Balancing

There are two types of balancing actions. Energy imbalance actions address overall mismatches between generation and demand at a national level across the settlement period as a whole. System imbalance actions tackle local or regional constraints in the capacity of the transmission network, or short-term variations between demand and supply within a settlement period.

National Grid is required to determine which balancing services should be classified as SO-Flagged i.e. System Actions.

The System Management Action Flagging Methodology Statement classes System Management as:

- any balancing service used by National Grid that partially or wholly resolves a transmission constraint;
- any system-to-system balancing service used by National Grid in respect of electricity flows over an interconnector, to avoid adverse effects arising on the National Electricity Transmission System from significant load profile changes;
- any system-to-system balancing service used by a Transmission System Operator (TSO) other than National Grid, for the purposes of resolving a system operation issue in a connected transmission system;
- any balancing action used to despatch Supplemental Balancing Reserve for the purposes of testing the service whether through or outside the Balancing Mechanism;
- any balancing action used by National Grid primarily to manage the Rate of Change of Frequency (RoCoF) or to manage Fault Levels;
- any automatic Low Frequency Demand Disconnection relay demand control action.

## What is the issue?

Currently Spin-Gen, Non-BM and Non Tendered Fast Reserve actions are not included in the imbalance price calculations as these actions are not being included in the Balancing Service Adjustment Data ('BSAD') . The Proposer contends that in order to guarantee a correct calculation of the Imbalance Price, fair and harmonised treatment of all services, greater transparency and, ultimately, National Grid's compliance with the BSAD obligation; the aforementioned Fast Reserve actions should be included in the Imbalance Price calculation.

There also appears to be a lack of harmonised treatment between STOR and Fast Reserve actions. The defect that this Modification Proposal is trying to address is particularly exacerbated by two issues:

- Non-Tendered Fast Reserve actions represent the lion share of the costs paid by the ESO for Reserve products and these are not at present duly captured in the calculation of the cash-out price; and

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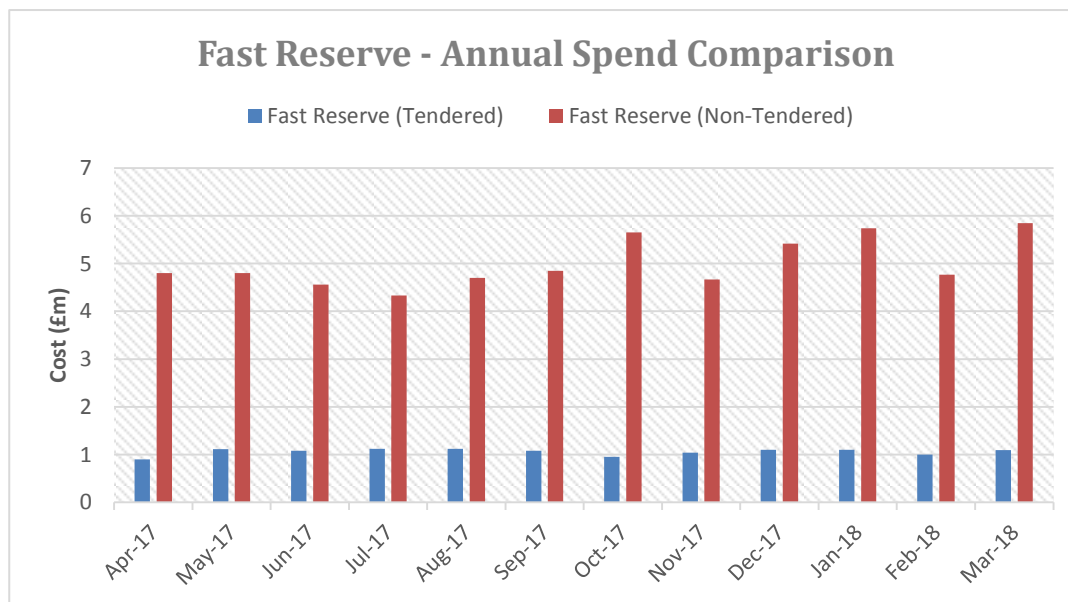
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- National Grid spent ~£5m/month on Non-Tendered Fast Reserve in 2017 for availability (excluding utilisation via offers and bids)<sup>1</sup>, yet no data is provided on the prices or the volumes awarded to the individual service providers.

The graphic below, grouping data from National Grid’s Monthly Balancing Services Summary (MBSS), highlights the disparity in spending between tendered and bilateral services. The stark contrast shown, risks sending incorrect messages to the industry and distorts the market signal.



### Non-Tendered Fast Reserve

In addition to the above, as the Imbalance Price should truly reflect the costs of actions taken by National Grid, it becomes apparent that the increasing annual expenditure for Non-Tendered Fast Reserve actions represent the lion share of the costs paid by the ESO for Reserve products and should therefore be duly captured in the calculation: National Grid’s spending has increased from £51.86m in 2016/17 to £60.13m in 2017/18.<sup>2</sup>

The Proposer believes that there is no reason for a different treatment of Reserve products and Fast Reserve should have been captured already in the calculation of the Imbalance Price via the BSAD and via the RSP methodology. National Grid recognises that Non-BM FR should be included for the purpose of the calculation to reflect the evolution of the market. The same logic should apply to Non-Tendered FR actions, which include Spin-Gen payments.

The current calculation of the Imbalance Price is sending incorrect messages to the industry and distorting the market signal, this lack of transparency is potentially impacting the behaviour of Market Participants, effecting to the costs to end consumers. National Grid should therefore send the correct signal to the market to inform about the constraint and the required level of capacity.

<sup>1</sup> National Grid, Monthly Balancing Services Summary (MBSS) 2017/18. Available here: [https://www.nationalgrid.com/sites/default/files/documents/MBSS\\_Mar\\_2018.pdf](https://www.nationalgrid.com/sites/default/files/documents/MBSS_Mar_2018.pdf)

<sup>2</sup> National Grid Procurement Guidelines Report FY 2017/18, Page 21. Available here: [https://www.nationalgrid.com/sites/default/files/documents/Procurement%20Guidelines%20Report%2017\\_18.pdf](https://www.nationalgrid.com/sites/default/files/documents/Procurement%20Guidelines%20Report%2017_18.pdf)

Additionally, the value provided by further types of Fast Reserve actions, to the system, e.g. Non-Tendered Fast Reserve (typical of Spin-Gen contracts) is not being taken into account. Capturing Spin-Gen payments in the calculation of the Imbalance Price, will make such prices more reflective, ensuring data on prices and volumes awarded to individual Spin-Gen service providers is openly shared. These bilateral contracts between National Grid and pumped storage providers (via BM) are in fact signed outside of the scope of commercial procurement of ancillary services. If these services are not being included in BSAD then the market may not be able to accurately calculate the 'real' value of Reserve causing inefficiency in the future provision of Balancing Services.

Increased transparency over Spin-Gen service will allow market participants to verify what service is called on, at which point in time, and the impact on the Imbalance Price. This may alter market behaviour, which is the purpose of the Imbalance Price. Because of this it is crucial that the Imbalance Price is reflective of all Actions.

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### Proposed solution

This Modification Proposal aims to further contribute to correct the Imbalance Price, which is the result of an incorrect calculation as Fast Reserve (FR) actions (Non-BM as well as Non-Tendered FR) have not been included.

The proposed solution is to:

- include Non-BM Fast Reserve and Non-Tendered FR actions into the calculation of the Imbalance Price by National Grid;
- extend the application of the Reserve Scarcity Price (RSP) calculation methodology to Fast Reserve; and
- consider whether any other Balancing Services should be considered as part of this Modification such as Demand Turn Up.

This Modification aims to make it clear to the ESO when developing future Balancing Services and associated systems that all energy actions should flow through into the Imbalance Price calculation.

### Enduring (long-term) solution

The ideal solution would be for National Grid to put in place a functioning automated system which allows FR actions to feed into the calculation of the imbalance price in real-time. National Grid shall endeavour to roll out such system as soon as possible and in a transparent way.

Including Fast Reserve in BSAD will require no System Changes as the extra data will be included in the existing processes.

System changes from ELEXON's perspective will be required to allow the extension of the RSP calculation methodology.

### Interim solution

While such automated system and ELEXON's system changes are being developed, a manual process should be implemented; whereby NG's balancing team at the end of the day would download the list of FR actions from the day before and insert them in the Balancing Services Adjustment Data (BSAD) model. National Grid shall endeavour to roll out such system as soon as possible and in a transparent way.



## Applicable BSC Objectives

Impact of the Modification on the Relevant Objectives:	
Relevant Objective	Identified impact
(a) The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence	<i>Positive</i>
(b) The efficient, economic and co-ordinated operation of the National Electricity Transmission System	<i>Positive</i>
(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	<i>Positive</i>
(d) Promoting efficiency in the implementation of the balancing and settlement arrangements	<i>Positive</i>
(e) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency [for the Co-operation of Energy Regulators]	<i>Neutral</i>
(f) Implementing and administering the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation	<i>Neutral</i>
(g) Compliance with the Transmission Losses Principle	<i>Neutral</i>

The Proposer believes this Modification would better facilitate **Applicable BSC Objectives (a), (b), (c) and (d)** for the reasons set out below:

### Views against Objective (a)

The proposed changes will allow address a current and persisting non-compliance issue of the ESO with the C16 Licence: according to the provisions in the BSAD, National Grid should already be sending FR pricing information to ELEXON to include into the calculation of the Imbalance Price.

### Views against Objective (b)

The proposed changes to the cash-out price calculation make prices more reflective of the value to consumers of balancing, particularly during times of very tight margins. In doing so, market participants will be incentivised to make more efficient balancing and investment decisions. This should result in reductions in the total costs (to the ESO and market) of maintaining a balanced system, whilst presenting savings on the costs of delivering secure electricity supplies in the future.

Making cash-out prices sharper will signal the commencement of reforms designed to better reflect the value of flexible plant in the balancing arrangements. It may therefore contribute to deferring the mothballing of flexible plant and help counteract potential tightening of margins.

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## Views against Objective (c) and (d)

Reflecting the value that actions deliver supports effective competition by aligning competitive incentives of market participants with the interests of the consumer. The reforms eliminate distortions in the arrangements that currently impede value reflectivity, thereby supporting effective competition that drives value for the consumer.

In addition, strengthening the energy imbalance price signal, through Price Average Reference (PAR) reform, reserve scarcity pricing and introducing pricing for demand control, should incentivise market participants to trade to balance their positions ahead of Gate Closure. This should increase liquidity in the forward market and benefit competition by encouraging investment in flexible capacity (flexible generation, demand participation and other technologies).

This Modification may also alter the incentives for parties to enter the market. The reforms address existing inefficiencies, which limit the potential for some parties, in particular those offering services that facilitate flexibility and balance (such as DSR or storage), to participate in the wholesale electricity market.

## Implementation approach

The Proposer contends that the implementation of the Modification should be achieved as quickly as possible as the defect is current and is potentially creating inefficient balancing decisions by industry participants, which ultimately costs the end consumer.

This Modification should be implemented as part of the first available BSC release following Authority decision, allowing for any lead time for implementation of changes to Systems identified during the Assessment Phase. The Proposer suggests that an implementation date of April 2020 to align with the implementation of P354, as well as any changes required as part of Article 52 of EBGL, is the optimal implementation date for the full enduring solution.

## Timing

Whilst this is not being proposed as an urgent Modification, the Proposer notes that if it is found that a defect exists in information provision; this should be implemented as soon as possible, potentially outside of the BSC Change Process if the Workgroup believes that this should already be done as part of BSAD.

If the Workgroup consider that a change is needed so that National Grid start providing the data, this could be done as part of a Staged Implementation approach with information on balancing actions provided as soon as practicable by National Grid. The Legal text could act as enabler to this.

The application of Reserve Scarcity Pricing to these actions (where appropriate) could then be implemented as soon as possible but at a date to be decided.

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### 3 Areas to Consider

In this section we highlight areas which we believe the Panel should consider when making its decision on how to progress this Modification Proposal, and which a Workgroup should consider as part of its assessment of P371. We recommend that the areas below form the basis of a Workgroup's Terms of Reference, supplemented with any further areas specified by the Panel.

The first important thing to consider, which will also impact on the Implementation approach, is whether or not National Grid should already be providing information to ELEXON on Non BM and Non Tendered Fast Reserve Balancing Actions.

#### Compliance

##### The extent of the defect

It has been noted by the Proposer that they feel that National Grid should already be providing information to ELEXON on Fast Reserve Balancing Actions and that there is no defect in the BSC but rather National Grid is non-compliant with its licence conditions, specifically the BSAD Methodology.

If the Workgroup concludes that this is the case they should report back to the Panel immediately with its conclusions ahead of the Workgroup Consultation. Information provision can then be implemented outside of this Modification Process. This may then affect the timescale and Implementation Dates of this Modification, especially if it is found that applying the Reserve Scarcity Pricing methodology to Fast Reserve Balancing Actions is unlikely to alter the future Imbalance Price (taking into account changing System Prices Parameters).

##### Electricity Balancing Guidelines

It is important to consider the requirements of the European Electricity Balancing Guideline (EB GL) and whether with the current defect, GB is fully compliant with these guidelines. The Commission regulation ([EU\) 2017/2195](#), in regard to Electricity Balancing states that:

- (8) *"The rules defining the role of balancing service providers and the role of balance responsible parties ensure a fair, transparent and non-discriminatory approach. Moreover, the rules concerning the terms and conditions related to balancing set out the principles and roles by which the balancing activities governed by this Regulation will take place, and ensure adequate competition based on a level-playing field between market participants, including demand-response aggregators and assets located at the distribution level."*
- (14) *"The pricing method for standard products for balancing energy should create positive incentives for market participants in keeping and/or helping to restore the system balance of their imbalance price area, reduce system imbalances and costs for society. Such pricing approach should strive for an economically efficient use of demand response and other balancing resources subject to operational security limits. The pricing method used in the procurement of balancing capacity should strive for an economically efficient use of demand response and other balancing resources subject to operational security limits."*

The extracts above are in reference to some of the issues that this Modification hopes to address and thus it is therefore important that the Workgroup takes these and any other relevant EB GL requirements into consideration as part of its discussions.

## **REMIT**

The Regulation on Wholesale Energy Markets Integrity and Transparency (REMIT) is an EU regulation ([\(EU\)1227/2011](#)) that came into force on 28 December 2011 and is aimed at preventing market abuse in the wholesale energy markets. It establishes a new framework for the monitoring of wholesale energy markets. A key requirement of this framework is for Market Participants to publish inside information. The Agency for the Co-operation of Energy Regulators (ACER) recently published the fourth edition of its non-binding [guidance on REMIT](#) which includes details on the reporting of inside information. This guidance states that inside information should be disclosed in a manner ensuring that it is capable of being “disseminated to as wide a public as possible”, and suggests that Market Participants with inside information should use centralised platforms.

## **Classification of Balancing Actions**

The Workgroup should investigate the current classification process and consider which Balancing Actions should be classed as System Balancing Actions, and ensure this classification procedure is being correctly applied. The Workgroup should also discuss whether the current checks and assurance methods are fit for purpose.

## **Investigation of impacts and changes to System Prices (Energy Imbalance Price) Parameters**

The Workgroup should initially assess the historical impact on the Imbalance Price if Non BM Fast Reserve and Non Tendered Fast Reserve actions had been included in the Imbalance Price calculation. This can then be advanced to assess how the Imbalance Price would change if the Reserve Scarcity Pricing methodology was applied to all Fast Reserve Actions. Moving forward, it is also important to evaluate the impact of future changes to the System Prices Parameters, including those listed below:

### **Continuous Acceptance Duration Limit (CADL) pricing**

CADL is used to flag short duration Bid-Offer Acceptances, associated with System Balancing actions in the Energy Imbalance Price calculation. A Bid-Offer Acceptance relating to any given Balancing Mechanism (BM) Unit will be flagged in the system price calculation if it has duration of less than the CADL value in minutes, currently 15 minutes.

CADL is defined in [BSC Section T](#), paragraph 3.1B. In regard to changing the CADL figure, the BSC Panel may revise the value of CADL after consulting with BSC Parties but subject to Ofgem’s approval.

### **Loss of Load Probability (LoLP)**

The LoLP is a measure of system reliability calculated by the ESO for each Settlement Period. The methodology is set out in the [Loss of Load Probability Calculation Statement](#).

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Currently a static LoLP is used, but from 1 November 2018 this will be replaced by a dynamic LoLP function.

### Value of Loss Load (VoLL)

The VoLL price is an assessment of the average value that electricity consumers attribute to the security of supply. It is currently set at £3,000/MWh, however the VoLL will be increased to £6,000/MWh on 1 November 2018.

### Price Average Reference (PAR) Volume

The Price Averaging Reference (PAR) volume is used to tag Bid-Offer acceptances such that a maximum volume of PAR MWh is used to set the Energy Imbalance Price. The current value of PAR is 50MWh. However in November 2018 the PAR is reducing to 1MWh.

### Availability Windows

ELEXON currently check whether STOR actions are correctly flagged as STOR actions by examining whether they fall into set STOR availability windows. The Workgroup will need to consider what checks can be done on Fast Reserve and potentially Demand Turn Up flagging as these Balancing Services are required 24 hours a day.

### System Needs and Product Strategy (SNAPS)

National Grid's [SNAPS consultation](#) provides information on future system needs and seeks to consult on how best to facilitate the evolution of Balancing Services markets. Part of this evolution involves rationalising existing Balancing Services. The Workgroup will potentially need to consider this area of work when creating solutions for P371, terms of:

- will the current Balancing Services affected by this Modification exist in 2020;
- how to deal with possible name changes of these Balancing Services; and
- how to efficiently incorporate new Balancing Services and their associated Actions into future Imbalance Prices.

### Areas to consider

The table below summarises the areas we believe a Modification Workgroup should consider as part of its assessment of P371:

Areas to Consider
Has the compliance with current Code obligations and EU Regulation been considered?
Which Balancing Actions should be classed as System Balancing Actions?
Have the impacts and changes to System Prices (Energy Imbalance Price) Parameters been investigated?
What checks can be done to ensure that relevant actions have been correctly flagged?

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Areas to Consider
How will the Balancing Services affected by this Modification change as part of National Grid's SNAPS work?
Is it possible to future proof any solution for P371 against possible changes in name of existing Balancing Services as well as the potential creation of new Balancing Services and their associated Actions?
What changes are needed to BSC documents, systems and processes to support P371 and what are the related costs and lead times?
Are there any Alternative Modifications?
Should P371 be progressed as a Self-Governance Modification?
Does P371 better facilitate the Applicable BSC Objectives than the current baseline?

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## 4 Proposed Progression



### What is the Self-Governance Criteria?

A Modification that, if implemented:

(a) is unlikely to have a material effect on:

- (i) existing or future electricity consumers; and
- (ii) competition in the generation, distribution, or supply of electricity or any commercial activities connected with the generation, distribution, or supply of electricity; and
- (iii) the operation of the national electricity transmission system; and
- (iv) matters relating to sustainable development, safety or security of supply, or the management of market or network emergencies; and
- (v) the Code's governance procedures or modification procedures; and

(b) is unlikely to discriminate between different classes of Parties.

ELEXON feel that this Modification should not be classed as Self Governance. It should not be classed as Urgent as although the defect impacts on the Imbalance Price it does not negatively affect a particular type of Party or customer more than another and should be subject to assessment by a Workgroup.

### Next steps

This Modification should be assessed by a Workgroup and submitted into the Assessment Procedure.

### Workgroup membership

The assessment of this Modification Proposal requires knowledge in:

- Electricity balancing arrangements;
- Imbalance Pricing calculation;
- Settlement arrangements;
- Procurement of balancing services; and
- Electricity transmission licence provisions.

It is important that Workgroup members fully understand these areas and as part of the process, we will provide training for any Workgroup members who request it.

### Timetable

The table below displays the proposed progression of the Modification.

Proposed Progression Timetable for P371	
Event	Date
Present Initial Written Assessment to Panel	13 September 2018
Workgroup Meeting 1	W/B 15 October 2018
Workgroup Meeting 2	W/B 12 November 2018
Workgroup Meeting 3	W/B 10 December 2018
Assessment Procedure Consultation and Industry Impact Assessment	7 January 2019 – 25 January 2019 (15 WDs)
Workgroup Meeting 4	W/B 11 February 2019
Present Assessment Report to Panel	14 March 2019
Report Phase Consultation	20 March 2019 – 2 April 2019 (10 WDs)
Present Draft Modification Report to Panel	11 April 2019
Issue Final Modification Report to Authority	18 April 2019

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## 5 Likely Impacts

This Modification will impact:

- Suppliers;
- Non-Physical Traders;
- the Transmission Company; and
- ELEXON.

The Modification will also impact the Settlement Administration Agent (SAA) and the Balancing Mechanism Reporting Service (BMRS) systems. As a minimum, we anticipate that changes will be required to BSC Section Q 'Balancing Mechanism Activities' and to the BSAD.

### Does this modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?

At the time of submitting this IWA, the Authority is conducting three SCRs:

- [Switching](#);
- [Electricity Settlement](#); and
- [Targeted Charging Review](#).

We do not believe this Modification will impact any of the above SCRs. And as such, we request that this Modification be exempt from the SCR process.

### Consumer Impacts

National Grid will be able to comply with their licence obligation to operate the system in a competitive way, and at the lowest costs to consumers by selecting the most competitive actions to balance the system. This will foster competition among providers and will ultimately result in the lowest cost to consumers.

### Environmental Impacts

None identified.

Impact on BSC Parties and Party Agents	
Party/Party Agent	Potential Impact
All Parties	All Trading Parties are affected by the Imbalance Price as it affects Trading Charges. A change in the Imbalance Price will also affect Non BSC Parties as Trading Parties may choose to alter their Trading behaviour in response to the Imbalance Price

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### Impact on Electricity System Operator

As part of the solution National Grid will be required to start sending ELEXON information on Non BM Fast Reserve and Non Tendered Fast Reserve Balancing Actions. These actions will need to be Flagged to differentiate them from other Balancing Actions

### Impact on BSCCo

Area of ELEXON	Potential Impact
Release Management	ELEXON will be required to implement this Modification.

### Impact on BSC Systems and processes

BSC System/Process	Potential Impact
SAA	Changes will be required to reflect the changes to the imbalance price calculations.
BMRA	

### Impact on Code

Code Section	Potential Impact
Section Q	Changes would be required to implement this Modification.

### Impact on Code Subsidiary Documents

CSD	Potential Impact
SVAA User Requirement Specification	Changes may be required to reflect changes to processes.
BMRA Service Description	
SVAA Service Description	
SAA User Requirement Specification	
BMRA User Requirement Specification	
SAA Service Description	

### Impact on Core Industry Documents and other documents

Document	Potential Impact
BSAD methodology	Text may need to be added to make it clear on National Grid to provide all Non BM Balancing Actions information
<a href="#">System Management Action Flagging (SMAF)</a>	Are the rules on System Management Action Flagging clear

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Impact on a Significant Code Review (SCR) or other significant industry change projects

None identified

Impact on Consumers

More efficient Balancing Decisions will eventually flow through to the end consumer's bill in a positive way

Impact on the Environment

None

Other Impacts

Item impacted	Potential Impact
Imbalance Pricing Guidance Note	Changes would be required as a result of this Modification.

## 6 Recommendations

We invite the Panel to:

- **AGREE** that P371 progresses to the Assessment Procedure;
- **AGREE** the proposed Assessment Procedure timetable;
- **AGREE** the proposed membership for the P371 Workgroup; and
- **AGREE** the Workgroup's Terms of Reference.

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## Appendix 1: Glossary & References

### Acronyms

Acronyms used in this document are listed in the table below.

Glossary of Defined Terms	
Acronym	Definition
ACER	Agency for the Co-operation of Energy Regulators
BM	Balancing Mechanism
BMRA	Balancing Mechanism Reporting Agent ( <i>BSC Agent</i> )
BMRS	Balancing Mechanism Reporting Service
BSAD	Balancing Services Adjustment Data
BSC	Balancing and Settlement Code
CADL	Continuous Acceptance Duration Limit
CSD	Code Subsidiary Document
DSR	Demand Side Response
EBSCR	Electricity Balancing Significant Code Review
ESO	Electricity System Operator
FPN	Final Physical Notification
IWA	Initial Written Assessment ( <i>Document</i> )
LoLP	Loss of Load Probability ( <i>Parameter</i> )
MBSS	Monthly Balancing Services Summary
PAR	Price Average Reference ( <i>Parameter</i> )
PN	Physical Notification
REMIT	Regulation on wholesale energy market integrity and transparency
RoCoF	Rate of Change of Frequency
RSP	Reserve Scarcity Pricing
SAA	Settlement Administration Agent ( <i>BSC Agent</i> )
SBP	System Buy Price ( <i>Parameter</i> )
SCR	Significant Code Review
SMAF	System Management Action Flagging
SNAPS	System Needs and Product Strategy
SO	System Operator
SSP	System Sell Price ( <i>Parameter</i> )
STOR	Short Term Operating Reserve
SVAA	Supplier Volume Allocation Agent ( <i>BSC Agent</i> )
VoLL	Value of Lost Load ( <i>Parameter</i> )
WD	Working Day

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## External links

A summary of all hyperlinks used in this document are listed in the table below. All external documents and URL links listed are correct as of the date of this document.

External Links		
Page(s)	Description	URL
3	Electricity Balancing Significant Code Review (EBSCR) page on the Ofgem website	<a href="https://www.ofgem.gov.uk/electricity/wholesale-market/market-efficiency-review-and-reform/electricity-balancing-significant-code-review">https://www.ofgem.gov.uk/electricity/wholesale-market/market-efficiency-review-and-reform/electricity-balancing-significant-code-review</a>
3	Project Discovery status report on the Ofgem website	<a href="https://www.ofgem.gov.uk/publications-and-updates/project-discovery-status-report">https://www.ofgem.gov.uk/publications-and-updates/project-discovery-status-report</a>
4	P305 'Electricity Balancing Significant Code Review Developments'	<a href="https://www.elexon.co.uk/mod-proposal/p305/">https://www.elexon.co.uk/mod-proposal/p305/</a>
10	Commission Regulation (EU) 2017/2195 establishing a guideline on electricity balancing	<a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017_.312.01.0006.01.ENG&amp;toc=OJ:L:2017:312:TOC">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2017_.312.01.0006.01.ENG&amp;toc=OJ:L:2017:312:TOC</a>
11	Regulation (EU) 1227/2011 on wholesale energy market integrity and transparency	<a href="https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32011R1227">https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A32011R1227</a>
11	ACER guidance on REMIT	<a href="https://acer.europa.eu/en/remit/Pages/ACER_guidance.aspx">https://acer.europa.eu/en/remit/Pages/ACER_guidance.aspx</a>
11	BSC Sections page on the ELEXON website	<a href="https://www.elexon.co.uk/bsc-and-codes/balancing-settlement-code/bsc-sections/">https://www.elexon.co.uk/bsc-and-codes/balancing-settlement-code/bsc-sections/</a>
11	Loss of Load Probability Calculation Statement	<a href="https://www.elexon.co.uk/wp-content/uploads/2015/10/Loss_of_Load_Probability_Calculation_Statement_v1.0.pdf">https://www.elexon.co.uk/wp-content/uploads/2015/10/Loss_of_Load_Probability_Calculation_Statement_v1.0.pdf</a>
13	National Grid's System Needs and Product Strategy (SNAPS) Consultation document	<a href="https://www.nationalgrid.com/sites/default/files/documents/8589940795-System%20Needs%20and%20Product%20Strategy%20-%20Final.pdf">https://www.nationalgrid.com/sites/default/files/documents/8589940795-System%20Needs%20and%20Product%20Strategy%20-%20Final.pdf</a>
14	Electricity Settlement page on the Ofgem website	<a href="https://www.ofgem.gov.uk/electricity/retail-market/market-review-and-reform/smarter-markets-programme/electricity-settlement">https://www.ofgem.gov.uk/electricity/retail-market/market-review-and-reform/smarter-markets-programme/electricity-settlement</a>
15	System Management Action Flagging Methodology Statement	<a href="https://www.nationalgrid.com/sites/default/files/documents/APPENDIX%20B%20-%20SMAF.pdf">https://www.nationalgrid.com/sites/default/files/documents/APPENDIX%20B%20-%20SMAF.pdf</a>

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External Links		
Page(s)	Description	URL
16	Switching Significant Code Review page on the Ofgem website	<a href="https://www.ofgem.gov.uk/publications-and-updates/switching-significant-code-review-launch-statement-and-request-expressions-interest-participate-programme-workgroups">https://www.ofgem.gov.uk/publications-and-updates/switching-significant-code-review-launch-statement-and-request-expressions-interest-participate-programme-workgroups</a>
16	Targeted Charging Review – SCR page on the Ofgem website	<a href="https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-significant-code-review-launch">https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-significant-code-review-launch</a>

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