

Modification Proposal – BSCP40/03

MP No: 217
(mandatory by BSCCo)

Title of Modification Proposal (mandatory by originator):

Revised Tagging Process and Calculation of Cash Out Prices

Submission Date (mandatory by originator):

19th October 2007

Description of Proposed Modification (mandatory by originator)

It is proposed that a revised tagging process is introduced to the BSC that would enable bid/offer acceptances (BOA) and forward trades to be tagged as a “system” or an “energy plus system” (i.e. some energy some system) or an “energy only” action based on the primary reason for the action. Each “system” action would be included in the calculation of cash out prices as an un-priced volume whilst each “energy” and “energy plus system” actions would be included in as a priced volume.

The development of the “*Tagging Methodology Statement*”, the “*Replacement Price Methodology Statement*” together with enhanced reporting under the BSC should ensure open and transparent understanding of SO actions and increase confidence that cash out prices reflect the cost of resolving the energy imbalance in real time.

The tagging process should include the following elements:

- Each BOA and SO forward trade would be subject to a “tag” indicating the reason for the action. These tags should indicate whether the action was for “system” reasons or for “energy plus system” (i.e. some energy some system) reasons or for “energy” only reasons;
- The process for tagging actions should be defined in a BSC “*Tagging Methodology Statement*”. This statement should establish the rules that are used by the SO to separate actions taken for “system” reasons from “energy” and “energy plus” actions;
- Certain actions may meet both a system and an energy requirement. The tagging methodology must appropriately classify such actions as either “energy plus” or “system” actions. “Energy plus system” actions could include those that deliver an energy component that helps resolve the net imbalance volume while also providing a system service (e.g. frequency response). “System” actions could defined in the tagging methodology by reference to types of action (e.g. constraints) and/or by reference to particular events on the GB transmission system (perhaps identified ex ante) where explicit “system” actions have to be taken;
- Certain actions may be clearly system or energy related and these actions can be “tagged” through clear mechanistic rules in the tagging methodology. This may be the case for certain “system-related” short duration actions;
- Tagged actions would feed into the calculation of cash out prices according to the prescribed rules set out in the “*Tagging Methodology Statement*”. (i.e. the price and volume of all “energy” and “energy plus system” actions and the volume (but not the price) of “system” actions would be used to establish the main cash out price);

- The net imbalance volume would be calculated from the net of all actions taken by the SO that are required for the purpose of setting cash out prices;
- The treatment of individual or aggregate SO forward trades (BSAD), applicable balancing services actions (ABSVD), demand side reserve actions and imbalance on the SO accounts require detailed consideration in the derivation of cash out prices in relation to the calculation of net imbalance volume, the tagging process and inclusion as priced or un-priced actions;
- It is for discussion as to whether the main cash out price would be calculated from the marginal “energy” or “energy plus system” action, from a “chunky marginal” (e.g. 500MWh) volume of “energy” and “energy plus system” actions or from all actions taken for “energy” and “energy plus system” purposes in the main stack. The revised tagging should result in cash out prices that appropriately reflect the cost of actions taken by the SO to resolve the energy imbalance on the system;
- Where the nature of an action is ambiguous (in the view of the SO) a process for providing “default tags” (system/energy) on the action should be provided under the BSC **“Tagging Methodology Statement”**. A default energy tag could apply in circumstances when the SO is unable to determine the system/energy nature of an action for operational reasons. Cash out prices would not be adjusted ex post as a consequence of the SO determining a system/energy default action was in fact a system or an energy requirement;
- In the event that “system” actions forms part of the net imbalance volume a replacement price for this volume is required. The process for establishing the price for such actions should be established in a **“Replacement Price Methodology Statement”** defined in the BSC. The price should reflect an appropriate “energy” related price for the purpose of setting cash out prices. The replacement price could be derived from the market price, the weighted average of other energy actions, or the marginal (or chunky marginal) energy action. There may be other alternative approaches towards setting an appropriate energy-related replacement price;
- The **“Replacement Price Methodology Statement”** should address the way that the price of energy delivered from BM units contracted to the SO under ancillary service agreements (e.g. short term operating reserve, fast reserve or BM start up) is reflected into cash out. In this context it may be appropriate to address the way that Price Adjusters are used in deriving cash out prices;
- An ex post report should be provided that includes analysis of the actions classified as “energy”, “energy plus system”, and “system” actions, default tags and the application of the replacement prices; and
- The revised tagging process should enable the reporting of cash out prices in existing timescales.

Description of Issue or Defect that Modification Proposal Seeks to Address (*mandatory by originator*)

Despite the attempts to differentiate system and energy actions in the derivation of cash out prices through the current tagging processes (SO tagging of forward trades, rule based tagging such as CADL and NIV deemed energy tagging) there are circumstances in which it remains possible for cash out prices to be strongly influenced by system-related actions. In particular bids or offers required to resolve “constraints” and taken out of merit order may be included in the NIV and therefore feature in cash out prices. For example:

“In order to secure the GB Transmission System on Friday and Saturday 28/29 September in an economic and efficient manner, it was necessary to buy a significant amount of high cost generation for system reasons. As the market had become notably short (1.5-2GW), this generation also assisted with energy balancing and contributed to the higher than normal system buy prices above £200/MWh over the evening peaks on these two days”(Trading Operations Report 132/02, Elexon, September 2007).

Consequently, cash out prices may not be fully reflective of the cost of resolving the short-term energy imbalance. This gives rise to incorrect incentives to balance as a result of inappropriate market signals. This may result in an outcome in terms of total imbalance that is less economic and efficient than would be the case if cash out was not impacted by system actions.

Impact on Code (optional by originator)

Impact on Core Industry Documents or System Operator-Transmission Owner Code (optional by originator)

Impact on BSC Systems and Other Relevant Systems and Processes Used by Parties (optional by originator)

Impact on other Configurable Items (optional by originator)

Justification for Proposed Modification with Reference to Applicable BSC Objectives (mandatory by originator)

The proposed modification will better facilitate **Objective B**, related to the economic and efficient operation of the transmission system, by ensuring that cash out prices reflect the marginal cost of balancing the system for energy purposes. By removing system actions from cash out there will be appropriate market signals. This will ensure economic and efficient resolution of energy imbalances.

The proposed modification will better facilitate **Objective C**, related to 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 by ensuring that system actions do not distort the calculation of energy imbalance prices. In addition, the proposal should result in more efficient despatch of generation and demand side management by resulting in energy imbalance prices that provide the correct signals into the market.

The removal of the current confusing and inconsistent arrangements for separating system and energy actions and its replacement with a transparent and objective means of distinguishing the nature of SO actions means that the modification proposal will better facilitate **Objective D** relating to promoting efficiency in the implementation and administration of the balancing and settlement arrangements.

Urgency Recommended: No (delete as appropriate) (optional by originator)

Justification for Urgency Recommendation (mandatory by originator if recommending progression as an Urgent Modification Proposal)

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Attachments: No (delete as appropriate) (mandatory by originator)

If Yes, Title and No. of Pages of Each Attachment: