Modification Proposal

MP No: 194
(mandatory by BSCCo)

Title of Modification Proposal *(mandatory by proposer)*:

Revised Derivation of the 'Main' Energy Imbalance Price

Submission Date *(mandatory by proposer)*: 26th August 2005

Description of Proposed Modification *(mandatory by proposer)*:

The proposal is to amend the calculation of the 'Main'* Energy Imbalance Price such that only a predefined maximum volume of priced balancing actions, remaining in the Net Imbalance Volume (NIV), will contribute to the derivation of the volume weighted average imbalance price. The maximum volume of priced balancing actions will be the most expensive 100MWh remaining in the NIV.

For example, if the magnitude of NIV is between 0 and 100MWh then the 'Main' imbalance price would be derived using all the priced volume in the NIV (as now). If the magnitude of NIV is greater than 100MWh, then the 'Main' imbalance price would be derived using a maximum of the most expensive 100MWh of priced volume remaining in the NIV.

The Modification Proposal does not propose changes to the treatment of Balancing Services Adjustment Data (BSAD), the derivation of the 'reverse' price, or the various 'tagging' methodologies employed within the imbalance price calculation.

*SBP when NIV > 0, SSP when NIV<=0

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

The defect is specifically in the part of the 'Main' energy imbalance price calculation which derives a volume weighted average price from all the priced balancing actions remaining in the Net Imbalance Volume (NIV) – i.e. after the various 'tagging' mechanisms have been applied, but before BSAD variables BPA/SPA are added. Deriving a volume weighted average price *from the entire NIV* does not always form a good proxy for the marginal cost of balancing energy, especially at times of energy shortage when the differential between the average price and the marginal price of balancing energy is likely to be greatest. Hence the resultant imbalance price is inhibited from appropriately signalling energy scarcity which could lead to perversities in the forward markets where commercial decisions are heavily influenced by the economics of being in imbalance.

Impact on Code *(optional by proposer)*:

Impact on Core Industry Documents *(optional by proposer)*:

None identified

Impact on BSC Systems and Other Relevant Systems and Processes Used by Parties *(optional by proposer)*:

Impact on other Configurable Items *(optional by proposer)*:

None identified

Modification Proposal	MP No: 194 *(mandatory by BSCCo)*

Justification for Proposed Modification with Reference to Applicable BSC Objectives *(mandatory by proposer)*:

This Modification Proposal has been designed to improve the signals and incentives provided by the 'Main' energy imbalance price to promote security of supply through forward market activity, whilst accommodating the concerns raised by Market Participants and Ofgem during the assessment of previous Modification Proposals in this area. National Grid has performed analysis to ensure the proposal achieves this and will share its analysis during the assessment of the proposal. We believe that the nature and timing of this proposal should facilitate implementation ahead of winter 06/07.

The proposal retains the principle of deriving the main price from the NIV (on a volume weighted average basis), which will ensure that prices are robust against potential manipulation. Using a maximum volume for 'main' imbalance price setting purposes will produce price signals that are more reflective of the state of the system at the time. For example when NIV is small, and the difference between the average and marginal prices of balancing energy is small, the majority (or all) of the priced balancing actions remaining in the NIV will contribute to the average price. When NIV is greater, and the difference between the average and marginal prices of balancing energy balancing increases, only the balancing actions which are more likely to represent the marginal cost of balancing energy will contribute to the average price. Thus at times of energy shortage the price is more likely to rise to reflect scarcity. Using a significant volume of priced balancing actions ensures that small volumes, which may not be representative of the state of the system, do not set prices.

National Grid has chosen to average over a volume of 100MWh as a trade off between deriving appropriate prices at times of shortage, and not unduly influencing prices at other times. By using a fixed maximum, (as opposed to, say, a percentage of NIV) the enhancement to the incentives increases as the Net Imbalance Volume increases. We recognise that there are a number of possible methodologies for determining such a volume, and believe that the Modification Group could consider the relative merits of alternatives.

This modification will enhance the signals provided by imbalance prices to the forward markets which will increase competition, and security of supply, by encouraging Parties to trade ahead of Gate Closure. This will better facilitate the applicable BSC Objective (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".

Encouraging Parties to trade ahead of Gate Closure will benefit security of supply and will therefore better facilitate applicable BSC Objective (b) "the efficient, economic and co-ordinated operation by the Transmission Company of the Transmission System".

Details of Proposer:

Name: Mark Brackley

Organisation: National Grid

Telephone Number: 01926 656024

Email Address: mark.brackley@ngtuk.com

Modification Proposal	**MP No: 194** *(mandatory by BSCCo)*

Details of Proposer's Representative:

Name: Robert Smith

Organisation: National Grid

Telephone Number: 01926 654076

Email Address: robert.smith@ngtuk.com

Details of Representative's Alternate:

Name: Shafqat Ali

Organisation: National Grid

Telephone Number: 01926 655980

Email Address: shafqat.ali@ngtuk.com

Attachments: No

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