

# Draft MODIFICATION REPORT for Modification Proposal P138 Contingency Arrangements in Relation to the Implementation of Demand Control Measurers pursuant to Grid Code OC6

Prepared by: ELEXON on behalf of the BSC Panel

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This document has been distributed in accordance with Section F2.1.10<sup>1</sup> of the Balancing and Settlement Code.

#### RECOMMENDATIONS

The Balancing and Settlement Code Panel recommends that:

- Proposed Modification P138 should not be made;
- If the Authority determine that P138 should be made, the Implementation Date should be 3 November 2004, if an Authority determination is received on or before the 30 April 2004. If an Authority determination is received after that date but on or before the 20 August 2004, the Implementation Date should be 23 February 2005; and
- The development and implementation costs for Proposed Modification P138 of £20,660 and ELEXON effort if 80 man days, with an additional 20% tolerance associated with these estimates, be noted.

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 $<sup>^1</sup>$  The current version of the Balancing and Settlement Code (the 'Code') can be found at www.elexon.co.uk/ta/bscrel\_docs/bsc\_code.html

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#### **SUMMARY OF IMPACTED PARTIES AND DOCUMENTS**

The following parties/documents have been identified as being potentially impacted by Modification Proposal P138.

| Parties                       |             | Sections of the | BSC         | Code Subsidiary Documents                                     |               |
|-------------------------------|-------------|-----------------|-------------|---|---------------|
| Suppliers                     | $\boxtimes$ | А               |             | BSC Procedures  | $\boxtimes$   |
| Generators                    | $\boxtimes$ | В               |             | Codes of Practice   |               |
| Licence Exemptable Generators | $\boxtimes$ | С               |             | BSC Service Descriptions                                      | $\boxtimes$   |
| Transmission Company          | $\boxtimes$ | D               |             | Service Lines   |               |
| Interconnector                |             | Е               |             | Data Catalogues   |               |
| Distribution System Operators |             | F               |             | Communication Requirements Documents                          |               |
| Party Agents                  |             | G               | $\boxtimes$ | Reporting Catalogue   |               |
| Data Aggregators              |             | н               |             | MIDS  |               |
| Data Collectors               |             | J               |             | Core Industry Documents                                       |               |
| Meter Operator Agents         |             | K               |             | Grid Code   | $\boxtimes$   |
| ECVNA                         |             | L               |             | Supplemental Agreements                                       |               |
| MVRNA                         |             | М               |             | Ancillary Services Agreements                                 |               |
| BSC Agents                    |             | N               |             | Master Registration Agreement                                 |               |
| SAA                           | $\boxtimes$ | 0               |             | Data Transfer Services Agreement                              |               |
| FAA                           |             | Р               |             | British Grid Systems Agreement                                |               |
| BMRA                          |             | Q               |             | Use of Interconnector Agreement                               |               |
| ECVAA                         |             | R               |             | Settlement Agreement for Scotland                             |               |
| CDCA                          |             | S               |             | Distribution Codes  |               |
| TAA                           |             | Т               | $\boxtimes$ | Distribution Use of System Agreements                         |               |
| CRA                           |             | U               |             |   |               |
| Teleswitch Agent              |             | V               | $\boxtimes$ | BSCCo   |               |
| SVAA                          |             | W               |             | Internal Working Procedures                                   | $\boxtimes$   |
| BSC Auditor                   |             | Х               | $\boxtimes$ | Other Documents   |               |
| Profile Administrator         |             |                 |             | Transmission Licence  |               |
| Certification Agent           |             |                 |             |   |               |
| MIDP                          |             |                 |             |   |               |
| TFLA                          |             |                 |             |   |               |
| Other Agents                  |             | i               |             |   |               |
| SMRA                          |             |                 |             | Cost of implementing + / -                                    | 20%           |
| Data Transmission Provider    |             |                 |             | Proposed Modification P138: Change specific £17,66            | 50            |
|                               |             |                 |             | Standalone Release Cost Not Ap                                | plicable      |
|                               |             |                 |             | BSC Auditor Effort £2,000<br>Clarification of Solution £1,000 |               |
|                               |             |                 |             |   | ,<br>plicable |
|                               |             |                 |             | Demand Led Costs  | . 1           |
|                               |             |                 |             | Operational/maintenance £1,537 Total <sup>2</sup> : £ 20,6    |               |
|                               |             |                 |             | 80 EL   | EXON          |
|                               |             |                 |             | man o   | lavs          |

<sup>1.</sup> Note that the operational / maintenance cost is per Settlement Period affected by the Demand Control for 100 BM Units.

<sup>2.</sup> Note that the total cost does not include the operational / maintenance cost and a standalone project overhead was not quoted as P138 would be implemented as part of a BSC systems release as this is more cost effective and efficient.

### 1 DESCRIPTION OF PROPOSED MODIFICATION AND ASSESSMENT AGAINST THE APPLICABLE BSC OBJECTIVES

#### 1.1 Modification Proposal

Modification Proposal P138 'Contingency Arrangements in relation to Implementation of Demand Control Measures pursuant to Grid Code OC6' (P138) was raised on 8 August 2003 by Innogy PLC. P138 aims to bring certain aspects of Demand Control within the provisions of the Balancing and Settlement Code (the Code), namely the adjustment of Energy Account volumes to reflect lost demand and the inclusion of Demand Control volumes in the Energy Imbalance Price calculation.

The Panel considered the Initial Written Assessment for P138 at its meeting of 11 September 2003. The Panel agreed to submit P138 to a three month Assessment Procedure with the assessment to be undertaken by the Pricing Issues Standing Modification Group (PSMG) supported by members of the Volume Allocation Standing Modification Group (VASMG) and Licensed Distribution System Operators (LDSOs).

There are currently no provisions in the Code that relate to the impact of Demand Control measures as defined by certain provisions of the Grid Code OC6 (reference 1). The modification to the Code would includes the following:

- An instruction issued by the System Operator (SO) for Demand Control under certain circumstances (defined in the Grid Code OC6 (reference 1)) which would lead to the volume of demand being reduced would be considered to be Offer Acceptance(s);
- The SO would provide details to BSCCo of the LDSO(s) that were affected by the Demand Control
  and approximately by what volume each LDSO was affected. These details would have been
  provided to the SO by LDSOs as this is a current requirement of the Grid Code OC6 (reference 1);
- The volumetric impact of the Demand Control upon each relevant affected Party within the GSP Group would be calculated, i.e. the Demand Control Volume;
- Affected Parties would receive a derived Demand Control Offer price for this Demand Control Offer;
   and
- Affected Parties expected Metered Volume would be adjusted by the amount identified by the relevant Demand Control Offer so that the Party's pre-Demand Control position is approximated.

During the Assessment Procedure for P138, the PSMG met six times, on 15 September 2003, 2, 10 and 23 October 2003 and 11 and 26 November 2003. The PSMG have undertaken one consultation and one Impact Assessment from the BSC Central Service Agent, BSCCo and the SO.

The PSMG were split in their views as to whether P138 better facilitates the Applicable BSC Objectives and therefore could not make a recommendation regarding P138.

The Panel considered the issues set out in the P138 Assessment Report (P138AR, reference 3) at its meeting of the 11 December 2003 and agreed by a majority that the Proposed Modification P138 does not better facilitate the Applicable BSC Objectives and therefore should not be made.

#### 1.2 Proposed Modification

#### 1.2.1 P138 Overview

Under P138, Demand Control actions will be treated as equivalent to Offer Acceptances. In order to give effect to P138, a number of key requirements are to be introduced by the Proposed Modification:

- Where an instruction is issued by the SO for Demand Control, as defined in the Grid Code OC6 (reference 1), as a consequence of insufficient generation to meet demand (i.e. 6.2.1 (c), (d) and (e): Demand Reduction instructed by NGC; Automatic Low Frequency Demand Disconnection; and/or Emergency Manual Demand Disconnection), then an Offer Acceptance would be created, reflecting the volume associated with the Demand Control;
- Deemed volumes of lost demand would be calculated for all affected Parties. Details of this
  calculation are to be included within the Code. Some of these details (i.e. estimates of the volumes
  of lost demand) would have been provided to the SO by LDSOs as this is a current requirement of
  the Grid Code OC6 (reference 1);
- The volumes associated with lost demand would be apportioned to affected Parties using defined volume allocation rules, which are based upon a comparison of the relevant BM Unit Metered Volumes on the last equivalent day and Settlement Period for which Initial Settlement had been performed;
- Only Supplier BM Units which were importing (i.e. those beginning 2\_ which had negative Metered Volume) on the equivalent Settlement Period would be included in the volume allocation apportionment. Therefore P138 is limited to Supplier BM Units that are importing on the equivalent Settlement Period to the Demand Control;
- Affected Parties would receive a marginal Offer Price (referred to as the Demand Control Offer Price) for the volume by which their demand was reduced (Demand Control Volume), payable by the SO; and
- Affected Parties' contracted position would be adjusted by the Demand Control Volume so that each Party's imbalance positions would be the same, whether or not the Demand Control had occurred

#### 1.2.2 P138 Mechanism

This section describes the basic mechanism for P138. The mechanism for P138 has been split down into a number of steps:

- Notification of Demand Control;
- Initial Notification of Demand Control Volumes and Prices;
- Calculation of the Demand Control Offer Price;
- Calculation of BM Unit Deemed Demand;
- Submission of Data into Settlement; and
- Settlement Processing.

#### 1.2.2.1 Notification of Demand Control

This process is initiated where the SO instructs the LDSOs in accordance with Grid Code OC6.2.1 (c), (d) and (e) (reference 1). Periods of Demand Control instructed in accordance with these clauses are referred to as 'Demand Control Periods' Note that it is assumed that the instruction to the LDSOs is synonymous with the corresponding GSP Groups.

The SO sends a notification, following each Demand Control instruction, to the Balancing Mechanism Reporting Agent (BMRA), identifying the start time of the particular Demand Control Period for each affected LDSO(s). The start time of the Demand Control Period for a particular LDSO is defined as the time the instruction to reduce demand is issued by the SO, for the relevant LDSO. Note that it is assumed that the SO will not issue a delayed instruction for Demand Control to take effect i.e. for a given point in the future, therefore it is assumed that the Demand Control instruction would take affect at the moment that it is instructed.

At some point, the SO instructs the LDSOs to start reconnecting demand, in accordance with OC6 (reference 1). The SO sends a notification to the BMRA following the instruction to start reconnecting demand, notifying the time of the end of the Demand Control Period for the affected LDSO(s) and, if possible, an estimate of the Demand Control Volume achieved per Settlement Period. The end time of the Demand Control Period for a particular LDSO is defined as the time the instruction to reconnect demand is issued by the SO, or the start of an Electricity Supply Emergency, a Fuel Security Period or a Black Start Period.

Demand Control Settlement Periods are Settlement Periods that span the start and end times notified above and are particular to a GSP Group (LDSO). For the avoidance of doubt, where the start or end of a Demand Control Period falls part way through a Settlement Period, then the whole Settlement Period is a Demand Control Settlement Period.

#### 1.2.2.2 Initial Notification of Demand Control Volumes and Prices

As soon as practicable, the SO provides a system warning message to the BMRA (which the BMRA publishes to currently defined timescales) providing an estimate of the Total Demand Control Volume for each Demand Control Settlement Period, the affected LDSO(s) and the Offer Acceptance with the highest price, which was taken or utilised in the Settlement Period within which the first Demand Control Period was actually instructed (to give Parties an idea of the likely Demand Control Offer Price) and which:

- Has an Offer volume in excess of 1MWh;
- Which on its own or as part of a number of Acceptances has an instruction length greater than the Continuous Acceptance Duration Limit (CADL); and
- Is not itself a Demand Control Offer.

The SO calculates the total volume of energy that it deems to have been lost due to the Demand Control as a MWh per Settlement Period per LDSO value and passes this information onto the Settlement Administration Agent (SAA), by Settlement Day + 2 (Business Days) at the latest. This communication will be via email.

The SAA will match the LDSO to the relevant GSP Group so that the SAA has the details of the total Demand Control Volume (MWh) per Settlement Period per GSP Group. The LDSO to GSP Group mapping details will have been provided to SAA by BSCCo.

The Demand Control Volume for each Settlement Period as notified to the SAA by the SO by Settlement Day + 2 (Business Days) will be deemed to be correct, aside from any manifest error. If there is such a manifest error in the SO notifications, the SO will have the discretion to correct the data.

Any Settlement Period falling wholly or partially between the time the SO instructed Demand Control to start and the time the SO instructed Demand Control to finish or the time the Demand Control was deemed to end as a consequence of the start of another situation (i.e. Electricity Supply Emergency, Fuel Security Period or Black Start) will be defined as a Demand Control Settlement Period.

#### 1.2.2.3 Calculation of the Demand Control Offer Price

By the Initial Interim (II) run, the SAA calculates the Demand Control Offer Price. The Demand Control Offer Price would be the Price of the Accepted Offer accepted or utilised in the Settlement Period within which Demand Control occurred (note that this does not include BSAD), with the highest Offer price which:

- Has an Offer volume in excess of 1 MWh;
- Which on its own or as part of a number of Acceptances that has an instruction length greater than the CADL; and
- Is not itself a Demand Control Offer.

The Demand Control Offer Price would be used in all subsequent Settlement Periods which were subject to the same period of Demand Control. If two periods of Demand Control called in different GSP Groups overlapped then the Demand Control Offer Price would be the same for both periods of Demand Control. If two periods of Demand Control were called but did not overlap, then separate Demand Control Offer Prices would be calculated for each period of Demand Control.

If there are no such Accepted Offers meeting the criteria defined, then as a default, the Market Index Price would be used as the Demand Control Offer Price. If there was also no Market Index Price for that Settlement Period, then the Demand Control Offer Price would default to the Energy Imbalance Price derived from a volume weighted average of balancing actions in the Net Imbalance Volume (NIV) (as calculated in accordance with Section T4.4.5(a) or T4.4.6(a) as the case may be. Note that this is the same value to which reverse price defaults when it is zero).

#### 1.2.2.4 Calculation of BM Unit Deemed Demand

The volume allocation rules described will be used by the SAA to apportion the Demand Control Volume across all importing Suppliers in the affected GSP Group.

For the avoidance of doubt, these volume allocation rules will be applied no matter by which relevant method demand is reduced (within the previously defined constraints).

The volume allocation rules will only apply to Supplier BM Units (i.e. those with IDs beginning '2\_') that were importing in the given Settlement Period (i.e. which have negative consumption on the equivalent day used in the following volume allocation rules). Exporting BM Units (regardless of type) and directly connected demand are excluded from this calculation.

The Demand Control Volumes are to be calculated for each GSP Group, for each Settlement Period within which Demand Control occurred.

To calculate the Demand Control Volume for each Settlement Period of Demand Control:

- Identify the most recent day d' which has the same day of the week as the Settlement Day d, and for which Initial Settlement has been performed and which is not a clock change day (i.e. the equivalent day as defined in section T4.2.2 (d)).
- For the Settlement Period(s) in which Demand Control occurred on day d, identify the corresponding Settlement Period j' on the equivalent day d'. This mapping process is straightforward (period 1 mapping to period 1, period 2 mapping to period 2, and so on), except in

the case where day d is a clock change day. In this case the default rules set out in T4.2.2(c) are to be followed to determine the mapping.

- If the Metered Volume apportioned to a particular BM Unit in Settlement Period j' and day d' is zero, then the Metered Volume for that BM Unit from Settlement period j'-1 from day d' is substituted to be the Metered Volume for Settlement Period j'. (Note if the Metered Volume in Settlement Period j'-1 is zero, then a value of zero is used for Settlement Period j in the calculation.)
- If the Metered Volume for a BM Unit in period j' of day d' is positive (i.e. the BM Unit is exporting), then a value of zero is used for Settlement Period j in the calculation.
- Sum the Metered Volume of all the BM Units i, in the affected GSP Group in day d' and Settlement Period j' (to give  $\Sigma_i QM_{ii'}$ ).
- Divide the Metered Volume of each BM Unit i, in day d' and Settlement Period j' by the total over the GSP Group (as calculated above) to give the proportion of demand per BM Unit throughout the GSP Group (to give  $PDC_{ij} = QM_{ij'} / \Sigma_i QM_{ij'}$ ).
- Multiply this value obtained by the Total Demand Control Volume (TDCV<sub>j</sub>; as notified by the SO by Settlement Day + 2 (Business Days)) to give the volume that will be added onto that BM Unit to take account of the Demand Control (i.e. DCV<sub>ij</sub> = PDC<sub>ij</sub> \* TDCV<sub>j</sub>).

Note that this calculation would have to be carried out separately for each Settlement Period affected by the Demand Control. The SO will report a MWh figure of Total Demand Control Volume for each Settlement Period affected by the Demand Control.

Note that this calculation is carried out once and does not alter as more information becomes available in each Settlement Run.

For the avoidance of doubt no specific processing is required to account for Bank Holidays i.e. volumes for a Bank Holiday Monday will be estimated in the same way as those for a Working Day, as per T4.2.2 (d).

#### 1.2.2.5 Submission of Data into Settlement

The Demand Control Offer will be considered equivalent to an Acceptance of an Offer at the Demand Control Offer Price. Therefore, for each Demand Control Settlement Period, defined above (i.e. which, for a given GSP Group, falls within a Demand Control Period), the SAA shall include the Demand Control Offer Volume for each affected BM Unit in the Energy Imbalance Price calculation, at the Demand Control Offer Price, (i.e. placed into the Offer / Buy stack).

#### 1.2.2.6 Settlement Processing

Once this data is entered into settlement, the following apply:

- The Demand Control Offer Acceptance will be allocated to the relevant BM Unit and the cashflow for the Demand Control Offer Volume will be paid to the lead Party of the relevant BM Unit by the SO via the SO's BM Cashflow (CSOBM<sub>i</sub>);
- The deemed Offer Acceptance will contribute to the calculation of System Buy Price (SBP) and will be treated along with all other Accepted Offers (except that CADL tagging will be applied only to the Total Demand Control Volume not the Demand Control Volume applied to the individual Supplier BM Units. This means that if the Total Demand Control Volume has a duration of less than the CADL, it will be tagged out, however if the Total Demand Control Volume has a duration of more than the CADL, none of it will be tagged out, even if part of it is attributed to a Supplier BM Unit that has had another acceptance in one of the Demand Control Settlement Periods that has been subject to CADL tagging);

- The imbalance position (i.e. the calculation of Energy Imbalance for each energy account) of the affected Supplier would be corrected for those Demand Control Offer Volumes;
- The position of the impacted parties in the Energy Contract Volume Aggregation Agent (ECVAA)
  would be corrected for the correct calculation of Credit by a manual modification to the relevant
  flow; and
- Non Delivery Rules would not be applied to the Demand Control Offer Volumes.

#### 1.2.3 Cashflow modelling examples

During the Assessment of P138 a model was developed to highlight the main cash flows that would result from the implementation of P138. Eight examples of Settlement Periods where there had been Demand Reduction Imminent (DRI), High Risk of Demand Reduction (HRDR), or Notification of Insufficient System Margin (NISM) warnings with the associated prices were inserted into the model. The model showed the increase or decrease in payments made (including Payment for the Demand Control Offer, imbalance charges, Residual Cashflow Reallocation Cashflow (RCRC) and Balancing Services Use of System (BSUoS)) by each Party under P138 arrangements compared to current arrangements. Further details of the model and examples are contained within the P138 Assessment Report (P138AR, reference 3).

#### 1.3 Issues Raised by the Proposed Modification

The Terms of Reference agreed by the Panel for the assessment of P138 set out the issued raised by P138. The Terms of Reference were provided as Annex 3 to the P138 Assessment Report (P138AR, reference 3), and formed the basis of the detailed deliberations of the PSMG (provided in the P138 Assessment Report (P138AR, reference 3)). Therefore the issues are not detailed further in this Modification Report.

### 1.4 Assessment of how the Proposed Modification will Better Facilitate the Applicable BSC Objectives

The Panel considered the P138 Assessment Report (P138AR, reference 3), and the assessment by the PSMG of whether P138 better facilitates the Applicable BSC Objectives. The Panel noted that no consensus had been reached by the PSMG as to whether P138 better facilitates the Applicable BSC Objectives. The Panel agreed by a majority that the Proposed Modification P138 does not better facilitate the Applicable BSC Objectives and therefore should not be made.

### 1.4.1 Applicable BSC Objective 3(b) The efficient, economic and co-ordinated operation by the Transmission Company of the Transmission System

#### **Arguments For:**

- 1. P138 will ensure that Demand Control periods can be effectively utilised under the BSC.
- 2. P138 will introduce appropriate incentives on NGC to ensure that the cost of Demand Control is appropriately targeted.
- 3. Demand Control is an instruction issued to meet energy requirements, and therefore Suppliers should be paid for demand shed under the Grid Code OC6 (reference 1).
- 4. Demand Control is a rare event and often a last resort decision, however introducing a price for Demand Control similar to other Balancing Mechanism actions will lead to the efficient and economic running of the Transmission System by the Transmission Company.

#### **Arguments Against:**

- 1. Demand Control as instructed under the Grid Code OC6 (reference 1) is NOT an option open to the SO based upon economic rationale. If it were, the SO would have made use of it as a justifiable balancing service long before now. The very fact that the SO has not instructed Demand Control for such a long time clearly indicates that it is not seen as a 'free' option and is treated as an action to be 'avoided at all costs'. Charging the SO for taking Demand Control will have no impact upon its behaviour. Demand Control will occur whether or not there is a cost associated with it. The SO would take every feasible action, irrespective of price, prior to initiating Demand Control.
- 2. Demand Control is a purely operationally driven decision taken by the SO to ensure the overall system stability where there is either insufficient contracted reserve or failure of the market to provide sufficient energy to meet demand and implemented via Emergency Instructions. It is not a commercial decision taken by the SO. The level of contracted reserve is driven by the SO's obligations in relation to Security of Supply. Putting a price on Demand Control, as suggested under P138, will not impact the level of reserve held and will do nothing to prevent insufficient generation being contracted by Suppliers and the market failing. It will, as a result, fail to lead to the more efficient, economic or co-ordinated operation of the Transmission System. The SO should not be penalised following the failure of the market over which it has limited control.
- 3. In the very rare event that Demand Control is used it should only be utilised to ensure the overall stability of the system. In this respect the SO should only consider the technical aspect of maintaining the integrity of the system and should not take account of any financial consideration.
- 4. If the assertion that the SO will respond to the pricing of Demand Control is correct then there could be a perverse incentive making it more likely that Demand Control is initiated. P138 proposes that the SO pays for Demand Control at the marginal price. The Marginal Price is defined as the highest priced Offer taken prior to the initiation of Demand Control. This could incentivise the SO to take Demand Control earlier than would otherwise have been the case, as the earlier it is initiated, the cheaper it will be. If this incentive is taken to its logical conclusion, Demand Control will be the first action taken by the SO as it will be 'free' due to the fact that there is no Offer price to set the cost of the action. Based upon this logic P138 fails to achieve its objective of making Demand Control less likely.
- 5. Based upon the same incorrect premise that the SO will respond to the costing of Demand Control, it could be argued that the SO would never take Demand Control, preferring to wait until the system begins to collapse in an uncontrolled manner and a Black Start situation occurs. This would avoid the need for the SO to pay for the action at the prevailing marginal price as proposed by P138, but would obviously be an undesirable outcome for the wider industry and an inappropriate incentive for the SO.
- 6. Even though treating the amount of demand reduction as an offer appears to be the correct intellectual thing to do, it is not clear that it will send a sufficient signal to participants to improve balancing or to ensure sufficient plant is available. The signal will be sent too late, as it comes once the event has actually occurred. It is possible for imbalance prices to send signals to participants when past imbalance prices alter expectations of likely future levels. However, this mechanism will be used infrequently meaning that participants will have insufficient experience of the relevant prices for it to alter their future expectations. Market participants have previously indicated that pricing signals that only present themselves at times of Demand Control come too late to affect behaviour as they are only seen after the event and can not be predicted. As such, higher imbalance prices that only occur following Demand Control will have no impact upon the contracting behaviour of industry participants.

- 7. The inclusion of deemed Demand Control Offers within the offer stack used to calculate imbalance prices (SBP / SSP), could lead to an increase in average SBP and thus supposedly increase the incentive on parties to balance. Whilst it is desirable for the SBP to be increased at times of system stress to improve the incentives on Parties to balance, it is believed that there are more appropriate means of achieving this. Imbalance prices are only increased under P138 as a result of the SO paying Suppliers what is effectively a windfall payment following Demand Control. This windfall payment may reduce incentives on Suppliers to balance as it would reduce or negate any increase in imbalance cost exposure faced by Suppliers who are in a short contracted position. Without the perversions associated with windfall payments, the sharper incentives on parties' to balance would better facilitate Applicable BSC Objective (b). Unfortunately, the increase in imbalance prices is directly linked to the payment of such windfall gains.
- 8. Payment at a marginal price, by the SO, for the Demand Control Volume is in direct contradiction to Applicable BSC Objective (b) as it would almost certainly have been more efficient for the energy to be procured through forward contracts to ensure that sufficient was made available. If Demand Control is required due to a lack of available energy to meet demand, the market should be incentivised to contract for greater volumes. It can readily be assumed that the cost per MWh of such contracting would be less than the marginal offer price P138 suggests is paid for every MWh of demand reduced.
- 9. It appears obvious that the P138 proposal would lead to increased uncertainty in relation to imbalance prices and RCRC payments at times of Demand Control. Under the proposal, the increase in imbalance prices, and resultant RCRC payments, would be dependent upon the volume associated with, and price at which, Demand Control is instructed. Neither the volume nor price, associated with the Demand Control action under P138, is predictable. Therefore P138 will lead to increased uncertainty within the market.
- 10. The proposed mechanism relies upon post event calculation and allocation of volumes, identification of prices and calculation of payments. This means that prompt pricing becomes impossible during a Demand Control Period, a requirement that has previously been held as sacrosanct by market participants during other pricing modification discussions.
- 11. It could be suggested that P138 results in the need for the development of a separate pricing regime that only operates at times of Demand Control. As industry participants have previously argued, this could be seen to be inefficient and to inappropriately introduce unnecessary complexity and uncertainty into the market.

## 1.4.2 Applicable BSC Objective 3(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;

#### **Arguments For:**

- By treating Demand Control as a BM action and removing the potential financial risks associated with Demand Control measures, the Modification Proposal will better facilitate Objective (c). P138 will remove the risk that parties are exposed to high and unpredictable imbalance charges and RCRC during a Demand Control Period.
- 2. P138 will better facilitate effective competition in the sale and generation of electricity. There is a defect within the current methodology, which may benefit a party that was short and could therefore be said to be causing the Demand Control to the detriment of a party that attempted to balance their position. P138 will amend this to ensure all Parties contract positions are reflective of their notified position prior to Demand Control being initiated.
- 3. P138 will remove the ability of the SO to use Demand Control and not pay for the instruction.

- 4. The P138 solution ensures that the volume associated with the Demand Control instruction is feed back into the derivation of the imbalance price. This will mean that the NIV tagging process is more robust as it will be more accurate and it will also ensure that the energy imbalance price is more reflective of the actions taken by the SO.
- 5. Importing Supplier BM Units in a GSP Group affected by Demand Control should not be exposed to increased imbalance exposure because of such an instruction. P138 would promote competition by removing this exposure.
- 6. Under current arrangements, Suppliers' incentives to balance are dampened at times of Demand Control as the resultant reduction in Metered Volumes will generally improve short affected Suppliers' imbalance positions. By treating Demand Control Volumes as deemed offers, Suppliers' contracted positions are changed such that their imbalance positions are not impacted by the Demand Control action. The removal of the current perversion that could reduce incentives on Suppliers to balance at times of Demand Control does better facilitate Applicable BSC Objective (c).

#### **Arguments Against:**

- 1. It is not clear that the present treatment of Demand Control is acting as a deterrent to competition in supply.
- 2. It is not clear that Parties that are short would be the ones that caused the Demand Control in all circumstances. It may be that there is a shortfall in area A, but due to system constraints the SO chooses to invoke Demand Control in area B and that Party X is short in area C. Given the system set up, it could be that Party X has not caused Demand Control to be invoked in area B, so should not be exposed to a higher SBP.
- 3. Also, it is not clear that the market has failed as the Demand Control could, for example, be invoked due to system problems. This is not a failure of the market, as there is no market for the system itself as there is only one SO.
- 4. In most cases P138 will appropriately account for the impact of Demand Control on Suppliers' contracted volumes. However, this may not be the case where Demand Control is affected by disconnecting specific loads. In such a situation it will be quite clear which Supplier's Metered Volume will have been affected and which Supplier should receive the Demand Control Offer payment. However, the proposed P138 mechanism does not take account of this, effectively smearing the reduced volume across the whole Supplier community based upon their market shares within the GSP Group. This results in Demand Control Offer payments being made to Suppliers that were not affected by the Demand Control action, whilst the Supplier that lost significant Metered Volume will only receive a small element of the total Demand Control Offer payment that should have been received under the principles of P138.
- 5. Despite the acceptance that, in most cases, P138 appropriately accounts for the impact of Demand Control on Suppliers' contracted volumes. Other elements of P138 counteract the benefits of correctly accounting for the volumes associated with Demand Control resulting in an overall detrimental impact on Applicable BSC Objective (c).
- 6. It is inappropriate for Suppliers to be rewarded with, what equates to, a 'windfall' payment in the event of Demand Control. The choice of which GSP to be subject to Demand Control is by the SO, without any involvement of Suppliers who thus take no action. If payment is made at the Marginal Offer Price taken within the BM, this could provide perverse incentives on Suppliers as they will benefit when there is Demand Control. It is appropriate that Suppliers are held neutral; i.e. do not incur costs where Demand Control is invoked for something they are not responsible for (being out of balance in a Demand Control area due to the action taken by the SO); but Suppliers should not receive a windfall profit. The issue of rewarding a Supplier for doing nothing is compounded when

- it is noted that the volume estimation would not reflect reality and would not necessarily allocate demand reductions accurately, which is turn is exacerbated by the proposition that the volume allocation rules should be based on an equivalent day methodology.
- 7. Payment for deemed offers associated with Demand Control will be re-charged to the industry through BSUoS. BSUoS charges reflect the costs incurred by the SO in balancing the system. The re-allocation of P138 costs through BSUoS charges results in Parties not impacted by Demand Control paying for the windfall payments received by Parties that are affected by Demand Control. Payment for Demand Control through BSUoS is based upon the total Metered Volumes of all Market Participants and has no relation to whether a party has contributed to the Demand Control initiation through their imbalance position. It is not appropriate for a Supplier to benefit from Demand Control, at the expense of other parties within the industry, when it could have been in a short position and thus contributing to the need for Demand Control to be initiated.
- 8. The allocation of BSUoS charges is based upon Metered Volumes. As such those Suppliers benefiting from windfall payments as a result of having their Metered Volumes reduced, will also benefit from reduced BSUoS, reduced Transmission Network Use of System (TNUoS) and possibly reduced Distribution Use of System (DUoS) charges, as these are all calculated as a factor of Metered Volume that will reduce following Demand Control. The recovery of total costs by the SO is achieved through the general socialisation of costs across the community. Whilst affected Suppliers benefit through reduced Metered Volumes, non-affected parties will face higher costs as their market share is artificially increased, seeing them incur a higher proportion of charges.
- 9. The impact of increased BSUoS charges being incurred by all industry participants whilst payment following Demand Control are made to a limited number of Suppliers based upon their Metered Volumes in a specific area, will discriminate against smaller Suppliers. Smaller Suppliers, or Suppliers whose customer base is location specific, are proportionately less likely to receive payment following Demand Control, but guaranteed to pay a proportional increase in BSUoS charges. This effect is in direct contradiction of Applicable BSC objective (c).
- 10. The eight examples, contained within the P138 Assessment Report (P138AR, reference 3), demonstrate that the net impact upon industry participants resulting from cashflows associated with P138 is arbitrary. The range of different volumes, prices and imbalance positions that can be in place when Demand Control occurs means that no single party can be certain of being better or worse off. As a result, P138 is unlikely to change the behaviour of any participant.
- 11. From the examples contained within the P138 Assessment Report (P138AR, reference 3), it can be seen that, whilst generators are generally made worse off by P138 as a result of facing higher BSUoS charges without benefiting from any windfall payments, there could be situations where they benefit as a result of the increase in RCRC payments being greater than the increased BSUoS charges. Similarly, Suppliers not affected by Demand Control are generally worse off as a result of being subject to higher BSUoS costs without benefiting from payment for reduced volumes. However, these Suppliers too could be made better off under P138 if RCRC payments outweigh the increased BSUoS charges.
- 12. In all examples a Supplier is contributing to the need for Demand Control by being in a short contracted position. Despite this short position, in the majority of examples (5 out of 8), this Supplier is made better off following Demand Control under P138. This appears to provide a perverse incentive whereby Suppliers who contribute to the need for Demand Control could benefit from its instruction.
- 13. The re-allocation of monies resulting from P138 fails to provide any incentive on industry parties to change behaviours from those currently displayed. As such P138 fails to better facilitate BSC Applicable Objective (c).

### 1.4.3 Applicable BSC Objective 3(d) Promoting efficiency in the implementation and administration of the balancing and settlement arrangements

#### **Arguments For**

- 1. There are currently no contingency arrangements associated with Demand Control periods in the BSC. The proposal will address this defect and on this basis will better facilitate Objective (d) by promoting efficiency in the implementation and administration of the Balancing and Settlement Arrangements
- 2. The costs associated with implementing a manual solution for P138 do not have a negative impact on facilitating Applicable BSC Objective (d).

#### **Arguments Against**

- 1. The process proposed under P138 will add significant complexity to the implementation and administration of the Balancing and Settlement Arrangements and therefore P138 will be to the detriment of Applicable BSC Objective (d). As well as this increased complexity, it will also add uncertainty and increase risk for Parties operating within the industry. There will be significantly different BSUoS charges, Imbalance prices and RCRC payments as a result of P138 and parties will have to wait until at least 48 hours after the end of each Demand Control Settlement Period before knowing the impact that the P138 calculations will have on them and on Parties that they trade with. The information required to determine the effect of P138 cashflows on any given party will not be available prior to the completion of the II Run.
- 2. Where a change to the process of managing the balancing and settlement arrangements results in the inability to provide prompt prices, increased uncertainty and volatility, greater scope for error, increased costs and a risk of discrimination, it cannot better facilitate Applicable BSC Objective (d).
- 3. The process associated with the implementation and administration of the changes proposed by P138 has been hugely simplified. As a result of the necessary simplification of the procedures proposed to affect the P138 objectives, estimates are used to calculate other estimates, which in turn determine potentially significant changes in industry cash flows resulting in a lottery of P138 winners and losers.
- 4. P138 makes the assumption that some parties will not be impacted by Demand Control (e.g. embedded generators and directly connected demand). There may be times when P138 discriminates against such Parties as a result of their exclusion.
- 5. It would not be promoting efficiency in the implementation and administration of the Balancing and Settlement Arrangements if the costs associated with P138 were to be incurred as these costs do not outweigh the reputed benefits.

#### 1.5 Alternative Modification

Two options were considered that may have formed an Alternative to Proposed Modification P138. Both options considered a different definition of the Demand Control Offer Price, namely a zero price or the Market Index Price. Neither of these options were progressed. It was believed that setting the Demand Control Offer Price to zero would not better facilitate the Applicable BSC Objectives compared to the Proposed Modification as it would result in greater imbalance payments to Parties affected by the Demand Control. It was also believed that setting the Demand Control Offer Price to the Market Index Price may provide compensation for the Demand Control but would not provide a strong price signal during periods of system stress. The options for an Alternate Modification are explored in the P138 Assessment Report (P138AR, reference 3) and so are not discussed further in this Modification Report.

#### 1.6 Governance and Regulatory Framework Assessment

The starting point for P138 is an instruction issued by the SO to LDSOs in accordance with the Grid Code. The Grid Code contains reporting details (System Warning messages) for NISM, HRDR and DRI, but does not containing reporting details if Demand Control occurs. The PSMG believe that since this obligation is to be included in the Code, there is no need to also include it in the Grid Code, however the SO believes that there may potentially be an impact on the Grid Code and is currently reviewing relevant documentation.

#### 2 RATIONALE FOR PANEL'S RECOMMENDATIONS

The Panel noted that the PMSG did not reach a consensus view as to whether P138 better facilitates the Applicable BSC Objectives. The Panel considered the arguments for and against Proposed Modification P138 in respect of each Applicable BSC Objective (as set out in section 1.4 of this Modification Report). The BSC Panel recommended by majority that the Proposed Modification P138 does not better facilitate the Applicable BSC Objectives and should not be made.

The Panel believed that it is perverse to expect the SO to pay for the market's inability to deliver sufficient generation to meet demand. The Panel noted that the response received from the SO for the Assessment Procedure consultation stated that 'Charging National Grid for taking Demand Control will have no impact on its behaviour' and 'Demand Control will occur whether or not there is a cost associated with it'.

The Panel believed that although P138 should not be implemented at the current time, should either P136 'Marginal Definition of the 'main' Energy Imbalance Price' or P137 'Revised Calculation of System Buy Price and System Sell Price' be approved then the principle of P138 may need to be reconsidered. The Panel also noted that P138 covered both the volume impact and pricing impact of Demand Control, and that the volume aspect of Demand Control may require further consideration as another Modification Proposal.

#### 3 IMPACT ON BSC SYSTEMS AND PARTIES

An assessment has been undertaken in respect of BSC Systems and the following have been identified as potentially being impacted by the Proposed Modification.

#### 3.1 Overview

The PSMG have recommended a manual solution for P138 (Option I of the LogicaCMG Impact Assessment included in the P138 Assessment Report (P138AR, reference 3)). In summary, development and implementation of P138 will incur BSC Central Service Agent costs of approximately £17,660. Furthermore, each time Demand Control is invoked, costs of approximately £1,537 per Settlement Period affected (and based on 100 BM Units being affected) will be incurred. There is an additional 15% tolerance associated with these figures.

This excludes ELEXON effort of approximately 80 man days and additional ELEXON costs of

- £2,000 (Approximately 10% of the development cost for the BSC Auditor effort); and
- £1,000 (Approximately 5% of the development cost for any clarification in the solution during development).

The total cost for the Implementation of P138 is therefore £20,600 plus 80 ELEXON man Days plus £1,537 per Settlement Period which is affected by demand Control (based on 100 BM Units being affected).

There is also an **additional 20% tolerance** associated with these figures.

A lead time of approximately 22 weeks is required.

Therefore, provisional discussions indicate that:

- P138 is to be delivered in the November 2004 (3 November 2004 Implementation Date) BSC Systems release, if an Authority determination is received on or by 30 April 2004; and
- P138 is to be delivered in the February 2005 (23 February 2005 Implementation Date) BSC Systems release, if an Authority determination is received on or by 20 August 2004.

#### 3.2 BSCCo

BSCCo is impacted by the requirement to implement P138. Furthermore, should Demand Control occur, BSCCo will receive notification of the Demand Control in order that industry queries can be addressed if required.

The Impact Assessments are provided in Annex 7, however, in summary:

- The ELEXON CVA Programme estimate a resource requirement of 41 man days for the development and implementation of P138, plus 20 man days for release overheads.
- ELEXON CVA Operations estimate a resource requirement of 5 man days for the development and implementation of P138
- ELEXON Assurance estimate a resource requirement of 6.5 man days for the development and implementation and provision of assurance to the CVA programme for the implementation of P138.
- ELEXON Governance and Regulatory Affairs believe that there may be an impact on the department as there could be an increase in the workload of the Panel, who oversee most of the section G 'Contingencies' provisions.
- The ELEXON communications department have indicated that there may be a resource requirement of 6 ELEXON man days if the Pricing Data section of the BSCCo website is to be modified.
- The following ELEXON departments have indicated that there is no impact from the implementation of P138: Market Monitoring, Strategic Commercial Services and Finance.

Therefore a total of approximately **80 ELEXON man days** are required for the development and implementation of P138. There is also an **additional 20% tolerance** associated with this figure.

There are also additional ELEXON costs of £3,000 associated with the development and implementation of P138 consisting of:

- £2,000 (Approximately 10% of the development cost for the BSC Auditor effort); and
- £1,000 (Approximately 5% of the development cost for any clarification in the solution during development).

There are no additional ELEXON demand led costs associated with P138.

There is also an **additional 20% tolerance** associated with these figures.

#### 3.3 BSC Systems

The Detailed Level Impact Assessment for P138 is provided in the P138 Assessment Report (P138AR, reference 3) and is summarised in this section.

The following table details the impacts on the BSC Systems from the implementation of P138.

| System / Process                           | Potential Impact of Proposed Modification  |
|--|--|
| Registration                               | No Impact  |
| Contract Notification                      | No Impact  |
| Credit Checking Systems                    | No Impact  |
| Balancing Mechanism<br>Activities          | Impacted as the Demand Control will be considered to be equivalent to an Offer Acceptance.   |
| Collection and Aggregation of Metered Data | No Impact  |
| Supplier Volume<br>Allocation              | No Impact  |
| Settlement                                 | Impacted. The Demand Control Offer Volumes for each BM Unit will be fed manually into the calculation of SBP, the calculation of Energy Imbalance for each Energy Account and the calculation for credit cover. Also the Demand Control Offer Volumes would be payable by the SO and so included in CSOBM. The Demand Control Offer Acceptances on the affected BM Units would be excluded from Non Delivery Rules so that they would not apply for these Acceptances. |
| Clearing, Invoicing and Payment            | No Impact  |
| Reporting                                  | Impacted. The initial estimations of Demand Control would be published on the BMRS. Also the Settlement Report would contain details of the Total Demand Control Volume, however, an additional report would have to be sent manually to explain why the Settlement Report contained the Total Demand Control Volume and give details of each Supplier's deemed Demand Control Offers  |

The BSC Central Service Agent provided a Detailed Level Impact Assessment which provided costs and timescales for a number of options that the PSMG were considering at the time of obtaining the impact assessment. This is further explored in the P138 Assessment Report (P138AR, reference 3). The PSMG agreed that the LogicaCMG alternate solution would be the best way to implement P138. (LogicaCMG Impact Assessment Form Reference I, Option 1).

Therefore, the development and implementation of P138 will incur costs of  $\pmb{\pounds}17,600$  for Central Service Agent development. No BSC Agent Project overhead has been quoted for P138 since P138 would be implemented as part of a BSC systems release as this is more cost effective and efficient. The operation of P138 will incur costs of  $\pmb{\pounds}1,537$  per Settlement Period affected by the Demand Control (Based on 100 BM Units). There is also an **additional 15% tolerance** associated with these figures.

The changes will require a BSC Central Service Agent development time of **6 weeks**.

#### 3.4 Parties and Party Agents

P138 may impact BSC Parties due to the change to the calculation of the Energy Imbalance Price during periods of Demand Control. If BSC Parties verify trading charges, then there will be an impact on any such processes / systems for such verification. Also Parties will be impacted by receiving the additional manual report alongside the Settlement Report for periods of Demand Control detailing the extent to which Parties were affected by the Demand Control.

#### 4 SUMMARY OF TRANSMISSION COMPANY ANALYSIS

The Transmission Company Analysis (provided in full in the P138 Assessment Report (P138AR, reference 3)) states that no impact has been identified resulting from P138 to the SO's ability to discharge its actions under the Transmission Licence. Also minimal costs have been identified for the changes required to SO documented procedures from P138.

The SO does not support the implementation of P138. The SO has stated that P138 will have no impact on its behaviour and that Demand Control will occur irrespective of the cost associated with it.

#### 5 IMPACT ON CODE AND DOCUMENTATION

In summary, the following documents are impacted by the implementation of P138:

- The Code, Sections G, Q, T and X, Annex X-1;
- BSCP515 Licensed Distribution;
- The SAA Service Description;
- The BMRA Service Description;
- The SAA User Requirements Specification (and Operating Service Manual and Local Working Instructions);
- The ELEXON Business Process Model; and
- The ELEXON Obligations Register.

#### **5.1** Balancing and Settlement Code

Legal Text for Proposed Modification P138 is provided in Annex 1. The following table sets out a summary of the amendments to the Code required to give effect to P138:

| Code Section                       | Potential Impact of Proposed Modification   |
|------------------------------------|---|
| G 'Contingencies'                  | There will need to be a new subsection in section G describing the following:  The need for the SO to submit Total Demand Control Volumes for each Demand Control Settlement Period for each GSP Group when a Demand Control Period is initiated. This clause will also need to define a Demand Control Period and the notifications the SO would need to make to initiate and terminate such a Period.  The obligation on BSCCo to provide the LDSO – GSP Group relationships to SAA.  To identify that deemed acceptances will arise from OC6 Demand Control instructions.  The obligation on the SAA to calculate the Demand Control Acceptance volumes and the Demand Control Offer prices.  The description of how the calculations for the Demand Control Offer Price and the Demand Control Acceptance Volume should be derived.  To state that the Demand Control Offers would be treated like other accepted offers, for the purposes of establishing SBP.  To relax the obligation on the SO for reporting Demand Control acceptances etc within 15 minutes.  To reflect the additional liability of the SO to pay for the Demand Control Offers. |
| T 'Settlement and trading Changes' | Section T will need to be amended to reflect the non-application of Non-Delivery Rules.   |
| V 'Reporting'                      | A new paragraph should be inserted to note that any information sent to the BMRA by the SO in respect of Demand Control Settlement Periods should be published on the BMRA.   |
| X Annex X1 'General Glossary'      | Various Terms such as Demand Control Period, Demand Control Settlement Period and Total Demand Control Volume will need to be defined.  |

#### **5.2** Code Subsidiary Documents

The following table sets out the amendments to Code Subsidiary Documents required to give effect to P138:

| Code Subsidiary Document      | Potential Impact of Proposed Modification   |
|-------------------------------|---|
| BSCP515 Licensed Distribution | BSCP515 requires amendment to give the process by which BSCCo will notify SAA of any new LDSO — GSP Group relationships.  |
| The SAA Service Description   | The SAA Service Description requires amendment to detail the extra processing to be carried out by SAA during Periods of Demand Control.  |
| The BMRA Service Description  | The BMRA Service Description may require amendment to detail<br>the extra reporting on BMRA (although it should be noted that<br>this reporting will be on the System Warning Message Screen<br>which is a free text field so there is no requirement to amend<br>the BMRA system). |

#### **5.3 Other ELEXON Configurable Items**

The following table sets out the amendments to other ELEXON Configurable Items required to give effect to P138:

| ELEXON Configurable Item  | Potential Impact of Proposed Modification   |  |  |
|---|---|--|--|
| The SAA User Requirements Specification (and Operating Service Manual and Local Working Instructions) | The SAA system and process documentation requires amendment to detail the extra processing to be carried out by SAA during Periods of Demand Control. |  |  |
| The ELEXON Business Process<br>Model  | The Elexon Business Process Model requires amendments to reflect the new requirements during Demand Control Settlement Periods.                       |  |  |
| The ELEXON Obligations Register   | The Elexon Obligations Register requires amendments to reflect<br>the new requirements during Demand Control Settlement<br>Periods.                   |  |  |

### 5.4 Impact on Core Industry Documents and Supporting Arrangements

The following table sets out the amendments to Core Industry Documents required to give effect to P138:

| Document  | Potential Impact of Proposed Modification   |
|-----------|---|
| Grid Code | The SO highlighted that there may be an impact on the Grid Code, in particular OC7 (Reference 2) to ensure that the Grid Code is consistent with P138. The SO is currently reviewing the Grid Code in this area and noted that if changes are required to the Grid Code, this may impact the Implementation Date of P138. |

#### **6 SUMMARY OF REPORT PHASE CONSULTATIONS**

To be completed following receipt of consultation responses

| Consultation question   | Respondent agrees | Respondent disagrees | Opinion unexpressed |
|---|-------------------|----------------------|---------------------|
| Do you agree with the Panel's views on P138 and the provisional recommendation to the Authority contained in the draft Modification Report that P138 should not be made?          |                   |                      |                     |
| Do you agree with the Panel's view that the legal text provided in the draft Modification Report correctly addresses the defect or issue identified in the Modification Proposal? |                   |                      |                     |
| Do you agree with the Panel's provisional recommendation concerning the Implementation Date for P138?   |                   |                      |                     |
| Do you believe that there are any impacts that have not been highlighted?   |                   |                      |                     |

#### **6.1** Summary of the Consultation Responses

To be completed following receipt of consultation responses

#### 6.2 Comments and Views of the Panel

To be completed following Panel Meeting of 15 January 2004

#### 7 SUMMARY OF ASSESSMENT PROCEDURE CONSULTATIONS

| Consultation question   | Respondent agrees | Respondent disagrees | Opinion unexpressed |
|---|-------------------|----------------------|---------------------|
| 1. Do you believe Proposed Modification P138 better facilitates the achievement of Applicable BSC Objective (b) The efficient, economic and co-ordinated operation by the Transmission Company of the Transmission System?  | 2                 | 4                    | 1                   |
| 2. Do you believe Proposed Modification P138 better facilitates the achievement of 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? | 3                 | 3                    | 1                   |
| 3. Do you believe Proposed Modification P138 has a negative impact on Applicable BSC Objective (d) Promoting efficiency in the implementation and administration of the balancing and settlement arrangements?  | 4                 | 2                    | 1                   |
| 4. Overall, do you believe Proposed Modification P138 better facilitates the achievement of the Applicable BSC Objectives?  | 3                 | 3                    | 1                   |

| 5. Do you support the implementation approach described in the consultation document / the implementation option preferred by the Modification Group?  | 4 | 1 | 1 |
|--|---|---|---|
| 6. Do you believe there are any alternative solutions that would better facilitate the Applicable BSC Objectives to a greater degree than P138 (for example, adopting P138 with one of the suggested alternative pricing options or any other options that the Modification Group has not identified) that should be considered? | 1 | 4 | 2 |
| 7. Do you agree with the PSMG's views of the scope of P138 in relation to those Parties covered / not covered by the modification (see page 3 of the consultation document)?   | 5 | 0 | 2 |
| 8. Does P138 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure?  | 1 | 4 | 2 |

#### **7.1** Summary of the Consultation Responses

A summary of the arguments for and against whether P138 better facilitates each of the Applicable BSC Objectives are set out in the table below. These are further explored in the P138 Assessment Report (P138AR, reference 3).

| Arguments For P138   | Arguments Against P138   | Neutral  |
|--|--|--|
|  |  |  |
| P138 may encourage the SO to procure energy in a more efficient way at times of system stress.   | P138 does not provide any better signals to the market to balance, especially in times of system stress.   | Although P138 does better facilitate Applicable BSC Objective (b) in principle, it is such a rare event that there would be no change in the behaviour of the SO in fulfilling its current responsibilities. |
| The SO would be faced with a cost for any Demand Control measures.   | The signal presented by the cost of Demand Control could be wrong.   |  |
|  | Demand Control is an operational tool not an economic one.   |  |
|  | The seriousness of Demand Control is such that basing it on a commercial signal may not be reasonable and prudent.   |  |
|  | Applicable BSC Objective (c)   |  |
| Currently the cost of Demand<br>Control is targeted onto those<br>Participants affected by the<br>Demand Control. Under P138,<br>the cost of the Demand<br>Control would be shared by all<br>Participants BSUoS. | If a system warning message were issued, notifying a possibility of Demand Control, it may change Parties behaviour and encourage a short position since if Demand Control were invoked, the Party would receive a Marginal Price for their Demand Control Offer, which would be greater than the SBP that they would be charged for their short fall in energy. | Although P138 would not better facilitate Applicable BSC Objective (c) (as there is no current defect in the Code), it would not have an adverse impact on the Applicable BSC Objectives.                    |

| Arguments For P138  | Arguments Against P138                    | Neutral  |
|---|---|--|
| Allowing the SO to take Demand Control as a free action (i.e. the SO effectively buying energy for free) is a fundamental defect in the Code.   | ultimately pay for the Demand             |  |
| P138 increases SBP during times of System Stress.   |   |  |
| ,   | Applicable BSC Objective (d)              |  |
| Since the cost to implement P138 would be modest, it puts in place an efficient process for the payment of Suppliers for Demand Control Offers. | P138 increases complexity for no benefit. | Whilst there is an negative impact on Applicable BSC Objective (d), that impact is modest. |

#### 8 IMPLEMENTATION APPROACH

P138 requires change to the Code and Code Subsidiary Documents and the development of a number of SAA scripts. The costs and timescales for the implementation of P138 are included in section 3. P138 will be implemented as part of a BSC systems release as this is more cost effective and efficient. ELEXON will be responsible for managing the implementation of P138.

#### 9 DOCUMENT CONTROL

#### 9.1 Authorities

| Version | Date     | Author    | Reviewer       | Change Reference |
|---------|----------|-----------|----------------|------------------|
| 0.1     | 15/12/03 | Katie Key | Justin Andrews | P138AR01         |
| 0.1     | 15/12/03 | Katie Key | Mandi Francis  | P138AR01         |
| 0.2     | 16/12/03 | Katie Kev |                | P138AR02         |

#### 9.2 References

| Ref         | Document                        | Owner                 | Issue date       | Version        |  |
|-------------|---------------------------------|-----------------------|------------------|----------------|--|
| Reference 1 | Operating Code No. 6 (OC6)      | National Grid Company | 15 October 2001  | Revision 3     |  |
| Reference 2 | Operating Code No. 7 (OC7)      | National Grid Company | 24 November 2003 | Revision<br>12 |  |
| Reference 3 | P138AR (P138 Assessment Report) | ELEXON                | 5 December 2003  | 1.0            |  |

#### ANNEX 1 DRAFT LEGAL TEXT

See attached document 'P138MR Annex 1'

Note that Period Priced Accepted Offer Volume is defined in the Code, section T3.8A. No values of Period Priced Accepted Offer Volume will be determined for those Offer Acceptances that have an instruction length less than the CADL. Therefore section G6.4.1 (a) in the Draft Legal Text excludes Offers that would be tagged out by both De-Minimis and CADL tagging.

#### **ANNEX 2** MODIFICATION GROUP DETAILS

The PSMG have met six times during the assessment for P138. The details of the Modification Group members, and the meetings that each attended are detailed in the table below.

| Name            | Company               | Member | 15/<br>09    | 02/<br>10 | 10/<br>10 | 23/<br>10    | 15/<br>11 | 26/<br>11    |
|-----------------|-----------------------|--------|--------------|-----------|-----------|--------------|-----------|--------------|
| Justin Androus  | FLEVON (Chairman)     | Υ      | -/           | √         | -/        |              |           |              |
| Justin Andrews  | ELEXON (Chairman)     | Y      | √            | V         | √         | /            | /         | /            |
| Neil Cohen      | ELEXON (Chairman)     |        | /            | /         | ,         | <b>√</b>     | √ /       | √ /          |
| Katie-Ann Key   | ELEXON (Lead Analyst) | Υ      | √            | √         | <b>√</b>  | √            | √         | √            |
| Bill Reed       | Innogy PLC (Proposer) | Υ      | √            | √         | √         | √            | √         | √            |
| Ben Willis      | Npower                | Υ      |              | V         |           | √            |           | ļ .          |
| Mark Manley     | BGT                   | Υ      |              | √         | √         |              | √         |              |
| Joanne Ellis    | Cornwall Consulting   | Υ      |              |           |           | $\checkmark$ |           |              |
| John Costa      | Edf Energy            | Υ      | $\checkmark$ |           |           | $\checkmark$ |           |              |
| Kevin Rendell   | National Grid Transco | Υ      | $\checkmark$ |           |           | $\checkmark$ |           | $\checkmark$ |
| Martin Mate     | British Energy        | Υ      | $\checkmark$ |           |           | $\checkmark$ |           |              |
| Paul Jones      | Powergen              | Υ      | √            |           | √         | $\checkmark$ |           | $\checkmark$ |
| Ron Slade       | Edf Energy            | Υ      | √            | √         | √         |              |           | √            |
| Chris Pooley    | Campbell Carr         | Υ      |              |           |           |              |           |              |
| Maurice Smith   | Campbell Carr         | N      |              |           |           | $\checkmark$ |           |              |
| Vishal Patel    | British Energy        | N      | $\checkmark$ |           |           | $\checkmark$ |           | $\checkmark$ |
| Dena Harris     | ELEXON                | N      | $\checkmark$ |           |           | $\checkmark$ |           |              |
| Matt Buffey     | Ofgem                 | N      | √            | √         |           | $\checkmark$ | √         | $\checkmark$ |
| Simon Bradbury  | Ofgem                 | N      |              |           | √         |              |           |              |
| Danielle Lane   | BGT                   | N      |              |           |           |              |           |              |
| Louise Petchell | National Grid Transco | N      |              | √         |           |              |           |              |
| Paul Mott       | Edf Energy            | N      |              |           |           |              |           |              |
| Jan Devito      | Jade                  | N      |              |           |           |              |           |              |
| Ndidi Njoku     | Ofgem                 | N      |              |           |           |              | √         | √            |
| Garth Graham    | Scottish and Southern | N      |              |           |           |              |           | $\sqrt{}$    |
| Rob Barnet      | Campbell Carr         | N      |              |           |           |              |           | $\checkmark$ |

The Terms of Reference for the PSMG in respect of P138 are detailed in the P138 Assessment Report (P138AR, reference 3)

#### ANNEX 3 CONSULTATION RESPONSES

To be completed following receipt of consultation responses