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# ANNEX 4 BSC AGENT IMPACT ASSESSMENTS

NETA Change Form						
Title		Version No.				
Correction of MEL vs FPN Accep	otance Volume Discrepancies	0.2				
		LogicaCMG Reference				
		ICR594				
<b>ELEXON Reference</b>	Date CP Received	Date IA Issued				
SSMG Issue 7	10/8/2004	20/8/2004				
LogicaCMGContact Name	Baseline for Impact Assessment					
	Requirements Specification for P167 Erroneous Calculation of Bid Offer Acceptance (BOA) Volume v2.0, dated 9 August 2004 [041RBR]					
Price Breakdown						
Item description	Remarks	Price (ex VAT)				
Change Specific	Option 1B	£317,871				
Incremental Release Costs	All Options	£16,686				
Fixed Release Costs	All Options	£250,403				
Enhanced Reporting	Optional Extra	£11,178				

Total Price (ex VAT)	1B + Enhanced Reporting	£596,138
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Price Tolerance	0%
Justification for Price Tolerance	
N/A	

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Project Duration	22 weeks
Cut Off Date for Inclusion in Specified Release (if applicable)	
N/A	

Operational Price (ex VAT)	
Rationale	
None	

Annual Maintenance Price (ex VAT)	£0
Rationale	
The Annual Maintenance Price is zero under the agreement comm	nencing on 1 January 2005.

## **Validity Constraints**

- Price and duration assume that this change is developed in isolation and the effects of other changes are excluded
- Price is for creating DCRs, not a formal documentation issue
- No allowance is included for supporting PwC activities. Any effort will be charged at contracted T&M rates
- No allowance is included for supporting ELEXON assurance activities. Any effort will be charged at contracted T&M rates
- No allowance is included for End to End/Participant Testing activities. Any effort will be charged at contracted T&M rates
- No allowance is included for Walkthrough activities. Any effort will be charged at contracted T&M rates
- No allowance is included to support ELEXON in parallel run testing activities

The validity period for this quote is 30 days and the offer is based on the following payment schedule:

 LogicaCMG will invoice 30% on receipt of Purchase Order or authorised start of work, 30% on completion of first build phase, 30% on live implementation and 10% on successful completion of the Success Criteria or one month after live implementation, whichever is sooner

Authorised Signature	Date Signed

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### **Requirements and Solution**

### **Brief Summary of Change**

This change was previously assessed under the name "Issue 7", but has now been raised as P167.

The "Issue 7" assessment had the following 6 options:

Option 1A

Option 1B

Option 2A

Option 2B

Option 3A

Option 3B

In this P167 assessment, the previous Options 2A, 2B, 3A and 3B have been removed. The previous Options 1A and 1B are now the Options 2A and 2B and the Options 1A and 1B are completely new.

The price for the four Options is to provide the Basic SAA Reporting described in Section 3.1.5 of the Requirements Specification. An additional incremental price is shown for providing the Enhanced SAA Reporting also described in Section 3.1.5 of the Requirements Specification for any of the four Options.

### LogicaCMG's Proposed Solution

The following tasks are common to all of the Options:

- Amend SAA and BMRA Information Imbalance Charges calculation
- Amend SAA Non-delivery Volume calculation
- Amend SAA Reports (Basic Reporting Requirements)
- Amend BMRA Web Pages
- Amend BMRA TIBCO publication library
- Amend BMRA performance reports
- Amend BMRA help text
- Amend database to store ARLs
- New dated parameter to determine effective date of P167

The specific work involved for each Option is as follows:

#### Option 1A

- Amend SAA and BMRA Acceptance Volume calculation to:
  - Calculate of ARL for each acceptance
  - Amend accepted volume calculations against ARL
  - Calculate a capped acceptance level in the case of "MEL busting"

### Option 1B

- Amend SAA and BMRA Acceptance Volume calculation to:
  - Calculate of ARL for each acceptance
  - Amend accepted volume calculations against ARL

## Option 2A

- Amend SAA and BMRA Acceptance Volume calculation to:
  - Calculate of ARL for each acceptance
  - Calculate Bid-Offer Ranges for each acceptance against ARL
  - Amend accepted volume calculations against ARL
  - Calculate a capped acceptance level in the case of "MEL busting"

#### Option 2B

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- Amend SAA and BMRA Acceptance Volume calculation to:
  - Calculate of ARL for each acceptance
  - · Calculate Bid-Offer Ranges for each acceptance against ARL
  - Amend accepted volume calculations against ARL

For the Enhanced Reporting Requirements, the SAA Reports require a greater amount of amendment than for the Basic Reporting Requirements.

## **Deviation from ELEXON's Solution / Requirements**

None

### **Operational Solution and Impact**

None

## **Testing Strategy**

Unit	Χ	Change Specific X End to End		End to End	
Module	Χ	Operational Acceptance	Χ	Participant Testing	
System	Χ	Performance	Χ	Parallel Running	
Regression		Volume		Deployment/ Backout	Χ

Other:

Performance testing has been included.

## **Validated Assumptions**

None

## **Outstanding Issues**

None

# **Changes to Service**

# **Services Impacted**

	BMRA	CDCA	CRA	ECVAA	SAA	TAA	Other
Software	Х				Х		
IDD Part 1 (Docs)	Х				Х		
IDD Part 1 (S'Sheet)	X				Χ		
IDD Part 2 (Docs)	X				Χ		
IDD Part 2 (S'Sheet)	X				Χ		
URS	Χ				Χ		
SS	Х				Х		
DS	Х				Х		
MSS	Х				Х		
OSM	Х				Х		
LWIs	Х				Х		
RTP	None						•

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Comms	None		
Other	None		
Nature of Documentation Changes			
Nature / Size of System Changes			
Large			
Deploymen	t Issues, e.g. Outage Requirements:	Outage required	
Impact on Service Levels:		None	
Impact on System Performance:		None	

### Responsibilities of ELEXON

Within reasonable levels, ELEXON will make available appropriate staff to assist LogicaCMG during the development of this change

### **Acceptance Criteria**

This is assumed to be covered by the acceptance criteria in the "CVA Program – Release Acceptance Criteria" document produced for the Feb03 release

## **Any Other Information**

#### General

- ARLs can be displayed graphically on the BMRA, but there will be no filtering of
  individual ARLs (e.g. to those associated with a single acceptance). The display of all
  ARLs for a given BM Unit can be switched as with other data types i.e. to display all
  or none.
- MIL and MEL will only be considered for ARL re-calculation if the timestamp associated with them is after Gate Closure for the relevant settlement period
- Only MEL flows with timestamps less than the Acceptance Time will be considered in determining the ARL for that acceptance

#### Option 2

 There will be no graphical or tabular display of the adjusted bid-offer ranges for option 2. The ranges remain constant anyway, it is only the reference level which changes. Note that the bid offer ranges are only displayed in tabular format at present.

#### A.1.2 Attachments

P167 Price Presentation v0.2

NB: Impact assessment of multiple options was conducted by the BSC Agents, cost estimates for some those options not being progressed under Proposed Modification P167 have been removed for clarity

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## ANNEX 5 PARTY AND PARTY AGENT IMPACT ASSESSMENTS

Responses from P167 Participant Impact Assessment, representations were received from the following parties:

	Company
1.	British Energy
2.	EDF Energy
3.	SAIC Ltd
4.	Scottish and Southern Energy; Southern Electric; Keadby Generation Ltd; and SSE Energy Supply Ltd

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## **Detailed Level Impact Assessment of P167**

Please provide responses to the following questions:

1. What impact, if any, will the Modification have on your organisation?

Small config change to multiple systems (Logistics/Zainet/hub/evaluate/RDPS) to cope with SAA-I014 modification. Also, small/medium change to MDR to cope with loading new data from a modified BOAL data flow. The modified way that Bid Offer Acceptance volumes are calculated will need to be reflected within Evaluate and this represents a medium to large impact.

- 2. What implementation timescale, if applicable, would your organisation require to implement the changes associated with the Modification?
  - 4 months
- 3. What costs, if any, would your organisation incur to implement the changes associated with the Modification?
- 4. If the Modification is not applicable to your organisation, please indicate why.
- 5. Any other comments:

Name: Rachel Lockley
BCA
Organisation:British Energy Power and Energy Trading. Eggborough Power Ltd; British Energy
Generation
Date: _20 August 2004

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## **Detailed Level Impact Assessment of P167**

Please provide responses to the following questions:

1. What impact, if any, will the Modification have on your organisation?

EDF Energy would be required to update our Settlement systems and our databases which use data from BMRA.

2. What implementation timescale, if applicable, would your organisation require to implement the changes associated with the Modification?

6 months lead time is required.

3. What costs, if any, would your organisation incur to implement the changes associated with the Modification?

Due to changes required for more than 1 of our IT systems we estimate costs of £100k to implement P167.

- 4. If the Modification is not applicable to your organisation, please indicate why.
- 5. Any other comments:

Name: John Mawson

**BCA** 

Organisation: EDF Energy

Date: 20/08/2004

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## **Detailed Level Impact Assessment of P167**

Please provide responses to the following questions:

1. What impact, if any, will the Modification have on your organisation?

Significant impact on our settlement systems – e.g. new flows, file structure, validation rules, testing etc.

2. What implementation timescale, if applicable, would your organisation require to implement the changes associated with the Modification?

We would require a minimum of 6 months notice.

3. What costs, if any, would your organisation incur to implement the changes associated with the Modification?

In the region of £75k. Please note that this assumes costs are shared among parties using the same type of system.

- 4. If the Modification is not applicable to your organisation, please indicate why.
- 5. Any other comments:

See our comments on the consultation. We do not believe the benefit from P167 justified the extensive costs required for system changes, as well as the increased settlement and operational complexities.

Name: John W Russell

BCA/PACA\* BCA
Organisation: SAIC Ltd.

Response provided on behalf of: Scottish Power UK plc; Scottish Power Energy Management Ltd.; Scottish Power Generation Ltd.; Scottish Power Energy Retail Ltd.; SP Manweb plc.; SP Transmission Ltd.

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## **Detailed Level Impact Assessment of P167**

Please provide responses to the following questions:

1. What impact, if any, will the Modification have on your organisation?

Significant impact on IT systems.

2. What implementation timescale, if applicable, would your organisation require to implement the changes associated with the Modification?

Minimum seven months

- 3. What costs, if any, would your organisation incur to implement the changes associated with the Modification? **CONFIDENTIAL RESPONSE REMOVED**
- 4. If the Modification is not applicable to your organisation, please indicate why.
- 5. Any other comments:

None

Name: Sue Macklin

BCA/PACA (please delete as applicable)

Organisation: Scottish and Southern Energy; Southern Electric; Keadby Generation Ltd; and SSE

Energy Supply Ltd Date: 18<sup>th</sup> August 2004 P167 Assessment Report Page 61 of 106

# ANNEX 6 RESPONSES FROM P167 ASSESSMENT CONSULTATION

# **Consultation Issued 23 August 2004**

# Representations were received from the following parties

	Company	File number	No BSC Parties Represented	No Non-Parties Represented
1.	Edison	P167_AR_001	1	0
2.	Scottish and Southern Energy	P167_AR_002	5	0
3.	British Gas Trading	P167_AR_003	1	0
4.	RWE Npower	P167_AR_004	10	0
5.	EDF Trading LTD	P167_AR_005	2	0
6.	E.On Uk	P167_AR-006	15	0
7.	Scottish Power	P167_AR_007	6	0
8.	EDF	P167_AR_008	9	0
9.	National Grid Transco	P167_AR_009	1	0

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Respondent:	Libby Glazebrook
No. of Parties Represented	1
Parties Represented	First Hydro
No. of Non Parties Represented	None
Non Parties represented	
Role of Respondent	Generator

	Question	Response	Rationale
1.	Do you believe Proposed Modification P167 would better facilitate achievement of the Applicable BSC Objectives?  Please give rationale and state objective(s)	No	Whilst there is clearly an error in the current rules, the costs of implementing this modification do not appear to outweigh the benefits and do not therefore promote efficiency in the implementation and administration of the balancing and settlement arrangements (objective d)
2.	Do you support the implementation approach preferred by the Modification Group?  Please give rationale	No	No – see answer to Q10
3.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered?  Please give rationale	Yes	A simple solution would be for NGT to ignore bids from plant that had redeclared its MEL by more than a few MW to take account of ambient temperatures. If the plant is forced into redeclaring MEL then its momentary reliability is questionable and it could be argued that is should not be relied upon to deliver the bid.
4.	Do you believe the issue raised by P167 is a defect in the current baseline?  Please give rationale	Yes	Yes there is a defect but I am not sure given the cost and benefits that it is worth fixing

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	Question	Response	Rationale
5.	Do you believe there would be an overall cost benefit from implementing P167?  Please give rationale	Yes / No	Very difficult to say without detail of the BSCCo costs or BSC Party costs. The assessment quotes the benefits of implementing as ranging from £400k if the system is short to £100k if long. This is against costs for central systems and BSC parties totalling between £1.12m to £1.37m (plus BSCCo charges). This gives a minimum payback period of 2.8 years.
6.	Do you believe there is potential for Parties to exploit the defect identified under P167?  Please give rationale	Yes	Parties may choose not to redeclare MEL if they believe that there is a possibility of the Transmission Company accepting a bid, as there might be substantial savings to be gained by paying a bid price rather than System Buy Price.
7.	Do you believe P167 would have a detrimental impact on the submission of MEL and MIL data?  Please give rationale	Yes / No	
8.	Do you believe there should be exception scenarios including in P167 for 'Multi shafted BM Units' that should be considered further under P167?  Please give provide details and/or specific operational examples	No	In order to be fair, exceptions should be made – however given that the analysis has shown no instances of the defect affecting multi-shafted BMUs, then it is not worth the effort of making exceptions for these.
9.	Do you believe there are any exception scenarios that should be considered further under P167 that have not been identified by the SSMG to date?  Please give provide details and/or specific operational examples	Yes / No	

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	Question	Response	Rationale
10.	How do you believe Bid/ Offer Upper and Lower prices bands should be derived under P167?  Please give rationale	From FPN / From the Acceptance Reference Level	Neither is perfect. If a bid is accepted from a generator that has redeclared down its MEL then if the price bands are derived from the ARL, this could result in the generator operating below its SEL or at a level that it does not wish to run at (as indicated by a low or negative bid price). If FPN is adopted, the SO will need to consider the relevant bid-offer price band with reference to the FPN not the actual output level. This might result in an increase in manifest error claims or discourage NGT from accepting bids on units that have redeclared their MELs to avoid errors occurring (which brings me back to the answer to Q3)
11.	Do you believe the impact on imbalance prices from the perceived defect is material?  Please give rationale	No	Even for the 7 samples days, the impact on imbalance prices is not that high
12.	Please provide comments on the estimated materiality associated with the perceived defect identified under P167?	THIS RE	SPONSE IS CONFIDENTIAL TO ELEXON/ THE AUTHORITY
13.	Please provide details of any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure?		

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	Question	Response	Rationale
14.	Are there any further comments on P167 that you wish to make?	The documentation suggests that where MEL has been redeclared below FPN, ARL will be the smallest previously declared MEL value – this does not seem right and could present gaming opportunities. Surely ARL should be the prevailing MEL (if less than FPN) at the time of the BOA, not a lower value if one previously existed.  Consider the following example:  At Gate Closure (GC), MEL=FPN=100MW  Between GC and the start of the settlement period, MEL is declared down to 0 MW, then back up to 99MW.	
		NGC then issue an ac	cceptance to run at 50MW.
		The logic in the docu	mentation would then appear to set ARL=zero.
		Then, the acceptance (which NGC might reasonable have thought was a bid acceptance of -49MW), would actually be defined as an offer acceptance of +50MW, perhaps with a hig price.	

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From: Garth Graham

Sent: 23 August 2004 14:08 To: Modification Consultations

Cc: Thomas Bowcutt

Subject: P167 Assessment Consultation

Dear Sirs,

This response is sent on behalf of Scottish and Southern Energy, Southern Electric, Keadby Generation Ltd., Medway Power Ltd., and SSE Energy Supply Ltd.

In relation to the fourteen questions contained within your note of 10th August 2004, and the associated Assessment Consultation for P167, we have the following comments to make:-

Q1 Do you believe Proposed Modification P167 would better facilitate achievement of the Applicable BSC Objectives? Please give rationale and state objective(s)

We do not believe that P167 will better facilitate the achievement of the Applicable BSC Objectives. In particular, the effect of P167 would mean that MEL moves from an operational data item to a commercial data item and this could have significant consequences for the System Operator with respect to security of supply. In addition we believe that the overall financial impact (associated with the suggested defect) is still relatively small compared to the cost when the central and participant costs are added together. Clearly, given these concerns, the approval of P167 would not better facilitate the achievement of the Applicable BSC Objectives.

Please note our response to any of the following questions should not be construed to lend support whatsoever to this Modification.

 ${\tt Q2}$  Do you support the implementation approach preferred by the Modification Group? Please give rationale

Yes.

Q3 Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale

None at this time.

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Q4 Do you believe the issue raised by P167 is a defect in the current baseline? Please give rationale

No.

- Q5 Do you believe there would be an overall cost benefit from implementing P167? Please give rationale
- No. As indicated in our answer to Q1 above we believe that the overall financial impact (associated with the suggested defect) is still relatively small compared to the cost when the central and participant costs are added together.
- Q6 Do you believe there is potential for Parties to exploit the defect identified under P167? Please give rationale

No.

Q7 Do you believe P167 would have a detrimental impact on the submission of MEL and MIL data? Please give rationale

Yes.

Q8 Do you believe there should be exception scenarios including in P167 for 'Multi shafted BM Units' that should be considered further under P167? Please give provide details and/or specific operational examples

Yes.

- Q9 Do you believe there are any exception scenarios that should be considered further under P167 that have not been identified by the SSMG to date? Please give provide details and/or specific operational examples
- Q10 How do you believe Bid/ Offer Upper and Lower prices bands should be derived under P167? Please give rationale
- Q11 Do you believe the impact on imbalance prices from the perceived defect is material? Please give rationale

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No.

Q12 Please provide comments on the estimated materiality associated with the perceived defect identified under P167?

It does not appear material from the estimates as there are a number of assumptions and associated extrapolations.

Q13 Please provide details of any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure?

None at this time.

Q14 Are there any further comments on P167 that you wish to make?

None at this time.

Regards

Garth Graham Scottish and Southern Energy plc

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Respondent:	Mark Manley
No. of Parties Represented	
Parties Represented	British Gas Trading (BGT)
No. of Non Parties Represented	
Non Parties represented	1
Role of Respondent	

	Question	Response	Rationale
1.	Do you believe Proposed Modification P167 would better facilitate achievement of the Applicable BSC Objectives?  Please give rationale and state objective(s)	Yes	BGT believe that P167 does better facilitate Applicable BSC Objective C by promoting competition in the generation and supply of electricity.
			The defect identified is resulting in Parties Bid Offer Acceptance (BOA) volume being overstated. The settlement calculation then adds this volume back into the delivering Party's energy account, which overstates a Party's credited energy position. This overstatement is protecting Parties from being exposed to the full effects of the prevailing imbalance price by protecting the Party from SBP or resulting in a windfall payment of SSP. The consultation documentation provides an estimate of the annual materiality of the defect, which ranges from £100,000 to £400,000. BGT believes the materiality of the defect is significant and justifies a change to the current baseline. BGT also notes that 1 particular segment of the market is currently benefiting from the defect to the detriment of other market participants. BGT believes there is a requirement to amend the current baseline to remove the identified defect.

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	Question	Response	Rationale
			The defect is also impacting all other market participants through the Residual Cashflow Reallocation Charge (RCRC). BSC Parties are currently not receiving the correct amount of RCRC due to individual Parties positions being incorrectly reported. Removing the defect should ensure that Parties imbalance volumes are correctly reported and thereby ensuring Parties are receiving appropriate RCRC payments.
			As the identified defect impacts on BOA volumes there is also an impact on the calculation of imbalance prices. As BOA volumes are being overstated the NIV tagging methodology is being impacted. This means that imbalance prices are currently being incorrectly calculated and in certain settlement periods this has flipped the market from short to long. The analysis undertaken by ELEXON on the impact on imbalance prices illustrates that the defect impacts imbalance prices on a regular basis. Whilst the impact in terms of price movement appears relatively small the collective annualised impact is significant, £327,000.
2.	Do you support the implementation approach preferred by the Modification Group?  Please give rationale	Yes	The implementation approach developed provides a robust mechanism for correctly calculating Parties BOA volumes and thereby removing the defect.
3.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered?	No	
	Please give rationale		
4.	Do you believe the issue raised by P167 is a defect in	Yes	BGT concur with the view of the modification group that there is

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	Question	Response	Rationale
	the current baseline? Please give rationale		clearly a defect within the current baseline that is resulting in Parties BOA volumes being overstated. This view also seems to be supported by discussions that took place prior to NETA go-live. BGT believe the issue was acknowledged in the run up to go-live but the likely materiality was underestimated.
5.	Do you believe there would be an overall cost benefit from implementing P167?  Please give rationale	Yes	BGT believe there is a cost benefit of implementing P167. Based on the analysis provided in the consultation document there is an impact in terms of avoided imbalance payments between £100 and £400k per annum. BGT believe the materiality of this is significant enough to justify a change to the BSC.  Furthermore the defect has also had an impact on the calculation of
			imbalance prices. Imbalance prices would have been different in a significant number of settlement periods if the defect would not have been present in the current baseline. Whilst the price change can be seen to be relatively minor when considered as a stand alone, collectively when this is summed across the industry the impact is significant. The consultation document quotes a materiality of £327,000 per annum. BGT believes this volume could be understated as it is based upon imbalance prices in March & April and June & July. The materiality could be significantly higher with the inclusion of winter imbalance prices.
			BGT believe there is a cost benefit of implementing P167 against the change costs specified in the consultation documentation. The change specific cost is the correct measure against which the cost benefit should be calculated against. Whilst the fixed release cost can be quoted, in reality this is a stranded cost that will be incurred

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	Question	Response	Rationale
			as part of a batched release.
6.	Do you believe there is potential for Parties to exploit the defect identified under P167?  Please give rationale	No	BGT agree with the views of the modification group that there appears to be too many unknowns for Parties to exploit the issue. However it is worth noting that this issue is occurring on a regular basis.
	Do you believe P167 would have a detrimental impact on the submission of MEL and MIL data?  Please give rationale	No	BGT do not believe that P167 will have a detrimental impact on MEL and MIL submission. Whilst these parameters are not currently commercial drivers there are rules in the Grid Code to prevent participants from making inaccurate submissions. NGT can issue Significant Incident Reports (SIRs) for failure to provide timely and accurate data. A continued failure to comply with Grid Code obligations could result in the recipient being requested to attend a meeting with Ofgem to explain their actions. BGT therefore believe there is sufficient an incentive for Parties to provide the System Operator (SO) with accurate and timely data.
	Do you believe there should be exception scenarios including in P167 for 'Multi shafted BM Units' that should be considered further under P167?  Please give provide details and/or specific operational examples	No	Centrica do not see any reason for developing an exception rule for this type of BMU. Centrica is active in the Balancing Mechanism with a number of this type of BMUs. When Centrica operate these BMUs, the declared SEL will reflect the minimum MW level at which Centrica is prepared to operate the combination of turbines in that period. If Centrica set SEL at a level lower than this minimum MW, it would be possible for the BMU to be BOA'd down below the minimum level but above SEL, necessitating one or more turbines to be desynchronised to deliver the BOA. Since dynamic parameters relate to the BMU as a whole there is no certainty of how long the BMU will be down at this level i.e how long the desynchronised unit(s) will be off.  As BOA movement below SEL must by definition be to zero, if NGT wished to take a BMU below its SEL but not take the BMU completely off, i.e. take off one or more turbines in a BMU, Centrica would expect such a request to be made via a PGBT or BMU specific

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Question	Response	Rationale
		trade. The PGBT mechanism would give both Centrica and NGT certainty over duration, volume and price and would be transparent to all Parties.
		BGT do not see foresee any requirement for an exception rule to be developed as part of the solution to P167.
Do you believe there are any exception scenarios that should be considered further under P167 that have not been identified by the SSMG to date?  Please give provide details and/or specific operational examples	No	BGT any unaware of any further exception scenarios that should be considered.
How do you believe Bid/ Offer Upper and Lower prices bands should be derived under P167?  Please give rationale	From FPN	BGT believe BOA should continue to be calculated from the FPN parameter. BOP should remain fixed at gate closure and should not become a dynamic parameter that is changeable within the gate. Allowing BOD to be changed within gate will make the role of the SO much more complex and it will also place a significant burden on participants in the BM. If it became a dynamic parameter it may prevent Parties from participating in the BM because of the continuous requirement to monitor and update submissions. BGT believe the most pragmatic solution is to continue deriving the information from the FPN.
Do you believe the impact on imbalance prices from the perceived defect is material?  Please give rationale	Yes	BGT do believe the impact on imbalance prices is material. The analysis provided in the consultation document illustrates the materiality of the issue. It is quite clear from the documentation that a relatively small change in the price can have a significant impact on the market collectively. BGT also believe it is fair to say that the figure quoted in the document may be understating the actual impact as it does not take account of winter imbalance prices

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Question	Response	Rationale
		that would tend to be higher than the period used. BGT understand the restrictions that ELEXON have had to operate within when undertaking this calculation and believe that this number provides a useful insight into the materiality.
		BGT also notes the potential for the Net Imbalance Volume to be incorrectly reported due to the perceived defect. BGT understands that there have been instances when the main and reverse price would have flipped if the defect had been present within the current baseline.
Please provide comments on the estimated materiality associated with the perceived defect identified under P167?	impact th	eve the incorrect reporting of Parties imbalance positions and the ne defect is having on the calculation of imbalance prices is sufficiently to change the current baseline.
Please provide details of any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure?	No	
Are there any further comments on P167 that you wish to make?	No	

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Respondent:	RWE Npower plc
No. of Parties Represented	10
Parties Represented	RWE Npower plc, RWE Trading GmbH, Npower Cogen Ltd, Npower Cogen Trading Ltd, Npower Ltd, Npower Direct Ltd, Npower Northern Ltd, Npower Northern Supply Ltd, Npower Yorkshire Ltd, Npower Yorkshire Supply Ltd.
No. of Non Parties Represented	
Non Parties represented	
Role of Respondent	Supplier / Generator / Trader / Consolidator / Exemptable Generator / Party Agent

	Question	Response	Rationale
	Do you believe Proposed Modification P167 would better facilitate achievement of the Applicable BSC Objectives?  Please give rationale and state objective(s)	No	Not only do we believe that P167 is not a defect in the Code, we also do not feel that the benefits of the proposed change out-weigh the costs of making that change. We note that the consultation document highlights the consequential effect on imbalance costs. We do not agree with the assumption in the document that this figure represents a cost that can correctly taken into consideration when weighing up the costs and benefits.
	Do you support the implementation approach preferred by the Modification Group?  Please give rationale	Yes	Whilst we do not agree that there is a defect, we agree that the proposed solution seems the most efficient.
	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered?  Please give rationale	No	

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	Question	Response	Rationale
4.	Do you believe the issue raised by P167 is a defect in the current baseline?  Please give rationale	No	We do not believe that P167 identifies a defect in the Code. The issue was acknowledged before NETA Go Live and has been part of the Arrangements since then without causing significant distortions or levels of concern.
5.	Do you believe there would be an overall cost benefit from implementing P167?  Please give rationale	No	The cost of changes to the central systems alone does not justify the minimal benefits highlighted in the consultation document. The published costs do not currently contain the impact on parties and we feel that these could be substantial. Once these costs have been taken into account, there can be no case for change.
6.	Do you believe there is potential for Parties to exploit the defect identified under P167?  Please give rationale	No	As with many other parts of NETA, there are too many variables involved that are out of an individual parties control from any one party to be able to exploit this 'defect'.
7.	Do you believe P167 would have a detrimental impact on the submission of MEL and MIL data?  Please give rationale	Yes	MEL and MIL are operational parameters. This change would make them commercial parameters and could compromise the accuracy of data provided to NGC in order for parties to attempt to avoid consequential imbalance exposure.
8.	Do you believe there should be exception scenarios including in P167 for 'Multi shafted BM Units' that should be considered further under P167?  Please give provide details and/or specific operational examples	No	We do not believe the change should be made, thus there is no need to account for exceptional circumstances.
9.	Do you believe there are any exception scenarios that should be considered further under P167 that have not been identified by the SSMG to date?  Please give provide details and/or specific operational examples	No	

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	Question	Response	Rationale
10.	How do you believe Bid/ Offer Upper and Lower prices bands should be derived under P167?  Please give rationale	From FPN	In line with the fact that we do not believe there is a defect, we feel that the Bid / Offer ladder should remain referenced to the FPN.
11.	Do you believe the impact on imbalance prices from the perceived defect is material?  Please give rationale	No	The impact on imbalance prices seems very limited, in the main of the order of pence /MWh. There are some occasions where there is an increased impact, but we do not believe these isolated incidents are enough to make the impact on imbalance prices material.
12.	Please provide comments on the estimated materiality associated with the perceived defect identified under P167?	We accept that any change in BOA's will have a consequential impact on imbalance prices. However, whilst we agree that the total materiality in the 48 days analysed is £327,000, we do not feel that this is representative of the full picture. Building on the figures calculated by Elexon, our own analysis has shown that the maximum materiality on an individual party is of the order of a few thousand pounds and the impact on the majority of others is negligible, and this is before the RCRC rebate. We feel that these figures within the consultation are misleading and do not represent the full picture to Parties. By definition the total impact on imbalance costs and RCRC is zero, since all funds are then reallocated by market share. Consequently we do not feel that the impact on imbalance costs is material.	
13.	Please provide details of any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure?		
14.	Are there any further comments on P167 that you wish to make?	No	

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Respondent: Steve Drummond	
No. of Parties Represented	Two
Parties Represented	EDF Trading Ltd and EDF (Generation)
No. of Non Parties Represented	
Non Parties represented	
Role of Respondent	Trader/Generator

	Question	Response	Rationale
1.	Do you believe Proposed Modification P167 would better facilitate achievement of the Applicable BSC Objectives?  Please give rationale and state objective(s)	No	We remained concerned that despite being clear that a defect exists in the BSC as described by the mod, the case for change is not so clear. The materiality has been difficult to ascertain and understand, especially that it will impact BSUoS as well, whereas the expected costs are likely to run into millions for the consequential changes to central and user systems. Therefore, we do not as yet believe that Applicable BSC Objective (c) or (d) are better facilitated.
2.	Do you support the implementation approach preferred by the Modification Group?  Please give rationale	Yes	
3.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered?  Please give rationale	No	
4.	Do you believe the issue raised by P167 is a defect in the current baseline?  Please give rationale	Yes	Using FPN rather than MEL is clearly wrong. However, this issue has been known since before Go-live and, as such, it could be argued that it has been an acceptable part of the baseline.

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	Question	Response	Rationale
5.	Do you believe there would be an overall cost benefit from implementing P167?  Please give rationale	No	The cost benefit case has still to be fully quantified and understood and, as such, we cannot at this stage say that there would be a positive cost benefit.
6.	Do you believe there is potential for Parties to exploit the defect identified under P167?  Please give rationale	No	With no evidence of such activity to date and with the number of variables involved, we do not believe that parties currently exploit the defect. However we are concerned that the introduction of P167 might encourage parties to use MEL/MIL improperly.
7.	Do you believe P167 would have a detrimental impact on the submission of MEL and MIL data?  Please give rationale	Yes	P167 would change MEL/MIL from being purely operational parameters to commercial parameters as well and might therefore influence the timing of reporting to NGC. The consequences of this are uncertain.
8.	Do you believe there should be exception scenarios including in P167 for 'Multi shafted BM Units' that should be considered further under P167?  Please give provide details and/or specific operational examples	Yes	If they are valid cases that might warrant an exception.
9.	Do you believe there are any exception scenarios that should be considered further under P167 that have not been identified by the SSMG to date?  Please give provide details and/or specific operational examples	No	None that we're aware of.
10.	How do you believe Bid/ Offer Upper and Lower prices bands should be derived under P167?  Please give rationale	?	

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	Question	Response	Rationale
11.	Do you believe the impact on imbalance prices from the perceived defect is material?  Please give rationale	No	Our understanding is that the impact on the energy imbalance price would be relatively small.
12.	Please provide comments on the estimated materiality associated with the perceived defect identified under P167?	N/A	
13.	Please provide details of any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure?	N/A	
14.	Are there any further comments on P167 that you wish to make?	No	

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Respondent:	E.On UK plc
No. of Parties Represented	15
Parties Represented	E.On UK plc, Powergen Retail Limited, Cottam Development Centre Limited, Enizade Ltd, E.On UK Drakelow Limited, E.On UK Ironbridge Limited, E.On UK High Marnham Limited, Midlands Gas Limited, Western Gas Limited, TXU Europe (AHG) Limited, TXU Europe (AH Online) Limited, Citigen (London) Limited, Severn Trent Energy Limited (known as TXU Europe (AHST) Limited), TXU Europe (AHGD) Limited and Ownlabel Energy
No. of Non Parties Represented	0
Non Parties represented	
Role of Respondent	Supplier, Generator, Trader, Consolidator, Exemptable Generator and Party Agent

	Question	Response	Rationale
1.	Do you believe Proposed Modification P167 would better facilitate achievement of the Applicable BSC Objectives?  Please give rationale and state objective(s)	No	The proposal seems to compromise objective (b) and (c) because of the possibility of the reduction in availability of MEL information to both NGT and the trading market. There may be some achievement of objective (c) through more accurate targeting of imbalance charges. This is probably outweighed by the cost to the industry as a whole of implementing the necessary system changes
2.	Do you support the implementation approach preferred by the Modification Group?  Please give rationale	Yes	If the change has to be made then the proposed solution provides the necessary transparency for the settlement process
3.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered?  Please give rationale	No	

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	Question	Response	Rationale
4.	Do you believe the issue raised by P167 is a defect in the current baseline?  Please give rationale	Yes	It is probably not right that BMUs avoid imbalance charges that they would otherwise have incurred. Against that, the settlement arrangements are intended to incentivise appropriate behaviour in power trading and it is not clear that the proposal would result in better behaviour, with a risk of introducing worse.
5.	Do you believe there would be an overall cost benefit from implementing P167?  Please give rationale	No	This modification will not result in any money being saved – its impact will be to change the distribution of RCRC and BSUOS monies around the industry. E.On UK's perception is that the amount of real money that will be re-directed between Trading Groups will be quite small. It will take a long time for parties that see an increase in overall revenue from the settlement system to cover the combination of their own and their share of Elexon's implementation and operational costs
6.	Do you believe there is potential for Parties to exploit the defect identified under P167?  Please give rationale	No	Whilst Elexon have suggested to the Mod Group that there are potential scenarios for exploitation we do not believe that these are relevant as there are more profitable legal trading strategies that could be followed in the situations identified.
7.	Do you believe P167 would have a detrimental impact on the submission of MEL and MIL data?  Please give rationale	Yes	The modification would increase the likelihood of a party deciding to withhold a MEL re-declaration if they are hopeful that a bid might be accepted for a BMU that is experiencing production problems. NGT monitoring might result in this being highlighted, but parties would take a view on what they could get away with.
			The MEL re-declarations are an important source of market information, not just for NGC but also for Trading Parties that are analysing the BMRS data.

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	Question	Response	Rationale
8.	Do you believe there should be exception scenarios including in P167 for 'Multi shafted BM Units' that should be considered further under P167?  Please give provide details and/or specific operational examples	Maybe	Currently the acceptance of a bid by NGT that required the desynchronisation of one or more machines within a 'Multi shafted BM Unit' would be backed up by a recorded telephone conversation that ensured that the BMU would not be left away from its FPN, and its MEL would not be re-declared as NGT have already been informed of the unit's capability. This is an infrequent event.
			If NGT and Ofgem are prepared to allow the continuation the current informal arrangements for bid delivery by Multi-shafted BMUs then no exception process is required. If however it is decided that MEL re-declarations must be made then the proposed modification will result in 'Multi shafted BM Units' being potentially dis-advantaged by bid acceptances, both through receiving less bid volume (credited energy) and by not being able to return to their planned running at the end of the acceptance. We do not believe that this would be fair to those BMUs, and would probably lead to a reduction in the choices available to the SO.
9.	Do you believe there are any exception scenarios that should be considered further under P167 that have not been identified by the SSMG to date?  Please give provide details and/or specific operational examples	Yes	Wind farms have a variable MEL and the ability to deliver bids. The trading arrangements currently have little experience of wind farms operating as BMUs. The extension of the BSC to Scotland will lead to many wind farms being treated as BMUs, and the impact of this modification on their operation and incomes needs to be considered further
10.	How do you believe Bid/ Offer Upper and Lower prices bands should be derived under P167?  Please give rationale	From FPN	The bid has been priced from FPN on the basis of cost. It would not be right if the BMU had to run in an expensive but low-output mode, and have to pay a price that had been based on expectations of cheaper running.

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	Question	Response	Rationale
11.	Do you believe the impact on imbalance prices from the perceived defect is material?  Please give rationale	No	Few settlement periods are affected, and the impact of the proposed change is unpredictable.
12.	Please provide comments on the estimated materiality associated with the perceived defect identified under P167?	Our view is that the net impact on Trading Groups of the proposed change would be a small change to overall settlement cashflows, although individual accounts might see a larger impact.	
13.	Please provide details of any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure?		
14.	Are there any further comments on P167 that you wish to make?	Our supplier of our se impact on the packag	ettlement software has initially assessed this proposal as having a high je.

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Respondent:	Don Sinclair (SAIC Ltd)	
No. of Parties Represented	6	
Parties Represented	Please list all Parties responding on behalf of (including the respondent company if relevant).	
	Scottish Power UK plc; ScottishPower Energy Management Ltd.; ScottishPower Generation Ltd; ScottishPower Energy Retail Ltd.; SP Transmission Ltd; SP Manweb plc.	
No. of Non Parties Represented	0	
Non Parties represented	Parties represented Please list all non Parties responding on behalf of (including the respondent company if relevant).	
Role of Respondent	(Supplier/Generator/ Trader / Consolidator / Exemptable Generator / BSC Agent / Party Agent / other – please state 9)	
	Supplier / Generator / Trader / Consolidator / Exemptable Generator / Party Agent	

	Question	Response	Rationale
1.	Do you believe Proposed Modification P167 would better facilitate achievement of the Applicable BSC Objectives?  Please give rationale and state objective(s)	No	Whilst we agree in principle that the defect should be rectified, we believe the costs of central system changes as well as changes to parties' own system (as well as the increased complexities to the settlement arrangement and balancing operation) outweigh any perceived benefits suggested by P167. This would be detrimental to the BSC Objective (d).  The issue of the multi-shaft BMU and their potential reluctance to facilitate the balancing mechanism could also detriment the Competition Objective (c) as well as Objectives (a) and (b) – the efficient discharge, the efficient, economic and co-ordinated operation of the Transmission System by the NGC.

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	Question	Response	Rationale
2.	Do you support the implementation approach preferred by the Modification Group?  Please give rationale	Yes	The approach appears sensible. We would favour a least cost, most simplistic solution.
3.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered?  Please give rationale	No	We are not aware of any.
4.	Do you believe the issue raised by P167 is a defect in the current baseline?  Please give rationale	Yes	While the analysis showed that the defect exists, the costs required and the complexities created means that it is one that can be lived with.
5.	Do you believe there would be an overall cost benefit from implementing P167?  Please give rationale	No	See our comment in Qu. 1 above.
6.	Do you believe there is potential for Parties to exploit the defect identified under P167?  Please give rationale	No	It is not obvious why people would intentionally do it, as the risk/benefit makes it not worthwhile. There is currently no indication from the market that this is occurring. It is also believed that as this issue has now been highlighted, NGC would spot any potential exploitation.
7.	Do you believe P167 would have a detrimental impact on the submission of MEL and MIL data?  Please give rationale	Yes	P167 would make the MEL/MIL parameter more commercial rather than operational. This would have the effect that MEL/MIL are not updated timely due to potential commercial implication, which may be detrimental to the efficient operation of NGC and the management of the electricity network.

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	Question	Response	Rationale
8.	Do you believe there should be exception scenarios including in P167 for 'Multi shafted BM Units' that should be considered further under P167?  Please give provide details and/or specific operational examples	No	On the basis that to date, analysis has not identified any operational occurrences of the scenario. The inclusion could complicate the arrangement even further as well as discriminatory to others and open to debate on the list of scenarios. It would be cleaner not to have any exceptional scenarios.
9.	Do you believe there are any exception scenarios that should be considered further under P167 that have not been identified by the SSMG to date?  Please give provide details and/or specific operational examples	No	See comment on Qu. 8 above.
10.	How do you believe Bid/ Offer Upper and Lower prices bands should be derived under P167?  Please give rationale	From FPN	We preferred Option 1 of Bid-Offer Upper and Lower Range Derivation (fixed at FPN). This means Parties would be able to price different output levels and would therefore receive the associated payment for reducing output to an undesirable level if the Bid is accepted.
11.	Do you believe the impact on imbalance prices from the perceived defect is material?  Please give rationale	No	Analysis so far has not shown that this is significant.
12.	Please provide comments on the estimated materiality associated with the perceived defect identified under P167?	The range of the estimated materiality remains large. The figures remain indicative. We feet that individual parties' materiality impact may not be as large as expected. We also think that parties who have bids taken would probably be in a long position rather than as estimated in the analysis, which would mean the materiality would be in the lower end of the estimate.	

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	Question	Response	Rationale
13.	Please provide details of any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure?	None.	
14.	Are there any further comments on P167 that you wish to make?	None.	

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Respondent:	Paul Mott (EDF Energy)
No. of Parties Represented	9
Parties Represented  EDF Energy Networks (EPN) plc; EDF Energy Networks (LPN) plc  EDF Energy Networks (SPN) plc; EDF Energy (Sutton Bridge Power)  EDF Energy (Cottam Power) Ltd; EDF Energy (West Burton Power) Ltd; EDF Energy plc; London Energy plc; Seebo	
No. of Non Parties Represented	0
Non Parties represented	N/A
Role of Respondent	Supplier/Generator/ Trader

	Question	Response	Rationale
1.	Do you believe Proposed Modification P167 would better facilitate achievement of the Applicable BSC Objectives?  Please give rationale and state objective(s)	No	No, EDF Energy does not believe that Proposed Modification P167 would better facilitate achievement of the Applicable BSC Objectives. The case for change has not been made, as it is hard to quantify the materiality. The potential costs to amend the BSC Systems of over half a million pounds, which does not include the additional party costs. Therefore, we do not believe that Applicable BSC Objective (d) is better facilitated. EDF Energy does not see any benefit to competition from P167 and therefore Applicable BSC Objective (c) is not better facilitated.
2.	Do you support the implementation approach preferred by the Modification Group?  Please give rationale	Yes	
3.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered?  Please give rationale	No	

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	Question	Response	Rationale
4.	Do you believe the issue raised by P167 is a defect in the current baseline?  Please give rationale	Yes and No	This defect has been known since Go-live and this issue was discussed before NETA was implemented, but it was deemed that it would not have a material impact on settlements. EDF Energy does not believe it is a defect as the current methodology represents a method of calculating Bid Offer Volumes as opposed to the methodology proposed under P167.
5.	Do you believe there would be an overall cost benefit from implementing P167?  Please give rationale	Don't know	The modification group has been through many iterations to determine the materiality of P167. EDF Energy does not believe that it is possible to accurately quantify the impact and therefore the overall cost benefit analysis is open to question
6.	Do you believe there is potential for Parties to exploit the defect identified under P167?  Please give rationale	No	There are too many circumstances to fulfil to be able to exploit the current situation. EDF Energy agrees with the modification group that to date there is no evidence of exploitation of the current defect and the possibility of exploitation is extremely limited due to the number of variables influencing the possible benefits to parties.
7.	Do you believe P167 would have a detrimental impact on the submission of MEL and MIL data?  Please give rationale	Yes	Yes. MEL and MIL are NGT's only purely operational parameter during the Balancing Mechanism Window Period. The implementation of P167 would change MEL/MIL into a commercial parameter whereby resubmitting MEL could potentially impact a BM Unit's cashflow. We believe that it could have an impact as Parties could possibly "think twice" before resubmitting MEL/MIL data.
8.	Do you believe there should be exception scenarios including in P167 for 'Multi shafted BM Units' that should be considered further under P167?  Please give provide details and/or specific operational examples	Yes	With any solution, exceptions to the rules bring complications, however, before any solution can be recommended for implementation all exceptions should be identified and worked through by the modification group.

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	Question	Response	Rationale
9.	Do you believe there are any exception scenarios that should be considered further under P167 that have not been identified by the SSMG to date?  Please give provide details and/or specific operational examples	No	
10.	How do you believe Bid/ Offer Upper and Lower prices bands should be derived under P167?  Please give rationale	From the Acceptance Reference Level	The case given in the consultation report is extreme, normally there is not such a large jump in the price between Bid/Offer pair -1 and -2. However, it would make sense to derive the prices with reference to the Acceptance Reference Level.
11.	Do you believe the impact on imbalance prices from the perceived defect is material?  Please give rationale	No	There is an impact on the energy imbalance price. However, the impact is not significant in most cases and the incentive to balance is not reduced from the current situation. EDF Energy notes that in 97% of potentially affected Settlement Periods the impact is less than 25p on both imbalance prices.
12.	Please provide comments on the estimated materiality associated with the perceived defect identified under P167?	ELEXON and the modification group have worked hard to determine the materiality associated with P167. We note the different scenarios used and the variation in materiality produced.	
13.	Please provide details of any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure?	N/A	
14.	Are there any further comments on P167 that you wish to make?	EDF Energy would like the modification group to note that there are not many modifications going through assessment so this modification may be stand alone in a release and could cost $\pounds 620k$ to implement.	

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Respondent:	National Grid Transco
No. of Parties Represented	1
Parties Represented	0
No. of Non Parties Represented	0
Non Parties represented	N/A
Role of Respondent	BSC Party

	Question	Response	Rationale
1.	Do you believe Proposed Modification P167 would better facilitate achievement of the Applicable BSC Objectives?  Please give rationale and state objective(s)	Yes / No	We are of the view that this modification better facilitates BSC objective c) by more accurately apportioning bid/offer and RCRC cash flows to BSC participants.  NGT is of the view that this modification may be detrimental to the facilitation of BSC objective b) by creating an environment where information provision could be less accurate and so lead to a less efficient operation of the transmission system. This is dependent on the behaviour of BM participants (Please refer to section 7)
2.	Do you support the implementation approach preferred by the Modification Group?  Please give rationale	Yes	-
3.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered?  Please give rationale	No	We believe there are no obvious alternatives to the solutions proposed in the consultation document.

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	Question	Response	Rationale
4.	Do you believe the issue raised by P167 is a defect in the current baseline?  Please give rationale	Yes	We believe that there is a defect in the current baseline in that, under specific circumstances, Bid/Offer and RCRC cash flows are inaccurately apportioned to BSC participants. This defect can also lead to the inaccurate calculation of cash-out prices.
5.	Do you believe there would be an overall cost benefit from implementing P167?  Please give rationale	No	The best estimate of the material impact of this defect, provided by Elexon, is between 100K and 400K. Given the direct implementation costs of this modification and the implied cost of modification of participant IT systems we do not believe that the modification can be judged to have a financial benefit greater than the costs that will be incurred.
6.	Do you believe there is potential for Parties to exploit the defect identified under P167?  Please give rationale	No	We believe it would be very difficult for parties to intentionally exploit the defect given their inability to consistently predict Transmission Company BM actions. It is more likely that the periods in which this defect produces a material impact are due to a coincidence of circumstances that it would be very difficult for a BSC participant to replicate by design.
7.	Do you believe P167 would have a detrimental impact on the submission of MEL and MIL data?  Please give rationale	Yes	We are concerned that the accuracy and timeliness of MEL and MIL declarations could be adversely affected by this modification. (Please refer to Transmission Company Impact Assessment section 2)
8.	Do you believe there should be exception scenarios including in P167 for 'Multi shafted BM Units' that should be considered further under P167?  Please give provide details and/or specific operational examples	Yes	We believe that ideally all participants should be treated in an equal and consistent manner within the Balancing Mechanism. However our concern is that under this scenario 'Multi shafted BM Unit' behaviour may be impacted by this modification to the detriment of the secure and efficient running of the power system. However currently no instances of this scenario have been identified and as such we believe that physical evidence of this scenario should dictate whether it warrants further consideration under P167.

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	Question	Response	Rationale	
9.	Do you believe there are any exception scenarios that should be considered further under P167 that have not been identified by the SSMG to date?  Please give provide details and/or specific operational examples	No	We cannot identify any exception scenarios that have not been identified in the P167 consultation document.	
10.	How do you believe Bid/ Offer Upper and Lower prices bands should be derived under P167?  Please give rationale	From FPN	We believe that the Bid/Offer Upper and Lower price bands should continue to be derived from FPN. Please refer to Transmission Company Impact Assessment (section 5)	
11.	Do you believe the impact on imbalance prices from the perceived defect is material?  Please give rationale	No	The evidence provided in the consultation document tends to indicate that the percentage of periods where this defect significantly distorts cash out prices is minimal(> 25 pence). Therefore we don't believe that this defect has much of a material impact on cash-out prices.	
12.	Please provide comments on the estimated materiality associated with the perceived defect identified under P167?	Given the inherent uncertainty associated with such an estimate we believe 100K – 400K is a fairly good indication of annual materiality.		
13.	Please provide details of any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure?	Please refer to the Transmission Company Impact Assessment (section 9)		
14.	Are there any further comments on P167 that you wish to make?	In summary while we believe that P167 identifies a real defect in the settlement process its correction cannot be justified under the cost benefit identified in the consultation document. Further to this there is a concern that this modification may lead to other problems whose costs have not yet been identified.		

# **Responses from P167 GB Assessment Consultation**

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## **GB Consultation Issued 20 September 2004**

## Representations were received from the following parties

	Company	File number	No BSC Parties Represented	No Non-Parties Represented
1.	British Energy	P167_AR_001	4	0

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Respondent:	Martin Mate
No. of Parties Represented	4
Parties Represented	British Energy Power & Energy Trading Ltd, British Energy Generation Ltd, Eggborough Power Ltd, British Energy Generation (UK) Ltd
No. of Non Parties Represented	-
Non Parties represented	-
Role of Respondent	Supplier/Generator/Trader/Consolidator/Exemptable Generator/Party Agent

	Question	Response	Rationale
1.	Please Provide details of any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure (in particular in the context of BETTA)?	Yes	Incentives on NGC in relation to relevant acceptances.  Exactly what are Physical Notifications expected to represent, and what are the incentives or otherwise on parties to provide accurate Physical Notification data?
2.	Do you believe Proposed Modification P167 would better facilitate achievement of the Applicable BSC Objectives?  Please give rationale and state objective(s) (referring to previous response on P167 if appropriate).	Yes	The costs to implement the modification are considerable, and it is likely to take several years before the benefits achieve an overall cost-benefit. However, there does appear to be an overall benefit in time, particularly if the fixed release implementation costs could be efficiently shared with other changes. If the modification is not approved, we believe Elexon should continue to monitor the issue and refine their materiality estimation method to ensure that the effect is not being exploited excessively.

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	Question	Response	Rationale
3.	Do you support the implementation approach preferred by the Modification Group?  Please give rationale (referring to previous response on P167 if appropriate).	Yes, but	The BSC Panel and Ofgem should seek to ensure that the modification is implemented with other changes in order to reduce overall costs and thus improve the cost-benefit.
4.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered?  Please give rationale (referring to previous response on P167 if appropriate).	No	None at this time.

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	Question	Response	Rationale
5.	Do you believe the issue raised by P167 is a defect in the current baseline?  Please give rationale (referring to previous response on P167 if appropriate).	Yes	1. Some parties may be providing inaccurate Physical Notification data in the knowledge that acceptances may still be made, and in most cases there is no apparent downside. (BSC Objectives (a) and (b)).  2. Some parties may be avoiding imbalance exposure and affecting imbalance prices as a result of acceptances made by the System Operator in the circumstances identified. (Relevant parties might be submitting higher bid prices to reflect the possibility of benefit from avoided imbalance, but this seems unlikely). (BSC Objective (c))  3. The likely effect on the imbalance mechanism overall appears to be to increase occurrences of the system being considered 'long' (measured by NIV on the basis of the actions NGC takes) and to increase SSP (when long) or reduce SBP (when short). (BSC Objective (c))  Beneficiaries of these effects appear to be NGC; parties paying BSUoS; parties whose bids are accepted in the relevant circumstances; and possibly parties taking a long position with an expectation of the system being long. Parties likely to lose in the long term are those receiving cash-flow reallocation.  The consultation suggests that the net effect of the defect is a cashflow from suppliers to generators, which is a misleading generalisation as not all generators and suppliers are affected in the same way.
6.	Do you believe there would be an overall cost benefit from implementing P167?  Please give rationale (referring to previous response on P167 if appropriate)	Yes	From the information provided, the cost benefit could take several years to achieve. The time would be reduced by efficient scheduling of the implementation.

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	Question	Response	Rationale
7.	Do you believe there is potential for Parties to exploit the defect identified under P167?  Please give rationale (referring to previous response on P167 if appropriate)	Yes	Although the potential is limited by the uncertainty of NGCs actions and imbalance prices, there is some scope for BM Units high in the 'merit order' of bids to exploit the effect, as identified in section 2.4 of the consultation.
8.	Do you believe P167 would have a detrimental impact on the submission of MEL and MIL data?  Please give rationale (referring to previous response on P167 if appropriate)	Yes / No	Possibly, although this should be weighed against the potential for improvement in the accuracy of Physical Notification data if there were to be no advantage in submission of 'upper-bound' best-estimate data.
9.	Do you believe there should be exception scenarios including in P167 for 'Multi shafted BM Units' that should be considered further under P167?  Please give provide details and/or specific operational examples (referring to previous response on P167 if appropriate).	No	NGC's standard dynamic data do not cover all plant characteristics and create a risk for many bid-offer providers that they will not be able to deliver exactly to the stated dynamics. The limited duration of the balancing mechanism window also creates a risk for bid-offer providers, that an acceptance from NGC will expose them to imbalance later. All Bid-offer providers have to include these market limitations in their pricing and risk strategies.  Exceptions requiring special dynamics should be dealt with in a transparent manner under the Grid Code, not the BSC.
10.	Do you believe there are any exception scenarios that should be considered further under P167 that have not been identified by the SSMG to date?  Please give provide details and/or specific operational examples	No	None at this time.
11.	How do you believe Bid/ Offer Upper and Lower prices bands should be derived under P167?  Please give rationale (referring to previous response on P167 if appropriate).	From FPN	From FPN. We believe most BM Units currently offering into the Balancing Mechanism will have priced against Physical Notification level, not MEL/MIL (or proposed ARL).

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	Question	Response	Rationale
12.	Do you believe the impact on imbalance prices from the perceived defect is material?  Please give rationale (referring to previous response on P167 if	Yes	From the analysis provided, the effect on imbalance prices does appear to be material.
	appropriate).		
13.	Please provide comments on the estimated materiality associated with the perceived defect identified under P167 (referring to previous response on P167 if appropriate)?	monitor the issu	ion is not approved, we believe Elexon should continue to use and refine their materiality estimation method to ensure s not being exploited excessively.
14.	Are there any further comments on P167 that you wish to make?		

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## ANNEX 7 TRANSMISSION COMPANY ANALYSIS AND ASSESSMENT RESPONSE

Q	Question	Response
1	Please outline any impact of the Proposed Modification on the ability of the Transmission Company to discharge its obligations efficiently under the Transmission Licence and on its ability to operate an efficient, economical and co-ordinated transmission system?	We believe that the proposed modification may have a marginal impact on the ability of the Transmission Company to efficiently discharge its obligations under the Transmission Licence. However whether this is a positive or negative impact is predominantly dependent on the subsequent behaviour of BSC market participants. (covered in following sections of this response)
2	Please outline the views and rationale of the Transmission Company as to whether the Proposed Modification would have a detrimental impact on the submission of MEL and MIL data?	At present MEL and MIL are purely operational variables. Their declaration and re-declaration are the means by which BM participants are able to inform the Transmission Company of the generation capacity that it can consider available to be utilised at every period within the day. As these variables are not currently considered in the calculation of Bid/Offer acceptances there is no disincentive for BM participants to re-declare their MEL and MIL in line with their Grid Code obligations. If modification P167 is approved there is a very real concern that the BM participants re-declaration of MEL/MIL may be hindered by the parties need to consider the financial implications of any actions taken and so come into conflict with BM participants' Grid Code obligations. Any distortion to the true generation capacity declared to be available on the system can only have adverse consequences on the security of supply and the economic and efficient running of the electricity system.
3	Please outline the views and rationale of the Transmission Company as to whether the Proposed Modification would better facilitate achievement of the Applicable BSC Objectives?	We are of the view that this modification better facilitates BSC objective c) by more accurately apportioning Bid/Offer and RCRC cash flows and BSUOS charges to BSC participants.  We are of the view that this modification may be detrimental to the facilitation of BSC objective b) by creating an environment where information provision could be less accurate and so lead to a less efficient operation of the transmission system. This is however dependent on the behaviour of BM participants (as referred to in section 2)
4	Please outline the impact of the Proposed Modification on the computer systems and processes of the Transmission Company, including details of any changes to such systems and processes that would be required as a result of the implementation of the	To be provided at a later date.

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	Proposed Modification?	
5	Please outline the views and rationale of the Transmission Company as to how Bid- Offer Upper and Lower Ranges should be derived under P167?	It is the view of the Transmission Company that the ARL reference point should remain at FPN.  Prior to gate closure a BM participant will craft their Bid/Offer submissions in relation to their intended output which in the overwhelming number of cases will be in relation to FPN. The submission pricing and volumes will be reflective of a combination of the BM Units dynamic characteristics and economic desire to adjust the output of their plant.  If a BM Unit is forced, through operational necessity, to re-declare its MEL post gate closure then a volume of potential Bids will have been lost to the System Operator. However a similar volume of energy will have been removed from the system.  If we deem it is necessary to take further Bids on this BM Unit the implication is that the total volume of Bids the System Operator needs to take must have been reduced by the size of the BM participants initial MEL re declaration. The System Operator would be accepting these further Bids at the price it would under normal circumstances and the acceptance would still be taken in an economic and efficient manner. The BM participant would not unduly benefit as the Transmission Company would not take actions at prices any different to those it would have taken if the MEL had not been re-declared. It is simply the case that the more attractive Bids and the volume of energy they represented would have been removed from the market. The BM participant simply forfeits the benefit it would have derived from that volume of Bids that would have been accepted between FPN and MEL. This would seem correct given that the initial reduction in output was due to the BM Units technical constraints.  To use MEL as a reference point would mean that the Transmission Company would be benefiting from prices that do not reflect the intended economic value placed on the bid by the BM participant.  In the majority of cases the BM participant would have no idea of the size of the MEL re-declaration prior to its occurrence as it is likely that such a re-de
		Therefore there may potentially be a disincentive for BM participants to offer Bids that reflect their true economic value. Mindful that a re-declaration of MEL may alter the Bid value of the relative output levels of a BM Unit, the participant may submit less attractive Bids that reflect this risk. This would have implications for cash out prices and be detrimental to the efficient and economic

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		operation of the transmission system.
6	Please outline any potential issues relating to the security of supply arising from the Proposed Modification?	If, as previously stated, this modification has a detrimental impact on the accuracy of submitted MEL declaration then this may have implications for security of supply.
7	Please provide an estimate of the development, capital and operating costs (broken down in reasonable detail) which the Transmission Company anticipates that it would incur in, and as a result of, implementing the Proposed Modification?	To Follow at a later date
8	Please provide details of any consequential changes to Core Industry Documents that would be required as a result of the implementation of the Proposed Modification?	It is not envisaged at this time that there will be consequential changes to other Core Industry Documents.
9	Any other comments on the Proposed Modification?	At NETA go live a view was taken that National Grid should have minimal impact on BM participant submitted data that was subsequently used in the settlement process. To achieve this aim BM participants were asked to submit PN point profiles in discrete half-hourly blocks. If a PN position is re-declared then the PN position for the entire settlement period must be resubmitted. These full period submissions negate the need for us to carry out any profiling across different submissions and so remove any potential profiling error.  At NETA go live MEL and MIL did not have any bearing on the settlement process. Therefore the same rules were not required for these variables. MEL and MIL information does not have to be submitted in discrete settlement period blocks. The effective MEL position that the Transmission Company submits to the BMRS for each BM Unit at gate closure can be made up of differentially timed submissions that overlap within settlement periods. In these scenarios our IT systems have to apply ramping and rounding functionality to the data in order to produce this effective profile. Any MEL re-declarations that are submitted within gate are sent to the BMRS. However the duration of the MEL declaration sent is confined to the remaining time of the current within gate window, even if the MEL re declaration submitted by the BM participant stretches further than this. Here again the System Operator applies ramping and rounding functionality in the provision of this information.  We are concerned that this modification will lead to settlement calculations being performed on data that has not been subjected to the same rigorous submission requirements as those in the existing settlement calculations. Further to this we are concerned that the MEL data will not conform to the methodology for submitting information for the settlement calculation in that the submission should be untouched and unprocessed by the Transmission

Company. Altering the existing methodology would also have implications for the liability of data provision accuracy. We would need to clarify our obligations and liabilities under this proposed revised settlement process.

If this submission methodology for settlement data has to be violated then we will need to review the MEL submission and profiling process. We may deem it necessary to in some way modify this process to make it more robust against potential errors. Any cost and process change required for this will be included in the IT responses to follow.

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## Response to Question 4 & 7 of The Transmission Company Impact Assessment (P167)

NB: Impact assessment of multiple options was conducted by the BSC Agents, cost estimates for some those options not being progressed under Proposed Modification P167 have been removed for clarity

### **Summary of Costs:**

The following table gives a breakdown of indicative costs of the processes that will need to be amended following implementation of modification P167. Please be aware that these costs are best estimates based on the information available and the possibility that they may change can not be discounted.

Process	Option 1
MEL Issue	125,000
Despatch Systems	45,000
Creation of IO14 flow Variable	300,000
Total	470,000

#### **MEL Issue**

In section 9 of the TCIA we expressed the concern that if the submission methodology for settlement data has to be violated then we will need to review the MEL profiling process. We will need to modify this process to make it more robust against error.

### **Control & Despatch Systems**

Modification P167 will make it necessary for the Transmission Company to update its despatch and despatch advice systems.

#### **Creation of IO14 flow Variable**

The Transmission Company has a number of systems that capture central system IO14 flow information post event. If the IO14 flow was amended as is envisaged by the creation of a new variable then this would have an impact on a number of Transmission Operator systems. The cost of amending these systems to accommodate this new variable is approximately £300,000

## **Time-scale for Implementation**

The time-scale for Implementation of this modification would be ten calendar months following the latter of either Elexon approval or BETTA go-live.

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## P167 TRANSMISSION COMPANY ANALYSIS AND IMPACT ASSESSMENT - GB RESPONSE

From: Clare Talbot

Sent: 10 September 2004 15:02

To: ELEXON-Modifications

Cc: Rob Smith (National Grid)

Subject: RE: P167 Transmission Company Analysis Request - response

request ed by 5pm on 20/09/04

I would like to confirm to you that the original analysis from the Transmission Company on P167 still applies on a GB basis. If you require any further information please do not hesitate to contact us.

Regards,

Clare Talbot

For and on behalf of National Grid Company plc