

P194 Assessment Report Annex 4a-c: Impact Assessment Responses

- 1. Annex 4a – Transmission Company Analysis**
- 2. Annex 4b - BSC Party and Party Agent impact assessment**
- 3. Annex 4c – BSC Agent assessment**

P194 TRANSMISSION COMPANY ANALYSIS AND IMPACT ASSESSMENT – RESPONSE PRO-FORMA

In accordance with paragraph F 2.8 of the Code, please respond to the following questions concerning P194 (including the rationale for each 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.	<p>BSC parties have no obligation to balance their contractual position prior to gate closure. The incentive to resolve their position in the forward market will be solely determined by the difference between likely exposure from imbalance prices and the cost of buying that energy forward. It is therefore imperative that at times of system stress the incentives on participants to cover their contractual position are appropriate.</p> <p>Deriving a volume weighted average price from the entire NIV does not always form a good proxy for the marginal cost of balancing energy. At times of system shortage the differential between the average and marginal cost of resolving NIV, as shown by the proposer's analysis, is likely to be greatest.</p> <p>This distortion of the signal of energy scarcity could lead to a perverse incentive where, upon days of system stress, market participants would find it economically beneficial to go short into the Balancing Mechanism. It is specifically on these days that the incentive to balance should be the strongest as the System Operator's options for resolving imbalance are likely to be the most limited and so security of supply is impacted. (see National Grids BSC party response for further explanation on this issue) Removing this distortion will better enable the Transmission company to discharge its obligations under the Transmission License by ensuring that the market operates in a more efficient economical manner.</p>
2	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.	<p>This modification will enhance the signals provided by imbalance prices to the forward markets. This will increase competition, and security of supply, by encouraging parties to trade ahead of Gate Closure. This will better facilitate the applicable BSC objective (c) "Promoting effective competition in the generation and supply of electricity, and (so far as it is consistent with) promoting such competition in the sale and purchase of electricity" Encouraging Parties to trade ahead of Gate Closure will benefit security of supply and will therefore better facilitate applicable objective (b) "the efficient, economic and co-ordinated operation by the Transmission Company of the Transmission System".</p>
3	Please outline the impact of the Proposed Modification on the computer systems and processes of the	<p>No impact has been identified on the computer systems and processes of the Transmission Company that would be required as a result of the implementation of this Proposed</p>

	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 Proposed Modification.	Modification.
4	Please outline any potential issues relating to the security of supply arising from the Proposed Modification.	<p>We believe that the incentive for participants to cover their contractual positions will only be greater in periods of system stress. This will lead to greater certainty of sufficient capacity being available at this time. This will alleviate the risk to security of supply at times of system stress and send the correct incentives to the market.</p> <p>The enhanced incentive to balance should create increased liquidity in the forward markets and allow the market price to more accurately reflect the marginal cost of energy. This will enable the forward market to more appropriately signal emerging supply shortages. The forward price curve is a significant factor in the economic consideration in the investment in new capacity. As such the more accurately it reflects the likely forward cost of energy the more efficiently the market is able to respond to future demand/supply positions. Adequate capacity to meet future demand requirements is the core requirement of meeting long term security of supply. P194 will enhance the signal to the market to ensure that this incentive to provide adequate capacity is met.</p>
5	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.	No costs have been identified.
6	Please provide details of any consequential changes to Core Industry Documents and/or the System Operator Transmission Owner Code that would be required as a result of the implementation of the Proposed Modification	No consequential changes have been identified.
7	Any other comments on the Proposed Modification.	No further comments.

Responses for CPC00533

Detailed Level Impact Assessment of P194

'Revised Derivation of the 'Main' Energy Imbalance Price'

Carried out by	Comments
Sue Macklin SSE Energy Supply Ltd; Keadby Generation Ltd; SSE Generation Ltd; and Medway Power Ltd;	<ol style="list-style-type: none"> 1. Would the Proposed Modification, as outlined in the attached Requirements Specification, impact your organisation? Yes 2. If yes, please provide a description of the impact, any costs incurred, and the implementation timescale required: implementation notice - 4 months; 3. Do you prefer any of the implementation approaches described in the consultation document (NB: these relate to the P194 reporting requirements as considered in section 2.3 of the Requirements Specification)? Prefer option B <p>1.1</p>
Marie Williams UNITED UTILITIES (MOA)	<ol style="list-style-type: none"> 1. Would the Proposed Modification, as outlined in the attached Requirements Specification, impact your organisation? No 2. If yes, please provide a description of the impact, any costs incurred, and the implementation timescale required: N/A 3. Do you prefer any of the implementation approaches described in the consultation document (NB: these relate to the P194 reporting requirements as considered in section 2.3 of the Requirements Specification)? N/A 4. Any other comments: NONE
Michelle Derbyshire United Utilities I & C Solutions	no impact upon UUNL MOP

<p>Dave Morton EDF Energy</p>	<ol style="list-style-type: none"> 1. Would the Proposed Modification, as outlined in the attached Requirements Specification, impact your organisation? Yes 2. If yes, please provide a description of the impact, any costs incurred, and the implementation timescale required: Would require amendments to a number of systems at an estimated cost of £200k. We would probably not be able to make all the changes required without at least one year's notice. 3. Do you prefer any of the implementation approaches described in the consultation document (NB: these relate to the P194 reporting requirements as considered in section 2.3 of the Requirements Specification)? We do not believe it acceptable to implement this change and not make changes to SAA reporting as this would make NG actions even less transparent. Were P194 approved, we would prefer the implementation be timed to coincide with a scheduled release date.
<p>John W Russell Scottish Power UK plc ScottishPower Energy Management Ltd. ScottishPower Generation Ltd. ScottishPower Energy Retail Ltd. SP Manweb plc. SP Transmission Ltd.</p>	<ol style="list-style-type: none"> 1. Would the Proposed Modification, as outlined in the attached Requirements Specification, impact your organisation? Yes 2. If yes, please provide a description of the impact, any costs incurred, and the implementation timescale required: 2 Acceptance of P194 will only serve to increase imbalance prices to all BSC Parties. This will have particular impact on unpredictable (generally wind) generating plant as this plant will be more exposed to imbalance prices. 3. Do you prefer any of the implementation approaches described in the consultation document (NB: these relate to the P194 reporting requirements as considered in section 2.3 of the Requirements Specification)? We do not believe that P194 should be implemented. 4. Any other comments: No

Allen Gerber
E.On UK Plc

1. Would the Proposed Modification, as outlined in the attached Requirements Specification, impact your organisation?

Yes

2. If yes, please provide a description of the impact, any costs incurred, and the implementation timescale required:

The following separate areas that might be impacted:

- **System Price Forecaster – attempts to predict SBP/SSP outturns. It might cost £10k to update this to take account of the revised logic.**
- **SAA File handling – receives and stores the data in our SAA files. These might have to validate a new file structure and store additional data, but these services are provided by an external software vendor. They might charge £20k for the necessary amendments.**
- **Subflow 2 handling – files are received via the low grade service – might cost £5k to update**

There would be additional costs if the BMRA messages were to be amended.

3. Do you prefer any of the implementation approaches described in the consultation document (NB: these relate to the P194 reporting requirements as considered in section 2.3 of the Requirements Specification)?

Option B would be our preferred option, but we would have to do some more analysis to be sure.

4. Any other comments:

No comment

NETA Change Form

Title		Version No.
Revised Derivation of the 'Main' Energy Imbalance Price		0.2
		LogicaCMG Reference
		ICR686
ELEXON Reference	Date CP Received	Date IA Issued
P194	23 September 2005	30 September 2005
LogicaCMG Contact Name	Baseline for Impact Assessment	
Martin Godden	Requirements Specification for P194 version 1.0 P194RS_10.doc dated 23 Sept 2005	
Price Breakdown		
Item description	Remarks	Price (ex VAT)
Change Specific	Approach A (i)	£ 190,528
	Approach B (i)	£ 240,581
	Approach C	£ 78,700
	Approach A (ii)	£ 194,395
	Approach B (ii)	£ 257,980
Incremental Release Costs	Approach A (i)	£ 11,355
	Approach B (i)	£ 16,411
	Approach C	£ 4,889
	Approach A (ii)	£ 11,624
	Approach B (ii)	£ 16,680
Fixed Release Costs	Approach A (i)	£ 200,194
	Approach B (i)	£ 208,148
	Approach C	£ 191,122
	Approach A (ii)	£ 200,194
	Approach B (ii)	£ 208,148

Total Price (ex VAT)	Approach A (i)	£ 402,078
	Approach B (i)	£ 465,140
	Approach C	£ 274,710
	Approach A (ii)	£ 406,213
	Approach B(ii)	£ 482,808

Price Tolerance	0%
Justification for Price Tolerance	
N/A	

Project Duration	Approach A (i) Approach B (i) Approach C Approach A (ii) Approach B (ii)	23 weeks 26 weeks 20 weeks 23 weeks 26 weeks
Cut Off Date for Inclusion in Specified Release (if applicable)		
N/A		

Operational Price (e.g. per annum or event) (ex VAT)	£0
Rationale	
N/A	

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

Validity Constraints	
<ul style="list-style-type: none"> 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 the final solution being different from the baseline. No allowance is included for supporting Release Audit 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 <p>The validity period for this quote is 30 days and the offer is based on the following payment schedule:</p> <ul style="list-style-type: none"> 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

Requirements and Solution					
Brief Summary of Change					
This change is to amend the calculation of the 'Main' energy imbalance price (System Buy Price/System Sell Price) so that it only uses the top most expensive priced volume left after Net Imbalance Volume (NIV) tagging has occurred, up to a maximum volume of 100MWh (or a calculated level in the Alternative Modification).					
LogicaCMG's Proposed Solution					
<p>The Requirements Specification requires that LogicaCMG consider three delivery approaches and for each approach the Proposed Modification (i) and also an Alternative Modification (ii). The changes needed are similar but in the alternative the Price Averaging Reference (PAR) Volume would be calculated for each Settlement Period rather than being a fixed value (initially set to 100 MWh). The proposed and alternative solutions can be combined but as this will have the same costs as the alternative on its own the combined solution has not been priced separately.</p> <p>The three delivery Approaches considered are:</p> <p style="padding-left: 40px;">Approach A: Amend the calculation only.</p> <p style="padding-left: 40px;">Approach B: Amend the calculation and amend the settlement report.</p> <p style="padding-left: 40px;">Approach C: Amend the settlement report (assumes Approach A has already occurred).</p> <p>Approach C has only a single price as the calculation differences between the modification and the alternative are not relevant.</p> <p>Approach C has a smaller development cost due to not needing integration testing, but obviously has additional regression test costs and release costs.</p> <p>All calculation changes are as detailed in the baseline document.</p>					
Deviation from ELEXON's Solution / Requirements					
None					
Operational Solution and Impact					
None					
Testing Strategy					
Unit	X	Change Specific	X	End to End	
Module	X	Operational Acceptance	X	Participant Testing	
System	X	Performance		Parallel Running	
Regression		Volume		Deployment/ Backout	X
Other:					
Validated Assumptions					
None					

Outstanding Issues							
None							
Changes to Service							
Services Impacted							
	BMRA	CDCA	CRA	ECVAA	SAA	TAA	Other
Software					X		
IDD Part 1 (Docs)					X		
IDD Part 1 (S'Sheet)					X		
IDD Part 2 (Docs)					X		
IDD Part 2 (S'Sheet)					X		
URS					X		
SS					X		
DS					X		
MSS					X		
OSM					X		
LWIs							
RTP	None						
Comms	None						
Other	None						
Nature of Documentation Changes							
See above							
Nature / Size of System Changes							
Large							
Deployment Issues, e.g. Outage Requirements:					None		
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 covered by the acceptance criterion 2 in the "CVA Program – Release Acceptance Criteria" document for the Feb03 Release.							