

## Responses P90 Assessment Consultation

Consultation issued 16 August 2002

Representations were received from the following parties:

No	Company	File Number	No. Parties Represented
1.	Williams Energy	P90_ASS_001	1
2.	Entergy-Koch Trading Ltd	P90_ASS_002	1
3.	NGC	P90_ASS_003	1
4.	SEEBOARD	P90_ASS_004	1
5.	British Gas Trading	P90_ASS_005	1
6.	TXU	P90_ASS_006	21
7.	Aquila Networks	P90_ASS_007	1
8.	British Energy	P90_ASS_008	1
9.	Powergen	P90_ASS_009	4
10.	Scottish Power	P90_ASS_010	5
11.	Edison Mission	P90_ASS_011	2
12.	Innogy	P90_ASS_012	7
13.	Scottish and Southern	P90_ASS_013	4
14.	Immingham CHP (late response)	P90_ASS_014	1
15.	LE Group (late response)	P90_ASS_015	7

P90\_ASS\_001 – Williams Energy

Modification Proposal P90 'Improving the Representation of Energy Balancing Actions in Cashout Prices' Consultation Questionnaire

Responding on Behalf of (please list all BSC Parties): Williams Energy

Q	Question	Response (Please provide rationale where possible)
1.	<p>Noting that BSAD derivation and reporting is beyond the scope of the BSC (and that any changes would be the subject of a separate Transmission Company consultation),</p> <p>(a) Modification Proposal P90 proposes reporting and use of disaggregated (individual) BSAD trades in the calculation of Energy Imbalance Prices. Do you support this approach?</p>	<p>Yes</p> <p>It would treat BSAD trades in the stack in the same manner as BOAs and thus given both are forms of energy trade would be consistent.</p>
	<p>(b) In your opinion, should disaggregated BSAD trades for use in the Energy Imbalance Price calculation be time constrained in any way, for example, limiting 'eligible trades' to those made within a specified time period prior to the Settlement Period?</p>	<p>No</p> <p>The temptation to foreclose the BM via BSAD trades of greater lead time would be countered by the risk of incorrect trades (e.g. BSAD sells when the system turns out to be short). Thus given NGC's Licence objectives, SO Incentive scheme and audit scrutiny of actions this would ensure that BSAD trades and BOAs are used in the most optimal manner (i.e. efficient and cost effective)</p>
2.	<p>Modification Proposal P90 proposes a new mechanism for differentiating between system and energy balancing actions. This new mechanism negates the requirement for the Continuous Acceptance Duration Limit (CADL), do you support this approach?</p>	<p>No</p> <p>Conceptually CADL is a better mechanism for differentiating system and energy trades.</p>
3.	<p>In your opinion, does Modification Proposal P90 give a better separation of balancing actions (i.e. system vs energy) used in setting the Energy</p>	<p>No</p> <p>See above.</p>

Q	Question	Response (Please provide rationale where possible)
	Imbalance Price(s), if so, how?	
4.	In your opinion, is Modification Proposal P90 and the proposed use of BRL for price setting in the reverse stack and for the calculation of the reverse imbalance volume (RIV) for the main price calculation valuing actions more correctly, please provide rationale for your response?	Against the current baseline, yes.
5.	In your opinion, does Modification Proposal P90 with the reverse price set by BRL in the shorter stack more correctly target the cost of energy balancing actions to those causing the imbalance over the current baseline?	Against the current baseline yes, as it reduce penal aspect of imbalance cashout for participants.
6.	In your opinion, does Modification Proposal P90 with the reverse price set from BRL in the shorter stack address the issue of asymmetric risk?	Not fully, as it only helps to reduce asymmetric risk and dependent on the use of BRL will do so less effectively than P74 or P78.
7.	In your opinion, does P90 provide benefits in terms of greater transparency and simplicity of the energy imbalance price calculations?	P90 is certainly simple to a degree and is more transparent due to better treatment of BSAD trades but that does not mean it is the best solution
8.	<p>In your opinion how does Modification P90 affect any of the following issues (identified during discussion on Modifications P74 and P78):</p> <ul style="list-style-type: none"> <li>• the relative reward for notified and instructed actions and the impact on the Transmission Company's balancing of the system;</li> <li>• the perceived risk of Bid - Offer submission, the level of participation seen in the Balancing Mechanism and impact on system balancing;</li> <li>• changes in Physical Notifications shortly before Gate Closure;</li> <li>• changes in the level of asymmetric risk;</li> <li>• changes to the incentives on parties to balance their individual</li> </ul>	<p>It affects all these issues in a similar manner to P78 and thus the responses of Williams Energy for P78 indicating how are repeated below;</p> <p>It slightly better values notified actions that are beneficial to the system. It may lead to the Transmission Company needing to take less actions to balance the system, which is appropriate given the aim under NETA should be to design a market which requires minimal intervention.</p> <p>By reducing unfairly penal aspects of cashout prices, the risk-reward balance for generators should shift somewhat such that there may be greater participation from a greater variety of participants.</p> <p>Incentive for PNs to alter shortly before Gate Closure will not change</p>

Q	Question	Response (Please provide rationale where possible)
	<p>(contractual) trading positions before Gate Closure;</p> <ul style="list-style-type: none"> <li>• changes to the incentives for parties as a whole (i.e. in total, even if not balanced on an individual basis) to balance the market before Gate Closure;</li> <li>• the effect on Parties anticipating the 'direction' of the market, and therefore the Energy Imbalance Price, leading to volume volatility and consequential price instability in the market;</li> <li>• affect on liquidity and prices in the forwards and spot markets, the interrelation of forwards and spot markets with Energy Imbalance Prices and also the level of Energy Imbalance Prices themselves;</li> <li>• the risk levels of different categories of party from the implementation of Modification Proposal P90; and</li> <li>• any other issues identified with respect to Modification Proposals P74 and P78</li> </ul>	<p>significantly, although any increase is good, as it reflects a more competitive, liquid, efficient, dynamic market working effectively right up to Gate Closure.</p> <p>It should reduce natural asymmetric risk to a more reasonable level (i.e. less lop-sided).</p> <p>Incentive to balance individually will change, as it will reduce the current incentive to over-contract, due to less asymmetric cashout prices.</p> <p>Incentive to balance as whole will change, as by reducing participants incentive to over contract by as much, it will reduce the tendency for the system as a whole to be long and the degree to which it is long.</p> <p>Direction anticipation will not occur to any significantly greater extent than now and thus there will be no impact on price stability</p> <p>The presence of a number of significant vertically integrated players in the market makes this not certain but it should improve depth and liquidity in the traded markets.</p> <p>The likely impact on Energy Imbalance Prices is a reduced and less asymmetric cashout spread, where on average the buy price might be expected to be lower than currently and the sell price higher than currently.</p> <p>All risk profiles should be reduced, though portfolio, large or vertically integrated players will continue to enjoy a real advantage.</p>
9.	Do you believe that Modification Proposal P90 better facilitates achievement of the Applicable BSC Objectives, if so, which one(s) and	Against the current baseline, yes, in respect of two of the BSC Objectives;

Q	Question	Response (Please provide rationale where possible)
	why?	<p><i>"efficient, economic &amp; co-ordinated operation by the Transmission Company of the Transmission System"</i> by better incentivising participants</p> <p><i>"promoting effective competition in the generation and supply of electricity..."</i> by improving trading liquidity and more efficient operation.</p> <p>yes.</p>
10.	<p>Do you believe that any (or all) of the potential Alternatives to Modification Proposal P90 better facilitate achievement of the Applicable BSC Objectives than Modification Proposal P90?</p> <p>Option1: Dynamic BRL (Real time);</p> <p>Option 2: Dynamic BRL (Average);</p> <p>Option 3: Reverse Price set from Main Stack;</p> <p>Option 4: Reverse Price set from Main and Reverse Stack; and</p> <p>Option 5: Reverse Price set from First Bid – Offer Acceptance on Main Stack.</p> <p>Do you have a preference for one of the proposed options?</p> <p>Is there any other potential Alternative that should be considered?</p>	<p>Option 1 is not practical and thus would not better facilitate BSC Objectives.</p> <p>Option 2 would be practical and would better facilitate BSC Objectives – in the context of P79 a default BRL of OMW would be preferred.</p> <p>Option 3 would not better facilitate BSC Objectives as the reverse price is not being set in a cost reflective manner and indeed is being set by a non-energy concept, namely BRL.</p> <p>Option 4 is a more convoluted variant of Option3 and thus would also not better facilitate BSC Objectives.</p> <p>Option 5 would best facilitate BSC objectives and represents a solution which combines the best elements of P90 and P78Alt</p>
11.	<p>Are there any other issues that you believe should be considered during the assessment of Modification Proposal P90?</p>	<p>In an ideal world the best P90 solution should be compared to P78Alt which is the previously industry-wide accepted best price modification. P90 Alt Option 5 is viewed as the best solution of those proposed in relation to P90. Either P78Alt or P90 Alt Option 5 would both be strongly supported as effective dual price modifications. although P78Alt is viewed as slightly more preferable of all those proposed in P74, P78 and P90.</p>

P90\_ASS\_002 – Entergy-Koch Trading Ltd

Modification Proposal P90

Responding on Behalf of (please list all BSC Parties): Entergy-Koch Trading Ltd

Q	Question	Response (Please provide rationale where possible)
1.	<p>Noting that BSAD derivation and reporting is beyond the scope of the BSC (and that any changes would be the subject of a separate Transmission Company consultation),</p> <p>(a) Modification Proposal P90 proposes reporting and use of disaggregated (individual) BSAD trades in the calculation of Energy Imbalance Prices. Do you support this approach?</p>	<p>Yes. This would be consistent with trades that the transmission company takes in the BM. Confidentiality can still be maintained in reporting.</p>
	<p>(b) In your opinion, should disaggregated BSAD trades for use in the Energy Imbalance Price calculation be time constrained in any way, for example, limiting 'eligible trades' to those made within a specified time period prior to the Settlement Period?</p>	<p>No. Any trades the transmission company has entered into for the purposes of energy balancing should be included in energy imbalance prices</p>
2.	<p>Modification Proposal P90 proposes a new mechanism for differentiating between system and energy balancing actions. This new mechanism negates the requirement for the Continuous Acceptance Duration Limit (CADL), do you support this approach?</p>	<p>No. Energy is traded at the half hourly level in the exchanges and forward markets so any actions taken by the transmission company of less than CADL must be considered for system balancing purposes</p>
3.	<p>In your opinion, does Modification Proposal P90 give a better separation of balancing actions (i.e. system vs energy) used in setting the Energy Imbalance Price(s), if so, how?</p>	<p>Yes. Genuine system trades (that have a compensating opposite action) do not influence cashout prices whilst ensuring that trades that impact energy balance are better represented in imbalance cashout prices.</p>
4.	<p>In your opinion, is Modification Proposal P90 and the proposed use of BRL for price setting in the reverse stack and for the calculation of the</p>	<p>Yes. Calculating the main price from the RIV better represents trades for energy imbalance purposes but the removal of CADL will bring more</p>



Q	Question	Response (Please provide rationale where possible)
	<ul style="list-style-type: none"> <li>• changes to the incentives for parties as a whole (i.e. in total, even if not balanced on an individual basis) to balance the market before Gate Closure;</li> <li>• the effect on Parties anticipating the 'direction' of the market, and therefore the Energy Imbalance Price, leading to volume volatility and consequential price instability in the market;</li> <li>• affect on liquidity and prices in the forwards and spot markets, the interrelation of forwards and spot markets with Energy Imbalance Prices and also the level of Energy Imbalance Prices themselves;</li> <li>• the risk levels of different categories of party from the implementation of Modification Proposal P90; and</li> <li>• any other issues identified with respect to Modification Proposals P74 and P78</li> </ul>	
9.	Do you believe that Modification Proposal P90 better facilitates achievement of the Applicable BSC Objectives, if so, which one(s) and why?	Yes. This modification will improve the transparency of trade reporting which will encourage the Transmission Company to operate the Transmission System in a more efficient, economic and coordinated manner.
10.	<p>Do you believe that any (or all) of the potential Alternatives to Modification Proposal P90 better facilitate achievement of the Applicable BSC Objectives than Modification Proposal P90?</p> <p>Option1: Dynamic BRL (Real time);</p> <p>Option 2: Dynamic BRL (Average);</p>	<p>Option 1: No. Too difficult to manage in real time</p> <p>Option 2: No. As above</p> <p>Option 3: No. Same issues as with the original proposal</p> <p>Option 4: No. Same issues as with the original proposal</p> <p>Option 5: Yes. The concept is the same as P78 alternative and therefore</p>



Q	Question	Response (Please provide rationale where possible)
	<p>Option 3: Reverse Price set from Main Stack;</p> <p>Option 4: Reverse Price set from Main and Reverse Stack; and</p> <p>Option 5: Reverse Price set from First Bid – Offer Acceptance on Main Stack.</p> <p>Do you have a preference for one of the proposed options?</p> <p>Is there any other potential Alternative that should be considered?</p>	<p>will give a more cost reflective derivation of the reverse price. The modification should still not remove CADL</p>
11.	<p>Are there any other issues that you believe should be considered during the assessment of Modification Proposal P90?</p>	<p>No</p>

P90\_ASS\_003 – NGC

Modification Proposal P90

Responding on Behalf of (please list all BSC Parties):

Q	Question	Response (Please provide rationale where possible)
1.	<p>Noting that BSAD derivation and reporting is beyond the scope of the BSC (and that any changes would be the subject of a separate Transmission Company consultation),</p> <p><b>(a)</b> Modification Proposal P90 proposes reporting and use of disaggregated (individual) BSAD trades in the calculation of Energy Imbalance Prices. Do you support this approach?</p> <p><b>(b)</b> In your opinion, should disaggregated BSAD trades for use in the Energy Imbalance Price calculation be time constrained in any way, for example, limiting 'eligible trades' to those made within a specified time period prior to the Settlement Period?</p>	<p>Any modification must be assessed on whether the proposed change would make the BSC better meet its applicable objectives. As BSAD is not provided under the BSC, changes to BSAD cannot be used to justify support for P90. Such support must be on the basis that the resultant imbalance prices better meet the applicable objectives. As described in our response to Q2, we do not believe that disaggregation of BSAD is required in order to achieve more cost reflective imbalance prices.</p> <p>No, the existing concept of BSAD is that it contains all relevant trades for the applicable period. We believe that this should be retained.</p>
2.	<p>Modification Proposal P90 proposes a new mechanism for differentiating between system and energy balancing actions. This new mechanism negates the requirement for the Continuous Acceptance Duration Limit (CADL), do you support this approach?</p>	<p>No, CADL was implemented because it better facilitates the achievement of the BSC objectives by augmenting the existing Trade Tagging system and providing better cost targeting by seeking to remove system balancing costs from the energy imbalance price. If CADL were removed, it is likely that there would be an increase in the incidence of imbalance price spikes that did not reflect the price of energy in the Balancing Mechanism.</p>
3.	<p>In your opinion, does Modification Proposal P90 give a better separation of balancing actions (i.e. system vs energy) used in setting the Energy</p>	<p>No, the existing system is imperfect, as we believe that the reverse stack is mainly made up of system balancing actions (P78 was raised to address this issue). P90 does not address this as it retains the reverse</p>

Q	Question	Response (Please provide rationale where possible)
	Imbalance Price(s), if so, how?	stack in the imbalance price calculation and relies upon the level of BRL for the separation of system and energy. In cases where there are no energy actions in the reverse stack, the resultant imbalance price will clearly be based on a system action.
4.	In your opinion, is Modification Proposal P90 and the proposed use of BRL for price setting in the reverse stack and for the calculation of the reverse imbalance volume (RIV) for the main price calculation valuing actions more correctly, please provide rationale for your response?	No, using the reverse stack will pollute the reverse price with system actions. This also applies to the main stack as the system actions that are currently removed under the existing methodology (CADL and System Trade volumes) are re-introduced to potentially set the imbalance prices, see response to Q5. At times this will make imbalance prices more onerous, to the detriment of those spilling or shortfalling.
5.	In your opinion, does Modification Proposal P90 with the reverse price set by BRL in the shorter stack more correctly target the cost of energy balancing actions to those causing the imbalance over the current baseline?	No, consider the example of a long market where zero offers are taken in the balancing mechanism and the only buy trades are for system actions. The reverse price (SBP) will be set by the price of that trade. See graph 3 in the analysis where SBP spiked at £300/MWh in period 35 on 9 July 2002. Under the present baseline, system actions are excluded from BSAD.
6.	In your opinion, does Modification Proposal P90 with the reverse price set from BRL in the shorter stack address the issue of asymmetric risk?	No, with the potential for continuing price spikes in SBP, the market will continue to take a long position.
7.	In your opinion, does P90 provide benefits in terms of greater transparency and simplicity of the energy imbalance price calculations?	The apparent simplicity of the P90 concept cannot be seen as a benefit or any justification towards its implementation. We support the calculation of imbalance prices that achieve cost reflectivity and properly target those participants causing energy imbalance. With regard to transparency the issue of disaggregated forward energy trades is not within the scope of the BSC and should only be assessed in a consultation on National Grid's Procurement Guidelines.

Q	Question	Response (Please provide rationale where possible)
8.	<p>In your opinion how does Modification P90 affect any of the following issues (identified during discussion on Modifications P74 and P78):</p> <ul style="list-style-type: none"> <li>• the relative reward for notified and instructed actions and the impact on the Transmission Company's balancing of the system;</li> <li>• the perceived risk of Bid - Offer submission, the level of participation seen in the Balancing Mechanism and impact on system balancing;</li> <li>• changes in Physical Notifications shortly before Gate Closure;</li> <li>• changes in the level of asymmetric risk;</li> <li>• changes to the incentives on parties to balance their individual (contractual) trading positions before Gate Closure;</li> <li>• changes to the incentives for parties as a whole (i.e. in total, even if not balanced on an individual basis) to balance the market before Gate Closure;</li> <li>• the effect on Parties anticipating the 'direction' of the market, and therefore the Energy Imbalance Price, leading to volume volatility and consequential price instability in the market;</li> <li>• affect on liquidity and prices in the forwards and spot markets, the interrelation of forwards and spot markets with Energy Imbalance Prices and also the level of Energy Imbalance Prices themselves;</li> <li>• the risk levels of different categories of party from the implementation of Modification Proposal P90; and</li> <li>• any other issues identified with respect to Modification Proposals P74</li> </ul>	<p>In the Assessment phase for P74/P78 the issues identified centred around how both modification introduced a market length indicator before deciding which imbalance price participants should be cashed out at. As P90 relies upon the existing application of SBP/SSP to an individual account the incentive on participants will be similar to the existing baseline. However, the re-introduction of CADL volumes and introduction of system trades has the potential to spike the imbalance prices. This will tend to increase the asymmetry of risk.</p> <p>Note: for the example given in Q5, those accounts that were short on a long market would pay SSP under P74; Market Price under P78; but still SBP under P90.</p>

Q	Question	Response (Please provide rationale where possible)
	and P78	
9.	Do you believe that Modification Proposal P90 better facilitates achievement of the Applicable BSC Objectives, if so, which one(s) and why?	No, P18A was implemented on the basis that it better met the applicable objectives. The case has not been made that this decision was either wrong, or circumstances have changed such that it should be reversed. We also believe that the price spikes experienced since go-live demonstrate the difficulties associated with Automatic Trade Tagging and do not support its wider use at this time.
10.	<p>Do you believe that any (or all) of the potential Alternatives to Modification Proposal P90 better facilitate achievement of the Applicable BSC Objectives than Modification Proposal P90?</p> <p>Option1: Dynamic BRL (Real time);</p> <p>Option 2: Dynamic BRL (Average);</p> <p>Option 3: Reverse Price set from Main Stack;</p> <p>Option 4: Reverse Price set from Main and Reverse Stack; and</p> <p>Option 5: Reverse Price set from First Bid – Offer Acceptance on Main Stack.</p> <p>Do you have a preference for one of the proposed options?</p> <p>Is there any other potential Alternative that should be considered?</p>	No, all the options in the Requirement Specification remove CADL and for the reasons given above, we do not believe this would better meet the applicable objectives.

Q	Question	Response (Please provide rationale where possible)
11.	Are there any other issues that you believe should be considered during the assessment of Modification Proposal P90?	The modification is based upon the concept that a "genuine system trade" has an equal volume compensatory action. We believe that this is a feature of the current Automatic Trade Tagging and not a fundamental truth. For example, consider a short system that requires additional generation to satisfy a system constraint whose volume also brings the system into balance.

**P90\_ASS\_004 – SEEBOARD**

From information available we have been unable to conclude in this modification would provide a better solution to this issue than that proposed under P78 (Revised Definitions of System Buy Price and System Sell Price). As such we do not feel best placed to respond to questionnaire on modification P90.

Dave Morton  
SEEBOARD Energy Limited

P90\_ASS\_005 – British Gas Trading

Responding on Behalf of (please list all BSC Parties): British Gas Trading Ltd

Q	Question	Response (Please provide rationale where possible)
1.	<p>Noting that BSAD derivation and reporting is beyond the scope of the BSC (and that any changes would be the subject of a separate Transmission Company consultation),</p> <p><b>(a)</b> Modification Proposal P90 proposes reporting and use of disaggregated (individual) BSAD trades in the calculation of Energy Imbalance Prices. Do you support this approach?</p>	<p>Yes, this approach will increase the transparency of the imbalance price calculation and of BSAD.</p>
	<p><b>(b)</b> In your opinion, should disaggregated BSAD trades for use in the Energy Imbalance Price calculation be time constrained in any way, for example, limiting 'eligible trades' to those made within a specified time period prior to the Settlement Period?</p>	<p>No, all trades that relate to a specific settlement period should be used and reported no matter how far in advance they are made.</p>
2.	<p>Modification Proposal P90 proposes a new mechanism for differentiating between system and energy balancing actions. This new mechanism negates the requirement for the Continuous Acceptance Duration Limit (CADL), do you support this approach?</p>	<p>No. CADL was incorporated into the BSC to specifically remove short duration BOAs that had been found to have a disproportionate impact on the energy imbalance price. In our opinion this modification has been successful and there is no conclusive evidence that this impact will not again be felt if CADL is removed or set to zero.</p> <p>We would support the removal of CADL once NGC correctly identify system and energy actions and hence exclude system actions.</p>
3.	<p>In your opinion, does Modification Proposal P90 give a better separation of balancing actions (i.e. system vs energy) used in setting the Energy Imbalance Price(s), if so, how?</p>	<p>P90 gives a different, although not necessarily better, separation of system and energy balancing actions. We note the use of BRL to set the second price. We do not understand the thinking behind this as we understood that under the current system BRL removed BOAs deemed to</p>



Q	Question	Response (Please provide rationale where possible)
		be for Balancing Reserve, and hence system, reasons. It seems to defeat the purpose of this proposal to set an energy imbalance price using a volume of 'system' energy.
4.	In your opinion, is Modification Proposal P90 and the proposed use of BRL for price setting in the reverse stack and for the calculation of the reverse imbalance volume (RIV) for the main price calculation valuing actions more correctly, please provide rationale for your response?	We don't see that this is relevant for this proposal.
5.	In your opinion, does Modification Proposal P90 with the reverse price set by BRL in the shorter stack more correctly target the cost of energy balancing actions to those causing the imbalance over the current baseline?	
6.	In your opinion, does Modification Proposal P90 with the reverse price set from BRL in the shorter stack address the issue of asymmetric risk?	P90 may reduce asymmetric risk if there is a change in participants perception of risk and their behaviour. This should impact on the overall length of the market
7.	In your opinion, does P90 provide benefits in terms of greater transparency and simplicity of the energy imbalance price calculations?	P90 does provide greater transparency in the calculation of the energy imbalance price but only if BSAD volumes are clearly identified in the price stacks.
8.	<p>In your opinion how does Modification P90 affect any of the following issues (identified during discussion on Modifications P74 and P78):</p> <ul style="list-style-type: none"> <li>• the relative reward for notified and instructed actions and the impact on the Transmission Company's balancing of the system;</li> <li>• the perceived risk of Bid - Offer submission, the level of participation seen in the Balancing Mechanism and impact on system balancing;</li> </ul>	<ul style="list-style-type: none"> <li>• We do not believe P90 will significantly impact the relative reward for notified and instructed actions and the impact on the Transmission Company's balancing of the system.</li> <li>• P90 should reduce the perceived risk of Bid - Offer submission, the level of participation seen in the Balancing Mechanism and impact on system balancing.</li> <li>• P90 should not change the incentives to submit Physical Notifications</li> </ul>

Q	Question	Response (Please provide rationale where possible)
	<ul style="list-style-type: none"> <li>• changes in Physical Notifications shortly before Gate Closure;</li> <li>• changes in the level of asymmetric risk;</li> <li>• changes to the incentives on parties to balance their individual (contractual) trading positions before Gate Closure;</li> <li>• changes to the incentives for parties as a whole (i.e. in total, even if not balanced on an individual basis) to balance the market before Gate Closure;</li> <li>• the effect on Parties anticipating the 'direction' of the market, and therefore the Energy Imbalance Price, leading to volume volatility and consequential price instability in the market;</li> <li>• affect on liquidity and prices in the forwards and spot markets, the interrelation of forwards and spot markets with Energy Imbalance Prices and also the level of Energy Imbalance Prices themselves;</li> <li>• the risk levels of different categories of party from the implementation of Modification Proposal P90; and</li> <li>• any other issues identified with respect to Modification Proposals P74 and P78</li> </ul>	<p>shortly before Gate Closure.</p> <ul style="list-style-type: none"> <li>• The analysis of historic prices suggests that the proposal has some impact on the market length and imbalance prices. As such P90 could arguably reduce the level of asymmetric risk faced by participants.</li> <li>• As P90 retains a dual price mechanism the incentives on parties to balance their individual (contractual) trading positions before Gate Closure should remain. Indeed, if P90 succeeds in reducing the SBP-SSP spread and as such reducing the risk of exposure to the SBP faced by participants, then P90 should improve the incentive on parties to balance.</li> <li>• Parties should be incentivised to balance their own positions and not to look to the overall market position. The responsibility for balancing the market as a whole rests with the Transmission Company. In our opinion P90 does not change these incentives.</li> <li>• We do not believe this proposal would increase the risk of Parties anticipating the 'direction' of the market, and therefore the Energy Imbalance Price. Therefore it should not increase the level of volume volatility and consequential price instability in the market.</li> </ul>
9.	Do you believe that Modification Proposal P90 better facilitates achievement of the Applicable BSC Objectives, if so, which one(s) and why?	P90 is different to the current baseline but we do believe it has necessarily been established that it is <i>better</i> than the current baseline.
10.	Do you believe that any (or all) of the potential Alternatives to Modification Proposal P90 better facilitate achievement of the Applicable	Of the options outlined in the consultation document we would prefer to see Option 5 developed. This has been widely considered and debated

Q	Question	Response (Please provide rationale where possible)
	<p>BSC Objectives than Modification Proposal P90?</p> <p>Option1: Dynamic BRL (Real time);</p> <p>Option 2: Dynamic BRL (Average);</p> <p>Option 3: Reverse Price set from Main Stack;</p> <p>Option 4: Reverse Price set from Main and Reverse Stack; and</p> <p>Option 5: Reverse Price set from First Bid – Offer Acceptance on Main Stack.</p> <p>Do you have a preference for one of the proposed options?</p> <p>Is there any other potential Alternative that should be considered?</p>	<p>during the P74/78 process. The arguments in support of this reverse price remain the same.</p> <p>Whilst we appreciate the intent behind Options 1 and 2 we believe they will be overly complex to implement and will reduce the 'simplicity' of the price calculations that this proposal is seeking to establish.</p>
11.	<p>Are there any other issues that you believe should be considered during the assessment of Modification Proposal P90?</p>	<p>No, the modification group has considered all the relevant issues.</p>

P90\_ASS\_006 – TXU

Responding on Behalf of (please list all BSC Parties): All TXU Europe signatories (21 BSC Parties)

Q	Question	Response (Please provide rationale where possible)
1.	<p>Noting that BSAD derivation and reporting is beyond the scope of the BSC (and that any changes would be the subject of a separate Transmission Company consultation),</p> <p><b>(a)</b> Modification Proposal P90 proposes reporting and use of disaggregated (individual) BSAD trades in the calculation of Energy Imbalance Prices. Do you support this approach?</p> <p><b>(b)</b> In your opinion, should disaggregated BSAD trades for use in the Energy Imbalance Price calculation be time constrained in any way, for example, limiting 'eligible trades' to those made within a specified time period prior to the Settlement Period?</p>	<p>Yes, as it provides more transparency of the system operator's activities.</p> <p>No</p>
2.	<p>Modification Proposal P90 proposes a new mechanism for differentiating between system and energy balancing actions. This new mechanism negates the requirement for the Continuous Acceptance Duration Limit (CADL), do you support this approach?</p>	<p>Yes, CADL is an arbitrary fudge and we are not convinced of its effectiveness in separating System and Energy Balancing Actions.</p>
3.	<p>In your opinion, does Modification Proposal P90 give a better separation of balancing actions (i.e. system vs energy) used in setting the Energy Imbalance Price(s), if so, how?</p>	<p>Yes, we believe that it is a reasonable assumption that the majority of BOAs in the smaller stack will have been taken for system balancing purposes.</p>
4.	<p>In your opinion, is Modification Proposal P90 and the proposed use of BRL for price setting in the reverse stack and for the calculation of the reverse imbalance volume (RIV) for the main price calculation valuing actions more correctly, please provide rationale for your response?</p>	<p>Yes, as we believe it will eliminate more system balancing actions.</p>

Q	Question	Response (Please provide rationale where possible)
5.	In your opinion, does Modification Proposal P90 with the reverse price set by BRL in the shorter stack more correctly target the cost of energy balancing actions to those causing the imbalance over the current baseline?	The proposal does not change the way balancing costs are targeted, it just changes the way that the energy imbalance charges are set.
6.	In your opinion, does Modification Proposal P90 with the reverse price set from BRL in the shorter stack address the issue of asymmetric risk?	Not sure that it does, nor is it clear that this is the purpose of the proposal. However, the prices causing the asymmetry will be a more accurate reflection of energy balancing actions and we believe that this proposal will be better than the current baseline.
7.	In your opinion, does P90 provide benefits in terms of greater transparency and simplicity of the energy imbalance price calculations?	Yes.
8.	<p>In your opinion how does Modification P90 affect any of the following issues (identified during discussion on Modifications P74 and P78):</p> <ul style="list-style-type: none"> <li>• the relative reward for notified and instructed actions and the impact on the Transmission Company's balancing of the system;</li> <li>• the perceived risk of Bid - Offer submission, the level of participation seen in the Balancing Mechanism and impact on system balancing;</li> <li>• changes in Physical Notifications shortly before Gate Closure;</li> <li>• changes in the level of asymmetric risk;</li> <li>• changes to the incentives on parties to balance their individual (contractual) trading positions before Gate Closure;</li> <li>• changes to the incentives for parties as a whole (i.e. in total, even if not balanced on an individual basis) to balance the market before</li> </ul>	<p>No</p> <p>No</p> <p>No</p> <p>See answer to above question on asymmetric risk.</p> <p>No</p> <p>No.</p>

Q	Question	Response (Please provide rationale where possible)
	<p>Gate Closure;</p> <ul style="list-style-type: none"> <li>• the effect on Parties anticipating the 'direction' of the market, and therefore the Energy Imbalance Price, leading to volume volatility and consequential price instability in the market;</li> <li>• affect on liquidity and prices in the forwards and spot markets, the interrelation of forwards and spot markets with Energy Imbalance Prices and also the level of Energy Imbalance Prices themselves;</li> <li>• the risk levels of different categories of party from the implementation of Modification Proposal P90; and</li> <li>• any other issues identified with respect to Modification Proposals P74 and P78</li> </ul>	<p>No</p> <p>No, but it will mean that Energy Imbalance Prices are less polluted by System Balancing actions than they are currently.</p> <p>No</p> <p>No, we are not clear why we are being asked these questions when many of the issues identified in respect of P74 and P78 are peculiar to those proposals and do not seem to have any relationship with this proposal. If the questions being asked are meant to determine whether or not we believe that P90 is preferable to P74 and P78 then the answer is yes, however this proposal should be judged against the current baseline and not proposals on which the Authority is yet to make its determination.</p>
9.	Do you believe that Modification Proposal P90 better facilitates achievement of the Applicable BSC Objectives, if so, which one(s) and why?	Yes, we believe that increased transparency will encourage the efficient, economic and co-ordinated operation of the Transmission System. Also it will simplify the calculations of Energy Imbalance Prices which will improve efficiency in the implementation and administration of the balancing and settlement arrangements.
10.	Do you believe that any (or all) of the potential Alternatives to Modification Proposal P90 better facilitate achievement of the Applicable BSC Objectives than Modification Proposal P90?  Option1: Dynamic BRL (Real time);	We believe that Option 1 (and possibly 2 if it provides a cheaper solution to 1 with little impact on accuracy) should be further developed. However we feel that the others do not provide any benefit beyond the current proposal.

Q	Question	Response (Please provide rationale where possible)
	<p>Option 2: Dynamic BRL (Average);</p> <p>Option 3: Reverse Price set from Main Stack;</p> <p>Option 4: Reverse Price set from Main and Reverse Stack; and</p> <p>Option 5: Reverse Price set from First Bid – Offer Acceptance on Main Stack.</p> <p>Do you have a preference for one of the proposed options?</p> <p>Is there any other potential Alternative that should be considered?</p>	
11.	<p>Are there any other issues that you believe should be considered during the assessment of Modification Proposal P90?</p>	No.

**P90\_ASS\_007 – Aquila Networks**

Please find that Aquila Networks Plc response to P90 Assessment Consultation is 'No Comment'.

regards  
Rachael Gardener

Deregulation Control Group &  
Distribution Support Office  
AQUILA NETWORKS



P90\_ASS\_008 – British Energy

Responding on Behalf of (please list all BSC Parties):

Q	Question	Response (Please provide rationale where possible)
1.	<p>Noting that BSAD derivation and reporting is beyond the scope of the BSC (and that any changes would be the subject of a separate Transmission Company consultation),</p> <p><b>(a)</b> Modification Proposal P90 proposes reporting and use of disaggregated (individual) BSAD trades in the calculation of Energy Imbalance Prices. Do you support this approach?</p>	<p><b>Yes such a move will improve transparency of imbalance price calculations and avoids any 'black box' adjustment of imbalance price calculations through BSAD.</b></p>
	<p><b>(b)</b> In your opinion, should disaggregated BSAD trades for use in the Energy Imbalance Price calculation be time constrained in any way, for example, limiting 'eligible trades' to those made within a specified time period prior to the Settlement Period?</p>	<p><b>No as we believe it is difficult to distinguish between system and energy trades simply on the basis of time period.</b></p>
2.	<p>Modification Proposal P90 proposes a new mechanism for differentiating between system and energy balancing actions. This new mechanism negates the requirement for the Continuous Acceptance Duration Limit (CADL), do you support this approach?</p>	<p><b>Yes, see answers above.</b></p>
3.	<p>In your opinion, does Modification Proposal P90 give a better separation of balancing actions (i.e. system vs energy) used in setting the Energy Imbalance Price(s), if so, how?</p>	<p><b>Yes the inclusion of all BOA and BSAD trades in the derivation of the main and reverse price followed by trade tagging avoids potentially arbitrary allocation of system and energy trades and improves transparency.</b></p>
4.	<p>In your opinion, is Modification Proposal P90 and the proposed use of BRL for price setting in the reverse stack and for the calculation of the reverse imbalance volume (RIV) for the main price calculation valuing</p>	<p><b>Yes BRL has the merit that it can be representative of historical levels of regulating reserve which the SO holds for energy balancing purposes. It therefore provides a means of</b></p>

Q	Question	Response (Please provide rationale where possible)
	actions more correctly, please provide rationale for your response?	<b>transparently (and with a degree of accuracy) separating energy and system balancing actions/trades.</b>
5.	In your opinion, does Modification Proposal P90 with the reverse price set by BRL in the shorter stack more correctly target the cost of energy balancing actions to those causing the imbalance over the current baseline?	<b>Yes for reasons given above i.e. removes arbitrary split of system and energy trades.</b>
6.	In your opinion, does Modification Proposal P90 with the reverse price set from BRL in the shorter stack address the issue of asymmetric risk?	<b>Yes, see above answers.</b>
7.	In your opinion, does P90 provide benefits in terms of greater transparency and simplicity of the energy imbalance price calculations?	<b>Yes see above answers.</b>
8.	<p>In your opinion how does Modification P90 affect any of the following issues (identified during discussion on Modifications P74 and P78):</p> <ul style="list-style-type: none"> <li>• the relative reward for notified and instructed actions and the impact on the Transmission Company's balancing of the system;</li> <li>• the perceived risk of Bid - Offer submission, the level of participation seen in the Balancing Mechanism and impact on system balancing;</li> <li>• changes in Physical Notifications shortly before Gate Closure;</li> <li>• changes in the level of asymmetric risk;</li> <li>• changes to the incentives on parties to balance their individual (contractual) trading positions before Gate Closure;</li> <li>• changes to the incentives for parties as a whole (i.e. in total, even if not balanced on an individual basis) to balance the market before</li> </ul>	

Q	Question	Response (Please provide rationale where possible)
	<p>Gate Closure;</p> <ul style="list-style-type: none"> <li>• the effect on Parties anticipating the 'direction' of the market, and therefore the Energy Imbalance Price, leading to volume volatility and consequential price instability in the market;</li> <li>• affect on liquidity and prices in the forwards and spot markets, the interrelation of forwards and spot markets with Energy Imbalance Prices and also the level of Energy Imbalance Prices themselves;</li> <li>• the risk levels of different categories of party from the implementation of Modification Proposal P90; and</li> <li>• any other issues identified with respect to Modification Proposals P74 and P78</li> </ul>	
9.	Do you believe that Modification Proposal P90 better facilitates achievement of the Applicable BSC Objectives, if so, which one(s) and why?	<b>Better facilitates BSC Objective (c) the promotion of effective competition in generation and supply through the creation of an imbalance pricing regime which more accurately targets the costs of SO actions.</b>
10.	<p>Do you believe that any (or all) of the potential Alternatives to Modification Proposal P90 better facilitate achievement of the Applicable BSC Objectives than Modification Proposal P90?</p> <p>Option1: Dynamic BRL (Real time);</p> <p>Option 2: Dynamic BRL (Average);</p> <p>Option 3: Reverse Price set from Main Stack;</p> <p>Option 4: Reverse Price set from Main and Reverse Stack; and</p> <p>Option 5: Reverse Price set from First Bid – Offer Acceptance on Main</p>	

Q	Question	Response (Please provide rationale where possible)
	Stack. Do you have a preference for one of the proposed options? Is there any other potential Alternative that should be considered?	
11.	Are there any other issues that you believe should be considered during the assessment of Modification Proposal P90?	

P90\_ASS\_009 – Powergen

Responding on Behalf of (please list all BSC Parties): Powergen UK plc, Powergen Retail Limited, Cottam Development Centre Limited & Diamond Power Generation Limited

Q	Question	Response (Please provide rationale where possible)
1.	<p>Noting that BSAD derivation and reporting is beyond the scope of the BSC (and that any changes would be the subject of a separate Transmission Company consultation),</p> <p><b>(a)</b> Modification Proposal P90 proposes reporting and use of disaggregated (individual) BSAD trades in the calculation of Energy Imbalance Prices. Do you support this approach?</p>	<p>Yes. P90 takes the methodology for P78 and makes it more cost reflective by allowing NGCs forward trades to be accounted for individually in price setting rather than as an average block. It also provides greater transparency of these trades, as they will be reported individually. Finally, it simplifies the process with respect to the identification of which trades are for system or energy purposes by deeming this through the trade tagging process rather than relying on NGC to identify which ones were for which purpose.</p>
	<p><b>(b)</b> In your opinion, should disaggregated BSAD trades for use in the Energy Imbalance Price calculation be time constrained in any way, for example, limiting 'eligible trades' to those made within a specified time period prior to the Settlement Period?</p>	<p>No. We believe that all relevant trades should be included.</p>
2.	<p>Modification Proposal P90 proposes a new mechanism for differentiating between system and energy balancing actions. This new mechanism negates the requirement for the Continuous Acceptance Duration Limit (CADL), do you support this approach?</p>	<p>Yes. CADL is a somewhat arbitrary limit and the mechanism over complicates the price setting process. The inclusion of forward trades into both price stacks should help to undercut those trades which would have set very high prices and would have been removed by the use of CADL.</p>
3.	<p>In your opinion, does Modification Proposal P90 give a better separation of balancing actions (i.e. system vs energy) used in setting the Energy Imbalance Price(s), if so, how?</p>	<p>The separation of energy and system actions will always be an imprecise art. Modification P90 takes the use of trade tagging using the net imbalance position of the market and takes it a stage further by individually including each forward trade at its appropriate place in the</p>

Q	Question	Response (Please provide rationale where possible)
		stack. This must be more cost reflective than using aggregated blocks of information.
4.	In your opinion, is Modification Proposal P90 and the proposed use of BRL for price setting in the reverse stack and for the calculation of the reverse imbalance volume (RIV) for the main price calculation valuing actions more correctly, please provide rationale for your response?	Both prices arguably value actions more correctly by including all trades in the price setting mechanism. It is appropriate to continue to set the reverse price on the basis of the amount of reserve required. However, the modification could be improved by a more dynamic and responsive reserve level than a fixed level of BRL.
5.	In your opinion, does Modification Proposal P90 with the reverse price set by BRL in the shorter stack more correctly target the cost of energy balancing actions to those causing the imbalance over the current baseline?	Yes. The main price is set on the basis of the net imbalance of the market and the requirement for regulating reserve, whilst the reverse price is set on the basis of the requirement for regulating reserve only. In both the full set of trades is included at a disaggregated level.
6.	In your opinion, does Modification Proposal P90 with the reverse price set from BRL in the shorter stack address the issue of asymmetric risk?	Asymmetric risk is a feature of the market because it is easier for a generator to reduce generation than to increase it, and it is more likely that a generator will trip rather than accidentally over-generate to a significant extent. However, it is likely that the inclusion of all trades at a disaggregated level will make it less likely that extreme prices are set, for the reverse price in particular, dampening the effects of the asymmetry.
7.	In your opinion, does P90 provide benefits in terms of greater transparency and simplicity of the energy imbalance price calculations?	Yes. If forward volumes are reported to the market on a disaggregated basis then transparency will be increased. The mechanism is certainly simpler than the present baseline, which perhaps has become over-complex.
8.	<p>In your opinion how does Modification P90 affect any of the following issues (identified during discussion on Modifications P74 and P78):</p> <ul style="list-style-type: none"> <li>• the relative reward for notified and instructed actions and the</li> </ul>	<ol style="list-style-type: none"> <li>1. Instructed and notified actions may be devalued slightly, relative to actions which are not notified, by a reduction in the extremeness of</li> </ol>

Q	Question	Response (Please provide rationale where possible)
	<p>impact on the Transmission Company's balancing of the system;</p> <ul style="list-style-type: none"> <li>• the perceived risk of Bid - Offer submission, the level of participation seen in the Balancing Mechanism and impact on system balancing;</li> <li>• changes in Physical Notifications shortly before Gate Closure;</li> <li>• changes in the level of asymmetric risk;</li> <li>• changes to the incentives on parties to balance their individual (contractual) trading positions before Gate Closure;</li> <li>• changes to the incentives for parties as a whole (i.e. in total, even if not balanced on an individual basis) to balance the market before Gate Closure;</li> <li>• the effect on Parties anticipating the 'direction' of the market, and therefore the Energy Imbalance Price, leading to volume volatility and consequential price instability in the market;</li> <li>• affect on liquidity and prices in the forwards and spot markets, the interrelation of forwards and spot markets with Energy Imbalance Prices and also the level of Energy Imbalance Prices themselves;</li> <li>• the risk levels of different categories of party from the implementation of Modification Proposal P90; and</li> <li>• any other issues identified with respect to Modification Proposals P74 and P78</li> </ul>	<p>imbalance prices. However, we do not expect it to affect parties' desire to participate in the balancing mechanism.</p> <ol style="list-style-type: none"> <li>2. We cannot see why this would cause parties to significantly alter their Physical Notifications shortly before Gate Closure.</li> <li>3. Keeps a dual price, but possibly a less extreme one so could bring the market closer into balance from the historic long position it has occupied.</li> <li>4. Cannot see why there would be a particular incentive to guess the direction of the market over and above the present baseline.</li> </ol>
9.	Do you believe that Modification Proposal P90 better facilitates achievement of the Applicable BSC Objectives, if so, which one(s) and	Yes. We believe that it will better meet objective c) relating to the promotion of competition and objective d) relating to the efficient

Q	Question	Response (Please provide rationale where possible)
	why?	<p>implementation and administration of the balancing and settlement arrangements. Efficient competition requires cost reflective and accurate imposition of costs to participants which we believe P90 better achieves whilst maintaining the incentive to balance. The modification also provides more transparent information to the market about NGC's forwards trades.</p> <p>The price setting mechanism is also made much simpler improving the implementation of the arrangements. It also arguably makes it simpler for a new entrant to understand.</p>
10.	<p>Do you believe that any (or all) of the potential Alternatives to Modification Proposal P90 better facilitate achievement of the Applicable BSC Objectives than Modification Proposal P90?</p> <p>Option1: Dynamic BRL (Real time);</p> <p>Option 2: Dynamic BRL (Average);</p> <p>Option 3: Reverse Price set from Main Stack;</p> <p>Option 4: Reverse Price set from Main and Reverse Stack; and</p> <p>Option 5: Reverse Price set from First Bid – Offer Acceptance on Main Stack.</p> <p>Do you have a preference for one of the proposed options?</p> <p>Is there any other potential Alternative that should be considered?</p>	<p>Options 1 and 2 would provide a more dynamic BRL which would allow the BRL to react to changes in the market length. BRL was recently set to 5MWh (effectively zero) to reflect the fact that NGC did not need to provide regulating reserve due to the length of the market. If it is believed that the market will become shorter under P90, then the level of reserve should change to reflect this.</p> <p>Options 3, 4 and 5 are in our opinion not cost reflective and should not be pursued further.</p> <p>No.</p> <p>No.</p>
11.	Are there any other issues that you believe should be considered during the assessment of Modification Proposal P90?	No.



**P90\_ASS\_010 – Scottish Power**

**Responding on Behalf of (please list all BSC Parties):** *ScottishPower UK Plc.; ScottishPower Energy Trading Ltd.; ScottishPower Generation Ltd.; Scottish Power Energy Retail Ltd.; SP Transmission Ltd.*

Q	Question	Response (Please provide rationale where possible)
1.	<p>Noting that BSAD derivation and reporting is beyond the scope of the BSC (and that any changes would be the subject of a separate Transmission Company consultation),</p> <p><b>(a)</b> Modification Proposal P90 proposes reporting and use of disaggregated (individual) BSAD trades in the calculation of Energy Imbalance Prices. Do you support this approach?</p>	<p>Yes, it would provide the same level of transparency to NGC's pre Gate Closure actions as it would to its post Gate Closure actions, and give greater equivalence of pre and post Gate Closure actions within the imbalance price calculation. There would be system implications in providing this data but there are potential benefits from this approach.</p> <p>As a matter of process, we would also add that the scope of any NGC consultation should be confined to the drafting of the complementary BSAD changes, so as to be consistent with the finalised drafting of the BSC mod. The nature of the changes required should be determined by the BSC mod. The BSAD changes should not drive the BSC mod. This issue arose during consideration of P74 and P78 and we indicated in our Report phase comments then that the BSC changes should drive any changes to the BSAD Methodology Statement and not the other way around.</p>
	<p><b>(b)</b> In your opinion, should disaggregated BSAD trades for use in the Energy Imbalance Price calculation be time constrained in any way, for example, limiting 'eligible trades' to those made within a specified time period prior to the Settlement Period?</p>	<p>No, all balancing actions should be included, irrespective of the strike time.</p>
2.	<p>Modification Proposal P90 proposes a new mechanism for differentiating between system and energy balancing actions. This new mechanism negates the requirement for the Continuous Acceptance Duration Limit</p>	<p>There seems to be no clear justification for the removal of CADL'd tagging from imbalance price calculation. The actions tagged in this way, through the mechanism initiated by BSC modification P18A, have been clearly identified as system balancing actions. If the intention is to</p>

Q	Question	Response (Please provide rationale where possible)
	(CADL), do you support this approach?	produce 'purer' energy prices, it seems contrary to that intention not to specifically tag out such system balancing actions. However, in order to maintain the same relativity of the volumes entering each price calculation, as appears to be the intention of P90, the actions tagged by the CADL process could be offset by an equivalent volume from the opposite price stack, starting from the top of the stack, i.e. the more extremely priced end.
3.	In your opinion, does Modification Proposal P90 give a better separation of balancing actions (i.e. system vs energy) used in setting the Energy Imbalance Price(s), if so, how?	While P90 suggests a way forward in deriving 'purer' energy prices, note that we see the removal of CADL'd tagging as being contrary to that intention. The inclusion of all balancing actions may help to derive a price which is more cost reflective.
4.	In your opinion, is Modification Proposal P90 and the proposed use of BRL for price setting in the reverse stack and for the calculation of the reverse imbalance volume (RIV) for the main price calculation valuing actions more correctly, please provide rationale for your response?	It is appropriate to use BRL as a reference point for identifying those actions which can be removed from the main stack to derive a main price largely based on energy balancing actions. However, the concept of the BRL is currently considered in relation only to BM actions. If P90, or an alternative based upon it, were approved, there would be a case for reviewing the BRL value because all balancing actions are being included in the calculation process and not just actions taken post Gate Closure.
5.	In your opinion, does Modification Proposal P90 with the reverse price set by BRL in the shorter stack more correctly target the cost of energy balancing actions to those causing the imbalance over the current baseline?	By seeking to tag out system balancing actions, P90 may help to target energy balancing costs more effectively and encourage Parties to balance. We would caveat our view in respect of the removal of CADL'd tagging which ought to be retained.
6.	In your opinion, does Modification Proposal P90 with the reverse price set from BRL in the shorter stack address the issue of asymmetric risk?	It is possible that moving towards prices more firmly based on energy balancing actions and with a greater equivalence of pre and post Gate Closure actions will increase liquidity and competitiveness in the pre Gate

Q	Question	Response (Please provide rationale where possible)
		Closure market. This may help Parties to balance their positions and reduce imbalance costs but it will not necessarily lead to the elimination of asymmetric risk.
7.	In your opinion, does P90 provide benefits in terms of greater transparency and simplicity of the energy imbalance price calculations?	There is a greater degree of transparency associated with the provision of individual BSAD trade data. This may have a potential impact on the liquidity of pre Gate Closure markets with the potential for further benefits. Removing any subjective treatment of pre Gate Closure actions as system or energy balancing may also improve both transparency and simplicity.
8.	<p>In your opinion how does Modification P90 affect any of the following issues (identified during discussion on Modifications P74 and P78):</p> <ul style="list-style-type: none"> <li>• the relative reward for notified and instructed actions and the impact on the Transmission Company's balancing of the system;</li> <li>• the perceived risk of Bid - Offer submission, the level of participation seen in the Balancing Mechanism and impact on system balancing;</li> <li>• changes in Physical Notifications shortly before Gate Closure;</li> <li>• changes in the level of asymmetric risk;</li> <li>• changes to the incentives on parties to balance their individual (contractual) trading positions before Gate Closure;</li> <li>• changes to the incentives for parties as a whole (i.e. in total, even if not balanced on an individual basis) to balance the market before Gate Closure;</li> <li>• the effect on Parties anticipating the 'direction' of the market, and</li> </ul>	See our comments in respect of previous questions. There are potential benefits from adopting P90 but this view has to be caveated on the basis that CADL'd tagging is not part of the P90 solution. There is also a significant concern that P90 is another piecemeal attempt to address issues surrounding imbalance pricing and not a robust holistic solution which would find support from most BSC Parties (see also our comments in response to Qu. 11).

Q	Question	Response (Please provide rationale where possible)
	<p>therefore the Energy Imbalance Price, leading to volume volatility and consequential price instability in the market;</p> <ul style="list-style-type: none"> <li>• affect on liquidity and prices in the forwards and spot markets, the interrelation of forwards and spot markets with Energy Imbalance Prices and also the level of Energy Imbalance Prices themselves;</li> <li>• the risk levels of different categories of party from the implementation of Modification Proposal P90; and</li> <li>• any other issues identified with respect to Modification Proposals P74 and P78</li> </ul>	
9.	Do you believe that Modification Proposal P90 better facilitates achievement of the Applicable BSC Objectives, if so, which one(s) and why?	It is arguable that P90 will help NGC in the efficient operation of the Transmission system. BSC Parties would have more information about NGC's actions and would be able to be more active in the pre Gate Closure market in order to balance their positions, thereby helping NGC in balancing the system. It is also arguable that the increased transparency surrounding NGC 's actions would help to stimulate liquidity in short-term markets, thereby promoting competition in generation and supply.
10.	<p>Do you believe that any (or all) of the potential Alternatives to Modification Proposal P90 better facilitate achievement of the Applicable BSC Objectives than Modification Proposal P90?</p> <p>Option1: Dynamic BRL (Real time);</p> <p>Option 2: Dynamic BRL (Average);</p> <p>Option 3: Reverse Price set from Main Stack;</p> <p>Option 4: Reverse Price set from Main and Reverse Stack; and</p>	<p>We would like to have seen a further potential alternative added to those identified, viz. P90 but with the retention of CADL'd tagging. As we have already indicated, this would ensure that an established mechanism for the removal of system balancing actions would allow the derivation of 'purer' energy prices.</p> <p>There is also no analysis accompanying these alternatives, by which it would be possible to understand their impact when compared to P90 and to the current baseline. This makes it difficult to provide an unequivocal</p>

Q	Question	Response (Please provide rationale where possible)
	<p>Option 5: Reverse Price set from First Bid – Offer Acceptance on Main Stack.</p> <p>Do you have a preference for one of the proposed options?</p> <p>Is there any other potential Alternative that should be considered?</p>	<p>answer in respect of whether P90 or these Alternatives provide a robust solution.</p>
11.	<p>Are there any other issues that you believe should be considered during the assessment of Modification Proposal P90?</p>	<p>We continue to be concerned about the piecemeal approach adopted in respect of pricing modifications. The Panel's agreement to the establishment of a Pricing Issues Standing Group in the near future provides an opportunity for all the relevant issues relating to imbalance pricing to be considered and a holistic solution to be formulated in due course. There is a considerable risk that the piecemeal approach leads to inefficient implementation of solutions and wasteful expenditure by BSC Parties. Our comments on the DLIA for P90 highlight that some of the system changes proposed are likely to reverse recent changes made through Release 2. This underlines our reluctance to unequivocally support any one of the various recent pricing modification solutions as our preferred option.</p>

P90\_ASS\_011 – Edison Mission

Responding on Behalf of (please list all BSC Parties): First Hydro Company, Edison First Power

Q	Question	Response (Please provide rationale where possible)
1.	<p>Noting that BSAD derivation and reporting is beyond the scope of the BSC (and that any changes would be the subject of a separate Transmission Company consultation),</p> <p><b>(a)</b> Modification Proposal P90 proposes reporting and use of disaggregated (individual) BSAD trades in the calculation of Energy Imbalance Prices. Do you support this approach?</p>	<p>Yes, we support this approach. The disaggregation of BSAD trades will greatly improve the transparency of Energy Imbalance Price calculations, which in turn should encourage increased efficiency in the actions of the System Operator. In addition it will allow basic verification of the price calculation by all parties.</p>
	<p><b>(b)</b> In your opinion, should disaggregated BSAD trades for use in the Energy Imbalance Price calculation be time constrained in any way, for example, limiting 'eligible trades' to those made within a specified time period prior to the Settlement Period?</p>	<p>We would be concerned if longer term trades were included as these would have the effect of artificially flattening half-hourly price signals assuming a flat strike price is applied for all relevant half-hours. However, we are also concerned that in time limiting the forward trades that are to be included in cashout prices NGC might be incentivised to increase the amount of trading it undertakes in longer timescales. We would recommend that 'eligible' trades are those agreed day-ahead and within day. (indications from NGC are that the majority of their forward trades fall within these timescales). This should be coupled with monitoring of when NGC's forward trades are struck with a view to modifying the cut off for 'eligible trades' should this be necessary.</p>
2.	<p>Modification Proposal P90 proposes a new mechanism for differentiating between system and energy balancing actions. This new mechanism negates the requirement for the Continuous Acceptance Duration Limit (CADL), do you support this approach?</p>	<p>Yes - CADL is an arbitrary parameter that does not appropriately distinguish between energy and system trades. All trades that contribute to net energy imbalance should to be factored into the main price. Any system trades will be tagged out via the prevailing BRL.</p>

Q	Question	Response (Please provide rationale where possible)
3.	In your opinion, does Modification Proposal P90 give a better separation of balancing actions (i.e. system vs energy) used in setting the Energy Imbalance Price(s), if so, how?	As above - P90 provides for a much simpler, consistent and less arbitrary separation of energy and system balancing actions.
4.	In your opinion, is Modification Proposal P90 and the proposed use of BRL for price setting in the reverse stack and for the calculation of the reverse imbalance volume (RIV) for the main price calculation valuing actions more correctly, please provide rationale for your response?	<p>Prices for the reverse stack should be derived from actions taken to achieve half hourly energy balance on the reverse stack rather than the arbitrary use of a reference price taken from elsewhere. The use of the BRL values these action appropriately.</p> <p>The Remaining Imbalance Volume (RIV) provides a simple and transparent measure of the actions taken to achieve energy imbalance on the main stack.</p>
5.	In your opinion, does Modification Proposal P90 with the reverse price set by BRL in the shorter stack more correctly target the cost of energy balancing actions to those causing the imbalance over the current baseline?	The combined application of BRL and the Remaining Imbalance volume, results in prices that more accurately reflect the cost of half-hourly energy balancing over the current baseline. Parties that cause imbalance will not be exposed to the impact of system constraints (through the RIV) but prices will properly reflect the cost of all net balancing actions on those parties.
6.	In your opinion, does Modification Proposal P90 with the reverse price set from BRL in the shorter stack address the issue of asymmetric risk?	The bid-offer price curve will not change although from the analysis provided by ELEXON the cost of being out of balance will generally reduce. As with P74 and P78, the risk will reduce but it will not go away.
7.	In your opinion, does P90 provide benefits in terms of greater transparency and simplicity of the energy imbalance price calculations?	These benefits are a key feature of P90 which are to be welcomed.
8.	<p>In your opinion how does Modification P90 affect any of the following issues (identified during discussion on Modifications P74 and P78):</p> <ul style="list-style-type: none"> <li>• the relative reward for notified and instructed actions and the</li> </ul>	<b>FPN accuracy</b> - Unlike P74 and to a lesser extent P78, P90 will not incentivise parties to change FPNs shortly before gate closure to create an imbalance in the opposite direction to the market nor will it reward

Q	Question	Response (Please provide rationale where possible)
	<p>impact on the Transmission Company's balancing of the system;</p> <ul style="list-style-type: none"> <li>• the perceived risk of Bid - Offer submission, the level of participation seen in the Balancing Mechanism and impact on system balancing;</li> <li>• changes in Physical Notifications shortly before Gate Closure;</li> <li>• changes in the level of asymmetric risk;</li> <li>• changes to the incentives on parties to balance their individual (contractual) trading positions before Gate Closure;</li> <li>• changes to the incentives for parties as a whole (i.e. in total, even if not balanced on an individual basis) to balance the market before Gate Closure;</li> <li>• the effect on Parties anticipating the 'direction' of the market, and therefore the Energy Imbalance Price, leading to volume volatility and consequential price instability in the market;</li> <li>• affect on liquidity and prices in the forwards and spot markets, the interrelation of forwards and spot markets with Energy Imbalance Prices and also the level of Energy Imbalance Prices themselves;</li> <li>• the risk levels of different categories of party from the implementation of Modification Proposal P90; and</li> <li>• any other issues identified with respect to Modification Proposals P74 and P78</li> </ul>	<p>unnotified action.</p> <p><b>Improved transparency</b> - Publication of NGC's forward trades will incentivise the Transmission Company's towards even better balancing of the system.</p>
9.	Do you believe that Modification Proposal P90 better facilitates achievement of the Applicable BSC Objectives, if so, which one(s) and	<p>The modification better facilitates 3 of the 4 Applicable BSC Objectives.</p> <p>In simplifying the calculation of cashout prices and applying the</p>



Q	Question	Response (Please provide rationale where possible)
	<p>why?</p>	<p>treatment of 'system and energy trades' in a consistent manner, this modification proposal will promote efficiency in the implementation and administration of the balancing and settlement arrangements. Resulting prices and their constituent parts will be transparent, auditable and verifiable by all market participants. We regard these as important criteria for the setting of cashout prices.</p> <p>The modification will improve the transparency of trade reporting which will encourage the Transmission Company to operate the Transmission System in a more efficient, economic and co-ordinated manner.</p> <p>The modification will allow cashout prices to better reflect the costs of energy balancing . This will improve the economic signals to operate and invest in generation capacity. This will promote competition in the generation, sale and purchase of electricity whilst removing the current distortion resulting from the inclusion of constraints in cashout prices.</p>
<p><b>10.</b></p>	<p>Do you believe that any (or all) of the potential Alternatives to Modification Proposal P90 better facilitate achievement of the Applicable BSC Objectives than Modification Proposal P90?</p> <p>Option1: Dynamic BRL (Real time);</p> <p>Option 2: Dynamic BRL (Average);</p> <p>Option 3: Reverse Price set from Main Stack;</p> <p>Option 4: Reverse Price set from Main and Reverse Stack; and</p> <p>Option 5: Reverse Price set from First Bid – Offer Acceptance on Main Stack.</p> <p>Do you have a preference for one of the proposed options?</p>	<p>No - we do not believe that any of these alternatives improve P90. Option 4 is yet another step along the arbitrary road. Options 3 and 5 would lead to reduced incentives to balance as both the main and reverse prices would be based on bids when the system is long (which it will predominantly be).</p> <p>Options 1 and 2 have some merit as a refinement to the BRL value, however these changes are likely to be difficult to implement on the part of the System Operator and may delay P90 implementation. These options are not necessarily tied to P90, and could therefore be dealt with through a change to the definition of the BRL.</p>

Q	Question	Response (Please provide rationale where possible)
	Is there any other potential Alternative that should be considered?	
11.	Are there any other issues that you believe should be considered during the assessment of Modification Proposal P90?	

**P90\_ASS\_012 – Innogy**

**Responding on Behalf of (please list all BSC Parties):** Innogy plc, npower Limited, Innogy Cogen Trading Limited, Innogy Cogen Limited, npower Direct Limited, npower Northern Limited, npower Yorkshire Limited

Q	Question	Response (Please provide rationale where possible)
1.	<p>Noting that BSAD derivation and reporting is beyond the scope of the BSC (and that any changes would be the subject of a separate Transmission Company consultation),</p> <p><b>(a)</b> Modification Proposal P90 proposes reporting and use of disaggregated (individual) BSAD trades in the calculation of Energy Imbalance Prices. Do you support this approach?</p>	<p>Yes we support the use of disaggregated BSAD trades for the purpose of setting prices. This should provide consistency of treatment between the Balancing Mechanism and BSAD, provided option fees are appropriately treated. Greater disclosure of information on the nature of trades undertaken by the Transmission Company will increase transparency of these actions and facilitate the separation of system balancing actions from energy balancing actions.</p>
	<p><b>(b)</b> In your opinion, should disaggregated BSAD trades for use in the Energy Imbalance Price calculation be time constrained in any way, for example, limiting 'eligible trades' to those made within a specified time period prior to the Settlement Period?</p>	<p>There should be no time constraint on disaggregated BSAD trades reported by the Transmission Company. For the purpose of ensuring cost-reflectivity and transparency, all trades relevant to the particular settlement period should be included in the price setting process. Furthermore, any time constraint would be arbitrary and subjective. It would also introduce an element of bureaucratic complexity, presumably requiring the Panel to adjudicate on the relevant time period.</p>
2.	<p>Modification Proposal P90 proposes a new mechanism for differentiating between system and energy balancing actions. This new mechanism negates the requirement for the Continuous Acceptance Duration Limit (CADL), do you support this approach?</p>	<p>Although there is not a defining distinction between energy and system balancing actions, we are of the view that short term deliveries, say less than 5 mins, should not contribute towards system prices. Thus we think that the concept of CADL should be retained for load following actions, but that the duration should be reduced to 5mins rather than 15mins as imposed by P18A.</p>
3.	<p>In your opinion, does Modification Proposal P90 give a better separation</p>	<p>There is only a limited distinction to be made between system and</p>

Q	Question	Response (Please provide rationale where possible)
	of balancing actions (i.e. system vs energy) used in setting the Energy Imbalance Price(s), if so, how?	energy balancing actions since all actions impact on energy, be they BSAD trades or BOAs. The issue is which actions should contribute towards an “economically correct” price. P90 would appear to have some positive attributes in this respect, principally the inclusion of all NGC trades in the price setting stacks. However, without the CADL mechanism we are not persuaded that the P90 methodology appropriately reflects the underlying energy balancing resource cost.
4.	In your opinion, is Modification Proposal P90 and the proposed use of BRL for price setting in the reverse stack and for the calculation of the reverse imbalance volume (RIV) for the main price calculation valuing actions more correctly, if so, why and if not, why not?	The P90 methodology remains based on the use of a notional (and arbitrary) balancing reserve level (BRL). The P90 price setting methodology depends on the assumption that the BRL mechanism correctly identifies energy balancing trades in the reverse stack. However, if no reverse trades have actually occurred, which will often be the case due to the endemic length of the system, then by definition the methodology is not cost reflective and not therefore valuing actions more correctly.
5.	In your opinion, does Modification Proposal P90 with the reverse price set by BRL in the shorter stack more correctly target the cost of energy balancing actions to those causing the imbalance over the current baseline?	It is not clear that P90 alters the targeting of the cost of energy balancing.
6.	In your opinion, does Modification Proposal P90 with the reverse price set from BRL in the shorter stack address the issue of asymmetric risk?	Since P90 is still a dual cashout system it would not necessarily change the current incentives on parties to go long or fundamentally address the issue of asymmetric risk.
7.	In your opinion, does P90 provide benefits in terms of greater transparency and simplicity of the energy imbalance price calculations?	Disaggregated BSAD trades for the purpose of setting prices will improve disclosure of information on the nature of trades undertaken by the Transmission Company and increase transparency of these actions. This

Q	Question	Response (Please provide rationale where possible)
		will facilitate the separation of system balancing actions from energy balancing actions.
8.	<p>In your opinion how does Modification P90 affect any of the following issues identified during discussion on Modifications P74 and P78 including (but not limited to) the following:</p> <ul style="list-style-type: none"> <li>• the relative reward for notified and instructed actions and the impact on the Transmission Company's balancing of the system;</li> <li>• the perceived risk of Bid - Offer submission, the level of participation seen in the Balancing Mechanism and impact on system balancing;</li> <li>• changes in Physical Notifications shortly before Gate Closure;</li> <li>• asymmetric risk;</li> <li>• incentives on parties to balance their individual (contractual) trading positions before Gate Closure;</li> <li>• incentives for parties as a whole (i.e. in total, even if not balanced on an individual basis) to balance the market before Gate Closure;</li> <li>• the effect on Parties anticipating the 'direction' of the market, and therefore the Energy Imbalance Price, leading to volume volatility and consequential price instability in the market;</li> <li>• liquidity and prices in the forwards and spot markets, the interrelation of forwards and spot markets with Energy Imbalance Prices and also the level of Energy Imbalance Prices themselves;</li> <li>• the risk levels of different categories of party from the</li> </ul>	<p>P90 represents an evolution of the current price setting methodology rather than a replacement methodology. Therefore, the incentive properties of the current methodology do not change significantly. Consequently, P90 should not impact on NGC actions with regard to balancing the system, change the risk of bid or offer submission, or change incentives in relation to PN submission before gate closure.</p>

Q	Question	Response (Please provide rationale where possible)
	implementation of Modification Proposal P90; and <ul style="list-style-type: none"> <li>• any other issues identified with respect to Modification Proposals P74 and P78</li> </ul>	
9.	Do you believe that Modification Proposal P90 better facilitates achievement of the Applicable BSC Objectives, if so, which one(s) and why?	P90 may improve transparency in the price setting methodology and may therefore better facilitate Objective (d) in relation to “promoting efficiency in the implementation and administration of the balancing and settlement arrangements”.
10.	Do you believe that an Alternative Modification Proposal better facilitates achievement of the Applicable BSC Objectives than Modification Proposal P90, if so, what is it?  Do you have a preference for one of the proposed options?	The variety of proposed options indicate that there is no obvious incremental improvement of the current pricing methodology and highlight the need for a fundamental review of all pricing issues.
11.	Are there any other issues that you believe should be considered during the assessment of Modification Proposal P90?	No

## P90\_ASS\_013 – Scottish and Southern

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

In relation to the eleven questions contained in the Assessment Consultation Paper, contained within your note of 16th August 2002 concerning Modification Proposal P90, we have the following comments to make:-

1 Noting that BSAD derivation and reporting is beyond the scope of the BSC (and that any changes would be the subject of a separate Transmission Company consultation),

(a) Modification Proposal P90 proposes reporting and use of disaggregated (individual) BSAD trades in the calculation of Energy Imbalance Prices. Do you support this approach?

Whilst we welcome the move towards transparency and simplicity shown in this Modification Proposal P90, we feel there are a number of issues outstanding such as the inclusion of CADL and therefore, on balance, we do not support this Modification Proposal

(b) In your opinion, should disaggregated BSAD trades for use in the Energy Imbalance Price calculation be time constrained in any way, for example, limiting eligible trades to those made within a specified time period prior to the Settlement Period?

We find it difficult to value the effects of this suggestion.

2 Modification Proposal P90 proposes a new mechanism for differentiating between system and energy balancing actions. This new mechanism negates the requirement for the Continuous Acceptance Duration Limit (CADL), do you support this approach?

Modification Proposal P90 does not differentiate between System and Energy balancing actions. It seems to run counter to the aims of P18A. We believe that CADL and System Bid / Offer Tagging should be applied to avoid the price spikes that P18A was designed to avert.

3 In your opinion, does Modification Proposal P90 give a better separation of balancing actions (i.e. system vs energy) used in setting the Energy Imbalance Price(s), if so, how?

No, Modification Proposal P90 does not appear to give better separation of balancing actions.

4 In your opinion, is Modification Proposal P90 and the proposed use of BRL for price setting in the reverse stack and for the calculation of the reverse imbalance volume (RIV) for the main price calculation valuing actions more correctly, please provide rationale for your response?

No, cashouts are more likely to be influenced by inappropriate system constraint prices.

5 In your opinion, does Modification Proposal P90 with the reverse price set by BRL in the shorter stack more correctly target the cost of energy balancing actions to those causing the imbalance over the current baseline?



No, see answer to (4) above.

6 In your opinion, does Modification Proposal P90 with the reverse price set from BRL in the shorter stack address the issue of asymmetric risk?

No, see answer to (4) above.

7 In your opinion, does P90 provide benefits in terms of greater transparency and simplicity of the energy imbalance price calculations?

Whilst we agree that P90 does provide greater transparency it also has the potential to generate greater volatility in cashout prices.

8 In your opinion how does Modification P90 affect any of the following issues (identified during discussion on Modifications P74 and P78):

i) the relative reward for notified and instructed actions and the impact on the Transmission Company's balancing of the system;

Encourages independent action due to volatile cashout prices.

ii) the perceived risk of Bid - Offer submission, the level of participation seen in the Balancing Mechanism and impact on system balancing;

Encourages planners to submit wider spreads to manage risks / exploit opportunity.

iii) changes in Physical Notifications shortly before Gate Closure;

Higher volatility will encourage players to go long.

iv) changes in the level of asymmetric risk;

Increases risk due to the inclusion of System constraint prices.

v) changes to the incentives on parties to balance their individual (contractual) trading positions before Gate Closure;

Encourages going long to manage risk.

vi) changes to the incentives for parties as a whole (i.e. in total, even if not balanced on an individual basis) to balance the market before Gate Closure;

Price spikes will require parties to adopt balance to long strategies.

vii) the effect on Parties anticipating the 'direction' of the market, and therefore the Energy Imbalance Price, leading to volume volatility and consequential price instability in the market;

We agree, it will have this effect.

viii) affect on liquidity and prices in the forwards and spot markets, the interrelation of forwards and spot markets with Energy Imbalance Prices and also the level of Energy Imbalance Prices themselves;

Reduces liquidity as players hold on to length.

ix) the risk levels of different categories of party from the implementation of Modification Proposal P90; and

Traders will benefit from volatility at the expense of customers.

x) any other issues identified with respect to Modification Proposals P74 and P78

Modification Proposal P90 appears to be a backward step given the efforts to date to stabilize cashout prices, such as with P18A.

9 Do you believe that Modification Proposal P90 better facilitates achievement of the Applicable BSC Objectives, if so, which one(s) and why?

No, for the reasons outlined in the answers to the questions above.

10 Do you believe that any (or all) of the potential Alternatives to Modification Proposal P90 better facilitate achievement of the Applicable BSC Objectives than Modification Proposal P90?

Option1: Dynamic BRL (Real time);

Option 2: Dynamic BRL (Average);

Option 3: Reverse Price set from Main Stack;

Option 4: Reverse Price set from Main and Reverse Stack; and

Option 5: Reverse Price set from First Bid - Offer Acceptance on Main Stack.

Do you have a preference for one of the proposed options?

No, for the reasons outlined in the answers to the questions above.

Is there any other potential Alternative that should be considered?

Including CADL and System Bid / Offer Tagging .

11 Are there any other issues that you believe should be considered during the assessment of Modification Proposal P90?

Yes, seeking to achieve price transparency and simplicity without increasing price spikes and price volatility.

Regards

Garth Graham  
Scottish & Southern Energy plc

## **P90\_ASS\_014 – Immingham CHP**

### **P90 Assessment Consultation Comments**

Thank you for the opportunity for commenting on the P90 assessment consultation.

The current imbalance price setting rules fail to deliver the intended outcomes. In particular, they load energy imbalance charges, including some associated with system balance, on out of balance parties and unnecessarily increase market risk. The methodology is therefore punitive and penal to parties in imbalance.

As a general remark, Conoco considers that P90 better meets the applicable objectives than the existing imbalance pricing rules. The primary reason for this judgement relates both to efficiency as it provides a more cost reflective approach (or rather a less “uncost-reflective” approach). However, we also consider that:

- P90 is not superior to other modification proposals currently in play, most notably P78A, which is presently before the Authority;
- at least two of the alternatives set out in the P90 consultation paper warrant further consideration, being option 1 and option 5, as they would appear on the limited information available to improve on the original proposal as submitted by First Hydro because they tackle rigidities in the current formulation and application of BRL; and
- P90 raises a very valid issue with regard to the transparency of NGC's forward energy purchases, which should be addressed irrespective of the outcome of P90.

Please let me know if you would like further clarification on these comments.

**Maureen McCaffrey**

**Modification Proposal P90 – Response by Conoco/Immingham CHP**

**Responding on Behalf of (please list all BSC Parties):**

Q	Question	Response (Please provide rationale where possible)
1.	<p>Noting that BSAD derivation and reporting is beyond the scope of the BSC (and that any changes would be the subject of a separate Transmission Company consultation),</p> <p><b>(a)</b> Modification Proposal P90 proposes reporting and use of disaggregated (individual) BSAD trades in the calculation of Energy Imbalance Prices. Do you support this approach?</p>	<p>Yes, disaggregated trades should be included in the stack. Irrespective of the pricing mechanism, there is insufficient transparency in NGC's forward energy trades at present, and individual trades should be reported.</p>
	<p><b>(b)</b> In your opinion, should disaggregated BSAD trades for use in the Energy Imbalance Price calculation be time constrained in any way, for example, limiting 'eligible trades' to those made within a specified time period prior to the Settlement Period?</p>	<p>No. That said, we can see no reason why in a properly functioning market why NGC should be purchasing energy significantly ahead of gate closure.</p>
2.	<p>Modification Proposal P90 proposes a new mechanism for differentiating between system and energy balancing actions. This new mechanism negates the requirement for the Continuous Acceptance Duration Limit (CADL), do you support this approach?</p>	<p>Yes. It replaces an arbitrary but value based and unauditible methodology with a general rule that can be applied mechanically.</p>
3.	<p>In your opinion, does Modification Proposal P90 give a better separation of balancing actions (i.e. system vs energy) used in setting the Energy Imbalance Price(s), if so, how?</p>	<p>Yes. As we have noted, it replaces a value based and unauditible methodology with a general rule. The general rule includes a reasonable proxy for the level of average regulating reserve required on the system for energy purposes.</p>
4.	<p>In your opinion, is Modification Proposal P90 and the proposed use of BRL for price setting in the reverse stack and for the calculation of the reverse imbalance volume (RIV) for the main price calculation valuing</p>	<p>The general rule includes a reasonable proxy for the level of <b>average</b> regulating reserve required on the system for energy purposes, and is therefore to be preferred to the current pricing rules. Generally speaking, however, BRL is a static measure for a dynamic concept, and</p>

Q	Question	Response (Please provide rationale where possible)
	actions more correctly, please provide rationale for your response?	the current rules should be reconsidered.
5.	In your opinion, does Modification Proposal P90 with the reverse price set by BRL in the shorter stack more correctly target the cost of energy balancing actions to those causing the imbalance over the current baseline?	Yes. The majority of energy balancing actions will be reflected in the cashout price and constraints will, to a large extent, be excluded.
6.	In your opinion, does Modification Proposal P90 with the reverse price set from BRL in the shorter stack address the issue of asymmetric risk?	Yes. Cash out prices should be more cost reflective under P90 compared with the present arrangements. Therefore we would expect more rational behaviour to dampen down risk, although we believe there will always be some form of asymmetry because of the inherently different characteristics between generation and demand.
7.	In your opinion, does P90 provide benefits in terms of greater transparency and simplicity of the energy imbalance price calculations?	Yes. We see this as the major strength of P90 relative to the current pricing methodology. Elimination of CADL processes also increase simplicity.
8.	<p>In your opinion how does Modification P90 affect any of the following issues (identified during discussion on Modifications P74 and P78):</p> <ul style="list-style-type: none"> <li>• the relative reward for notified and instructed actions and the impact on the Transmission Company's balancing of the system;</li> <li>• the perceived risk of Bid - Offer submission, the level of participation seen in the Balancing Mechanism and impact on system balancing;</li> <li>• changes in Physical Notifications shortly before Gate Closure;</li> <li>• changes in the level of asymmetric risk;</li> <li>• changes to the incentives on parties to balance their individual</li> </ul>	<p>Generally speaking we do not believe the modification would significant affect participant incentives and current levels of risk. There are evident changes to market length but graph 4 does not indicate in what way. We suspect that, because the spread between prices would still be sustained at about broadly current levels, there would remain strong incentives to contract long. One consequence of this effect (if correct) is that there would <b>not</b> be a significant increase in forward trading.</p>

Q	Question	Response (Please provide rationale where possible)
	<p>(contractual) trading positions before Gate Closure;</p> <ul style="list-style-type: none"> <li>• changes to the incentives for parties as a whole (i.e. in total, even if not balanced on an individual basis) to balance the market before Gate Closure;</li> <li>• the effect on Parties anticipating the 'direction' of the market, and therefore the Energy Imbalance Price, leading to volume volatility and consequential price instability in the market;</li> <li>• affect on liquidity and prices in the forwards and spot markets, the interrelation of forwards and spot markets with Energy Imbalance Prices and also the level of Energy Imbalance Prices themselves;</li> <li>• the risk levels of different categories of party from the implementation of Modification Proposal P90; and</li> <li>• any other issues identified with respect to Modification Proposals P74 and P78</li> </ul>	
9.	Do you believe that Modification Proposal P90 better facilitates achievement of the Applicable BSC Objectives, if so, which one(s) and why?	<p>Yes. We believe the pricing mechanism to be more efficient in that some of the arbitrariness in the current pricing process would be eliminated.</p> <p>There would also be a beneficial impact on competitiveness of the market because of the enhanced transparency in NGC's forward energy purchasing actions, though we acknowledge that this could be achieved through changes to the disclosure requirements on NGC.</p>
10.	Do you believe that any (or all) of the potential Alternatives to Modification Proposal P90 better facilitate achievement of the Applicable	There is insufficient modelling to each a view on these issues. Each would need to be thoroughly evaluated against P90 original to reach a



Q	Question	Response (Please provide rationale where possible)
	<p>BSC Objectives than Modification Proposal P90?</p> <p>Option1: Dynamic BRL (Real time);</p> <p>Option 2: Dynamic BRL (Average);</p> <p>Option 3: Reverse Price set from Main Stack;</p> <p>Option 4: Reverse Price set from Main and Reverse Stack; and</p> <p>Option 5: Reverse Price set from First Bid – Offer Acceptance on Main Stack.</p> <p>Do you have a preference for one of the proposed options?</p> <p>Is there any other potential Alternative that should be considered?</p>	<p>view on the likely impacts.</p> <p>Intuitively, we feel that the “right” solution would entail a more dynamic assessment of BRL given that regulating reserve requirements vary on a half-hour by half-hour basis. Option 90(1) would seem to be the best enhancement, though considerations of price volatility might suggest a weighted average approach as under option 90(2) might have greater merit. In the event that a realistic approximation of regulating reserves can not be achieved prior to Gate Closure, we would suggest option 90(5) would have greatest merit.</p>
11.	<p>Are there any other issues that you believe should be considered during the assessment of Modification Proposal P90?</p>	<p>We are concerned that other significant pricing proposals are being considered at the moment (P74A, P78A) and that there does not seem to be a facility under current governance to compare and contrast these pricing options in the round.</p>

**P90\_ASS\_015 – LE Group**

Liz Anderson, General Manager, Energy Strategy and Regulation, **Responding on Behalf of (please list all BSC Parties):** EPN Distribution Ltd, London Electricity plc, London Electricity Group plc, Jade Power Generation Ltd, London Power Networks plc, Sutton Bridge Power, West Burton Ltd

Q	Question	Response (Please provide rationale where possible)
1.	<p>Noting that BSAD derivation and reporting is beyond the scope of the BSC (and that any changes would be the subject of a separate Transmission Company consultation),</p> <p><b>(a)</b> Modification Proposal P90 proposes reporting and use of disaggregated (individual) BSAD trades in the calculation of Energy Imbalance Prices. Do you support this approach?</p>	<p>We support this approach for two reasons:</p> <ul style="list-style-type: none"> <li>• it will increase transparency of actions taken by NGC to balance the system</li> <li>• the inclusion of individual BSAD trades will allow the price stack to be constructed with all trades in the correct price order</li> </ul>
	<p><b>(b)</b> In your opinion, should disaggregated BSAD trades for use in the Energy Imbalance Price calculation be time constrained in any way, for example, limiting 'eligible trades' to those made within a specified time period prior to the Settlement Period?</p>	<p>All trades should be included irrespective of when they were made. The inclusion of any cut-off point beyond which trades would be excluded would necessarily be arbitrary. Also, NGC should only be making these trades to balance the system (i.e. not for speculative trading purposes) and therefore all trades are relevant to the imbalance cash-out price calculations.</p>
2.	<p>Modification Proposal P90 proposes a new mechanism for differentiating between system and energy balancing actions. This new mechanism negates the requirement for the Continuous Acceptance Duration Limit (CADL), do you support this approach?</p>	<p>We do not support the removal of the CADL which has proved a highly effective mechanism in preventing system balancing actions from setting prices. Removing CADL will mean that system balancing actions will set prices even when BRL = 5MWh if the system action is the only accepted offer – a not infrequent scenario when the market is long. Also, if CADL is to be removed, why not leave in acceptances currently removed by the de-minimis rule when calculating the Remaining Imbalance Volume. The distinction made in P90 between CADL and de-minimis seems arbitrary and unjustifiable.</p>

Q	Question	Response (Please provide rationale where possible)
3.	In your opinion, does Modification Proposal P90 give a better separation of balancing actions (i.e. system vs energy) used in setting the Energy Imbalance Price(s), if so, how?	The requirement specification states that a key feature of P90 is that it assumes that some balancing actions taken in the opposite direction to the overall system imbalance were taken for energy balancing purposes (by retaining BRL). This will not always be true and therefore will not improve the separation of system and energy balancing actions relative to the current baseline and would provide a worse split than that proposed under P78A. This effect will be exacerbated by the removal of CADL which will cause the pollution of prices with highly priced system balancing actions where actions opposite to the direction of system imbalance are small in number / volume / duration. Therefore P90 will not give a better separation of system and energy balancing actions and will not better target costs or value uninstructed actions. We support the objective of better separating energy and system balancing actions but feel that this mod is not effective in improving the split.
4.	In your opinion, is Modification Proposal P90 and the proposed use of BRL for price setting in the reverse stack and for the calculation of the reverse imbalance volume (RIV) for the main price calculation valuing actions more correctly, please provide rationale for your response?	See answer to Qu.3.
5.	In your opinion, does Modification Proposal P90 with the reverse price set by BRL in the shorter stack more correctly target the cost of energy balancing actions to those causing the imbalance over the current baseline?	See answer to Qu.3.
6.	In your opinion, does Modification Proposal P90 with the reverse price set from BRL in the shorter stack address the issue of asymmetric risk?	No because the removal of CADL could lead to an increase in volatility in the reverse price, especially SBP in a long market.
7.	In your opinion, does P90 provide benefits in terms of greater	P90 will simplify the cashout price calculation slightly and is therefore

Q	Question	Response (Please provide rationale where possible)
	transparency and simplicity of the energy imbalance price calculations?	slightly more transparent, however it still retains some complexities such as de-minimis acceptance removal.
8.	<p>In your opinion how does Modification P90 affect any of the following issues (identified during discussion on Modifications P74 and P78):</p> <ul style="list-style-type: none"> <li>• the relative reward for notified and instructed actions and the impact on the Transmission Company's balancing of the system;</li> <li>• the perceived risk of Bid - Offer submission, the level of participation seen in the Balancing Mechanism and impact on system balancing;</li> <li>• changes in Physical Notifications shortly before Gate Closure</li> <li>• We can see no reason why the incentive to change PNs just before gate closure should alter.</li> <li>• changes in the level of asymmetric risk;</li> <li>• changes to the incentives on parties to balance their individual (contractual) trading positions before Gate Closure;</li> <li>• changes to the incentives for parties as a whole (i.e. in total, even if not balanced on an individual basis) to balance the market before Gate Closure;</li> <li>• the effect on Parties anticipating the 'direction' of the market, and therefore the Energy Imbalance Price, leading to volume volatility and consequential price instability in the market;</li> <li>• affect on liquidity and prices in the forwards and spot markets, the interrelation of forwards and spot markets with Energy Imbalance</li> </ul>	<p><b>the relative reward for notified and instructed actions and the impact on the Transmission Company's balancing of the system</b></p> <p>The reward for "instructed" actions is changed not one jot – the action itself is still payable at the bid or offer price (except in the event of non-delivery), and the acceptance is taken account of in the calculation of energy imbalance cashout payments both with current cashout calculations and with P90, and so (except in the event of non-delivery) the successful deliverer of notified actions is neutral to P90.</p> <p>In terms of account imbalances, whether from "instructed" or "notified" actions, P90 would increase the risk of pollution of the existing "shorter stack"-derived cashout price with system balancing actions.</p> <p><b>the perceived risk of Bid - Offer submission, the level of participation seen in the Balancing Mechanism and impact on system balancing</b></p> <p>P90 does not change the risks associated with Bid - Offer submission. We have no particular reason to believe it would change the level of participation seen in the Balancing Mechanism, for which payment is made at bid or offer price, not at imbalance cashout price. It should neither impede nor assist system balancing.</p> <p><b>changes in Physical Notifications shortly before Gate Closure</b></p> <p>We can see no reason why the incentive to change PNs just before gate closure should alter. We note that the existing, very strong, licence</p>

Q	Question	Response (Please provide rationale where possible)
	<p>Prices and also the level of Energy Imbalance Prices themselves;</p> <ul style="list-style-type: none"> <li>• the risk levels of different categories of party from the implementation of Modification Proposal P90; and</li> <li>• any other issues identified with respect to Modification Proposals P74 and P78</li> </ul>	<p>requirement, via the Grid Code, to submit accurate FPNs will remain in place and that deliberately submitting false IPNs followed by accurate FPNs would constitute market abuse.</p> <p><b>Changes in the level of asymmetric risk</b></p> <p>See answer to Qu.6.</p> <p><b>Changes to the incentives on parties to balance their individual (contractual) trading positions before Gate Closure</b></p> <p>Incentives to balance may be affected if the removal of CADL increases the volatility of SBP. This could lead to participants over-contracting to avoid cashout imbalance penalties.</p> <p><b>Changes to the incentives for parties as a whole (i.e. in total, even if not balanced on an individual basis) to balance the market before Gate Closure</b></p> <p>Incentives to balance may be affected if the removal of CADL increases the volatility of SBP. This could lead to participants over-contracting to avoid cashout imbalance penalties.</p> <p><b>The effect on Parties anticipating the 'direction' of the market, and therefore the Energy Imbalance Price, leading to volume volatility and consequential price instability in the market</b></p> <p>Incentives to anticipate the market direction will not be changed greatly relative to current practice.</p> <p><b>affect on liquidity and prices in the forwards and spot markets, the interrelation of forwards and spot markets with Energy</b></p>

Q	Question	Response (Please provide rationale where possible)
		<p><b>Imbalance Prices and also the level of Energy Imbalance Prices themselves</b></p> <p>Not possible to say with respect to forward and spot markets. With regard to Energy Imbalance prices themselves we note that the results of the analysis presented with this consultation show that the removal of CADL may increase the volatility of cash-out prices through the inclusion of short duration system balancing action price spikes. The presence of such price spikes forces suppliers to over-contract which reduces the volume of offers accepted which increases the likelihood that the reverse price stack is dominated by system balancing actions – a vicious circle re-instated through P90.</p> <p><b>the risk levels of different categories of party from the implementation of Modification Proposal P90</b></p> <p>Not possible to say</p> <p><b>any other issues identified with respect to Modification Proposals P74 and P78</b></p> <p>None</p>
9.	Do you believe that Modification Proposal P90 better facilitates achievement of the Applicable BSC Objectives, if so, which one(s) and why?	No, as the reduced separation of system and energy balancing actions does not better target costs to those causing the imbalance and we believe that cost-reflectivity is of great importance.
10.	Do you believe that any (or all) of the potential Alternatives to Modification Proposal P90 better facilitate achievement of the Applicable BSC Objectives than Modification Proposal P90?	<p><b>Option1: Dynamic BRL (Real time)</b></p> <p>This option will increase complexity as participants will have to forecast BRL to try and predict cash-out imbalance prices. It has some merits as BRL will more accurately reflect reserve purchased by NGC. Two</p>

Q	Question	Response (Please provide rationale where possible)
	<p>Option1: Dynamic BRL (Real time);</p> <p>Option 2: Dynamic BRL (Average);</p> <p>Option 3: Reverse Price set from Main Stack;</p> <p>Option 4: Reverse Price set from Main and Reverse Stack; and</p> <p>Option 5: Reverse Price set from First Bid – Offer Acceptance on Main Stack.</p> <p>Do you have a preference for one of the proposed options?</p> <p>Is there any other potential Alternative that should be considered?</p>	<p>concerns we have are that BRL could change post settlement period (we would hope that NGC know they are purchasing reserve when they purchase it!) and also whether SO-SO actions used on an “emergency basis” to create reserve would be included in BRL. Although this mod is better than P90 we do not feel it is better than the current baseline or P78A as the risk of the pollution of reverse prices with system balancing actions will be increased through the removal of CADL.</p> <p><b>Option 2: Dynamic BRL (Average)</b></p> <p>BRL will be based on BRL in previous settlement periods which have no relationship to what is happening in the current period. As such this alternative is not better than the current BRL methodology. We do not feel it is better than the current baseline or P78A as the risk of pollution of reverse prices with system balancing actions will be increased through the removal of CADL.</p> <p><b>Option 3: Reverse Price set from Main Stack</b></p> <p>Using BRL to set the reverse price from the main stack is less logically robust than using the first price (as per P78A and option 5 in the P90 consultation) which is the closest approximation available for an energy balancing action taken in the opposite direction. BRL could potentially be very large (it just happens to be 5MWh at present) in which case e.g. 180MWh of offers could be used to set SSP in a short market. This is intuitively wrong. We do not feel this option is better than the current baseline or P78A.</p> <p><b>Option 4: Reverse Price set from Main and Reverse Stack</b></p> <p>As per option 3 except the effect is complicated as the reverse price could include system actions as well as a large BRL volume from the</p>

Q	Question	Response (Please provide rationale where possible)
		<p>main stack. We do not feel this option is better than the current baseline or P78A.</p> <p><b>Option 5: Reverse Price set from First Bid – Offer Acceptance on Main Stack</b></p> <p>Option 5 is very close in structure to P78A with the exception that main stack acceptances of less than 15 minute duration may be included in the main and reverse price. Under the conditions imposed by option 5, these acceptances must have been included for energy balancing. We therefore believe that option 5 may better facilitate the BSC objectives than the current baseline and P78A as it better targets costs to those whose imbalance is causing the system imbalance through the better separation of system and energy balancing actions in the main and reverse prices. However, we believe that there is still scope for better improving the system-energy split and improving cost-reflectivity.</p>
11.	Are there any other issues that you believe should be considered during the assessment of Modification Proposal P90?	No