

Review Group 0291 Minutes
Monday 21 June 2010
Ofgem, 9 Millbank, London

Attendees		
Tim Davis (Chair)	(TD)	Joint Office
Lorna Dupont (Secretary)	(LD)	Joint Office
Alex Knight	(AK)	Centrica
Andrew Pearce	(AP)	BP Gas
Ben Woodside	(BW)	Ofgem
Charles Ruffell	(CR)	RWE
Chris Wright	(CW)	Centrica
Darren Lond	(DL)	National Grid NTS
Giuseppina Squicciani	(GS)	Ofgem
Jamie Black	(JaB)	Ofgem
Jeff Chandler	(JC)	SSE
Julie Cox	(JCx)	AEP
Nick Reeves	(NR)	National Grid NTS
Rekha Theaker	(RT)	WatersWye
Richard Fairholme	(RF)	E.ON UK
Richard Jones	(RJ)	xoserve
Shelley Rouse	(SR)	Statoil
Stefan Leedham	(SL)	EDF Energy
Steve Pownall	(SP)	National Grid NTS
Timothy Wyndham	(TW)	Ofgem

1. Introduction

Apologies were made for the late change to the previously agreed work plan and the published agenda. TD reminded the group that some parties travelled from distant places and had more complicated travel arrangements that were detrimentally affected by such late changes. Fundamental changes made at short notice should be avoided in the future. TD then referred to the Chairman's Guidelines and pointed out that meeting papers should be provided a minimum of 5 days in advance in order to give all time to prepare for the meeting and an opportunity to review and clarify internal positions.

In respect of the now deferred agenda item on linepack, CW asked, given the reaction to the available volume at the previous meeting, whether Ofgem believed that it was still worth pursuing. BW responded in the affirmative, pointing out that there were options still to be explored.

1.1 Minutes from previous meeting

The minutes were accepted.

1.2 Review of actions from previous meeting

Action RG0291/01: Ofgem (TW) to give an update on progress in the European expert groups on matters relevant to this Review Group.

Update: Covered within Ofgem's presentation. See 2.1 below. **Action closed**

Action RG0291/02: National Grid NTS (SP) and Ofgem (TW) to consider and report back on likely Third Package restrictions on Transporters offering “storage type” services.

Update: Information provided by National Grid NTS:

Article 15 of the Gas Directive provides for legal separation, but only where an independent system operator has been appointed.

Article 29 makes it clear that if the unbundling rules in Article 9 are complied with then a combined transmission, LNG, storage and distribution operator is permitted.

Article 33(3) also implies that a contract for linepack can be with a party other than a storage system operator (ie a transmission system operator).

See also 2.1 below. **Action closed**

Action RG0291/03: National Grid NTS (SP) to assess and confirm the maximum quantity which could consistently be made available through a linepack product.

Update: SP reported that this would be addressed in the July meeting. **Action carried forward**

Action RG0291/04: National Grid NTS (NR) to obtain and report on operational and balancing costs currently faced by National Grid NTS due to shippers not achieving an end-of-Day balance.

Update: Covered within National Grid NTS’s presentation. See 2.2 below. **Action closed**

Action RG0291/05: Ofgem (TW) to examine internal and external documents produced prior to the introduction of the fixed differential and report back on the rationale behind the methodology adopted.

Update: Covered within Ofgem’s presentation. See 2.1 below. **Action closed**

2. Review Group Discussions

2.1 Implications of EU Expectations (Ofgem/National Grid NTS)

BW gave a presentation on behalf of Ofgem (including responses to Actions RG0291/001 and 002) recapping on the objectives of cash out and linepack, the issues identified and the background to SLC27, and touching on the rationale behind the current fixed differential regime. Potential interactions with the Third Package were indicated and a brief update on the position of the European Framework guidelines on gas balancing was also provided.

JCx questioned if the perceived misallocation of costs between days that may result from the avoidance of taking balancing actions using linepack on a daily basis was a conceptual issue or one that had been analysed. SP responded that balancing actions were taken less than 20% of the time, ie if linepack was too high or too low. BW added that on most days action was not taken. The current incentive was to minimise actions, and the system may be too short or too long on a number of consecutive days without any actions being taken. SP pointed out that most actions were taken within the confines of the incentive. JCx suggested that analysis could be carried out to give credence to the perception.

Action RG0291/006: Analyse potential misallocation of costs due to build up of linepack variations over a period of days.

TW pointed out the possibility of linepack being misused as a balancing tool, and there was potential for valuing linepack in other ways. It was questioned how the Linepack Measure (LM) was incentivising National Grid to go into the market, hence this review. TD pointed out that removal of the LM was not in the scope of this Review Group. SP added that during the consultation on the SO Incentives only one respondent had suggested removal of the LM incentive, and the other five had suggested a review; there were interactions with the SO incentives but removal was not necessarily appropriate. BW believed that looking at the most appropriate way of using the linepack product and reviewing other options could highlight a more efficient means of utilisation. TD asked if LM remained, would there still be a problem of cost misallocation between days? BW responded that linepack might be an important balancing tool that is being under-utilised and may be better used. BW believed the current incentive could lead to suboptimal use.

SP observed that the circumstances were not as straightforward as in 2001. Historical data may not be useful as the operation of the system had changed so much in the intervening years. JCx suggested looking at a run of days to establish the circumstances of how linepack was behaving, and whether or not actions were taken, and the reasons why.

Action RG0291/007: Review trend of linepack on continuous days where no residual balancing actions are taken, and clarify details (when/where/why) of instances where actions were taken.

In response to a question from SL as to what was meant by costs (Slide 4, bullet point 3) BW indicated that this was cash out charges, ie the costs incurred by National Grid NTS in balancing the system. CW questioned if this was looking at a cost base or a market value base, and felt this was very important to understand at the outset.

BW affirmed this was cost associated with action or inaction, ie to minimise any costs incurred or avoided when balancing the system. JB added that Shippers also incurred costs. CW suggested that some analysis might be done to establish the scale of these costs. SP pointed that it was not necessarily just physical gas that was being looked at, but also trades. Linepack itself did not take account of NBP trades; was it being suggested that National Grid look at how Shippers' are situated at the end of day and also look between days? SL pointed out that Shippers who are short are actually helping the system when it is long. BW observed that being out of balance could cause a cost; others gave examples where it balances out. BW commented that parties who cannot trade out positions are causing a cost and this needs to be thought about - incentives are needed to help parties to take the right actions at the margins in the most efficient manner.

JCx commented on what appeared to be a contradictory view whereby Ofgem, despite observed improvements in Shippers' balancing behaviour under the current regime which was working well, appeared to require even more incentives to be put in place. BW replied that there were behavioural responses to the incentives currently in place, but these may not at the margins prove the right decisions for security of supply. JCx asked if BW thought that cash out delivers incentives to, for example, build storage plants to address any potential gap in security of supply in the future. Stronger cash out signals could result in cross subsidy and other very perverse effects and so it was important to establish why charges are wrong at the moment. BW responded balancing opportunities are under-utilised at the moment, and could contribute to the avoidance of investment if they were more efficiently used.

SL agreed with JCx's view. Models in support of investment decisions are driven by market prices – these are the most important factor driving long term positions/investments, and cash out prices do not feature in decisions. BW pointed out that National Grid NTS takes an action, which then feeds through to the market. SP and SL pointed out that investment was not just based on gas prices, but on total energy scenarios.

BW replied that cash out prices encourage the most efficient and accurate outcome/decisions at the margin, moderating behaviour on the day and investment decisions. If linepack was used more efficiently this could obviate the need to invest, for example in a medium range storage facility. SP pointed out this could undermine some current projects and may not facilitate competition. RF believed a key question might be whether National Grid should, as a matter of principle, be able to offer a service in competition with other providers. BW thought this might depend on the final product that was decided upon. The maximum value from linepack needed to be extracted day by day. He was not talking about National Grid offering a service, but of placing a value on it that could give parties a choice in decision-making.

CW questioned whether, if the group concluded that a default value could be set at zero or a certain level, would Ofgem accept this or would it say 'wrong answer'? BW indicated that Ofgem had no preconceptions in respect of higher/lower figures, but was concerned that a 12-year-old fixed price was still in use without having been reviewed over that period, ie it needs reviewing.

TD asked if the current rationale reflected costs incurred, in line with the principles put forward in Ofgem's presentation. BW was of the view that balancing should be done at the lowest cost by those best able to do it (ie Shippers on their own behalf).

Interactions with the Third Package were then discussed. SP felt was no conflict. JCx observed that definitions in various European documents were confusing and possibly inconsistent in respect of what can be used for functions and by various parties. TW suggested that, read in their full context, definitions provided for linepack to be used above and beyond the use of the system; the way it is worded in different Articles appears to differentiate between uses. BW added that Ofgem's view was that there were no particular restrictions at present, but consistency should be monitored to ensure compliance.

2.2 Cashout Fixed Differential (National Grid NTS)

NR gave a presentation concentrating on the primary objective, which was to update the SMP default values, and outlining alternative ways by which this might be achieved. For example, 'operational costs' could be used to reflect imbalance costs to the SO; alternatively, 'market prices' could be used to reflect possible Shipper actions to balance.

It was pointed out that SMP default values should essentially provide a commercial incentive to balance and also a proxy for the use and valuation of system flexibility. Consideration should also be given to the interactions between the use of SMP defaults and the development of a linepack product.

NR then proceeded to address Action RG0291/04 (ie National Grid NTS (NR) to obtain and report on operational and balancing costs currently faced by National Grid NTS due to shippers not achieving an end-of-Day balance) and provided two graphs as illustration.

He confirmed that, in respect of balancing costs, there would be Residual Balancing trades (neutrality), and also financial impacts to SO Incentives. In respect of operational costs, the components are Compressors, Pipeline and

Maintenance. Compressor usage is most likely to reflect marginal costs. However, approximately 95% of compressor fuel is used to transport gas around system. The 5% or less may be due to Shipper imbalance and the management of linepack, but this required more detailed analysis to allocate more accurately. NR pointed out that he had not included this as one of the options for a possible revision of the default values.

To assist in deriving default values, some initial figures were provided on compressor costs, and a possible methodology was indicated. RF commented that this was quite a volatile figure for a supposedly fixed differential. BW asked if it was possible to tell on a given day what the compressor usage was in respect of linepack. SL observed that if Shippers and the system were balanced, any compressor usage was only to move gas around. RF expressed a view that the approach did not feel particularly market based. SP questioned what the role of the fixed differential was – is it behavioural or something else? On different days there were different flow patterns and this was not necessarily due to balancing. BW commented that it was cash out that was being reviewed not necessarily the fixed differential. RF added that strong criteria would be needed against which an assessment could be made.

JCx suggested that an understanding of the basis of the 95:5 compressor costs split was needed if this was to be used to support differentials. RF questioned if any such figure would be fixed for a year, and whether it would be linked to SO incentives. SP replied that there would be interactions with the Shrinkage incentive that would require more consideration as part of the review.

There was a short discussion on what constituted a “market based” differential and about Ofgem’s indication that a differential should reflect costs incurred. TD asked for views on costs beyond compressor usage, including costs that might be avoided and quantified as part of the analysis – for example, avoiding building pipelines to create more linepack. BW suggested the analysis should consider costs deferred to different days. NR said the costs based approach would need to be looked at further.

Action RG0291/008: Refine compressor costs option.

Development of potential options

Pointing out that other suggestions would also be welcomed, NR then offered a number of options for consideration:

1. Retain the current SMP default values
2. Remove the SMP fixed differentials
3. Base differentials on transportation charges
4. Update SMP default values with current Hornsea prices
5. Use Market prices:
 - a) Apply a % SAP or alternative market price
 - b) Use forward prices to calculate default
6. Existing Methodology.

NR reiterated that whichever option was decided upon, it would need to demonstrate that it was transparent, market and objective based, cost reflective, provided incentive for Shippers to balance, did not cross-subsidise, facilitated competition, did not put security of supply at risk nor hampered market liquidity, and was dynamic. RF questioned the criterion, ‘dynamic’. BW suggested that this was trying to get away from a price that has no relevance to the market over time. It did not necessarily mean a constantly adjusting value but could involve an annual review of a formula. JC believed this would be better described as ‘cost reflective’ rather than ‘dynamic’.

Analysis of options

Option 1 – Retain current default values

NR briefly described this option and identified pros and cons. SL observed that this had worked for the tight winters of 2005/06 and 2006/07, and believed 'arbitrary' could be seen as a pro. He could not think of anything more market based than SAP, and wondered whether National Grid was being overcritical of the present system. JCx agreed there was a need to be cautious. SP stated that GSOG consider fixed differentials for storage investment. BW was convinced that it was not tenable to continue to use a price set 10 or so years ago. SL underlined that, as for any other Modification Proposal, a compelling case for change would have to be made and argued that it would be need to be clearly demonstrated that the current regime was 'broken' – measured against the Code Relevant Objectives, a significant improvement would have to be demonstrated.

Option 2 – Remove SMP fixed defaults

NR briefly described this option and identified the pros and cons. The option was then discussed. BW pointed out that this would probably increase National Grid's role and therefore produce more impact on the market. NR agreed that National Grid was not very comfortable with this option. SL commented that the cash out regime could be targeted at those who cause the action to be taken. However, SP pointed out that CCGTs swing the system quite a lot within day, and other factors can also affect system balance. BW added that costs incurred by end of day balancing are the point.

Option 3 – Base upon Transportation Charges

NR briefly described this option and identified the pros and cons. The option was then discussed. TD questioned the reliance on commodity charges alone. NR said that transportation charges are based on allowed revenue and assumed throughput, and it was difficult to base flexibility related prices on these. BW acknowledged that reflecting costs incurred is clearly difficult.

Option 4a – Update default values with current Hornsea prices

NR briefly described this option and identified the pros and cons. The option was then discussed. TD questioned if 2010 was a 'typical' year, or would the results be different if the analysis was undertaken for other years. NR agreed to look into this.

Action RG0291/009: Review and collate Hornsea figures based on current methodology for years 2002 – 2009 inclusive and report to next meeting.

Option 4b – Revise current methodology using range of Storage

NR briefly described this option and identified the pros and cons. The option was then discussed. SP questioned whether it was sensible to consider the price of Operating Margins gas as a proxy for flexibility. Others suggested considering the range of flexible options, with JC putting forward LNG import and interconnector swing as specific candidates.

NR agreed there might be other sources for deriving the price of flexibility, but transparency may be an issue. TD asked if all the flexibility options could be

looked at in this case, and SL thought that storage facilities previously excluded could be included this time round. TW asked what Rough storage had looked like in 2001 when the existing differentials were established – if within day availability is now included, has the scene changed? No one present was able to answer TW's question and BW agreed to find out.

BW questioned if there were no flexibility in the system, what alternatives would be used? RF and SP identified demand side reductions as a potential balancing tool, with contestability for Operating Margins showing that this was a potential source of flexibility.

TD asked for views on the sources that National Grid should incorporate in analysis for the next meeting. It was suggested that Operating Margins may be the last thing to be looked at rather than the first, but it was recognised that a lot depends on commercial sensitivity and confidence to share and use figures, the derivation of which may not be transparent.

Option 5a – Apply % of SAP

NR gave a briefly description, stating that this was not seen to be a good option and that he had been unable to identify any pros, only cons. The short discussion that followed also failed in the identification of any pros, although it was recognised as being market related.

Option 5b – Utilise forward prices

NR briefly described this option and identified the pros and cons. The option was then discussed. BW commented that this assumed a correlation between days – although reality could vary considerably. JCx pointed out that it could run into problems as to where/when a benchmark was set, whose price assessment it was, where it was published, etc.

NR provided a graph giving an example of Within Day versus Day Ahead 2008/2009, and indicated that Day Ahead is not necessarily higher than Within Day. SL questioned how tomorrow's prices could be regarded as reflecting costs incurred today. SP responded that it depends on what is trying to be valued, ie cash out on imbalances and also cash out on whether you have had an effect on linepack - potential costs across days.

Option 6 – Existing Methodology

NR briefly described this option, which was in effect codifying existing practice and making it more dynamic on a periodic basis. The option was then discussed. In response to a question, SP suggested that updating with the Hornsea price alone would be the minimum and, having updated it, this could be put into the UNC and subject to regular review. It could be a methodology, or formula or both, or sit outside of the main UNC and be subject to an annual consultation. Shippers preferred to have everything encompassed in the UNC, unless there was a valid reason not to include it.

Scoring of Options

A table of options was then presented and the group was invited to score each according to the criteria agreed at the previous meeting. RF commented that if the main objective were to provide an incentive for Shippers to balance, he would find it hard to score any of the options positively. JCx suggested the test should

be whether any options were better than the current regime. RF added that cash out was aimed at incentivising balancing and this should be the main criteria.

Across all options Shippers felt that none would change current balancing behaviour or provide a greater incentive to balance, and the meeting agreed that Options 3, 4a, 4b, and 5b could be discounted. It was recognised that Option 6 conferred the benefit of being in the UNC and gave the opportunity to make improvements over time.

In light of Ofgem’s presentation suggesting imbalance charges should be reflective of costs incurred, there followed a short discussion on cost reflectivity and the use of historical information as a benchmark. SL observed that ‘cost reflective’ depends on what solution we are prepared to progress. TD pointed out that Hornsea is a price rather than cost, and that variants of Option 6 were possible. JCx suggested splitting Option 6 into two.

TD questioned whether the Hornsea price was an appropriate measure of the cost of flexibility. SP said it was an administrative price and is transparent; there aren’t any others. TW asked if Rough would be a relevant tool for balancing purposes. NR said that Rough was not classed as a fast recycle facility; it is longer term. TD observed that IUK could also be thought to offer flexibility, with prices available. He then put a number of questions to the meeting: Why would other prices be better/worse than the Hornsea price? Are any of the suggestions raised during the meeting providing a better measure of flexibility than, say, Barrow or flexible contracts for St Fergus delivery? What else should National Grid analyse to inform the Review Group? What costs did attendees believe are incurred by National Grid NTS to balances the network? JCx added that answers may be different if the network had a different profile (i.e. be dependent on whether it was short or long).

Following these discussions, two further actions were agreed:

Action 0291/010: Analyse system length (tightness) versus SAP correlations and report to next meeting.

Action 0291/011: Option 4b – Update table to reflect all sources and flexibility options and report to next meeting.

The meeting’s views were sought, predicated on Option 1 as the baseline, and the scoring table was updated to provide an initial reflection of the outcome of the discussions:

OPTION	1	2	3	4a/4b	5a	5b	6
Criteria	No Change	Remove	Transport Costs	Update	%SAP	Market Price	Minimum
SMP Buy (p/kWh)	0.0288	SAP?	0.0309	0.0409	?	?	0.0409
SMP Sell (p/kWh)	0.0324	SAP?	0.0309	0.0419	?	?	0.0419
Transparent		=					✓
Market and Objective based		Margin ally more			✓	✓	✓

Cost Reflective		More					✓
Provide incentive for Shippers to balance	✓	=	=	=	=	=	=
Does not cross subsidise	✓	✓		✓			✓
Facilitates Competition	✓	=	✓	✓	✓	✓	✓
Does not risk security of supply	✓	=	✓	✓	✓	✓	✓
Does not hamper market liquidity	✓	=	✓	✓	✓		✓
Dynamic		=	✓	✓	✓	✓	✓

NR then gave a brief overview of other initial considerations (IS, SMP references within industry contracts, SO Incentive), and acknowledged that there may be others not yet identified.

3. AOB

None raised.

4. Diary Planning for Review Group

It was confirmed that the focus of the next meeting will be linepack.

TD confirmed that the next meeting had been arranged for Monday 19 July 2010 at 10:00 at the Energy Network Association's Offices, 6th Floor Dean Bradley House, 52 Horseferry Road, London SW1P 2AF.

ACTION LOG - Review Group 0291

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
RG0291 001	21/05/2010	2.1	Give an update on progress in the European expert groups on matters relevant to this Review Group.	Ofgem (TW)	Closed
RG0291 002	21/05/2010	2.2	Consider and report back on likely Third Package restrictions on Transporters offering "storage type" services.	National Grid NTS (SP) and Ofgem (TW)	Closed
RG0291 003	21/05/2010	2.2	Assess and confirm the maximum quantity that could consistently be made available through a linepack product.	National Grid NTS (SP)	Carried forward
RG0291 004	21/05/2010	2.3	Obtain and report on operational and balancing costs currently faced by National Grid NTS due to shippers not achieving an end-of-Day balance.	National Grid NTS (NR)	Closed
RG0291 005	21/05/2010	2.3	Examine internal and external documents produced prior to the introduction of the fixed differential and report back on the rationale behind the methodology adopted.	Ofgem (TW)	Closed
RG0291 006	21/06/10	2.1	Analyse potential misallocation of costs due to build up of linepack variations over a period of days.	National Grid NTS (NR)	
RG0291 007	21/06/10	2.1	Review trend of linepack on continuous days where no residual balancing actions are taken, and clarify details (when/where/why) of instances where actions were taken.	National Grid NTS (NR)	
RG0291 008	21/06/10	2.2	Refine compressor costs option.	National Grid NTS (NR)	
RG0291 009	21/06/10	2.2	Review and collate Hornsea figures based on current methodology for years 2002 – 2009 inclusive and report to	National Grid NTS (NR)	

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
			next meeting.		
RG0291 010	21/06/10	2.2	Analyse system length (tightness) versus SAP correlations and report to next meeting.	National Grid NTS (NR)	
RG0291 011	21/06/10	2.2	Option 4b – Update table to reflect all sources and flexibility options and report to next meeting.	National Grid NTS (NR)	