

Review Group 0291 Minutes
Wednesday 11 August 2010
Energy Networks Association, Dean Bradley House, 52 Horseferry Road, London
SW1P 2AF

Attendees		
Tim Davis (Chair)	(TD)	Joint Office
Lorna Dupont (Secretary)	(LD)	Joint Office
Amar Singh	(AS)	ExxonMobil
Ben Woodside	(BW)	Ofgem
Charles Ruffell	(CR)	RWE npower
Chris Aldridge	(CA)	National Grid NTS
Chris Wright	(CW)	Centrica
Graeme Thorne	(GT)	Halite Energy
Jacopo Vignola	(JV)	Centrica Storage Ltd
Jamie Black	(JB)	Ofgem
John Costa	(JC)	EDF Energy
Julie Cox	(JCx)	AEP
Mark Dalton	(MD)	BG Group
Nick Reeves	(NR)	National Grid NTS
Rekha Theaker	(RT)	WatersWye
Richard Fairholme	(RF)	E.ON UK
Steve Pownall	(SP)	National Grid NTS
Timothy Wyndham	(TW)	Ofgem

1. Introduction

TD welcomed attendees to the meeting.

1.1 Minutes from previous meeting (19 July 2010)

The minutes were accepted.

1.2 Review of actions from previous meeting(s)

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

and

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.

Update: Both actions covered under 2.1.1 below. **Actions closed**

Action RG0291/008: Refine compressor costs option.

Update: Covered under 2.1.1 below. **Action closed**

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

Update: Covered under 2.1.1 below. **Action closed**

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

Update: Covered under 2.1.1 below. **Action closed**

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

Update: Covered under 2.1.1 below. **Action closed**

Action RG0291/012: Linepack Product - Add further key measures in respect of residual balancing, environmental issues.

Update: Update due 10 September 2010. **Action carried forward**

Action RG0291/013: Linepack Product – Revise key assumptions to include firm status and bidirectional capability.

Update: Update due 10 September 2010. **Action carried forward**

Action RG0291/014: Linepack Product – Develop a ‘straw man’ based on Option 2.

Update: Update due 10 September 2010. **Action carried forward**

2. Review Group Discussions

2.1 Default Cashout

2.1.1 NTS Update on Options

NR presented, and explained that the objective was to seek to agree a preferred option to take forward.

The first part of the presentation covered updates in response to actions 006, 007, 009, 010 and 011 as follows:

RG0291/006 and RG0291/007: [S2 – 4] Figures were given for Trade days and Residual Balancing Actions taken in 2009/10. Various calculations were explained, the conclusion being that there could be a total potential net misallocation of -£1.63million. NR commented this seems a large cost, but perhaps not if viewed across the whole year. NR confirmed to CR that ‘Trade days’ were those involving either a buy or a sell. MD asked what the gross figure was since this would help to show the scale of the issue.

Graphs demonstrating daily linepack change between balancing actions were displayed, indicating how linepack build could balance itself out to some extent without buy/sell actions being necessary. JCx observed that there did not seem to be many times where it builds up and up and up leading to an action; these occasions appeared to be totally random.

RG0291/009: [S5] Hornsea figures were presented with SMPs updated based on the latest available prices, ie average annual process paid for a year’s worth of storage. Looking at the rise and fall in annual prices, JCx was not convinced that applying this methodology could be described as cost reflective. JC suggested applying a rolling average every year could help to smooth out any volatility.

RG0291/010: [S6/7] Graphs were presented to demonstrate System length versus SAP. In response to a question from JCx, NR concluded that there was a very small correlation but that that this did not exert any noticeable influence.

RG0291/011: [S8] Relating to Option 4b an updated and anonymised table was presented indicating how SMPs could potentially be derived from annual Operating Margins costs. However, for a variety of reasons National Grid did not recommend pursuit of this approach.

NR then recapped on the Group's progress. JCx was expecting to see some sort of EU framework document soon and was concerned that, if this proved to be fairly prescriptive and complicated, the current direction being put forward by National Grid NTS may not coincide and further changes may have to be made, perhaps even to revert to the current position - there may be limited value in racing to make changes without bearing this in mind. SP acknowledged this point but maintained there was benefit in addressing the issues generated by the change in the Licence made by Ofgem. TD added that National Grid NTS would not wish wait for EU developments to unfold if this would mean breaching their Licence obligations.

BW suggested that it might be 2-3 years before any EU changes are clear and settled, such that making progress now was important. JCx rejoined that although the fine detail may not yet be available, the key principles would most certainly have been determined, so a reasonable understanding of the position should be capable of being reached in the very near future and this may better inform the work of this group. BW replied that the work did not have to wait for this; any changes that were deemed to be beneficial should be progressed.

The presentation then moved on to consideration and discussion of the options. NR confirmed that the SSE Hornsea website published the last annual price, which would be available for use (year on year).

Option 1- Removing fixed default System Marginal Prices (SMPs) [S11]

Cashout is at SAP unless a Market Balancing Action occurs.

This option had been developed based on a number of assumptions, including the view that the current default SMPs do not provide a meaningful incentive to balance, and that not knowing when Market Balancing Actions may set SMPs is an incentive to balance.

Consideration was then given as to whether this option better facilitated the relevant objectives.

a) and b) efficient & economic operation of system

National Grid NTS believed that evidence supports the view that system length does not react to the current defaults and this may therefore introduce an inefficient neutrality process. However, on the downside, this option may not reflect the operational costs of managing the system impact of Shipper imbalance, and removing the default may increase the requirement for Market Balancing Actions.

d) securing effective competition

On the downside, National Grid NTS believed that SAP cashout might reduce the incentive to trade out the imbalance; an absence of the true cost of flexibility may not apportion costs appropriately and may cause cross subsidy through neutrality; and it reduces market liquidity.

In considering National Grid NTS' views, JCx pointed out that currently parties had indicated they were balancing as well as they could, and the risk of taking an action late in the day would have a bigger impact.

TD questioned whether there was any evidence that this is an inefficient neutrality process, and reminded the group of three pertinent questions, set as objectives by Ofgem:

- Would this provide the incentive to balance?
- Would it be reflective of costs incurred?
- Would it place costs against appropriate parties who were instrumental in causing the costs?

JC commented that if you were not sure that the SO was going to take an action, there was an incentive to balance. However, this could be turned on its head and it does provide an incentive to balance in order to minimise the risk of the SO taking an action. CA observed that a Shipper's action is based on the *expectation* of SO action. For the SO it would be easier to set cashout if the default was zero. AS believed it to be a question of timing in respect of actions taken; was there a specific time window, providing an opportunity to respond, or was it on an ad hoc basis? AS then referred to the GRT experience, which SP responded might be a backward step in the GB context and might reduce market liquidity.

CW requested that it be noted that the Review Group did not necessarily support National Grid NTS's conclusions drawn in respect of the relevant objectives. Points could be argued both ways and very different conclusions could be arrived at. CW could see both sides and was not convinced either way.

Option 2 - Updating existing methodology with either up to date Hornsea prices, or a 'basket' of flexible products. [S12]

NR explained the key features. This option was based on an 'As-Is' methodology, with Hornsea prices as a proxy for the value of flexibility.

Consideration was then given as to whether this option better facilitated the relevant objectives.

a) and b) efficient & economic operation of system

National Grid NTS believed that it provides a price for the flexibility of gas within the GB market, and that it targets the flexibility costs to the users of flexibility, ie imbalanced Shippers. On the downside, it does not necessarily reflect that day's cost of flexibility and so may not encourage efficient actions.

d) securing effective competition

National Grid NTS believed that providing a default price would supply an incentive for Shippers to trade out imbalances and thus encourage competition.

In considering National Grid NTS' views, RF commented that he was not sure how any of the options improved the current situation, especially with volatility from prices which change annually. SP responded that Hornsea prices were being used as an up to date proxy for the value of System flexibility. JCx agreed with RF and asked how it could be demonstrated to be better than the current arrangements.

NR believed it would be making the arrangements more cost reflective. SP observed that flows used to be North to South, but there were now different

patterns of System usage. Basing the SMPs purely on Hornsea was only looking at one category of flexibility – there were others.

TD pointed out that the option included putting a methodology into the UNC rather than just updating figures as a one-off. JCx believed care needed to be taken in sourcing the figures, to avoid creation of cross subsidies, etc.

Considering other proxies of the value of system flexibility, SP suggested that there were restrictions on what could be used in ‘the basket’ due to limited data availability. TD challenged this assertion - if the right thing to do was to look at other sources, then access to these with a view to obtaining what was necessary needed exploration. TD sought views as to whether storage prices were the best measure available. RF believed the approach would need to be more holistic. JC added that all the sources of flexibility needed considering. JCx suggested including sources that are open and transparent with a market price, assuming the rest are excepted.

JCx asked if changing an arbitrary number for a methodology and an annual update/consultation was necessarily an improvement? There are numerous methodologies and associated routine consultations – these only needed to change when there was a need to change rather than annual consultations being necessary. Also Methodology Statement changes are driven by National Grid and not the industry.

JC suggested it was also worth reviewing why the default prices existed and why they had not been previously reviewed – and perhaps the answer might be that they were in fact working and did not require change.

Option 3 - Introducing a percentage of SAP [S13]

Default SMP Buy is the higher of 4% of SAP or the highest priced Market Balancing Action. Default SMP Sell is the lesser of 5% of SAP or the lowest priced Market Balancing Action. In effect, this option restores default SMPs as a relative % of gas price as introduced in 2002.

Consideration was then given as to whether this option better facilitated the relevant objectives.

a) and b) efficient & economic operation of system

National Grid NTS believed that it provides a financial incentive for Shippers to balance relative to SAP (which will reflect market conditions and competing balancing products, ie storage). However, on the downside, it may not reflect that day’s cost of flexibility and may not therefore encourage efficient Shipper actions.

d) securing effective competition

National Grid NTS believed that introducing a dynamic price would supply an incentive for Shippers to trade out imbalances and thus encourage competition.

In considering National Grid NTS’ views, CW commented that balancing behaviour has been demonstrated to have improved and therefore it could not logically be concluded that a further percentage change would influence further improvements in behaviour.

TD asked if the group wished to keep this option open or if it should be discounted as a non-runner. SP pointed out that previous modification proposals have been rejected. MD observed that as it was under consideration and Ofgem had given no adverse indications, the assumption must be made that it should remain open.

NR moved on to present the response to action 008 (refinement of compressor costs), and explained that National Grid NTS had explored the cost of NTS space, and the cost to inject and withdraw gas from this space. There were 3 options relating to space - calculations had been made in respect of each and some figures were presented. JCx voiced concerns in respect of potential double recovery; the costs of pipeline are already recovered through the price control. JCx also suggested there was a need to know the total costs of having the System long or short on a day, and then find a way to apportion these to appropriate parties.

AS asked if the SO costs of varying linepack were just those associated with injection and withdrawal. CW observed that linepack was just a by-product of a transportation network – it would not be a primary storage facility of choice. SP responded that the issue was discovering what are the potential costs for using pipelines more flexibly. MD said this should come out of the linepack service development rather than cashout, but SP felt the two are inextricably linked. MD said it would be helpful to understand the gross value, and SP thought this could be looked into.

Option 4 - Reflecting operational costs. [S15]

Default and Marginal SMPs are set by the costs associated with managing a system that is out of balance. NR explained the key feature was that figures are calculated using the cost of providing pipeline space and associated compressor costs.

Consideration was then given as to whether this option better facilitated the relevant objectives.

a) and b) efficient & economic operation of system

National Grid NTS believed that it ensures that SMPs reflect the cost of managing the Shippers' long and short positions, and that there is no inefficient cross subsidy through neutrality.

d) securing effective competition

National Grid NTS believed that it will ensure that Shipper decisions are based on cost reflective signals.

In considering National Grid NTS' views, RF believed that there was a long way to go to prove that those presented were actual costs, and he was not convinced the option would be a better arrangement than currently. MD observed that the market was more efficient at balancing than National Grid's formula, and had concerns regarding increased costs to consumers.

Shippers accepted there could be benefits from increased cost reflectivity. RF commented that the approach appeared to present a significant amount of extra complexity for very little benefit.

SP believed that removing the linepack incentive could lead to more balancing actions, however JCx disagreed and suggested there could actually be less. CA accepted there might be fewer actions, but any that were taken could be bigger. JCx pointed out that Shipper behaviour was driven by cashout and the behaviour of National Grid NTS was driven by the linepack incentive and System safety implications, and causes and effects should be viewed appropriately.

2.1.2 Review Group Conclusions

The Options were then summarised and compared within a table, and NR stated that, in National Grid NTS's view, Option 4 or Option 2 would present the best solution.

RF asked TW to clarify what the expectations were in respect of the Licence Condition with regard to an outcome. TW indicated that it was expected that there would be an update of the default cashout values rather than just a review.

JCx asked for Ofgem's view of the options so far, or whether there were other options they felt should be considered. BW indicated that Ofgem was not in a position to express any preference at this point, and in response to a question from CR indicated that any modification proposal(s) would be considered against the status quo as raised. TD then asked Ofgem if it was able to give any indication that one or more of these options under consideration should not be pursued, so that the group's time could be spent more effectively in developing any potentially viable alternatives. No indication was given.

TD then sought views on the 4 options that had been discussed.

Option 4 drew the greatest comment, with JCx observing that there was a cost relating to compressor usage and this needed to be better understood, for example in relation to summer/winter differences and any correlation with imbalance. JC believed that, while the principles of balancing needed to be properly defined by Ofgem, Option 4 would appear to have the potential of revealing the true costs of physically balancing the System.

Concluding that there appeared to be no interest in Option 3, but some interest in Option 4, TD commented that views seemed to have widened rather than narrowed and that attendees wished to emphasise that National Grid should not suggest that any option it put forward was supported by the Review Group.

SP noted that no consensus view had been reached by the Review Group. In light of the comments received, and depending on internal discussions, he confirmed that it was likely that National Grid NTS would raise a Modification Proposal for submission to the September Panel. This would be based on introducing a methodology within the UNC, and that methodology would either be based on option 2 (Hornsea prices as a proxy for the value of System flexibility) or option 4 (the cost to National Grid of accommodating flexibility use).

2.2 Cumulative Linepack Option

SP gave a brief presentation on this option, explaining the driver generated under the Licence obligation and the criteria considered.

SP then described the 'straw man', and indicated that there would be a greater risk of volatility/swings if the linepack incentive were removed. The re-introduction of a modified Users' cumulative imbalance quantity was an attempt to mitigate a return to a pre-incentive regime. If a User has contributed to an adverse effect, then charges would be applied.

SP suggested that the first hurdle would be to remove the linepack incentive, which would need to be discussed with Ofgem, and then a Modification Proposal would be raised as a second step. CA added that if the Group thought that this option was a good idea/contained benefits then further exploration with Ofgem would take place.

An example of the Users' Cumulative Imbalance (CI) over a rolling period was presented for discussion. In response to a question from RT, SP explained that this was trying to mitigate 'wild linepack swings' and did not include a Park and Loan element. SP said there were various views on what the linepack product

really is. From an SO perspective the 2.8 incentive target had to be removed, but this might potentially generate issues whereby some Users might see it as an opportunity to take linepack to either extreme over a number of days; this is an attempt to mitigate that risk over a set period.

MD and AS observed that this was very similar to TTF, which had gone for Option 1. The Dutch were balancing on an hourly basis and provide more direct and frequent signalling, so that Users were able to take action in good time. SP confirmed that provision of signalling could be considered should this option be progressed. AS questioned how a Shipper would be able to accurately monitor its position and understand the risk faced. SP believed that all parties should have a reasonably good idea of their position. Balancing actions would dictate when charges were applied, with small actions likely to be less frequent bearing in mind that the bandwidth would be wider. JCx asked if SP had a preferred view on when the Cumulative Imbalance should be cleared down. CA explained that the clock would start ticking again for all parties following a balancing action or at the end of the set period.

It was suggested that this appeared to be risky for Shippers, and would appear to allow playing around with the system to take up deliberate imbalance positions. SP pointed out that it was a split cashout; there would be daily balancing, cashed out at SAP, and the cumulative set period would be cashed out separately. JCx believed that this might produce some strange effects through parties trying to simultaneously manage a daily and a cumulative position. Some individual actions could influence the market and force otherwise potentially unnecessary actions on the System. Information transparency might be an issue and she was concerned that this might undermine current good Shipper behaviour.

TW asked if there was a better way of valuing linepack if the incentive was removed. This option gives the Shipper more time to get back into balance; it widens a Shipper's options to redress its position over a few days before getting cashed out.

AS observed that appropriate System information was required to manage a more risky position. GT pointed out that much would also depend on a particular organisation's risk policy and trading parameters. CW asked if a party could choose when to be cashed out, ie that day rather than in 5 days' time. CA responded that this had not been considered but could be looked at.

AS repeated his concerns regarding greater risks and exposure. TW said that it gave a more efficient outcome if the parties who most favoured being in balance were able to achieve that position even more closely.

CW asked why have a fixed period? Should it be rolling until National Grid NTS take an action? SP said that cashout was still performed on a daily basis, it was just the cumulative effect over the rolling period that presented additional exposure. JCx pointed out that some positions might be created on a weekend/weekday basis, making a fixed period inappropriate. JC pointed out that Shippers were incentivised to balance at the end of the day through fixed price cashout so it was hard to understand how this would help. He also questioned how it could be suggested that this option revealed the market value of linepack flexibility. TW suggested that the approach potentially provided an alternative to balancing, and as such the Cumulative Imbalance cashout price could be seen as the opportunity cost of using linepack.

TW thought it would be useful to have views on the merits of this option. There was some belief that it did not address the relevant objectives; it was just running to a different and more complicated cycle. CW observed that if real time linepack was published, and if a party could establish its position in relation to the System, that may make the option more viable.

CW asked if an impact on market liquidity might be anticipated. SP believed it did not reduce this - any balancing actions taken were likely to be larger. JCx suggested more analysis was required to demonstrate this and illustrate other potential impacts – perhaps taking a historical period and applying the scheme to show the full set of impacts, although this would clearly exclude any behavioural response and so the results would need to be interpreted with caution. SP agreed that analysis would be valuable if the option is pursued and developed.

CW asked what might happen if individual Shippers were on different rolling periods. SP responded that any cycle could be broken by National Grid NTS having to take a balancing action, and that distortion was to be avoided. The intention was to address linepack going to extremes before the Park and Loan concept was brought in to play. JCx pointed out that having rolling periods may involve Shipper and Transporter system changes, and this would need consideration.

It was suggested that signals could skew markets and push prices up, or enable 'educated' guesses to be made. SP said that it was not for National Grid NTS to dictate which way the market should go, and was mindful that Ofgem wanted to keep National Grid NTS out of the market as much as possible. AS observed that National Grid NTS would have an influence on the market when publishing real time linepack information (planned from October 2010), and a market feel for when actions might be taken would naturally develop. JCx recalled that the publication of PCLP made prediction as to when an action would be taken much easier.

SP indicated that raising a Modification Proposal for development would be the next step.

2.3 Hybrid Approach (Option 3)

CA explained that this presents another idea for a different cashout regime. There were three directions to approach the pricing and valuing of End of Day Linepack. CA then gave a presentation exploring the advantages and disadvantages of these directions: cost reflective, incentive and value.

RT pointed out that National Grid NTS was not incentivised to build the system to provide linepack. CA confirmed that if it 'ran out of pipe' and so could not accommodate more linepack, National Grid NTS would go to the market. National Grid's cost was associated with two things – what space is available now, and the cost of going to market. BW added that there were many different cost options, and building pipe was expensive and therefore likely to be quite high up on the spectrum.

CA then described the Hybrid Option, combining cost and incentive, and explained the concepts of Non-MBA days and MBA Days, and standard and dynamic flexibility charging. An example of how this might work was presented in a table form.

RT questioned what exactly these options were trying to encourage, as it seemed to place parties in positions of exposure against which they could not protect themselves. Where was the benefit for those who had 'helped' the System? It was remarked that, in comparison with this option, the cumulative solution looked relatively attractive; the double retrospective 'hit' would not receive support from Shippers, and RF pointed out that retrospection is not generally favoured by Ofgem.

The figures were then reviewed, discounting the retrospective elements.

CA thanked all present for their contributions, and affirmed that the current incarnation of the price incentive encourages National Grid NTS to stay out of the market, and it needed to be reviewed to see if it was still appropriate.

3. Any Other Business

None raised.

4. Diary Planning for Review Group

The remaining tasks were briefly discussed. It was agreed that the focus of the next meeting would be on the linepack product. NR confirmed that, as indicated in their suggested Workplan and Terms of Reference, National Grid NTS would provide ROM/DCA outputs for both the linepack and cashout options, together with the consequential User Pays implications, in time for the next meeting.

Action RG0291/015: Linepack and Cashout options – National Grid NTS (NR) to present ROM/DCA outputs and consequential User Pays implications.

The next meeting has been arranged for Friday 10 September 2010 at 10:30 at 31 Homer Road, Solihull B91 3LT. A further meeting has also been scheduled on 20 September 2010 to facilitate completion of the Review Group Report.

Date	Venue	Time	Focus
Friday 10 September 2010	31 Homer Road, Solihull B91 3LT	10:30 – 15:30	Linepack product (agree Review Group conclusions); agree content of Review Group Report
Monday 20 September 2010	ENA, 6 th Floor Dean Bradley House, 52 Horseferry Road, London SW1P 2AF	10:30 – 15:30	Finalise and approve Review Group Report

ACTION LOG - Review Group 0291

Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
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)	Closed
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)	Closed
RG0291 008	21/06/10	2.2	Refine compressor costs option.	National Grid NTS (NR)	Closed
RG0291 009	21/06/10	2.2	Review and collate Hornsea figures based on current methodology for years 2002 – 2009 inclusive and report to next meeting.	National Grid NTS (NR)	Closed
RG0291 010	21/06/10	2.2	Analyse system length (tightness) versus SAP correlations and report to next meeting.	National Grid NTS (NR)	Closed
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)	Closed
RG0291 012	19/07/10	2.1.3	Linepack Product - Add further key measures in respect of residual balancing, environmental issues.	National Grid NTS (SP)	Update due 10 September
RG0291 013	19/07/10	2.1.3	Linepack Product – Revise key assumptions to include firm status and bidirectional capability.	National Grid NTS (SP)	Update due 10 September
RG0291 014	19/07/10	2.1.3	Linepack Product – Develop a 'straw man' based on Option 2.	National Grid NTS (SP)	Update due 10 September
RG0291 015	11/08/10	4	Linepack and Cashout options – present ROM/DCA outputs and consequential User Pays implications.	National Grid NTS (NR)	Update due 10 September

