

Exit Capacity Substitution Workshop 4 - Minutes
Tuesday 25th May 2010
Ofgem Offices, Millbank, London

Attendees		
Steve Fisher	(SF)	National Grid Transmission
Andrew Fox	(AF)	National Grid Transmission
Lesley Ramsey	(LR)	National Grid Transmission
Paul O'Donovan	(PoD)	Ofgem
Lewis Hodgart	(LH)	Ofgem
Graham Jack	(GJ)	Centrica Energy
Julie Cox	(JC)	Association of Electricity Producers
Rekha Theaker	(RT)	Waters Wye Associates Limited
Cheryl Snoddy	(CS)	Northern Ireland Utility Regulator
Jacopo Vignola	(JV)	Centrica Storage Limited
Simon Trevilla	(ST)	Wales & West Utilities Ltd
Bethan Winter	(BW)	Wales & West Utilities Ltd
Stefan Leedham	(SL)	EDF Energy
Richard Fairholme	(RF)	Eon UK
Charles Ruffell	(CF)	RWE Npower
Fraser Ashman	(FA)	Wingas Storage UK Ltd
Ian Taylor	(IT)	Northern Gas Networks
Shiv Singh	(SS)	National Grid Distribution
Alan Raper	(AR)	National Grid Distribution
J Brown	(JB)	RWE Npower
Mark Sutton	(MS)	TPA Solutions

21. Introduction

SF welcomed attendees to the meeting.

21.1 Minutes of the Previous Workshop Meeting

The minutes of workshop 3 can be found at
<http://www.nationalgrid.com/uk/Gas/Charges/statements/transportation/ExCapSubMS/>

The minutes of the previous workshop (7th April 2010) were accepted.

21.2. Outstanding Actions

21.2.1. Action 11: Monitor European Legislation for potential impact on exit substitution proposals

AF advised where key obligations are located (Article 16 of Regulation EC 715/2009) regarding conditions for access to transmission networks. He advised that National Grid did not consider these regulations sufficient to exclude interconnectors from substitution proposals, and therefore capacity at an interconnector points may be substituted away if not “wanted”. MS queried the definition of “wanted” and whether this referred to NTS shipper capacity bookings or to **the downstream capacity holdings**. AF replied that Ofgem had indicated that a User Commitment is required to exclude capacity from exit capacity substitution. This signified that shipper capacity bookings would be used to determine whether capacity was “wanted” and hence not substitutable. PoD reiterated that the authority has the ability to veto any proposals which are considered inappropriate which may include those at Moffat.

Action on-going

21.2.2. Action 16: National Grid to record the actual incremental quantities against the location. This information to be published.

AF provided a table detailing the locations and quantities of incremental capacity released in July 2009. AF advised that this information can be found on National Grid’s website at <http://www.nationalgrid.com/uk/Gas/Charges/statements/transportation/ExCapSubMS/> (see Workshop 3).

JC stated that the table illustrated high levels of “spare” capacity, as it showed that incremental releases at most locations were accommodated without revenue drivers. AF agreed that this illustrates the extent to which existing capability is allocated before investment. However, this data relates to the July 2009 application process.

Action closed

21.2.3 Action 17: National Grid NTS to investigate whether additional investment information for specific projects could be obtained from revenue driver submissions

AF stated that all non-confidential investment information that National Grid is prepared to release had been provided.

JC requested that a comparison, of short term savings i.e. revenue drivers, against long term savings i.e. actual investment costs inputs into RAV, was undertaken. AF replied that actual investment spend is not put into the public domain but that this information is given to Ofgem. PoD explained that exit revenue drivers had not been in use long enough to collate any data. However, historically, entry assessments have been determined at the time of the price control.

Action closed

Action 23: National Grid to consider whether information is available to compare revenue drivers with actual investment incurred on completed entry or exit projects

Action open

21.2.4. Action 18: Transmission work stream minutes to be checked to clarify previous statements on the requirement for revenue drivers for the 2009 baseline re-jig.

AF confirmed that the May 2009 Transmission Work stream meeting minutes stated that revenue drivers would not be sought in respect of the baseline re-jig and were consistent with statements made in exit capacity substitution workshop 3. AF stated that revenue drivers would not be sought where either existing capability or substitution is used to accommodate incremental exit flat capacity release.

Action closed

21.2.5. Action 20: AF to consider whether donor exit point selection order could be represented diagrammatically in the methodology statement.

AF presented an example of a schematic diagram showing the NTS overlaid with the gas flow direction. AF stated that schematic diagrams of all LDZs, based on those in the Ten Year Statement, could be published in the back of the methodology statement if people regarded them as adding value. MS said that they did.

AF added that the flow directions would be taken from the charging model and would only be correct for that specific supply demand scenario.

JC asked if the diagrams would be updated for each substitution. SF responded that the diagrams are indicative only and substitution analysis may look at a wider range of supply/demand scenarios. JC stated this would lead to numerous questions and queries regarding the analysis. SF/AF agreed they would look to update the diagrams annually and publish them in the methodology statement

Action closed

21.2.6: Action 21. National Grid NTS to review and clarify the possibility of exit capacity revision resulting in baseline reductions.

AF confirmed that the release of incremental obligated entry capacity may increase or decrease the level of NTS baseline exit flat capacity at any specific NTS Exit Point.

AF explained that where the release of incremental obligated entry capacity is met through substitution then additional exit capacity could be made available in the location of the recipient ASEP at the expense of the exit capacity in the location of the donor ASEP. AF stated that in this

instance exit baselines in the location of the donor ASEP may be decreased. This is consistent with a statement made at Workshop 2.

However, AF stated National Grid is currently considering proposing to apply exit capacity revision in respect of funded incremental obligated entry capacity only, i.e. where there is investment, and therefore reductions in NTS baseline exit flat capacity would not be possible. This is what was intended in the statement in workshop 3.

Action closed

21.2.7. Action 19: Ofgem to monitor whether a licence change is required to clarify the scope for veto of exit substitution proposals.

PoD stated that Ofgem were currently satisfied with their discretionary ability to accept or reject exit substitution proposals, however requested industry views on whether a Licence change would provide greater comfort. There was no demand for a change at this time. AF stated that it is up to industry to make clear their preference for licence clarification on this issue.

Action closed

21.2.8 Action 22: National Grid to check if investment cost savings can be provided with examples at workshop 4

Included in slides showing exit substitution examples (see 22)

Action closed

22. Detailed Examples of Exit Capacity Substitution

22.1. Slides 16, 17, 18 and 19, DN Baseline Re Jig 2009

AF presented slides on the key features of the DN baseline re-jig in July 2009. He provided tables detailing, within each LDZ, the number of sites where baselines were either increased or decreased and the quantity of capacity moved. These tables showed that baselines were increased at 33 sites without the need for revenue drivers. Comparing actual capacity applications in the July window with pre- and post- re-jig baselines the number of incremental capacity requests was reduced from 41 sites to 20 of which a revenue driver had been sought for only one.

MS queried the incremental quantities and stated that it was difficult to identify this for either the pre re-jig or post re-jig baselines.

Action 24: National Grid to provide incremental quantities using pre and post re-jig baselines and actual July 09 applications

ST/AR queried the incremental quantities stating inconsistencies between the Summary of Incremental Exit Capacity in the Enduring Period from 01 October 2009 to 30th September 2014 and the Long Term Exit (flat)

Capacity Summary Report (both reports can be found at <http://www.nationalgrid.com/uk/Gas/Data/excap/>)

Action 25: National Grid NTS to investigate inconsistencies found between the Summary of Incremental Exit Capacity in the Enduring Period from 1st October 2012 to 30th September 2014 and the Long Term Exit (Flat) Capacity Summary Report

Post Meeting Note

The table in the Summary of Incremental Exit Capacity in the Enduring Period from 1st October 2012 to 30th September 2014 report shows “aggregate exit baselines.” This data is the aggregation of the baseline quantities and only refers only to baseline quantities at specific NTS exit points where there is an incremental signal, hence it may appear to be inconsistent with obligations in the Long Term Exit (Flat) Capacity Summary report. The future publication of the Summary of Incremental Exit Capacity in the Enduring Period from 1st October 2012 to 30th September 2014 report will be changed to contain clearer headings.

22.2. Slides 20, 21, 22, 23, 24, 25, 26, 27, 28 and 29, South East Example to consider firstly high supply flows and secondly uncertain supply flows.

AF provided an example of a new power station load of 50 GWh/d connecting to the NTS near to the south east extremity of the system. This example was considered in two parts, firstly with assumed high supply flows from the Isle of Grain ASEP and secondly with a lower flow due to the uncertainty of flows from the Isle of Grain ASEP.

The high flow scenario showed that the new exit point could be accommodated without the need for investment or substitution. JC queried the exact value used for the high flow. AF/SF responded that they believed this to be around the booked capacity but they would check and confirm this.

Action 26: Obtain further details on the flow assumptions used in the high flow scenario at Isle of Grain ASEP in the South East Example.

MS queried the demand level used in the analysis, and whether peak day or a number of days were considered. SF replied that this would be illustrated in the second part of the example. AF added that analysis was based on demands in the SE area at obligated level, i.e. high demand.

This example also showed that with high supplies at Isle of Grain up to circa 300 GWh/d could be supported at the new exit point before substitution or investment is required.

The low flow scenario showed that incremental capacity for the new exit point could only be satisfied with either investment or substitution due to the higher pressure drop caused by higher north to south flows.

AF explained that substitution is considered before network investment and in this example the incremental capacity could be satisfied through substitution of unsold NTS baseline exit flat capacity from downstream exit points (Tatsfield) at an exchange rate of 1:0.649, i.e. less than 1:1.

JC commented that in this instance capacity was being created. AF agreed but added that the 1:0.649 exchange rate was the theoretical value required to meet the incremental capacity. However, for reasons stated in the presentation, the issue of whether a 1:1 collar should apply in practice is still under consideration.

JC commented that LNG flows may increase each year thereby decreasing the quantity required to be substituted. This demonstrates that analysis is only relevant for the time it is undertaken, National Grid could not assume flows will increase each year.

MS requested further detail on the supply flow assumptions made at Isle of Grain ASEP. SF replied that this was based on analysis of historical flows and the lowest flow occurring on a high demand day over the previous two years was used for analysis.

JC queried whether Operating margins had been taken into account.

Action 27: Are Operating Margins taken into account in substitution analysis

Post Meeting Note: To confirm Operating Margins are not included in substitution analysis. The criteria for the use of Operating Margins are set out in the System Management Principles Statement. Primarily, Operating Margins will be used in the immediate period following operational stresses such as beach supply failure as a result of a failure offshore, unanticipated demand changes or unexpected pipeline and/or plant unavailability to maintain system pressures in the period before other balancing measures become effective.

Action Closed

JC noted the large quantity of unsold capacity at some DN exit points and asked if any of the exit points with unsold capacity were not flowing and were, or could be, de-commissioned. AF explained that all the exit points considered in the example were in use but that the sold capacity level was less than the baseline. ST added that he believed there were no DN offtakes without booked capacity.

AF then illustrated a further example that assumed no downstream substitutable capacity existed. Substitution to the new power station, in this example, was from upstream exit points. The required increment could not

be completely accommodated by available upstream capacity, so partial substitution, partial investment would be required. AF added that there are issues with partial substitution as discussed at previous workshops, e.g. revenue drivers. This example assumes such issues are resolved and partial substitution is applied. AF stated that the residual partial investment may be too small to be economic, in which case some of the substitution could be undone to leave a level of investment that can be provided economically.

JC asked what would happen currently if, as in this example, a request for a new exit point in the South East was made. AF replied that analysis would be based on the low supply flow scenario and that investment would be required as the substitution obligation will not come into effect until 2011.

RF asked if Ofgem would look at other options to substitution i.e. baseline revisions or re-jigs. PoD stated that this was not an option unless there was the cooperation of other direct connects. SF added that there would also be a need for consideration to be given to contractual alternatives i.e. where revenue drivers have been set with an assumption that such contractual alternatives may provide a benefit compared to investment.

AF added that these examples showed how National Grid could not rely solely on procured levels of entry capacity in order to determine levels of exit capacity that can be released to Users because entry capacity bookings may not result in actual flows that are needed to drive exit capability.

22.3. Slides 30, 31 and 32 - North East Example

AF provided an example of a new power station load of 50 GWh/d connecting to the NTS at a new exit point near to a number of existing ASEPs. In this example the potential net supply in the area is much larger than demand and this provides sufficient capability to allow the system to accept the new load without network reinforcement or exit substitution, i.e. there is sufficient existing (spare) capacity.

Responding to a question AF stated that because of the high transmission capability and entry supplies several similar 50GWh/d loads could be accommodated in this area without investment.

MS asked if examples of a new connection, of 50GWh as in this example, could be provided in each of the 12 LDZ diagrams discussed earlier. JC added that this would be useful as the baselines do not reflect current physical capability. JC stated that this example only reinforces the fact that capability is not published and this creates issues around transparency. SF responded that resources are not available to carry out the extensive analysis requested. He added that, as stated in early workshops, the analysis is only relevant at the time of the analysis, e.g. if the analysis is repeated next year a higher Isle of Grain flow rate may be used and that

National Grid will look to allocate any spare capability prior to substitution/investment.

23. Slides 33, 34 and 35 - Exit Capacity Revision

AF explained how exit capacity is dependant upon certainty of entry gas flows in the same area as the exit point and that new infrastructure does not necessarily provide additional exit capacity.

AF stated that following the release of funded incremental obligated entry capacity and the demonstration of consistent gas flows National Grid intends to create a notional exit point adjacent to the relevant ASEP with a notional exit capacity equal to the demonstrated incremental entry flow. This capacity would be moved, in line with substitution analysis, to satisfy incremental exit capacity requests. Hence the notional exit point would provide an intermediate step towards revising baseline quantities in compliance with the Licence.

JC stated that this should be done presently to show any spare capacity created historically. She stated that the NTS had changed from a system containing a number of interruptible exit points to a system with all firm exit points without incurring extra investment costs and this demonstrated the existence of spare capacity.

JC added that if National Grid provided notional points, at the initialisation of exit capacity revision, the location of all current “spare” capacity could be indicated. AF responded that the intention is that notional exit points will only be used when an appropriate incremental signal has been received at an ASEP and flows demonstrated.

RP asked what would happen if flows fluctuated within the 2 years flow assessment period. AF replied that although there was nothing defined currently, a view would be taken on the level of flows that could be expected consistently. This is likely to be based on assessment of flows on higher demand days.

AF/SF stated that the order of consideration for allocation of capacity at new exit points would be spare capability, followed by any capacity at notional points, then substitution and finally either investment or contractual solutions.

JC commented that annual updating would be required and that eventually all the “spare” capacity would be allocated with any unallocated capacity (created by exit capacity revision) located at notional points.

RT asked what would happen if two incremental signals were requested. AF responded that the most efficient substitutions / revisions would be considered first (based on exchange rate and/or residual investment) although there is unlikely to be significant difference.

JC thought that different exchange rate limits may be required i.e. one exchange rate for the use of “spare” and one for the use of unsold baseline capacity. SF replied that this could be part of a soft landing approach. SF added that all substitution proposals submitted to Ofgem would include all flow assumptions made.

24. Slides 37 and 38 – Timeline

AF presented the development timeline and indicated that the informal consultation will be delayed until end June. AF requested feedback on both the duration of the informal consultation and the date of the next workshop. As no alternative view was put forward, AF proposed an informal consultation lasting 5 weeks and a date change from August to 7th September for the next workshop.

25. Diary Planning

It is proposed that the informal consultation will begin towards the end of June 2010, for a duration of 5 weeks, until Friday 30th July 2010
Exit capacity substitution workshop 5 is to be held at 10:00 am
Tuesday 7th September 2010 at Ofgem Offices, Millbank, London.

Details of all planned workshops are on the National Grid Website
<http://www.nationalgrid.com/uk/Gas/Charges/statements/transportation/ExCapSubMS/>

Open Actions					
Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
11	23/02/10	8	Monitor European Legislation for potential impact on exit substitution proposals.	Work group	Carried forward
23	25/05/10	21.2.3	National Grid to consider whether information is available to compare revenue drivers with actual investment incurred on completed entry or exit projects	NTS	Open
24	25/05/10	22.1	National Grid to provide incremental quantities using pre and post re-jig baselines and actual July 09 applications	NTS	Open
26	25/05/10	22.2	Obtain further details on the flow assumptions used in the high flow scenario at Isle of Grain ASEP in the South East Example.	NTS	Open

Closed Actions					
Action Ref	Meeting Date	Minute Ref	Action	Owner	Status Update
1	27/01/10	3.1	National Grid NTS to review whether relevant and useful data is available on the level of.	NTS	Closed
2	27/01/10	3.1	National Grid NTS to produce an example indicating the cost savings from exit substitution.	NTS	Closed
3	27/01/10	3.1	National Grid NTS to consider whether information can be provided on the extent of “spare capacity”.	NTS	Closed
4	27/01/10	3.2	Clarify the licence requirement for adjustment to exit capacity baselines as a result of entry capacity release and substitution.	NTS/Ofgem	Closed
5	27/01/10	3.5	NTS and DNOs to provide historical information on DN flow swapping activities.	NTS/DNOs	Closed
6	27/01/10	3.11	Ofgem to check whether any European Legislation requires special treatment to protect exit capacity at interconnectors from substitution.	Ofgem	Closed
7	23/02/10	6.1	Identify whether a further breakdown of investment can be made available.	NTS	Closed
8	23/02/10	6.1	Consider whether forecast investment figures can be provided for 10/11 and 11/12.	NTS	Closed
9	23/02/10	6.3	Clarify when a revenue driver is sought	NTS	Closed
10	23/02/10	7	Consider whether exit capacity substitution is possible with an exchange rate less than 1:1.	NTS	Closed
12	23/02/10	9	Clarify when the industry will be notified of exit baseline changes resulting from the release of incremental obligated entry capacity.	NTS	Closed
13	23/02/10	9	Clarify when revised exit baselines will become effective following exit capacity revision.	NTS	Closed
14	23/02/10	13	Confirm the extent to which the licence permits exit substitution	Ofgem	Closed

			proposals to be vetoed and how this compares to entry substitution.		
15	23/02/10	13	Amend the allocation time line to include QSEC processes.	NTS	Closed
16	07/04/10	21.2.2	National Grid to record the actual incremental quantities against the location. This information to be published.	NTS	Closed
17	07/04/10	21.2.3	National Grid NTS to investigate whether additional investment information for specific projects could be obtained from revenue driver submissions	NTS	Closed
18	07/04/10	17.2.3	Transmission workstream minutes to be checked to clarify previous statements on the requirement for revenue drivers for the 2009 baseline re-jig.	NTS	Closed
19	07/04/10	17.2.7	Ofgem to monitor whether a licence change is required to clarify the scope for veto of exit substitution proposals.	Ofgem	Closed
20	07/04/10	18.2	AF to consider whether donor exit point selection order could be represented diagrammatically in the methodology statement.	NTS	Closed
21	07/04/10	18.6	National Grid NTS to review and clarify the possibility of exit capacity revision resulting in baseline reductions.	NTS	Closed
22	07/04/10	19	National Grid to check if investment cost savings can be provided with examples at workshop 4	NTS	Closed
25	25/05/10	22.1	National Grid NTS to investigate inconsistencies found between the Summary of Incremental Exit Capacity in the Enduring Period from 1 st October 2012 to 30 th September 2014 and the Long Term Exit (Flat) Capacity Summary Report	NTS	Closed
27	25/05/10	22.2	Are Operating Margins taken into account in substitution analysis	NTS	Closed

