NTS Charging Methodology Forum (NTSCMF) Minutes Tuesday 26 September 2017 at Elexon, 350 Euston Road, London NW1 3AW

Rebecca Hailes (Chair)	(RH)	Joint Office	
Helen Bennett (Secretary)	(MB)	Joint Office	
Adam Bates	(AB)	National Grid NTS	
Andrew Pearce	(AP)	ВР	
Andrew Sealey	(AS)	South Hook Gas	
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Charles Ruffell	(CR)	RWE Trading	
Colin Williams	(CW)	National Grid NTS	
David Cox*	(DC)	London Energy Consulting	
David Mitchell	(DM)	SGN	
David Reilly	(DR)	Ofgem	
Debra Hawkin*	(DH)	TPA Solutions	
Gerry Hoggan	(GH)	Scottish Power	
Graham Jack	(GJ)	Centrica	
Henk Kreuze	(HK)	Vermillion Energy	
Jeff Chandler	(JCh)	SSE	
John Costa	(JC)	EDF Energy	
Joanne Parker	(JP)	SGN	
Julie Cox	(JCx)	Energy UK	
Kieron Carroll	(KC)	PSE Kinsale Energy	
Laura Johnson	(LJ)	National Grid NTS	
Lee Bowerbank	(LB)	Exxon Mobil	
Lucy Manning	(LM)	Gazprom	
Nahed Cherfa	(NC)	Statoil	
Nick Wye*	(NW)	Waters Wye Associates	
Pavanjit Dhesi	(PD)	Interconnector	
Paul Youngman	(PY)	Drax	
Phil Lucas	(PL)	National Grid NTS	
Robert Wigginton*	(RW)	Wales & West Utilities	
Steve Pownall*	(SP)	Xoserve	
Vladislav Zuevskiy	(VZ)	Northern Gas Networks	

Apologies: Dymph Cooke

Copies of all meeting papers are available at: https://www.gasgovernance.co.uk/NTSCMF/260917

1. Introduction and Status Review

RH welcomed all to the meeting.

1.1 Approval of Minutes (05 September 2017)

The minutes of the previous meeting were approved.

1.2 Pre-Modification discussion

No modifications were provided for consideration at this meeting.

2. Workgroups

2.1 0621 – Amendments to Gas Transmission Charging Regime

CW explained that an updated draft modification will be provided in time for the next workgroup meeting planned for 13 October 2017.

RH reminded the Workgroup that as we get closer to the end of the year, there will be more work for the Workgroup to undertake, especially upon the impact assessment aspects.

3. Gas Charging Review

RH confirmed that the flow of the meeting would follow the presentation provided by National Grid NTS and not necessarily the flow of the Agenda.

During an onscreen review of the material provided for the Workgroup, CW advised which discussion points would be covered during this workgroup meeting:

- EU Tariff Code Update
 - o EU Tariff Code Update
- Sub-workgroups
 - Transmission Services Components
 - Output/summary of recent sub-workgroups
 - FCC
 - Avoiding inefficient bypass of the NTS
 - Multipliers/Interruptible
- Action 0501
 - o An example of how National Grid NTS forecasts 1:20 demand
- Action 0707
 - o Influence on entry vs exit impact in the CWD model of existing contracts
- Plan and change process
 - o Planning for NTSCMF meetings and sub groups and their focus
 - o GB/EU process alignment
- · Charging Models
 - Development of Transmission Services CWD spreadsheet
- UNC Modification
 - o Any updates related to UNC 0621

The main discussion points are captured (by exception) as follows.

EU Tariff Code Update

The second External TAR NC Implementations Workshop will be held on 05 October 2017, which falls on the same date as the next Transmission Workgroup, will be held at BluePoint Conference Centre, Brussels.

For details and how to register your attendance, please visit:

https://www.entsog.eu/events/second-implementation-workshop-for- the-network-code-onharmonised-transmission-tariff-structures-for- gas-tar-nc

Combined ASEP Modification

This modification proposal will consider the introduction of different classifications of capacity at ASEPs to allow different charging treatments.

Given the links to some of the topics under UNC0621, a more detailed modification proposal for the Combined ASEP Modification proposal will be presented to the Transmission Workgroup on 05 November 2017 following publication of an updated draft to Modification 0621 at the 13 October 2017 meeting.

Transmission Service Components

Referring to the Transmission Service components diagram (slide 8) CW talked through the steps in the process from left to right. This is a key diagram in understanding some of the way the components fit together and work as a whole.

Output from Sub Workgroups

CW advised the workgroup that the Sub Workgroups are completed for now, the final one was held 19 September 2017 which covered Multiplier and Interruptible.

All documentation and outputs will be available on the NTSCMF pages here:

http://www.gasgovernance.co.uk/ntscmf

http://www.gasgovernance.co.uk/ntscmf/subg

CW confirmed that the sub workgroup that is scheduled for 28 September has been cancelled.

Questions and comments are still encouraged to be sent to the National Grid NTS Capacity and Charging team: http://box.transmissioncapacityandcharging@nationalgrid.com.

When asked, CW confirmed that further information would be given at the next NTSCMF meeting scheduled for 13 October 2017 on the subject of 'Back Haul', (a virtual entry point), and DR suggested the use of the iDoc (Implementation Document for the Network Code on Harmonised Transmission Tariff Structures for Gas) may also provide some guidance.

3.1 Forecasted Contracted Capacity (FCC)

CW went through the summary slides for FCC following the sub workgroup in September.

CW began by reminding the Workgroup of the two options that are under consideration for this topic:

- Obligated capacity, or
- Proportion of obligated capacity.

The information provided in the Forecasted Contracted Capacity section of the material provided for the Workgroup is as follows:

- Status of discussion review of where we are
- Development linked to other topics
- FCC Options Development

At this point, CW thought it most appropriate to move on to the presentation provided by Vermillion for this meeting which covered:

- General Idea
- Input Parameters
 - When asked, HK explained that assumptions were used for the Expected Bookings Yearly average
 - JCh expressed some concern over the data used for entry and exit, suggesting a different approach for bookings.

- JCx commented that baselines for capacity were set in 2009 and they were set on a like for like basis; there is currently lots of un-booked capacity at GDNs.
- NW added that bookings are way below what is available. Historical flows are annual averages and suggested that comparing an obligated level with an average might not be the right way of doing this
- Outcome for Entry:
 - Scaling factor 31% to have all income via capacity charges
- Outcome for Exit
 - o Scaling factor 69% to have all income via capacity charges
 - High expected booking for GDNs

Observations

- JCx said that the existing contracts feed on existing prices is complex. It would be interesting to see what impact year on year analysis using historical flows would have on charges.
- o GJ sought clarification on tariffs and the conclusions presented.
- NW said that there is a need for the comparison of average flows with obligated to be understood, this is not necessarily wrong but needs to be understood. The under recovery will be recovered via some sort of socialised charge.
- NW suggested that there is a need to get to a greater accuracy by point rather than an overall picture.

Moving back to the National Grid NTS presentation:

Thinking of the overall package and FCC's influence combined with other components, discussion within the Workgroup took place and is summarised below:

When asked, CW advised that there are challenges with both approaches of either obligated or proportion of obligated capacity and that it is extremely beneficial to hear viewpoints from everyone.

CW also explained that he does not intend to provide anticipated bookings for 2019 along with the updated modification in October and a method for anticipated bookings is not something that will be codified under UNC0621.

JCx reminded all that currently, industry and National Grid NTS do not have a view of what changes in booking behaviours would be anticipated and appreciated the difficult task they have in forecasting bookings.

On the subject of forecasting under recovery for the purposes of modelling, CW advised that the model remains as it stands and that it gives the ability to show sensitivity and test varying methods, which is the purpose of the published model.

3.2 Avoiding Inefficient Bypass of the NTS (AlBoNT) (31.08.17 Sub-group)

CW gave a reminder of some general themes from the discussion to date:

- AlBoNT is a product to encourage use of the NTS and discourage inefficient bypass, it is considered beneficial to keep the product;
- Generally agreed that in some way it should reflect the cost of pipelines and be a form of discount against these investment costs, and
- Preference for the product to be self-limiting in design (e.g. through formula) rather than arbitrary parameters.

There are a number of areas to review to address the variability and how self-limiting could be achieved:

- Transmission and / or Non-Transmission (for discount to or alternative from);
- Charge as Capacity or Commodity;
- How demand factors into the calculation (and links to any other charges);
- Costs and how they are reviewed / updated (including expectations on transparency / ease of understanding)

CW went through the summary slides for Avoiding inefficient bypass following the sub workgroup in September.

AB then took the Workgroup through the Original Costs slide which outlines OCC Revenue; Commodity Revenue from old OCC Sites and Cross Subsidisation and answered specific questions relating to examples shown.

CW added that National Grid NTS have tried to give as broad a view as possible illustrating the scale of influence on the current commodity charges.

Moving on, CW talked the Workgroup through some of the views expressed for each question that arose in the sub workgroups, which were:

- Influence of Costs / Load factor
- Discount alternative from Transmission / Non-transmission
- Influence of Costs / Load factor
- Application to Entry / Exit
- Use / changeability

A range of scenarios were presented to illustrate the potential impacts using the current methodology as a base. Slides 29 to 33 are explained as follows:

- Slide 29 Cross Subsidisation across different input options
 - This slide shows the level of cross subsidisation that the Optional Commodity Charge (OCC) has on the commodity revenue base when changing the different inputs into the OCC formula (across the bottom of the graph).
- Slide 30 Original Costs with different options
 - The original cost inputs are used in calculating OCC rates. The other inputs (Load factor, fixed costs and commodity rate application) are changed
 - Shows the revenue obtained from OCC charges (blue) and commodity revenue now obtained from previous OCC users (green) that no longer have a valid OCC route due to the change in inputs. The blue line represents the cross-subsidisation level (as per previous slide) and the red circles just highlight the best and worst case scenarios for cross subsidisation.
- Slide 31 RPI costs with different options
 - Same as the previous slide but the cost inputs have been inflated by RPI (since 1998)
- Slide 32 Steel Index costs with different options
 - Same as slide 30 but the cost inputs have been inflated by a steel index (since 1998)
- Slide 33 Appendix current formula (cost, load factor, fixed costs, tx/non-tx optioneering
 - o Combines slides 29 32 into one graph

There was a discussion on the merits of avoiding inefficient bypass and how it may or may not have linked to investment decisions and also the level of charges being distributed between shorthaul and non-shorthaul flows.

3.3 Multipliers/Interruptible Existing Contracts

The general themes of discussion on Multipliers have been as follows:

- Any multiplier arrangement should recognise a diverse range of NTS Users and the range of capacity products can suit varied requirements
 - Cross subsidy between long term and short term users is a concern for some
 - o Entry and Exit can be treated separately in terms of multipliers
 - o Can have IP and Non-IP treatment
- Question to address for both Entry and Exit:
 - What is an appropriate multiplier for Entry / Exit Capacity justified against the required objectives?

The general themes of discussion on Multipliers have been as follows:

- Any pricing arrangement should recognise a diverse range of NTS Users and the range of capacity products can suit varied requirements, that will include risk appetite and consider how this is reflected for interruptible
- Products and methodology to release interruptible / off peak capacity to remain as per current arrangements
- Entry and Exit can be considered separately in terms of interruptible pricing
- Can have IP and Non-IP treatment
- Questions to address for pricing for both Entry interruptible and off peak Exit:
 - What is an appropriate arrangement to price interruptible / off peak relative to firm capacity justified against the required objectives?
 - How to determine the probability of interruption is key. All observations, in addition to that outlined in the TAR NC, should be provided to the group / NG.

CW went through the summary slides for Multipliers and interruptible following the sub group in September.

CW went on to explain there have been a number of views expressed for both Multipliers and Interruptible.

In particular, there was a lengthy debate regarding multipliers.

HK advised the group of the differing decisions being made across Europe with varying multipliers being set across Europe.

GJ mentioned that there is no methodology/rationale for any multipliers presently and stated there is a need for Interruptible products longer term, this would be beneficial from a planning point of view.

On the subject of timing, there was a discussion about when, it was considered most beneficial for the values for multipliers and interruptible to be known. Consideration is being given to an additional consultation nearer the time for both and if so, when would a decision be needed. In general, it was considered around May/June would be most appropriate, ahead of specific Entry and Exit processes. This would also be subject to an annual process if adopted for all points.

CW clarified that the plan up until now has been to gather industry views on potential approaches and to capture thoughts, discussions options for consideration.

It was mentioned that the workgroup should consider that long term capacity provides security to charges, and that in future if long term capacity commitments stretch 17 years ahead, 8 of those years are National Grid allowed revenue, and how is all this going to impact on long term capacity.

PD mentioned that the Charging Statement is published at the same time each year with prices locked in, and asked if going forward is there a possibility for charges to be updated twice a year?

In response, it was confirmed that Capacity reserve prices are set once per year. For revenue recovery charges (separate to the reserve prices), these could change more than once a year depending how it is applied (even at IPs).

When asked, CW confirmed that the revenue recovery charge can be made through a number of different mechanisms and updated more than once in any given year.

4. Review of Outstanding Actions

0301: National Grid NTS (CW) to articulate and capture the Storage Review concerns within the NTSCMF Issue Register.

Update: CW noted that he expects to review the matter before providing a further update at the next Workgroup meeting. **Carried Forward**

0404: 'Avoiding Inefficient Bypass of the NTS' (one-pager) - CW and the Subgroup to revisit/re-word the final paragraph to add clarity, and republish.

Update: CW noted that he expects to review the matter again before providing a further update at the next Workgroup meeting. **Carried Forward**

0501: National Grid NTS (NR) to provide an example of how National Grid NTS forecasts 1:20 demand, especially the short-term aspects (i.e. up to 5 years out).

Update: CW explained that National Grid forecasts 1:20 demand. The 1:20 gas demand forecast is the peak day demand in a cold winter that statistically would be expected once every 20 years. Each element of demand of each forecast year is run through an aggregate 62 years of weather history to investigate what would have happened if that weather happened again. From all peak values simulated, the top fifth percentile is then the 1:20 peak.

JCx stated that this action was raised when 1:20 was being considered as a possible option for Forecasted Contracted Capacity, which is no longer the case and confirmed that this action update is no longer relevant. **Closed**

0707: CW/LJ to check the calculations of CWD to better understand when to include the existing contracts, clarifying the influence on entry vs exit impact in the CWD model of existing contracts. This will be illustrated at future workgroup.

Action extension: CW/LJ to give a view on materiality and analysis is required to see if the calculations cancel each other out.

Update: Referring to the presentation section specifically covering this action update, CW explained that he will provide the workgroup with a method to allow those who wish to, to calculate charges based on a gross method (i.e. including Existing Contracts in the base over which charges would be calculated). NTSCMF pack to be updated post meeting with the details. **Carried Forward.**

Plan and Change Process

RH confirmed fortnightly meetings will take place until end of year and that the next meeting will be held in Solihull at St Johns Hotel (The), please see the meeting invitation for directions.

CW confirmed to the workgroup that the topic discussion timeline is now complete and that each topic has been discussed at least twice, adding that the discussions, views and positions will be taken in to consideration when updating the Modification (0621) ready for the next meeting.

Moving to the 'Timeline (simplified) – in parallel' (slide 60), CW talked the workgroup through the updates made to the timeline. CW and DR confirmed that the UNC and the Agency for the Cooperation of Energy Regulators (ACER)consultation will take place at the same time i.e. in parallel. NG and JO will ensure that the documentation meets all the requirements.

Some participants were uneasy about this arrangement. DR reminded the group that ACER will make a recommendation not a decision. DR confirmed that no decision will be made by Ofgem until the UNC and ACER consultations and the Ofgem Impact Assessment are completed.

DR explained that when the consultation responses come through, Ofgem will have 3 options: Approve; Reject or Send Back.

When asked, DR confirmed that the impact assessment will be part of the Ofgem decision

process and not part of the consultation.

New Action 0901: RH; DR and CW to provide further clarification on ACER consultation plus the UNC consultation at the next meeting.

Moving on to discuss the Impact Assessment, CW encouraged the workgroup to provide their ideas on what should be contained within the Impact Assessment; what impacts or analysis would parties like to see in an Impact Assessment and, what could be covered in Modification 0621, if appropriate, that can support an Impact Assessment.

Discussion then followed with suggestions such as:

- Security of Supply
- Security of Price

New Action 0902: Joint Office to request views from those that don't attend the workgroups

New Action 0903: All to respond to the comments made in the presentation regarding Impact Assessment, specifically slide 61.

Charging Models – Development of Transmission Services CWD spreadsheet

The workgroup was advised that the Charging Model has been updated and that v1.4 is now published with Auction/capacity product alignment for IP/Non-IP and capacity splits can now be done by User Group/Point specific for FCC and booking scenarios.

The updated model is published here: https://www.gasgovernance.co.uk/ntscmf

Any questions or comments should be sent to National Grid: box.transmissioncapacityandcharging@nationalgrid.com

5. Any Other Business

- **5.1** DR advised that Ofgem are considering a license change that allows Ofgem to specify that National Grid (the GB TSO) are obliged to carry out certain activities relating to tariff network code, an informal consultation on the activities required by the tariff network code (activities to be done by TSO or NRA) may be sent out.
- **5.2** CW advised the workgroup that Phil Lucas has joined the team and will be replacing Laura Johnson when she begins her maternity leave.

6. Diary Planning

Next meeting 13 October 2017 at **The St Johns Hotel**, **651 Warwick Road**, **SOLIHULL**, **B91 1AT**, where the following topics will be reviewed:

Updated draft Modification 0621 and Gas Charging Review

Further details of planned meetings are available at: http://www.gasgovernance.co.uk/Diary

Time/Date	Venue	Workgroup Programme
10:30, Friday 13 October 2017	St Johns Hotel Solihull (The), 651 Warwick Road, SOLIHULL, B91 1AT	Amended Modification 0621 and Gas Charging Review
10:00, Wednesday 25 October 2017	Pink Room, ELEXON, 350 Euston Road, London NW1 3AW	To be confirmed
10:00, Monday 06 November 2017	Orange Room, ELEXON, 350 Euston Road, London NW1 3AW	To be confirmed
10:00, Wednesday 22 November 2017	LG8, Energy UK Charles House, 5-11 Regent Street, London SW1Y 4LR	To be confirmed
10:00, Wednesday 06 December 2017	Orange Room, ELEXON, 350 Euston Road, London NW1 3AW	To be confirmed

Action Table (as at 26 September 2017)

Action Ref	Meeting Date(s)	Minut e Ref	Action	Owner	Status Update
0301	06/03/17 (amended 05/04/17)	3.0	National Grid NTS (CW) to articulate and capture Storage Review concerns within the Storage discussion document.	National Grid NTS (CW)	Carried Forward
0404	24/04/17	4.1	'Avoiding Inefficient Bypass of the NTS' (one-pager) - CW and the Subgroup to revisit/re-word the final paragraph to add clarity, and re-publish.	National Grid NTS (CW)	Carried Forward
0501	08/05/17	2.1	National Grid NTS (NR) to provide an example of how National Grid NTS forecasts 1:20 demand, especially the short-term aspects (i.e. up to 5 years out).	National Grid NTS (NR)	Closed
0707	17/07/17	3.1	CW/LJ to check the calculations of CWD to better understand when to include the existing contracts, clarifying the influence on entry vs exit impact in the CWD model of existing contracts. This will be illustrated at future workgroup. Action extension: CW/LJo to give a view on materiality and analysis is required to see if the calculations cancel each other out. Action extension 05/09/17: CW to re-examine the principles behind the charging model and provides justification as to how NTS undertook the charging modelling.	National Grid (CW/LJ)	Carried Forward
0901	26/09/17		Plan and Change process: RH; DR and CW to provide morning information on ACER consultation plus the UNC consultation at the next meeting.	RH; DR; CW	Pending
0902	26/09/17		Plan and Change process: Joint Office to request views from those that don't attend the workgroups	Joint Office (RH)	Pending
0903	26/09/17		Plan and Change process: All to respond to the comments made in the presentation regarding the Impact Assessment, specifically slide 61.	All	Pending