NTS Charging Methodology Forum (NTSCMF) Minutes
Wednesday 04 May 2016
Energy UK, Charles House, 5-11 Regent Street, London SW1Y 4LR

Attendees

Les Jenkins (Chair)	(LJ)	Joint Office
Lorna Dupont (Secretary)	(LD)	Joint Office
Amrik Bal	(AB)	Shell
Andrew Pearce	(AP)	BP Gas
Anna Shrigley	(AS)	Eni
Caroline Rossi	(CRo)	ExxonMobil
Charles Ruffell	(CR)	RWE
Colin Hamilton	(CH)	National Grid NTS
Colin Williams	(CW)	National Grid NTS
David Reilly	(DR)	Ofgem
Debra Hawkin	(DH)	TPA Solutions
Gerry Hoggan	(GH)	ScottishPower
Graham Jack	(GJ)	Centrica
Jeff Chandler	(JCh)	SSE
Julia Haughey	(JH)	EDF Energy
Julie Cox	(JCx)	Energy UK
Laura Johnson	(LJo)	National Grid NTS
Lucy Manning	(LM)	Gazprom
Mads Neilson*	(MN)	DONG Energy
Marshall Hall	(MH)	Oil & Gas UK
Nahed Cherfa	(NC)	Statoil
Nick Wye	(NW)	Waters Wye Associates
Pavanjit Dhesi	(PD)	Interconnector UK
Richard Fairholme	(RF)	Uniper
Robert Wigginton	(RW)	Wales & West Utilities
Sue Ellwood*	(SE)	Ellwoods Ltd

** via teleconference*

Copies of all papers are available at: http://www.gasgovernance.co.uk/ntscmf/040516

1. Introduction and Status Review

1.1 Approval of Minutes (06 April 2016)

The minutes from the previous meeting were approved.

1.2 Pre-Modification discussions

No business raised.

2. Workgroups

No business to consider.

3. EU Update

CH gave an update on the current position in respect of the EU Tariffs Code (TAR NC); see 4.6, below.

4. Charging Review

4.1 Terms of Reference (ToR) and Work Plan

A formal version of the Terms of Reference (ToR) has now been published at: *http://www.gasgovernance.co.uk/ntscmf*.

The Work Plan was reviewed at the end of the meeting.

4.2 Summary of April NTS CMF Analysis

LJo recapped on the modelling information presented on 06 April 2016, and key points from the analysis.

It was confirmed that the Supply Merit Order was not used in the CWD model, but this could be reviewed in the future. It was noted that Supply Merit Order was a key contributor to volatility.

CWD compared to Long Run Marginal Cost (LRMC) approach

This approach has potentially volatile Capacity prices with certain components driving large swings, including the method of how they are incorporated - Supply/Demand (Entry and Exit); Revenue input (Exit only) - this has significant upward pressure on the price (mismatch between Gas and Formula years). It looks to minimise the overall flow distance on the NTS for a flow scenario. This does mean that some prices are very low (including minimum or floor price) and some are high.

The effect/influence on revenue input of the mismatch between the Gas and Formula year was discussed. Referring to the recent Charging Statement, JCx suggested that a summary was required of what data was used where, so it was clear what informed prices; earlier forecasts could be produced. Demand changes year to year. Demand and matching merit order drives the volatility.

The CWD approach appeared to be generally indicating that changes (using 2014/15 to 2015/16) would be less volatile. This blunts the extremities of pricing. However, this does not take into consideration short term pricing, alternative products/arrangements, or how to manage the prospect of zero prices (does the industry want zero prices?).

There was potential to further develop this approach.

4.3 Relevant Objectives (GB and EU)

GB's current obligations in relation to charging, under the Licence and the relevant objectives were reiterated. CW pointed out that if changes to timings were required this would involve discussions relating to the Licence.

CH then outlined the EU Tariff Code core obligations, noting that the TAR NC is secondary legislation that elaborates on the primary legislation (links to the various documents in which these could be found in greater detail were provided on Slide 15).

The essence of what these were trying to achieve were then summarised, noting that there was some overlap with GB obligations. These were then briefly considered and commented on.

Referring to the statement that ‘Charges must be levied for access for existing and incremental infrastructure’ it was observed that this does not say that market based investment signals have to be used.

Expanding on the statement ‘Can take account of benchmarking by NRA’, CH indicated this could be done in two ways, i.e. in respect to efficient costs, and to the Tariffs themselves. JCh queried that there did not seem to be anything on ‘cost reflectivity’; PD believed it was mentioned in the EU Directive.

LJ observed that the information provided gave a helpful summary of the tests that might be applied, and then asked how will it be kept ‘principle based’. CW responded that the relevant objectives will be an integral part of designing the elements to be fitted together. Cost reflectivity might carry different meanings under different methodologies; measurements may be quantified, or better understood in terms of ‘best endeavours’, depending on the approach numeric might be very difficult to assess/produce. Revenue needs to reflect forward costs and historical investment recovery.

It was noted in the latest version of the TAR NC that some words had been changed, e.g to ‘comply’. DR believed it related to a regulation, which was meant to be complied with. CH added that the TAR NC should not go beyond the original legislation, it has to comply with that. JCx observed that this might indicate a need to be much more explicit in how compliance is demonstrated, and it would be a good idea to capture this.

For each of the methodologies considered LJ suggested the creation of a document or matrix showing the various features for each one together with a compliance statement, capable of being reviewed/revised as development work progresses.

Action 0501: *Methodology Comparison Document/Matrix* - National Grid NTS to produce an initial document/matrix to show the various features for each methodology together with a compliance statement.

4.4 Alternative Reference Price Methodologies

CW briefly described the various alternative reference price methodologies mentioned in the past, indicating the suitability of each in respect of potential models; VP(A) is the GB model. A short discussion ensued.

Ofgem GTCR conclusions and discussion

CW then moved on to explain the key elements of GTCR development and policy considerations relating to charging changes (TO Entry only). A comparison between the requirements of the current regime, the GTCR and the EU Tariffs Code was illustrated. A discussion ensued. It was noted that the GTCR recommendations were made in view of information available at the time. It was questioned if a dual regime was possible. DR responded that there was arguably a role for a dual regime but that TAR NC would only allow use for commodity charge if the NRA (Ofgem) considered it to be cost reflective; while theoretically there could be a dual regime participants should consider the views expressed by Ofgem in its GTCR letter. The GTCR shell proposals and the CWD proposals should be assessed and the best approach decided. There was a need to understand early on what constraints (modelling) and/or boundaries there might be, e.g. discounts, non-discriminatory elements, potential for undue discrimination at IPs, etc; clear, explicit justifications for what was agreed would be important to underpin any decisions.

A comparison of the two main GTCR options (there were others, not considered here) against the current Entry Capacity (using LRMC) was then illustrated. CW explained the differences and effects, observing that the ‘GTCR Approach for Entry Capacity – Current LRMC approach with as a p/kwh additive element for final charge ahead of year of use’ was believed to be the simpler of the two.

Summarising the alternatives reviewed, CW believed that Postage Stamp, asset allocation and VP(B) seem less suited to GB and use of the NTS. CW would welcome other views on what parties considered were the best approaches to take forward. There was a brief discussion. It was believed that getting capacity figures right should inform the methodologies/models. It was questioned were investment/divestment signals required? Was a lot of variation required in locational charges?

CW posed the question, which is most suited to GB and links both the commercial regime and the physical regime most appropriately into the future, and believed that consideration should be given to the signals from each approach. This was discussed. NW observed that LRMC does not necessarily create a signal, and queried if a location or investment signal needed to be included in the modelling. He was concerned that this may be simplifying what these models actually do, and further exploration of detail was needed. The model should be purely for the setting of tariffs and any options should be considered against this primary purpose. JCx asked if was possible to split out transit and non-transit assets; or could it be too difficult in a mesh network like GB's (and analysis paralysis might be reached quite quickly).

LJ suggested that parties give the potential approaches consideration prior to the next meeting and provide views so that any options deemed unsuitable could be quickly assessed and de-scoped, with clear reasons for discounting.

Action 0502: *Potential Approaches* - All parties to consider prior to the next meeting and provide views to CW on suitability/unsuitability to enable assessment to take forward or discount.

4.5 Modelling Capacity Weighted Distance (CWD) and Long Run Marginal Cost (LRMC) with flow data

LJo explained that further analysis had been carried out modelling LRMC and CWD flow data using the same assumptions except for the Capacity values used as inputs into each approach. The assumptions made for the April analysis were reiterated - that GB has a single methodology for all points, that there is no change in behaviour for capacity, and no discount structure has been included (i.e. all capacity at each point attracts the same price). The key assumptions for capacity, network and revenue when modelling CWD compared to LRMC were described in tables.

A number of charts were then presented (Slides 31 - 40) relating to Entry and Exit Flow data, Entry and Exit Obligated and Flow data, and price comparisons using LRMC and CWD; the information that these provided was discussed and explained in more detail. LJo explained which prices were shown in each chart. It was noted that the graph on Slide 32 showed there were less flows in the system than what the obligated levels are. Moving on to Slide 35, the inputs were discussed, and CW explained how it had been decided what to use, i.e. to put in perspective if moving away from baselines and peaks. This information was simplified (complexities are added with certain products) and is a capacity comparison. Parties were directed to the additional information/tool published as a spreadsheet (available at *www.gasgovernance.co.uk/ntscmf/040516*) should they wish to carry out their own individual analysis to assess the effects. DR queried why prices were less for the forecast flows scenario than the obligated scenario, and CW explained it was because of the way that Entry works (it does not have a revenue adjustment component); this was just a straight comparison and will not see as great a variance as would be seen with Exit.

Slide 36 showed prices under the CWD model; prices increase at each of the points.

The effect on Booked Capacity on Long and Short Term Products (Entry and Exit) was then reviewed. A number of charts were then presented on Slides 41 - 43; the information provided was discussed and explained in more detail. It was noted that, looking at both Long and Short Term over the last couple of years, more Short Term products are being booked; what is flowing on the system is less than what is being booked (Slide 42 shows the decline; there is less activity in the QSEC auctions; there have been large behavioural changes over the past few years). MH suggested that this should also be compared with booked capacity at earlier periods to give a more holistic picture. CW believed that Short Term was increasing due to the behavioural shifts. NW observed that a number of bookings would be storage related; this compounds the impact of the decline. LJ noted that this graph was a statement of what is seen today.

AS noted that the best time to buy capacity was 'within day', a regime needed to be designed to incentivise the right behaviours; it might be good also to show alongside this information how much commodity charge/revenue was generated. This was discussed.

GJ observed that it would be good to know as soon as possible what National Grid NTS' view on Short Term multipliers for the GB regime was, to enable undue/non discrimination elements to be considered. CW indicated this was under discussion. Article 13 (EU code), what it says and what it applies to relating to discrimination, was then discussed; DR indicated there may be justification in some instances for discrimination provide it was not undue discrimination. It was noted that Ofgem appeared to have substantial discretion, however it would need to justify why particular approaches are taken.

It was suggested that a further column/bars should be added to the analysis - what the target price should have been to recovered revenue. This was discussed. AS referred to the GTCR and what Shippers will be expected to pay in the future. LM observed that the graphs do not show what Shippers actually pay. CW pointed out that the model's intentions are different in each case and explained in more detail, and why some numbers are not useful. It was suggested the information provided in the graphs should relate to/include payable prices, discount prices and reserve prices. LM noted that most Shippers pay commodity prices - this was a large element of costs. AS believed a more holistic picture was required. JCx observed that LRMC does not target allowed revenue in the way that CWD does, and there was a need to achieve a better comparison.

Action 0503: *Booked Capacity - additional information* - National Grid NTS to provide additional information (i.e. commodity price that recovers the relevant revenue) to enable a better comparison of principles.

Revenue collected under flow and obligated capacity prices against flow capacity was illustrated.

LJo then gave a brief summary of the conclusions relating to the modelling of CWD and LRMC with flow data, noting that flow levels are currently less than 30% of the obligated levels for both Entry and Exit, and when recovery of revenue is linked to a low percentage against forecast charges could result in significant under recovery that will need to be accommodated into potentially volatile charges, and this could have the effect of undermining the methodology used for setting capacity. Under any methodology the link between actual and forecast (when used in setting prices) was important. Forecasted contracted capacity needs to be as close to what is going to be flowed on system to ensure revenue is collected in the applicable year. JCx commented that it was necessary to get under recovery as close to zero as possible; DR added the TAR NC expects it to be minimised; GJ suggested some stress testing was required. There was a brief discussion relating to the current means of under/over recovery and the mechanisms in use.

4.6 EU Tariffs Code (TAR NC) - Current outlook

Key updates relevant to Gas Charging review

CH gave an update on the current position.

Implementation timescales - There had been a change to the previous timescale, with entry into force moving to April 2017. The first annual auction impacted will be July 2019.

Regulatory accounting Principles (Article 38) - This is still very contentious. The text has been clarified by the EC to highlight that ACER guidance on determination of allowed or target revenues is “non- binding”. ENTSOG considers the setting of allowed or target revenues as out of scope of the TAR NC, and proposes the deletion of Article 38 in full.

ACER review (Article 27) - This has been amended slightly with respect to the timescales of each step. ACER can still make proposed amendments to the proposed methodology. The review cycle is now at least every five years. ENTSOG proposes that ACER is removed from the NRA decision-making process, or removed at least from the first cycle and for the NRA to take account of ACER’s repost at a subsequent cycle. ACER ‘decisions’ are now going to be ‘opinions’.

Calculation of interruptible priced (Article 16) - Adjustment factor A has been reinstated and this reintroduction is unlikely to change. ‘Backhaul’ priced at marginal cost of product has been reintroduced and may have an ‘A’ factor as well - this will be strongly contested by some TSOs. The text will be reshaped.

AB believed that Ofgem should be looking at multipliers and cross border trade and the relevant objectives, and how compliance can be demonstrated (subjective and evidence based?). CH affirmed that at EU level multipliers was not a big issue - it only affects GB. MH commented that a minimum multiplier of 1 was inappropriate and detrimental for the GB market and will impair cross border trade. DR confirmed that Ofgem was pushing for more flexibility, through DECC; bi-lateral discussions were ongoing and he believed there was still the opportunity to put the GB case.

Responding to a question from PD, DR confirmed that a change to the cap had not been argued for, just the floor. DECC was negotiating.

Storage (Article 10) - The latest text confirms that storage discount is at least 50%. All criteria for determining discount have been removed from the Article, the level of discount being simply subject to consultation (each Member State (MS) - to discuss an appropriate value). ENTSOG is pressing for the discount to be in the range of 0-100%. There may be strict criteria for a lower discount. DR added that GB is the only MS pushing for a multiplier of less than 1.

Existing contracts (Article 39) - The ‘grey zone’ - The fixed price element for contracts concluded before 29 November 2013 is still included. Price protection for contracts for incremental capacity concluded between 29 November 2013 and date of application for TAR NC has now been removed. The text is unlikely to change with regard to the GB regime (there will be a push to reinstate protection of contracts in price-cap regimes).

4.7 Dual Regime discussion

CW outlined the current GB framework for Revenues and recovery.

Simplified schematics illustrating the EU Tariff Code General Revenue reconciliation /recovery structure were then displayed and explained, and the definitions of ‘transmission services’ and ‘non-transmission services’ were clarified.

The assumptions made to facilitate a dual regime were then set out; CW pointed out that the services do not perfectly map, but were believed to be reasonably solid in terms of revenue; in terms of income it is how it is treated which would decide where it sits. (How charges contribute to and recover revenue would be a different discussion.)

There were a range of areas under the EU Tariffs Code that may permit a dual regime. Any implementation becomes a GB debate. CW confirmed that IPs were Bacton and Moffat; all others were Non IPs. If there was single regime it has to be argued where Shorthaul might fit. This was discussed. It was suggested that GB should be seeking flexibility and the right regime for its circumstances and can explain how it complies. It was noted that there was an 'optional commodity charge' to serve inefficient bypass of the network. It was questioned what actually sat in 'transmission services' and 'non-transmission services'.

Some dual regime scenarios were illustrated, indicating how they might/might not be applied at Interconnection Points (IPs) and Non Interconnection Points (Non IPs). DR clarified the information relating to the item 'Existing Contracts'- it would not apply to any GB contract, i.e. there was no protection. A discussion followed. The GB is considered to be a floating regime by the EU. MH observed that the protection clause appears to apply to some MSs for their existing arrangements, and that this needs to be clarified why it was not applicable to GB's existing contracts. DR observed that the text had changed a few times. It was suggested that DR clarify the legal understanding/interpretation of what this means for GB's existing contracts, as it seems discriminatory for these to be 'not protected'.

Action 0504: *Existing GB Contracts statement (Price can't be adjusted for contracts concluded before 29 November 2013)* - Ofgem to clarify the legal understanding /interpretation of what this means for GB's existing contracts.

Consideration was then given to the current NTS Optional Commodity ("Shorthaul") arrangements and how these might need to change at IPs and Non IPs. CW indicated that alternative products could be had for things that could be linked in certain ways, and explained in more detail how 'links' would be applied. CW noted that definitions will need to be closely monitored as they seem subject to change, and the eventual interpretations will affect how mechanisms are applied. A number of complications can be foreseen and will have to be managed accordingly.

Reference was made to the application of multipliers for standard CAM products, could they be used for anything else? This was briefly discussed, but there were no firm conclusions at present as to how things might work.

DR had been explaining the reasons for Shorthaul and the economic incentive underpinning it to EU. CH observed that the code text is not yet stable. MH reiterated that GB needs to have the EU's explicit recognition of the uneconomic bypass concept for Shorthaul. DR believed Article 7a2 would be the best place for it to sit (CAM NC, as an amendment). MH believed there was a need to get it recognised in the TAR NC, rather than be open to defeat as a proposed amendment to the CAM NC.

The current Storage arrangements and how these might need to change at IPs and Non IPs was considered. It was noted that a discount could not be applied to commodity, only capacity.

Consideration was then given to the current non-transmission services under dual regime arrangements and how these might be applied to IPs and Non IPs.

Concluding, CW reiterated the existing GB framework for Revenues and recovery, and then presented a schematic illustrating what might be permitted based on the current understanding of EU requirements and possibilities; this was briefly discussed. It was summarised that irrespective of treatment some areas will need to be reviewed as any inclusion in the overall methodology will likely be different to today (NTS Optional Commodity charge, Storage Short Term pricing, Revenue reconciliation). It was noted that dual regime arrangements, whilst permitted, could be complex; and that relevant objectives will be integral. Alignment with Ofgem's GTCR policies needs to be considered.

MH suggested that Ofgem should review the movements in TAR NC that have occurred since publication of its GTCR policies, and should reflect on and reconsider what needs to be changed. DR observed that the GTCR was very high level in its scope, and that contract protection was not referred to in Ofgem's conclusions. MH referred to the previous inclusion of a multiplier of 0.5, that has since disappeared, and believed that Ofgem should consider revising its thinking in respect to some areas.

AP reiterated that an early agreement on whether or not a dual regime should be applied was important, as the industry needs to understand the pricing regime in which is to operate. GJ added that GB needs to push for more flexibility on multipliers and the retention of Shorthaul and 'grandfathering' of contracts – simply that they are protected, so that the rights for the affected contracts remain as previous despite being unable to offer that arrangement post-TAR.

Many believed that long-term contracts were protected and it has come as a great surprise to meeting participants that these now appear NOT to be protected.

4.8 Next Steps

JCh commented that he had found the information provided on Slides 60/61 relating to the Dual Regime scenarios to be very useful, and asked if a view could be provided on whether/how each of these scenarios would meet the relevant objectives/comply with the EU Codes.

Action 0505: Provide National Grid's view as to whether the Dual Regime scenarios are EU-compliant.

It was summarised that:

- National Grid NTS would refine further comparisons of CWD and LRMC
- discussions on principles behind using either approach would be continued
- consideration of Long and Short Term pricing and behaviours would continue
- discussions on alternate products would continue
- developments in the EU Tariffs Code would continue to be monitored

The focus for the next meeting would be on the relevant objectives.

5. Issues

None raised for discussion.

6. Any Other Business

6.1 Charging Statements

Noting earlier references made in discussion to recent Charging Statements, LJ asked if participants wished these to be discussed.

No discussion was deemed required.

7. Review of Actions Outstanding

0401: National Grid NTS to produce an assessment tool or model - a 'straw man' - to enable different methodology options to be considered and compared.

Update: Refinement to be continued. **Carried forward**

0402: National Grid NTS to produce draft principles/information on a "dual regime" for consideration.

Update: Presented; completed. **Closed**

0403: National Grid NTS to provide, for circulation, a communication to apprise the wider community of the work that was being developed within this forum.

Update: Under development. **Carried forward**

8. Diary Planning

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

Workgroup meetings will take place as follows:

Time/Date	Venue	Workgroup Programme
10:00, Friday 03 June 2016	Energy UK, Charles House, 5-11 Regent Street, London SW1Y 4LR	• Continued refined comparison of the current Long Run Marginal Cost (LRMC) Model with an alternative (Capacity weighted Distance (CWD) Model) to be built • To include long term/short term capacity pricing • To include range of scenarios that could result in combinations of methodologies at different points (e.g. to consider GTCR/EU, issues identified, potential dual charging regime scenarios for Interconnection Point/Domestic) Continued consideration of • Revenue recovery and reconciliation under respective scenarios • Impacts of the inputs for the modelling including their relevance
10:00, Tuesday 05 July 2016	Consort House, Prince's Gate Buildings, 6 Homer Road, Solihull B91 3QQ	*To be confirmed*
10:00, Wednesday 03 August 2016	Energy UK, Charles House, 5-11 Regent Street, London SW1Y 4LR	*To be confirmed*
10:00, Tuesday 06 September 2016	Consort House, Prince's Gate Buildings, 6 Homer Road, Solihull B91 3QQ	*To be confirmed*

10:00, Wednesday 05 October 2016	Energy UK, Charles House, 5-11 Regent Street, London SW1Y 4LR	*To be confirmed*
10:00, Wednesday 02 November 2016	Consort House, Prince's Gate Buildings, 6 Homer Road, Solihull B91 3QQ	*To be confirmed*
10:00, Friday 02 December 2016	Energy UK, Charles House, 5-11 Regent Street, London SW1Y 4LR	*To be confirmed*
10:00, Wednesday 11 January 2017	Consort House, Prince's Gate Buildings, 6 Homer Road, Solihull B91 3QQ	*To be confirmed*
10:00, Wednesday 01 February 2017	Energy UK, Charles House, 5-11 Regent Street, London SW1Y 4LR	*To be confirmed*

Action Table (04 May 2016)

Action Ref	Meeting Date(s)	Minute Ref	Action	Owner	Status Update
0401	06/04/16	4.8	National Grid NTS to produce an assessment tool or model - a 'straw man' - to enable different methodology options to be considered and compared.	National Grid NTS (CW)	***Due at 03 June 2016 meeting*** **Carried forward**
0402	06/04/16	4.8	National Grid NTS to produce draft principles/information on a "dual regime" for consideration.	National Grid NTS (CW)	**Closed**
0403	06/04/16	4.8	National Grid NTS to provide, for circulation, a communication to apprise the wider community of the work that was being developed within this forum.	National Grid NTS (CW)	***As soon as possible*** **Carried forward**
0501	04/05/16	4.3	*Methodology Comparison Document/Matrix* - National Grid NTS to produce an initial document/matrix to show the various features for each methodology together with a compliance statement.	National Grid NTS (CW/LJo)	***Due at 03 June 2016 meeting*** **Pending**

0502	04/05/16	4.4	*Potential Approaches* - All parties to consider prior to the next meeting and provide views to CW on suitability/unsuitability to enable assessment to take forward or discount.	ALL Parties	***As soon as possible*** **Pending**
0503	04/05/16	4.5	*Booked Capacity - additional information* - National Grid NTS to provide additional information (i.e. commodity price that recovers the relevant revenue) to enable a better comparison of principles.	National Grid NTS (CW/LJo)	***Due at 03 June 2016 meeting*** **Pending**
0504	04/05/16	4.7	*Existing GB Contracts statement (Price can't be adjusted for contracts concluded before 29 November 2013)* - Ofgem to clarify the legal understanding /interpretation of what this means for GB's existing contracts.	Ofgem (DR)	***As soon as possible*** **Pending**
0505	04/05/16	4.8	Provide National Grid's view as to whether the Dual Regime scenarios are EU-compliant.	National Grid NTS (CW/LJo)	***As soon as possible*** **Pending**