# NTS Charging Methodology Forum (NTS CMF) Minutes Monday 24 April 2017

### Consort House, 6 Homer Road, Solihull B91 3QQ

#### **Attendees**

Rebecca Hailes (Chair)	(RH)	Joint Office
Lorna Dupont (Secretary)	(LD)	Joint Office
Anna Shrigley*	(AS)	Eni UK
Benoit Enault	(BE)	Storengy UK Ltd
Bridget Roberts*	(BR)	E.ON
Charles Ruffell*	(CR)	RWE
Colin Hamilton	(CH)	National Grid NTS
Colin Williams	(CW)	National Grid NTS
Danishtah Parker	(DP)	National Grid Gas Distribution
David Reilly*	(DR)	Ofgem
Debra Hawkin	(DH)	TPA Solutions
Fiona Cottam	(FC)	Xoserve
Graham Jack	(GJ)	Centrica
Jeff Chandler*	(JCh)	SSE
Joanne Parker	(JP)	Scotia Gas Networks
John Costa	(JCo)	EDF Energy
Julie Cox	(JCx)	Energy UK
Kieron Carroll	(KC)	PSE Kinsale Energy
Laura Johnson	(LJ)	National Grid NTS
Nahed Cherfa	(NC)	Statoil
Nigel Sisman	(NS)	Sisman Energy Consulting
Pavanjit Dhesi*	(PD)	Interconnector UK
Robert Wigginton	(RW)	Wales & West Utilities
Roddy Monroe	(RM)	Centrica Storage
Sinead Obeng	(SO)	South Hook Gas
Vladislav Zuevskiy	(VZ)	Northern Gas Networks

<sup>\*</sup> via teleconference

Copies of all meeting papers are available at: <a href="http://www.gasgovernance.co.uk/ntscmf/240417">http://www.gasgovernance.co.uk/ntscmf/240417</a>

The NTS CMF Document Library has been set up on the Joint Office website and can be accessed at: http://www.gasgovernance.co.uk/ntscmf/doclib.

#### 1. Introduction and Status Review

RH welcomed all to the meeting.

#### 1.1 Approval of Minutes (05 April 2017)

RH reported that DR and CW had requested minor amendments and that a revised version had been published. The minutes of the previous meeting were then approved.

#### 1.2 Pre-Modification discussions

No business for consideration.

#### 2. Workgroups

No business for consideration.

#### 3. Gas Charging Review

CW gave a brief overview of the programme for the meeting.

#### 3.1 EU Tariffs Code - Update

CH reminded that the consultation on the Implementation Guideline document closed out on 30 June 2017, and encouraged parties to respond to <a href="mailto:TAR-NC@entsog.eu">TAR-NC@entsog.eu</a>. A workshop is planned for October 2017 and will contain more detail than the first one (likely to include ACER discussion of the NRA's role and what processes to put in place to ensure a more consistent implementation; templates; pros/cons; Reference Price Methodology, and Economic Test). Attention was drawn to publication of materials from the first Implementation workshop; these can be found on the ENTSOG website.

In ENTSOG work is continuing regarding transparency. There will be two sources for TAR NC information - the ENTSOG TRA Platform and the TSO/NRA website. A comparison of what might be found and where was illustrated in a Table. CH emphasised that in the case of a mismatch between the two sources then the TSO/NRA website would prevail.

Development of UNC Modification 0611 (Amendments to the firm capacity payable price at Interconnection Points) was progressing and the next meeting will take place on Thursday 04 May 2017, as part of the business proceedings of the Transmission Workgroup.

#### 3.2 Review of Subgroup Meetings

CW reported that the Subgroup had focused on further development (additional functionality and other refinements) of the Charging spreadsheets, and provided more detail on the assumptions made and the various changes to be included in the next release (expected in the week commencing 01 May 2017). A discussion ensued.

Responding to a question from DH, CW confirmed the spreadsheets have been developed assuming an ex-ante charge setting and all charges being set ahead of the tariff year. There had been no indication of mid-year changes. It was noted that any such changes would affect a party's strategies if applied. It was affirmed that developments and refinements would continue to take place; there is a need to understand if the code has any provisions for mid-year changes. Basing on a postalised capacity price does not adjust the reserve price, it adjusts the ultimate payable price for capacity. The model has the capability to treat revenue recovery in a number of ways. For a postalised adjustment it can include it as an 'additive' option, and it is up to the user how they utilise/combine the options/functionality. National Grid NTS has tried to provide a sufficiently flexible tool in response to parties' signalled requirements, however some combinations of options, whilst useful to help educate and inform, may not be possible in practice.

Some parties reported experiencing difficulties accessing/operating the models. This may be due to organisations having different versions of Exel and whether the required 'Solver add in' functionality was correctly set up. Advising that National Grid NTS used the version Exel2010, CW encouraged parties to forward copies of any error messages to him so that individual assistance could be offered, depending on the problem.

Moving on, CW reported that options for Forecasted Contracted Capacity had also been discussed by the Subgroup, and some initial conclusions had been reached and these have been included in the latest version of the "one-pager" document available on JO website.

The Subgroup had also considered its role in contributing to and complementing the UNC Modification process, and views on this were sought from the NTS CMF. A number of NTS CMF participants found the 'one-pagers' to be helpful, and that the Subgroup was better placed to delve into the more technical details of various aspects. Some parties expressed concern that it appeared as if the Subgroup, rather than the NTS CMF itself was taking decisions, and that those who were not involved in the Subgroup might be missing out on debate/decision. RW observed that the summary papers were reflective of what was discussed at the Subgroup meetings and that non-attendees were not missing anything. CW believed the groundwork (initial scrutiny, debates and testing, preliminary decisions/recommendations) as set out by the Subgroup had meant that the discussion at the NTS CMF could now look at proposed recommendations to approaches and offered opportunities for challenge. The authority for agreement and decision-making still rested with the NTS CMF itself. JCx observed that if the Subgroup did not fulfil this function then the NTS CMF would be required to meet more frequently. It was noted that the NTS CMF had a much larger participation and that large numbers presented greater difficulty, at times, to enable engagement in meaningful discussion. GJ commented that however forums were constructed, the work still had to be done and that interested parties can attend at whatever level suited. Frequency of meetings could always be adjusted as progress was made. The Subgroup in effect pre-processes, and then offers for discussion/views/decisions. In order to work with the UNC process it may be necessary to review the Subgroup's Terms of Reference to ensure clarity of its role.

At this point RH, drew attention to the fact that the Subgroup had a published Terms of Reference, but that this did not seem to be the case for the NTS CMF itself. Following a brief discussion, it was suggested that RH clarify what was currently in existence (historical Transmission Charging Methodology Forum (TCMF) or NTS CMF) and that a 'strawman' be drafted (by RH and CW) for discussion at the May/June meetings.

# Action 0402: NTS CMF Terms of Reference - RH and CW to draft a 'strawman' for discussion at the May/June meetings.

AS asked if the Subgroup could look at different scenarios now that the Capacity Weighted Difference (CWD) model was available. CW reiterated that users could test their own sensitivities/combinations, depending on which aspects/elements might be of most use to them. Formal analysis will be performed as part of the UNC Modification development process and subsequent outputs will be assessed/discussed by the Workgroup. In the meantime users can make/test their own sections to gain some idea of what is possible. There will be 'place holders' for some aspects, to be developed and refined as the experience accrues.

NS referred to the one-page summaries, believing it to be hard to understand what has been notionally agreed and what has not. It was important to be clear about the shape of the proposal and how resolution was to be achieved. Process management of any alternates was also of concern. JCo added that it was important to receive Ofgem's input at every stage to avoid inefficiency of effort/process. DR referred parties to Ofgem's policy view already put forward (21 February 2017), and CW pointed out Ofgem participates in the expression and exchange of views at the Subgroup meetings. GJ observed that parties were free to present their own views on what a model/methodology should be.

CW summarised certain topics, noting that the Subgroup has scrutinised underlying methodology and that NTS CMF has been involved; this now has more certainty but it does not preclude alternatives; for example multipliers and Interruptible, there was provision to have these, but an understanding has yet to be reached on how these are best dealt with. Some items will not be touched (it has been generally agreed not to address certain aspects at this stage, and they have been separated and set aside for future review). The next revision of the GCR Decisions List will provide an update of current positions reached and the proposals for the forthcoming UNC Modification.

DH commented that it was not obvious that CWD was going to provide what parties actually

want. CW confirmed that Postage was not 'off the table', it provides a helpful reference point to help assess and compare options, something parties asked for when developing a set of spreadsheets to help inform and educate on potential charging changes. Cost reflectivity is still expected to be a function (and Postage Stamp does not have this as it does not include capacity or distance, some of the key elements under TAR NC for cost drivers) and because it appears that CWD improves the position over the current methodology, it will be written into the modification. CWD will be compared to the prices that we have (sensitivity analysis was done after much discussion and considered in both the Subgroup and the NTS CMF). JCo was concerned that it might force us down a 'top down' route, whereas EU approach is from 'bottom up', and from many aspects CWD could be a lot worse than LRMC in terms of predictability and achieving more stability. CWD is more prescriptive. Responding, GJ pointed out that there were other restrictions being imposed because of TAR NC. JCx added that exhaustive analysis was performed/summarised in respect of LRMC, and that work/progress now needed to be made in other areas; many parameters are still to be decided to go into CWD, to achieve the best stability and predictability.

NS observed that in the past the deeper parts of assumptions made, and their implications, may not have been widely understood, and was concerned that the same mistakes may also be made/perpetuated this time. For example, NS observed that the treatment of negative flow distance was a major source of volatility in the current charging methodology and noted that this had not been investigated in earlier sensitivity analysis. Changing the assumption about the benefits of counter flow in the model could lead to more acceptable outcomes which are much closer to those obtained from the CWD approach. CWD is more complicated than Postage Stamp model; it originated in Germany, which has since moved away from that model and returned to Postage Stamp. Moving to CWD will place more complexity and criticality on certain areas. JCx observed that the formula year issue was set aside until the next Price Control (recognises that this fundamental to volatility), in all other areas decisions are preliminary and for review and may be kept simple.

GJ reiterated that Postage Stamp was not 'off the table', neither was LRMC, and a party could raise alternatives if they wanted to. The modification process will add clarity to the views put forward in the Subgroup, and further expressions of individual viewpoints will be looked for in the Workgroup's debates. The model is not the methodology, just a tool to assist in developing an understanding regarding the sensitivities and complexities that might be encountered.

Concerns were expressed that not all industry parties appeared to have a good understanding of the current position. CW pointed out that all documentation produced to date has been published on the Joint Office website, and that communications are issued through the Joint Office using the widest possible distribution list. How current positions in various areas have been reached was clearly documented in the GCR Decisions List (red, amber, green status). It was suggested that all participants in today's meeting should review the available documentation to bring themselves 'up to speed', and CW welcomed readers to submit informed questions to him and the team via the box account box.transmissioncapacityandcharging@nationalgrid.com as appropriate.

Action 0403: NTSCMF and Subgroup documentation review - All participants to review the available documentation published on the Joint Office website at <a href="http://www.qasgovernance.co.uk/ntscmf">http://www.qasgovernance.co.uk/ntscmf</a> and <a href="http://www.qasgovernance.co.uk/ntscmf/subg">http://www.qasgovernance.co.uk/ntscmf/subg</a>, and submit informed questions to CW via <a href="mailto:box.transmissioncapacityandcharging@nationalgrid.com">box.transmissioncapacityandcharging@nationalgrid.com</a> as appropriate.

CW affirmed that parties would see the draft modification before it is formally raised.

Charging Spreadsheets for modelling

CW briefly outlined the progress made to date. He reiterated that In line with the previous discussions on the Reference Price Methodology (RPM) it is proposed not to continue with the LRMC Model, and that where a RPM is used it will either be using Capacity Weighted Distance (CWD) or Postage Stamp. Following a review at NTS CMF (05 April 2017) and the Webex session (07 April 2017) the revised spreadsheets are now available on the Joint Office website at: <a href="http://www.gasgovernance.co.uk/ntscmf">http://www.gasgovernance.co.uk/ntscmf</a>. The files include:

- The Transmission Services CWD spreadsheet (version 1.1) plus a User Guide;
- A Transmission Services Postage Stamp Model (version 1.0) plus a User Guide;
- A Non Transmission Services Charging Model (version 1.0).

The User Guides were welcomed and seen to be good; CW noted some suggestions for improvements to technical functionality (switch on/off capabilities). Referring to inputs terminology, VZ observed that it was important to have an understanding of what was being drawn upon/used (definitions, interpretations, figures, time periods), giving examples where there seemed to be mismatch. It was suggested that there might be different interpretations depending on which Licence (NTS or DNO). LJ explained what data National Grid NTS was using. It was observed that confidence about denominations, baselines, etc. was required, and in the validation of data and sources. It was agreed that any other data considerations could be discussed offline with each party as necessary.

Further updates and enhancements are likely to support the charging arrangements being proposed and under discussion. There will be an opportunities to discuss further the future development and appropriate release points.

#### Forecasted Contracted Capacity (FCC)

The Subgroup had been asked to consider, what is an appropriate selection or method of determining an FCC for GB. CW then briefly outlined the current conclusions (published in the FCC Discussion Paper v.0.5 <a href="http://www.gasgovernance.co.uk/ntscmf/subg1page">http://www.gasgovernance.co.uk/ntscmf/subg1page</a>), and encouraged parties to read this.

At present the modification will not rule anything out, but will eventually state the appropriate detail on the methodology for the FCC - it could even be a hybrid solution of available options; all options/suggestions remain under discussion, with nothing discounted at this point. It was considered that conclusions would become clearer through the ongoing discussions and development of the end-to-end model, and the UNC Modification process. It was recognised that there could be a step change as a result of FCC and therefore a transition into new values may be useful to change for 2019 and beyond. It may be beneficial to consider a combination of options for FCC if there is benefit in delivering against the objectives of using the FCC.

How to assess and select FCC values had been discussed. It is necessary to consider, in development of the FCC, how to avoid resulting values not being open to interpretation and challenge. In selecting an FCC value it would be helpful to develop objectivity assessments to help narrow down the options. Although selection criteria may not identify a perfect option, they should help to reduce the number of options. CW outlined the proposed criteria:

- Are the values published/publically available?
- · How far out into the future are the values available?
- Stability of values (year to year)
- · Objectivity of values.

Views were sought on whether these were the right criteria, their importance, and were there any others to consider. It was noted that Ofgem had made no objection to this current list.

NS believed that some points might be more price sensitive, and queried what was this trying to achieve. JCx pointed out that we are now more in a 'cost recovery world' rather than an 'investment signal world', and there was a need to consider how redistribution can reasonably be made. The TAR Code is happy to have distance and capacity as cost drivers. CW observed that transparency is required by the TAR NC (in clarity, process, degree of comprehension, etc.).

JCo commented that stability of values has to be of actual use. CWD uses capacity and incentivises a party to make sure it has the right amount reflected. Features of the CWD model were briefly discussed and compared. In certain circumstances it could provide a benefit. How unit prices were derived was discussed. The basic model does not take into account specific individual capacity bookings; CW explained this in more detail. It was recognised that both exit and entry capacity feed into the model and care needs to be taken in recognising how they feed through. The CWD process was discussed in more detail. CW observed that, if using the objectivity criteria, 'obligated' might be considered preferred because it is more visible and good from the point of view of timing however there are consequences and these may result in the need to consider other options or a 'hybrid'. DH commented that it affects the weighting, and that no one seems to be worried about what the actual prices will be. GJ noted that 9 different options were being considered. NS asked if there was an aspiration to understand how much of National Grid NTS' allowed revenue it wanted to recover by whatever method. CW gave an example of different methods to be used potentially (flow based costs, multipliers) depending on a range of combinations that could be selected. Some options will have to be revisited once parties have tried out the models and have a better understanding of the diverse effects of various combinations (positive or detrimental, present and future). Whatever the solution, it has to be consistent across all points.

JCo noted that while under-recovery was the current issue, it might be that we end up with something very similar in the future also. CW confirmed that there was one lever available for adjustment in the present (commodity charge); in the future there may be multiple levers to call upon. LJ said it was being queried, was it better at an aggregate or disaggregate level, and can it be given out publicly; this was under discussion. JCx commented that forecasting bookings was likely to be radically wrong in the first few years, and that experience would provide a better view of what should be most appropriate. The ex ante recovery mechanism needs to be got right as soon as possible. The more complex the initial arrangements are made, the harder it becomes. A postalised charge may eventually be the approach (we already postalise certain elements). Nobody really wants 'K' to be a big number, and with the benefit of hindsight a view of booking capacity behaviours will no doubt lead to subsequent revisions again, before the industry gets something it is more comfortable with. However, all at present is unknowable. BE observed that there was a need to look at potential consequences, not just revenue recovery, but also for security of supply and for consumers and utility for GB as a while; there would be impacts on generators, storage, etc. (perhaps irretrievable), and once certain assets were gone they were gone for good and would not be resurrected. The balance between fixed and variable transportation charges needs to be very carefully and closely considered because of major implications for how markets work, and the ultimate effects on prices for consumers.

KC believed a closer match would be achieved using a multiple of 1. Different parties (LDZs, CCGTs) have to book differently to meet their peak. Multipliers translate into a capacity implication. There is a need to think carefully about RPM and how these are incorporated. Effects on all parties need to be considered (peak based charging or average charging).

JCx observed that in the model at the moment were raw CWD charges, giving a raw value. Next, this needed to be adjusted ex ante. CW confirmed this functionality and several denominators that can be used to calculate this will be available in the next version of the charging spreadsheets to be released during w/c 01 May. This needs to be iterative to inform the discussions.

DH believed that multipliers needed to be decided before bookings were done, and explained mapping to bookings. The future can guide, but it would not be perfect.

Security of supply would be an issue. JCo noted that many North Sea fields were very mature, with some coming to the end of their lifecycle. GJ queried how interruptible capacity was to be treated, pointing out that LNG or gas from Norway or Russia does not have to come to the UK.

It was anticipated that the methodology to calculate should be known by the end of 2018 (the timescales aiming for completion to enable delivery for 2019 and to incorporate the EU consultation processes and UNC change processes); and all has to be in, in 2019. The DNOs will face a big issue if all the prices go up. Lots of implementation issues may become apparent, and some transition mechanism may be required, along with the implementation plan.

Forecasting Contracted Capacity will be revisited, and be discussed at future Subgroups and NTSCMF meetings and any comments between now and the next meeting should be forwarded to CW at: box.transmissioncapacityandcharging@nationalgrid.com.

#### 3.3 Plan and Change Process

CW reiterated the two approaches discussed at the previous NTS CMF meeting:

- Run consultation processes consecutively, i.e. the UNC process to be followed by EU Consultation; or
- Run the EU Consultation in parallel with the UNC process (consulting on all options in both - including any alternates).

This was discussed at the previous NTSCMF and the summary of that conversation, that did not land on a preference, was revisited. CW stated his preference for running the processes consecutively (running in parallel was not necessarily a big time saver). Others also considered this preferable as it would mean only one option would be subject to the TAR NC consultation process and enable Ofgem to make a decision, or informed decision on the UNC options available, to facilitate the TAR NC consultation. It was also considered it would not detrimentally impact the timescales as it could only save a maximum of two months working in series. CW agreed to summarise this discussion and outcome to seek any further views for the next meeting.

CW presented an updated UNC Modification timeline, observing that scope and content continued to be discussed. At the next meeting (08 May 2017) it was anticipated that there would be pre-modification discussion on all topics (to include draft proposals for each) for inclusion into the UNC Modification. It was planned to submit the modification to the June Panel.

Responding to a question from AS relating to Article 35 and the Entry Capacity Contracts, CW confirmed that he was awaiting the legal interpretation on the reconciliation aspects, and was expecting to issue an update on interpretations at the meeting on 08 May 2017.

#### 3.4 Gas Charging Review Modification – Proposed Outline and Scope

The draft UNC Modification Structure was revisited. The comments in favour of a 'super modification' had been noted at the last meeting; it had been recognised that the degrees of interdependencies were too great to split out, and what to include/exclude in terms of obligations was under discussion with Ofgem. CW also advised that whilst the majority of aspects would be included in the 'super modification', an additional discrete modification would be drafted to address 'ASEP Splitting to facilitate Storage Discount'.

#### 3.5 Next Steps

It was proposed to continue the work of the Sub-group and provide any output to the NTS

CMF for review and discussion. Anyone wishing to join in with the work of the subgroup was most welcome to contact CW for more details.

At the next meeting on 08 May 2017 it was anticipated that pre-modification discussions would continue, and that a draft modification would be developed.

#### 4. Issues

#### 4.1 Issues Register - Review

Not reviewed at this meeting.

#### 4.2 Gas Charging Review Decisions List - Review

This list contains everything that needs to be referenced as 'to change' or 'not to change'. CW summarised the current position of each individual item, and directed parties to the appropriate one-pagers for further details. Some areas will be revisited, for example 'Avoiding Inefficient Bypass of the NTS', when other aspects are known/more certain; products will be revisited, and principles required for the future.

NS commented on the last statement in the one-pager 'Avoiding Inefficient Bypass of the NTS', believing it to be unclear and therefore open to interpretation, and suggested that it might benefit from re-wording. A debate ensued which concluded that a working assumption for the development of the National Grid change proposal would be that any alternative charging arrangement developed to 'Avoid Inefficient Bypass of the NTS' should only give rise to a financial benefit to relevant users where such bypass might be economically viable rather than a discounted transportation service anticipated to have more wider usage.

Action 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.

AS referred to the interaction between short term multipliers (less than 1), Storage Discounts and Avoiding Inefficient Bypass of the NTS, and asked how would they all work together/relate to each other. CW responded that some aspects users can work through the model, other aspects are yet to be clarified.

It was noted that under certain circumstances, as provided for in their respective Licences, Ofgem could prevent National Grid NTS and the DNOs from increasing their prices.

#### 5. Review of Outstanding Actions

**0201:** Forecasting Contracted Capacity - National Grid NTS (JP) to clarify what data was available for forecasting future demands, and explain how the information is used in the options developed to date.

**Update:** CW confirmed that Neil Rowley (National Grid NTS) had been invited to address this at the next May meeting. **Closed** 

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

**Update:** Work ongoing. Carried forward

**0401:** *DESC modelling parameter changes* - RH to clarify with Xoserve (FC) whether there are any impacts on NTS charges, and if so to what extent.

Update: See 6.1, below. Closed

#### 6. Any Other Business

#### 6.1 Demand Estimation Sub-Committee (DESC) - Changes to modelling approach

FC outlined the background, explaining that the issue had originated from repeated evidence relating to algorithm performance (over allocation in the summer), and that the Demand Estimation Sub-Committee (DESC) now believes this to be priority for reconsideration. FC briefly summarised the changes to the modelling approach.

Peak Load Factors are a by-product. DESC is trying to make daily allocation more accurate. FC was not sure if any of the NTS prices are driven by SOQ Peak Day consumption. RW believed there would be an effect on demand that goes into the Ten Year Statement; it was not a charging function point. JCx commented that it sounded to be of a small consequential impact, but that parties need to be mindful of this. FC explained various simulation tests that had been made and the potential Load Factor impacts. She directed interested parties to the details of the analysis that was published for the February DESC meeting (the chosen option was "Model 1"), and in particular Slides 17 and 60:

http://www.gasgovernance.co.uk/sites/default/files/DESC%20Summer%20Modelling.pdf

Slide 17 shows an example of the typical impact to the Annual Load Factor shape (the impact that might be expected if the individual models indicate that holiday reductions should apply; it can be seen that it is quite a subtle change). Where holiday reductions are identified, they may result in small changes to Peak Load Factors. FC reported that analysis suggested that changes would be circa a 0.4 difference in percentage points (Slide 60). It was noted that actual future Peak Load Factors will depend on the behaviours exhibited by the sample meter points, over the 3-year modelling period. For further information parties were encouraged to view the February DESC material and minutes at (<a href="http://www.gasgovernance.co.uk/DESC/150217">http://www.gasgovernance.co.uk/DESC/150217</a>). FC welcomed any further queries.

Any questions should be forwarded to FC at: <u>Xoserve.demand.estimation@xoserve.com</u>.

#### 7. Diary Planning

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

Time/Date	Venue	Workgroup Programme
10:00, Monday 08 May 2017	Orange Room, ELEXON, 350 Euston Road, London NW1 3AW	Pre-Modification discussion UNC Modification - review and development of draft Issues Register
10:00, Tuesday 23 May 2017	Orange Room, ELEXON, 350 Euston Road, London NW1 3AW	UNC Modification - review and development
10:00, Monday 05 June 2017	PINK Room, ELEXON, 350 Euston Road, London NW1 3AW	UNC Modification - final review prior to Panel submission
10:00, Friday 07 July 2017	Orange Room, ELEXON, 350 Euston Road, London NW1 3AW	To be confirmed
10:00, Wednesday 02 August 2017	Orange Room, ELEXON, 350 Euston Road, London NW1 3AW	To be confirmed
10:00, Tuesday 05 September 2017	Orange Room, ELEXON, 350 Euston Road, London NW1 3AW	To be confirmed

10:00, Wednesday 04 October 2017	Orange 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 06 December 2017	Orange Room, ELEXON, 350 Euston Road, London NW1 3AW	To be confirmed

## Action Table (as at 24 April 2017)

Action Ref	Meeting Date(s)	Minute Ref	Action	Owner	Status Update
0201	01/02/17	3.1	Forecasting Contracted Capacity - National Grid NTS (JP) to clarify what data was available for forecasting future demands, and explain how the information is used in the options developed to date.	National Grid NTS (JP)	Closed
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
0401	05/04/17	6.1	DESC Modelling parameter changes - RH to clarify with Xoserve (FC) whether there are any impacts on NTS charges, and if so to what extent.	Joint Office (RH)	Closed
0402	24/04/17	3.2	NTS CMF Terms of Reference - RH and CW to draft a 'strawman' for discussion at the May/June meetings.	Joint Office (RH) and National Grid NTS (CW)	Pending
0403	24/04/17	3.2	NTSCMF and Subgroup documentation review - All participants to review the available documentation published on the Joint Office website at <a href="http://www.gasgovernance.co.uk/ntscmf">http://www.gasgovernance.co.uk/ntscmf</a> scmf and <a href="http://www.gasgovernance.co.uk/ntscmf/subg">http://www.gasgovernance.co.uk/ntscmf/subg</a> , and submit informed questions to CW as appropriate.	ALL PARTIES	Prior to 08 May 2017 meeting  Pending

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 republish.	National Grid NTS (CW)	Pending
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