Gas Charging Review

NTSCMF – 17 July 2017

Agenda

Area	Detail
EU Tariffs Code – Current Outlook	• No update from meeting on 07 July 2017
Output from sub-workgroup	• Summary of recent sub groups • Specific Capacity Discounts
Reminder of previous sub-group topics	• Forecasted Contracted Capacity (FCC) • Revenue Reconciliation/Recovery • Multipliers • Avoiding Inefficient bypass of the NTS
Action 0602	• Removal of sites from the CWD Model (Action 0602)
Plan and change process	• Overall timeline • Overview of the future sub groups and NTSCMF meetings and their focus
Next Steps	• Next Steps

Gas Charging Review

EU Tariff Code – Current Outlook

EU Tariff Code – Current Outlook

- As per slides shared at Transmission Workgroup on 6 July 2017

https://www.gasgovernance.co.uk/tx/060717

nationalgrid

Gas Charging Review

Output from sub workgroups

Gas Charging Review: Output from sub workgroup (1)

- One sub group since 7 June NTSCMF
  - 11 July – Specific Capacity Discount
- All documentation and outputs, when updated from the meetings will be available:

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

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

- They are also included into the NTSCMF material that follows any sub group
- From each of the sub-groups we have produced a set of summary slides which give an overview of what was discussed at the meeting

Sub workgroups – Joining and Contributions

- Input and contribution at the sub group meetings is essential to help advance the development of the particular topics
- Inputs in advance of the meetings could be:
  - Questions or comments or any position papers in addition to questions that will be used to drive discussion;
  - The one-pager documents can also be used to frame the discussions http://www.gasgovernance.co.uk/ntscmf/subg1page
- The timetable of discussion topics has been shared and should allow time to prepare any material – more opportunities to discuss will likely be added
- To receive joining instructions for the meetings (or to join a specific sub group on a particular topic) please contact National Grid

box.transmissioncapacityandcharging@nationalgrid.com

nationalgrid

Gas Charging Review

Specific Capacity Discounts sub-group (11 July) summary

Objectives – Key questions: Specific Capacity Discounts

Linking to Article 9, what discounts should apply?

- What level of discounts should be given under Article 9 of the EU Tariffs Code?
- What level should this % be and how can they be determined? How do they relate to the principles of what the discount should be for?
- Storage – a discount of at least 50% from Transmission Capacity Tariffs.

Terminology

- Understanding Article 9 – interpretation and discussion of the terms given in A9(1) and A9(2)

Gas Charging Review: Specific Capacity Discounts Terminology (1)

nationalgrid

Question	Comments from discussion	Summary of outcomes
• Understanding Article 9 – interpretation and discussion of the terms given in A9(1)	• A discount of at least 50 % shall be applied to capacity-based transmission tariffs at entry points from and exit points to storage facilities, unless and to the extent a storage facility which is connected to more than one transmission or distribution network is used to compete with an interconnection point. • Only the first part of A9(1) is considered applicable to GB. Text from "unless and…" is not applicable to GB. • Criteria is clearer for storage as given in text in other parts of the TAR NC recital (4).	• Agreed that the discount of at least 50% to be applied at GB, a requirement of TAR NC. • Application beyond capacity charges to be discussed, not an EU compliance measure but do not believe there are any restrictions to applying wider.

Gas Charging Review:
Specific Capacity Discounts Terminology (2)

Question	Comments from discussion	Summary of outcomes
• Understanding Article 9 – interpretation and discussion of the terms given in A9(2)	• At entry points from LNG facilities, and at entry points from and exit points to infrastructure developed with the purpose of ending the isolation of Member States in respect of their gas transmission systems, a discount may be applied to the respective capacity-based transmission tariffs for the purposes of increasing security of supply. • A9(2) permits other discounts for the purpose of increasing security of supply. • Does the discount, if applied, be levied against existing or future interconnection infrastructure? Expectation under TAR NC is for future however accept interpretation of text may be different. • Intent behind the article from TAR NC development was that GB interconnection infrastructure not the intended recipients. • Does GB have an SoS requirement for Ireland? Do not believe so. • Expect that whilst could be permitted in GB for LNG, may be more challenging for Interconnection infrastructure. • There may have been an intent behind A9(2) however accept the reading and interpretation of the text may be different. • How does this apply, if at all, to other charges (e.g. Non Transmission or other Transmission Charges)?	• A9(2) is an option not a requirement. • Discounts are possible at LNG and Interconnection infrastructure points however the rationale is less clear than for storage. • Up to parties to wish to, to present a case for any such discounts and proposal of any rationale.
• Is there a central or marker for A9 discounts?	• Can a marker be laid down to discuss deviation away from? • Believe that minimum compliance to accept the rationale behind TAR NC would be to apply 50% capacity transmission charges	• 50% discount for storage • No discount for LNG or Interconnection

Gas Charging Review:
Article 9 - what discounts should apply? (1)

Question	Comments from discussion	Summary of outcomes
• What level of discounts should be given under Article 9 of the EU Tariffs Code?	• Cross subsidies, as a result of any discounts, must be considered and the benefits of any discount as part of the overall methodology. Also revenue recovery mechanisms should be considered – if on commodity for example then discounts may be less of an issue? • Should any A9 discount be applied to existing capacity holdings - not a consistent view across the sub group - further discussion needed, incorporate into Existing Contracts discussion too. • Discussions went into other areas that have merit in looking at but this is focused on Transmission Capacity based charges • Related to Non Transmission and any commodity – some expressed view that Storage should remain exempt from these charges and wanted to see evidence to support a move away from this. • Change may better meet relevant objectives and current rules can be looked at to see if rationale remains relevant.	• Starting position is 50% for storage, none for LNG or IP. • Need to consider Non Transmission and other Transmission charges and their application - may have links to logic or application of A9.

Gas Charging Review:
Article 9 - what discounts should apply? (2)

nationalgrid

Question	Comments from discussion	Summary of outcomes
• What level should this % be and how can they be determined?	• There are close ties to multipliers and this will need to be considered in reviewing discounts and also how, in combination the charging methodology is applied and the overall impacts across all users not just those qualifying for any discounts. • Considered difficult to see what discounts should be applied without a fuller picture of the overall methodology would look like (chicken and egg scenario - need one for the other and vice versa). Some scenarios can be developed however the principles must be a focus as the price should not drive the discount as this weakens any principle under the methodology • Should not rely on current arrangements being "right" or the "most appropriate" just because they have been approved. As with all aspects of the UNC, continuous review and updates are necessary if change better meets the relevant objectives.	• Industry need to put forward positions if wish to consider any other arrangement than the minimum of 50% storage and none for LNG/IP. • Balance of charges across users is necessary. Any discount requires charges and revenues to be collected by other parties. This must not be unfairly distributed - current distribution should not be considered a measure but can be a useful tool to see how charges are recovered.
• How do they relate to the principles of what the discount should be for?	• A9(2) refers to Security of Supply as a measure to be considered if "increasing security of supply", need to consider how, and if this is brought into the measured objectives for the Gas Charging Review (UNC 0621) • A9(1) storage clearer as prescribes at least 50% linked to recital (4) - benefits of storage, avoiding double counting. • Should consideration be given beyond those listed (e.g. For generation?) TAR NC is specific and for GB not limited to only those in A9. Requires, as for others, as case to be constructed for any discounts to Transmission Capacity based charges. • Should different storage types be considered here, not just generically applied?	• Need to discuss how and if SoS comes into this, given A9(2) mentions discounts at NRA's approval linked to "improving security of supply".

Gas Charging Review: Specific Capacity Discounts

Some general themes:

- As positions need to be proposed, the group generally agreed that a marker can be laid down for positions to comment on and propose alternatives to
  - 50% discount for Transmission Capacity charges for GB storage points Entry and Exit Capacity
  - No discount proposed for LNG or Interconnection
  - This is not necessarily a final position, and is subject to change to reflect proposals that may get adopted
- Still need to discuss application of revenue recovery “top-up”, whether there is any cross over of logic or positions presented related to its application and for Non Transmission
- Security of Supply is explicitly stated on Art 9 (and Recital 4) of the TAR Code. Any decision on a modification should consider how security of supply will be included.

Gas Charging Review

Forecasted Contracted Capacity (FCC) update post 5 June NTSCMF

Forecasted Contracted Capacity (FCC) - Reminder

nationalgrid

- Reminder – 2 options on the table
  - Use Obligated levels or;
  - Use Obligated levels adjusted by a methodology to get to an alternative set of numbers;
    - For any such methodology – suggestions were welcome and encouraged.
    - Not received any proposals for what percentage of Obligated Level should be used for FCC

FCC – Using proportion of obligated levels

- If using a proportion of obligated:
  - Need to take into consideration what Existing Contracts are so that the FCC does not go negative
  - What is a sensible value to use?
    - Any suggestions on what could be based on?

FCC – Next Steps

- Next sub-group meeting scheduled for 8 September
  - Any proposals for the proportion of obligated levels to be used as FCC to be received before this meeting and discussed at this meeting
  - May be considered as any options are developed to discuss before this time

Gas Charging Review

Revenue Reconciliation/Recovery update post 7 July NTSCMF

nationalgrid

Revenue Reconciliation/Recovery - Reminder

- Reminder: Two main options for administering revenue recovery beyond CWD calculation (which may include some additional adjustments), via:
  - A capacity charge uplift
  - A flow based charge
- Both options would have denominator based on aggregate bookings or flows
- No disaggregation by Entry / Exit point.

nationalgrid

Revenue Reconciliation/Recovery Update

- Proposal from Specific Capacity Discount sub-group (11 July) is that this needs to be resolved before can come to a conclusion on a number of other topics

Gas Charging Review

Multipliers update post 7 July NTSCMF

nationalgrid

Objectives – Key questions to address

- Sub-group meeting scheduled for 25 July – 1pm-3pm

Suggested questions / areas to address
• **What are multipliers for?** • **E.g. Trade – NBP liquidity – ST flex –- SoS** • **Revenue recovery – encourage booking behaviour ST vs LT ?** • **Should pricing facilitate any of these / can pricing be detrimental?**
• Short term relative to Long term multipliers – should they incentivise a certain behaviour?
• Should multipliers facilitate access? – How to consider when combined with the revenue recovery options – do certain combinations work more effectively in this regard?
• Measurement against Relevant Objectives, GTCR and Stakeholder Objectives and EU (Multipliers at IPs need to be consulted on each year)
• Levels of Multipliers • Can be a number between 0 and 1, not just these values (and could be higher than 1, subject to the questions above). • TAR NC Consultation obligation
• Capacity access – views on the charge independent of the amount flowed? Is this an issue?
• Which aspects work under the current regime? Views and discussion (including output from this discussion)

Discussed on 26 June

Gas Charging Review

Avoiding Inefficient bypass of the NTS update post 7 July NTSCMF

Avoiding Inefficient bypass of the NTS: Following on from 7 July

- At NTSCMF on 7 July presented a summary of the discussions at the Sub Group discussing Avoiding inefficient bypass of the NTS
- Some additional analysis was discussed and this is presented here for discussions in facilitating next steps in the development of the avoiding inefficient bypass of the NTS product under the charging review

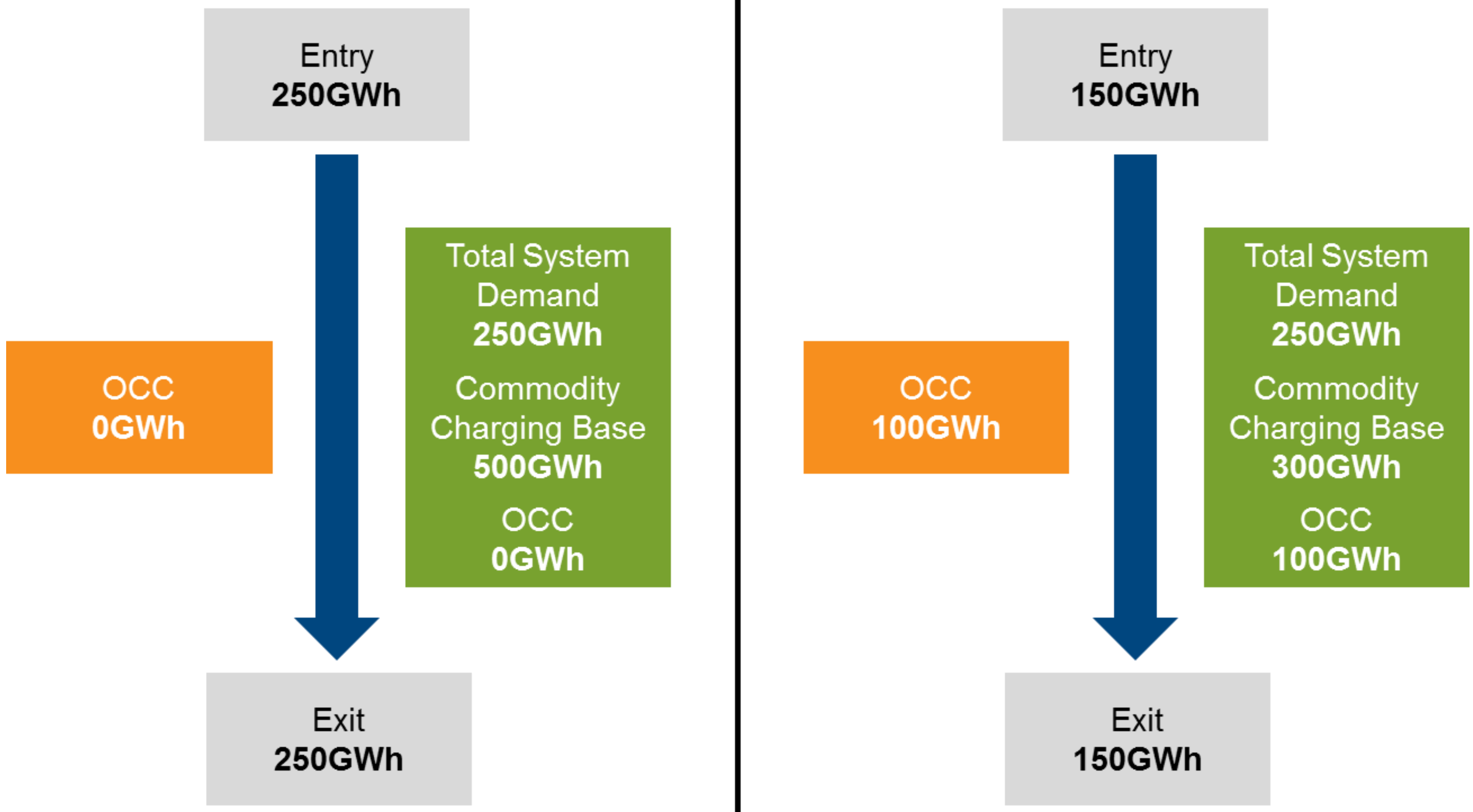
Avoiding Inefficient bypass of the NTS: Understanding the current charge (1)

nationalgrid

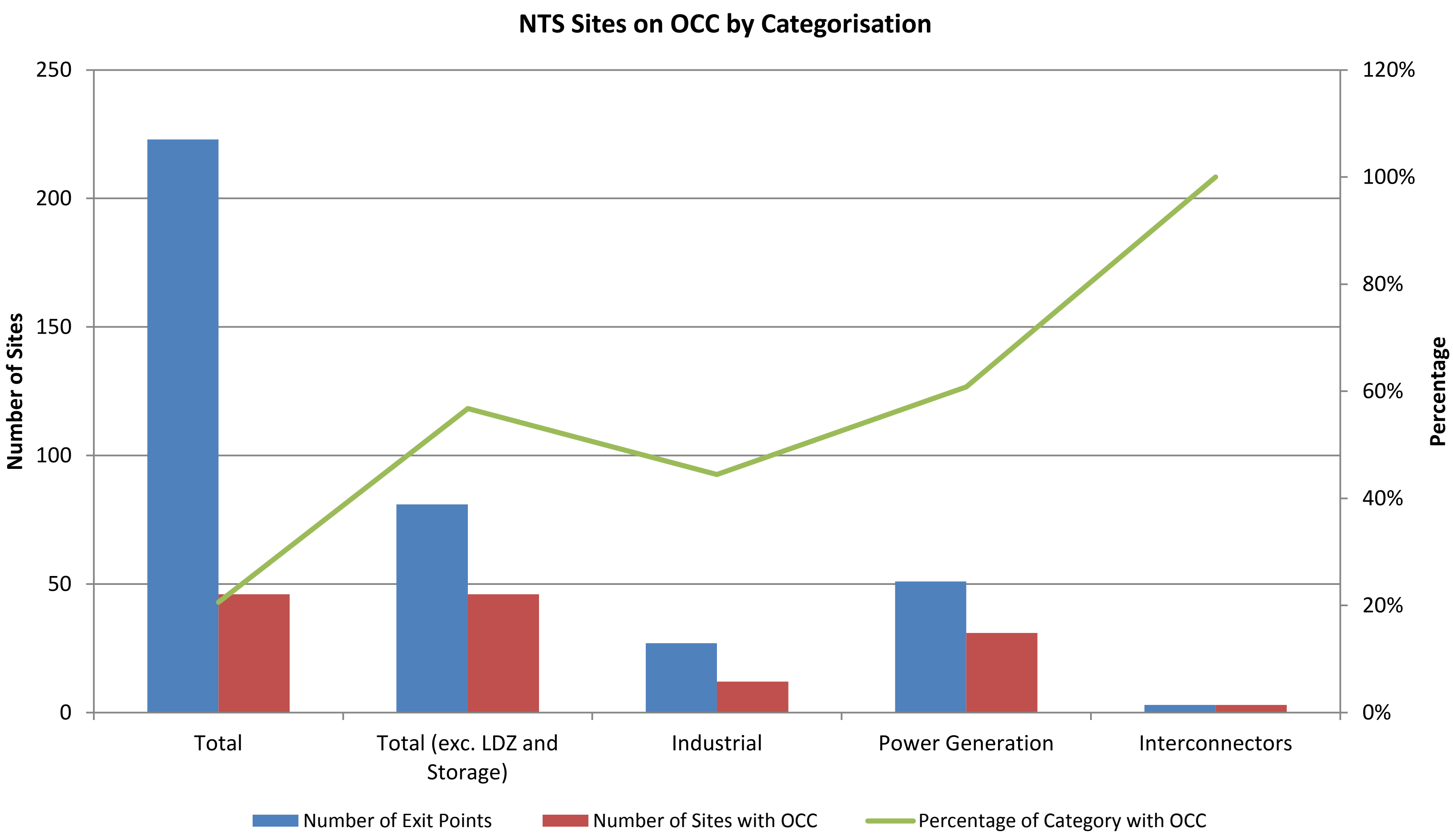
- NTS OCC (Optional Commodity Charge) pay for the flow from selected Entry point to Exit point
  - i.e. if one unit flows from Entry Point A to Exit Point B that would be one unit volume of data
- If this is not on OCC then the volume associated to TO and SO Commodity would need to be double the volume that was removed from the OCC as this would be attracting both the Entry and Exit Commodity charges
- For example:
  - If we assume that 250GWh is flowing on the NTS and between one Entry Point and one Exit Point.
  - 100GWh of this is entitled to NTS OCC
  - Next slide shows the charging calculation influence of flows

Avoiding Inefficient bypass of the NTS: Understanding the current charge (2)

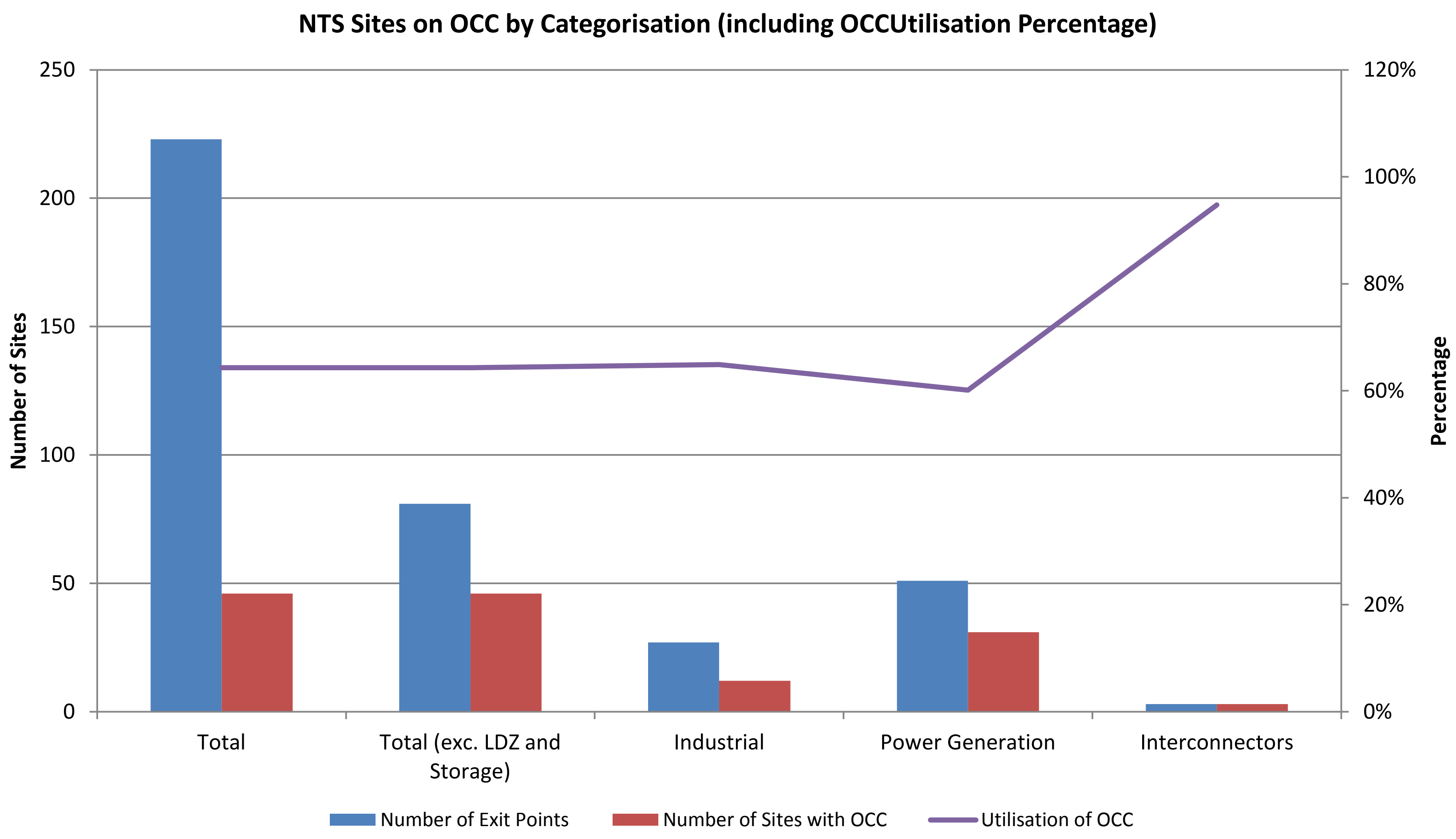
Commodity | **Optional Commodity Charge (OCC)**



NTS Sites on OCC by Categorisation

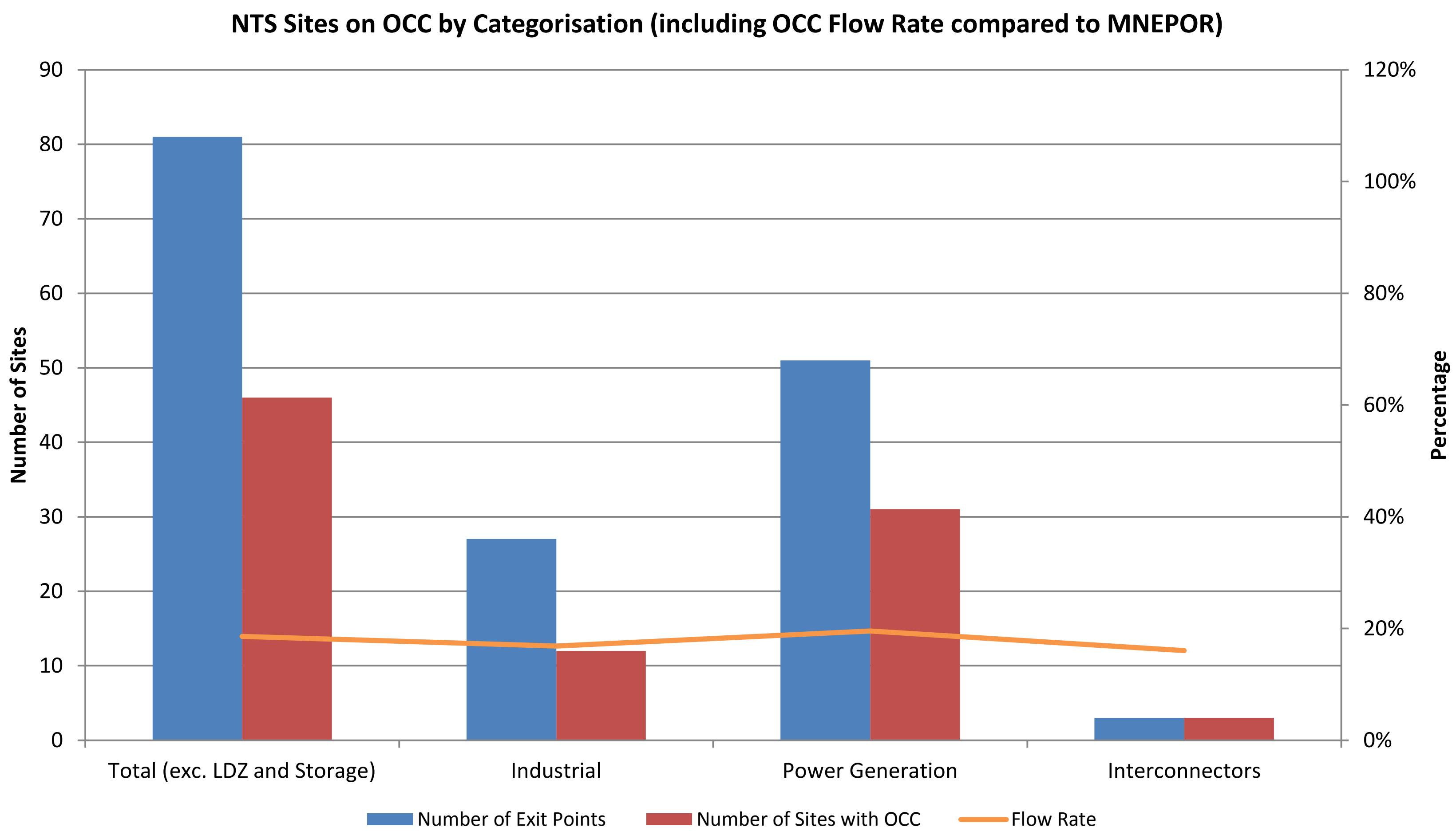


NTS Sites on OCC by Categorisation (inc. OCC Utilisation)

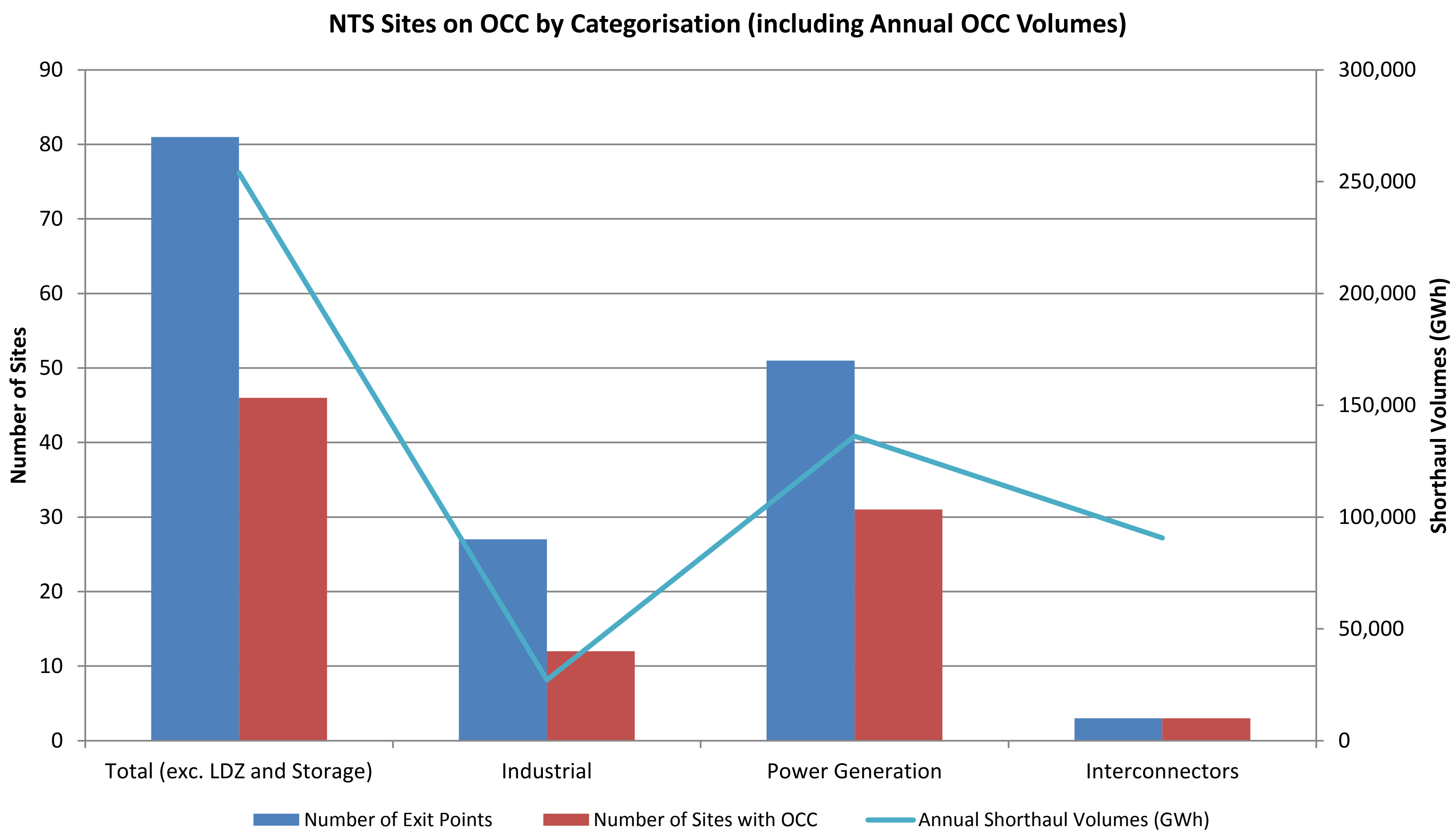


NTS Sites on OCC by Categorisation (inc. OCC Flow Rate)

nationalgrid



NTS Sites on OCC by Categorisation (inc. Annual OCC Volumes)



Gas Charging Review

Removal of sites from the CWD Model (Action 0602)

nationalgrid

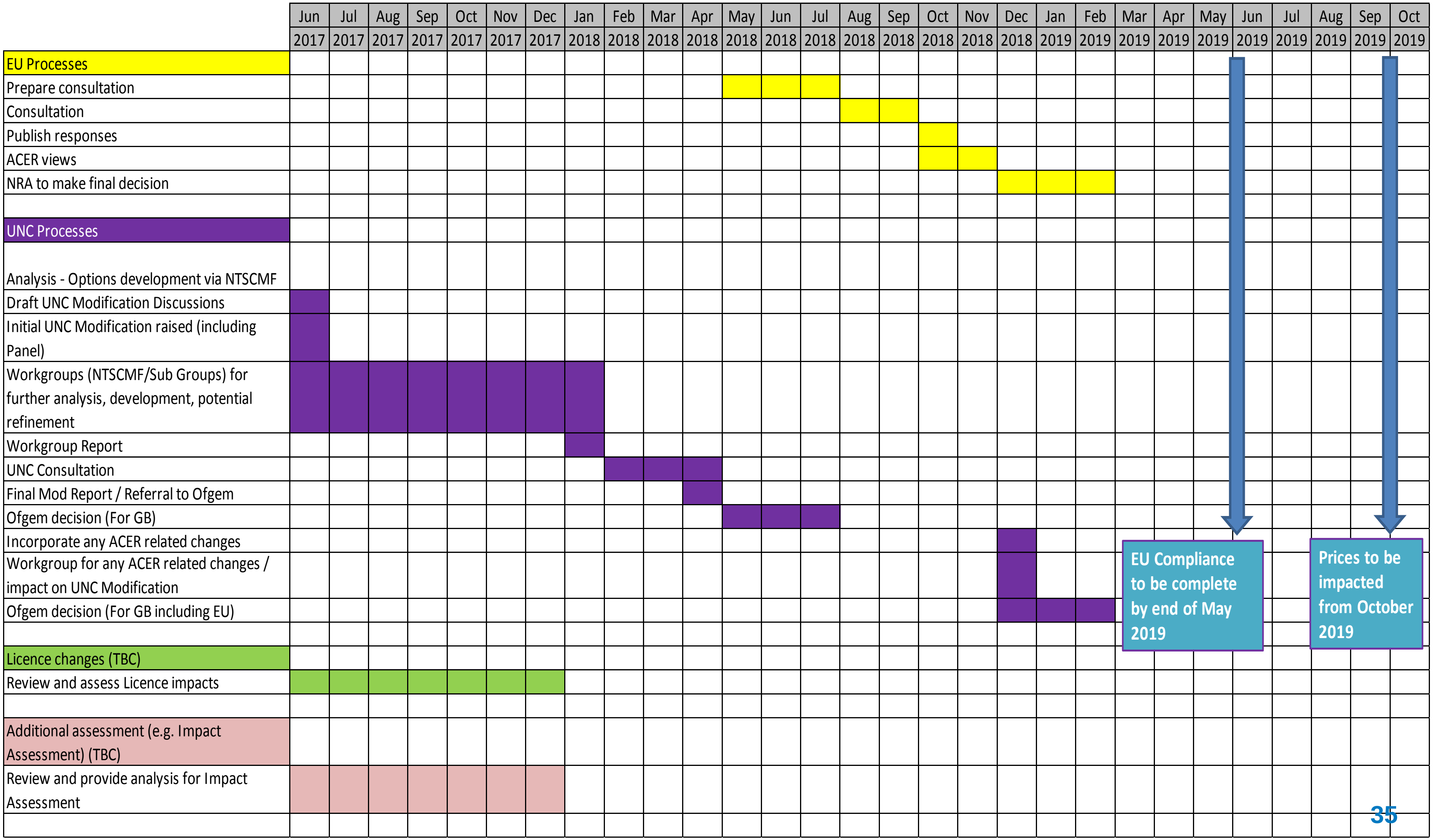
Removal of points from CWD model

- There are a number of steps that need to be completed to remove a point from the CWD model
  - Remove point from all applicable tabs (including hidden tabs)
  - Ensure formulas which pick up applicable tabs have the correct data ranges
- If remove a point that has zero capacity for Forecasted Contracted Capacity (FCC)
  - Will not have any impact on the prices produced
- If remove a point that has a capacity value for FCC
  - Will have a minimal impact (0.0001 – 0.0002 p/kWh/d) on the prices produced

Gas Charging Review

Plan and change process

Plan and Change process Timeline (simplified) for discussion



Gas Charging Review: Topic Development – Discussion timeline (1/2)

nationalgrid

Date	Meeting	Key topic to discuss#
30 May 13:00 – 15:00 (complete)	Sub Group	• Forecasted Contracted Capacity
5 June (complete)	NTSCMF	• Forecasted Contracted Capacity*
14 June 10:00 – 12:00 (complete)	Sub Group	• Revenue Reconciliation / Recovery (may also include some views on Multipliers)
29 June 10:00 – 12:00 (complete)	Sub Group	• Avoiding inefficient bypass of the NTS
7 July (complete)	NTSCMF	• CWD Updated Model • Revenue Reconciliation / Recovery* • Avoiding inefficient bypass of the NTS*
11 July 13:00 – 15:00 (complete)	Sub Group	• Specific Capacity Discounts
17 July	**NTSCMF**	• **Specific Capacity Discounts*** • **Non-Transmission Services Model***
25 July 13:00 – 15:00	Sub group	• Multipliers

#There may be some occasions where the topic runs over a few meetings, we will revisit the sub-group / NTSCMF meeting topic if this happens.

* These topics will be relaying outputs from the sub-group in addition to further discussion at NTSCMFs

Gas Charging Review:
Topic Development – Discussion timeline (2/2)

nationalgrid

Date	Meeting	Key topic to discuss[#]
2 August	NTSCMF	• Multipliers* • Avoiding inefficient bypass of the NTS
8 August 13:00 – 15:00	Sub Group	• Interruptible
23 August	NTSCMF	• Interruptible*
24 August 10:00 – 12:00	Sub Group	• Existing Contracts
5 September	NTSCMF	• Existing Contracts*
8 September 10:00 – 12:00	Sub Group	• Forecasted Contracted Capacity
12 September 10:00 – 12:00	Sub Group	• Avoiding inefficient bypass of the NTS
19 September 13:00 – 15:00	Sub Group	• Multipliers / Interruptible
26 September	NTSCMF	• Forecasted Contracted Capacity • Avoiding inefficient bypass of the NTS • Multipliers / Interruptible
28 September 10:00 – 12:00	Sub Group	• To be confirmed

N.B. Meetings beyond September 2017 are to be confirmed

Gas Charging Review: Topic Development – Additional Meetings

nationalgrid

- As required there may be additional Sub Group meetings scheduled. All outputs will be shared with NTSCMF
  - E.g. short meeting was held on Multipliers on the 26 June
- These will be used to help keep to the timeline and to further the discussions on the necessary topics
- We will be considering additional sub groups for 27 July 10am to 12pm and potentially additional sub groups towards the end of August
- Could cover further development / options on FCC, Revenue Recovery / Reconciliation and any others where possible.

nationalgrid

Gas Charging Review

Next Steps

Next Steps

- Sub Groups as per timetable – potentially extra Sub group on 27 July and towards end of August
- Next NTSCMF on 2 August

Revenue Forecast

Long term revenue forecasting – Charging Information

NTS long term revenue forecast (1)

- National Grid currently produces a twice yearly forecast of allowed revenues for both TO and SO that go out to the end of the current Price Control regulatory period 31 March 2021
- Updates provided May/June and November time.
- Following last publication appetite to understand a bit more about what can change and why to expand understanding and assist the narrative supporting the forecast
- Here we present some additional information related to the May 17 publication and how things may change for other things going forward

NTS long term revenue forecast (2)

- Some key background information
- Adjustments over RIIO do not change base allowances
- As changes are made over RIIO this will be done via the PCFM process that outputs MOD each iteration and adjusts revenues each year
- Process concludes around December each year
- Directs revenue change for forthcoming April
- Each PCFM looks back to start of RIIO - April 2013
- Some key messages for latest forecast

NTS long term revenue forecast (3)
Key messages

Area	Summary
Base Allowances and RPI	• Base Allowances (PU on the TO side) are in 09/10 prices. Therefore inflation to bring up to appropriate price base will have large impacts on the overall revenues (e.g. 09/10 to 17/18 approx. 27% uplift)
Timing of making changes	• NG will only put through approved / directed adjustments into the forecast and not pre-judge the outcome of any consultation / Ofgem decision
Some large changes shown in the latest forecast for TO / SO Revenues used in setting Transportation charges	• Step change from 16/17 to 17/18 increase in TO and reduction in SO - this is the revenue switch taking place as incremental moves from SO to TO. This is prescribed under the Licence and 17/18 represents the largest step change of this type in the T1 period.
	• Avonmouth / Mid Period Review outcome (that removes spending allowance from National Grid represented in the large MOD* negative adjustment for 18/19 that represents a TIM (Totex Incentive Mechanism) catchup from 13/14, TIM is then essentially reset from 19/20 onwards for Avonmouth and will include investments such as Feeder 9 and therefore adjustments via MOD.
	• Fleetwood is then being adjusted from [19/20] onwards again thought MOD via the PCFM (not included as yet as process has not concluded). Will impact years as impacts by PCFM outcome / direction decisions from Ofgem on the consultation.

**MOD = Price Control Financial Model (PCFM) Iteration Adjustment*

Contact us:

box.transmissioncapacityandcharging@nationalgrid.com

Colin Williams
Charging Development Manager
Tel: +44 (0)1926 65 5916
Mob: +44 (0)7785 451776
Email: colin.williams@nationalgrid.com

Jenny Phillips
Gas Capacity and Charging
Development Manager
Tel: +44 (0)1926 65 3977
Mob: +44 (0) 7776 318646
Email: jenny.phillips@nationalgrid.com

Laura Johnson
Senior Commercial Analyst
Tel: +44 (0)1926 65 6160
Email: laura.johnson@nationalgrid.com

Colin Hamilton
EU Code Development Manager
Tel: +44 (0)1926 65 3423
Mob: +44 (0) 7971 760360
Email: colin.j.hamilton@nationalgrid.com

Adam Bates
Commercial Analyst
Tel: +44 (0)1926 65 4338
Email: adam.bates@nationalgrid.com