#### **Gas Charging Review**







NTSCMF – 6 September 2016 Final slide pack - Update provided on 1 September 2016. All slides added or updated are marked with a blue star \_\_/\_

### **Agenda**

| Area                                       | Detail   |
|--|--|
| Plan                                       | <ul> <li>Gas Charging Review Plan Proposal</li> <li>EU and UNC timeline discussion and likely key dates and milestones</li> </ul>                |
| EU Tariffs Code – Current<br>Outlook       | <ul><li>Key updates relevant to Gas Charging Review</li><li>Areas under discussion</li></ul>   |
| Proposed approach                          | <ul><li>Proposals for developing changes</li><li>Bringing work streams together</li></ul>  |
| Existing Contracts                         | <ul> <li>Summary of existing contracts</li> <li>Volume and revenue values</li> <li>Summary of potential impacts to consider / discuss</li> </ul> |
| Transmission and Non Transmission Services | <ul><li>Reminder of Transmission and Non Transmission</li><li>Initial views on application</li></ul>   |
| Optioneering                               | Optioneering & development of models   |
| Next Steps                                 | <ul> <li>Further development at Future NTSCMF and additional workshops</li> </ul>  |

#### **Gas Charging Review**







Plan

Colin Williams

## Gas Charging Review: Plan proposals for discussion

- There are a number of elements to consider for the overall plan and marking key milestones
  - UNC Processes
  - EU Tariffs Code Processes
  - Giving time for development, discussion, review with industry stakeholders
- Here we provide some thoughts on the necessary pieces of work that would need to be done, how they could fit together and identify the key milestones





# **Gas Charging Review: UNC – developing change**

- Key UNC Processes summary:
  - Pre-work to engage with stakeholders to develop potential options for change, measurement criteria;
  - Initial UNC Modification, Panel referral to workgroup to develop further and engage with Stakeholders;
    - Further analysis, development, potential refinement;
  - Final UNC Modification for consultation;
  - Panel Decision, likely referral to Ofgem for decision



## Gas Charging Review: Licence and additional assessments

#### NTS Licence

- A consultation would likely be needed for any potential changes to the Licence with a decision from Ofgem
- Additional Assessments
  - There may be a need for additional assessments (e.g. from Ofgem) to cover elements that may not be part of the main analysis for any UNC Modification development
  - These would be considered as and when during the overall process
  - Could be an impact assessment or something similar



# Gas Charging Review: EU Tariffs Code – developing change

- EU Tariffs Code requirements
  - Consultation issued by either the TSO\* or the NRA\* (decided by the NRA) to cover the RPM\* used, justification criteria, key measurements and comparisons, estimates of prices, how capacity and non-capacity charges have been applied
    - In accordance with Article 26 of the EU Tariffs Code
  - Decision making on reference price methodologies
    - In accordance with Article 27 of the EU Tariffs Code
- There are some specific timescales required under Article 26 and 27





# Gas Charging Review: Plan proposals for discussion

- EU Tariffs Code timescales
  - Consultation (open for at least 2 months);
  - Publish responses received (within 1 month of consultation ending)
  - ACER to give its views in accordance with Article 27 (within 2 months of consultation ending)
  - NRA to publish motivated decision (within 5 months of consultation ending)
- If consult for two months then end to end EU process is approximately seven months
- Everything must be complete by end of May 2019





# Gas Charging Review: Planned proposed completion date

- Whilst date mandated under EU Tariffs Code is end of May 2019 our suggestion for discussion is to aim for completion by end of December 2018
  - Allows as much as possible to be accommodated into charges that would be notified in 2019





### Gas Charging Review: Key assumptions for draft plan

- Key assumptions for this draft plan for discussion
  - Target date of December 2018 to complete (latest is May 2019 however would be benefit from delivering earlier), for charges published in 2019)
  - Estimate of 3 months for ultimate Ofgem decision on EU, Charging Review and Licence
  - EU decision and GB UNC Modification decision (NRA) including Licence changes can happen at same time
  - Licence change consultation / Impact / Additional assessment happens at same time (although this excludes any Licence changes needed for April / October 2017)
  - Take minimum timescales for EU consultation (2m consultation +1m responses)
  - Any ACER influence is minimal / relatively quick to accommodate following the EU consultation
  - Have EU consultation (without decision) before final UNC consultation if possible
  - Licence change consultation / Impact / Additional assessment complete before final UNC Modification consultation



# Gas Charging Review: Key activities - draft plan for discussion

#### nationalgrid

|   |        |          |           |          | _        |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | _         |   |   |
|---|--------|----------|-----------|----------|----------|--|------|----------|------|----------|------|------|----------|------|------|------|------|------|------|------|----------|------|----------|------|--------|------|-----------|---|---|
|   | Aug    | Sep      | Oct       | Nov      | Dec      | Jan  | Feb  | Mar      | Apr  | May      | Jun  | Jul  | Aug      | Sep  | Oct  | Nov  | Dec  | Jan  | Feb  | Mar  | Apr      | May  | Jun      | Jul  | Aug    | Sep  |           | Nov   | Dec                                     |
|   | 2016   | 2016     | 2016      | 2016     | 2016     | 2017   | 2017 | 2017     | 2017 | 2017     | 2017 | 2017 | 2017     | 2017 | 2017 | 2017 | 2017 | 2018 | 2018 | 2018 | 2018     | 2018 | 2018     | 2018 | 2018   | 2018 | 2018      | 2018  | 2018                                    |
| EU Processes  |        | <u> </u> | <u></u>   | <u> </u> |          | <u> </u>                                     |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      |           | الـــــــــــــــــــــــــــــــــــــ       | ш                                       |
| Prepare consultation  |        | <u> </u> | L         |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | لــــــــ | ال  |   |
| Consultation  |        |          |           |          |          | <u> </u>                                     |      |          |      |          |      |      | !        |      |      |      |      |      |      |      |          |      |          |      |        |      |           | <u>,                                     </u> | لـــــــا                               |
| Publish responses   |        |          |           |          |          | <u> </u>                                     |      |          |      |          |      |      | !        |      |      |      |      |      |      |      |          |      |          |      |        |      |           | <u>,                                     </u> | لــــــــــــــــــــــــــــــــــــــ |
| ACER views  |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      |           |   |   |
| NRA Motivated Decision  |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      |           |   |   |
| NRA to make final decision  |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      |           |   |   |
|   |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | $\Box$    | ı — T   |   |
| UNC Processes   |        | '        |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | $_{i}$    |   |   |
|   |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | $_{i}$    |   |   |
| Analysis - Options development via NTSCMF   |        |          |           |          |          |  |      |          |      |          |      |      | !        |      |      |      |      |      |      |      |          |      |          |      | '      |      | , 1       | 1   | ı [                                     |
| Draft UNC Modification Discussions  |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | $_{i}$    |   |   |
| Initial UNC Modification raised (including  |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | $_{i}$    |   |   |
| Panel)  | '      | '        |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      | '      |      | ,         | 1 1   | 1                                       |
| Workgroups for further analysis,  |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | ,         |   |   |
| development, potential refinement   | '      | '        |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | , 1       | 1   | ı                                       |
| Final UNC Modification  |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | ,         |   |   |
| Incorporate any ACER related changes  |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | ,         |   |   |
| Workgroup for any ACER related changes /  |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | $_{i}$    | 1   |   |
| impact on UNC Modification  | '      | '        |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | ,         | 1 1   | 1                                       |
|   |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | ,         |   |   |
| Consultation on final MOD (including Panel's)   | l!     | l'       |           |          | <u> </u> | <u>                                     </u> |      | <u> </u> | l    | l        |      |      | !        |      |      |      |      |      |      |      | <u> </u> |      | <u> </u> |      |        |      |           | ı <sup> </sup>                                | ıl                                      |
| Ofgem decision  |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      |           |   |   |
|   |        |          |           |          |          |  |      |          |      | 1        |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      |           |   |   |
| Licence changes (TBC)   |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | $\Box$    |   |   |
| Develop Licence changes   |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | $_{i}$    |   |   |
| Consult on Licence changes  |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | $_{i}$    |   |   |
| Decision on Licence changes   |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      |           |   |   |
|   |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      | 1        |      | 1        |      |        |      | ,         |   |   |
| Additional assessment (e.g. Impact  |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | ,         |   |   |
| Assessment) (TBC)   | '      | '        |           |          |          | '  |      |          |      |          |      |      | !        |      |      |      |      |      |      |      |          |      |          |      | '      |      | ,         | <sub>1</sub> 1                                | 1                                       |
| Ofgem Impact or additional assessment   |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | , — †     | 1   |   |
| Consult on Impact or additional assessment  |        |          | 1         |          |          |  |      |          |      | <b>†</b> |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      | , — 1     | 1   |   |
| ,   |        |          |           |          |          |  |      |          |      |          |      |      | $\vdash$ |      |      |      |      |      |      |      |          |      |          |      |        |      | , — †     | 1   | $\Box$                                  |
| Respond on Impact or additional assessment  | '      | '        |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      | '      |      | ,         | 1 1   | 1                                       |
| neopona opara apara a . | $\Box$ | $\vdash$ | $\dagger$ | <b>†</b> |          | +  |      |          |      |          |      |      | $\vdash$ |      |      |      |      |      |      |      |          |      |          |      | $\Box$ |      | ,—†       | $\vdash$                                      | $\Box$                                  |
|   |        |          |           |          |          |  |      |          |      |          |      |      |          |      |      |      |      |      |      |      |          |      |          |      |        |      |           |   | —                                       |





# **Gas Charging Review: Plan - Summary**

- In order to have an well developed initial UNC Modification it is essential to make use of development in NTSCMF and use of workgroups
  - Use NTSCMF as primary forum and additional workshops to develop and discuss in depth details feeding back to NTSCMF
- Timescales emphasise the need to push forward with development if aiming for key dates on plan
  - E.g. initial UNC Modification by April 2017
- Views on this draft plan are welcome ahead of developing further

#### **Gas Charging Review**







EU Tariff Code - Current Outlook

Colin Hamilton

- ENTSOG has produced an argumentation proposal to support briefings for Member State representatives for Comitology
- There are 12 issues identified and they could therefore take up a much of the discussion time within comitology
- None of these are issues of major concern for NG

- Issues that have a major impact for many TSOs:
  - Recital 5: Financial stability of TSOs
  - Art. 38: Regulatory accounting principles
  - Art. 14(2): Within-day pricing: proposal for the removal of the flat daily rate
  - Art. 13: Multiplier cap and floor

- Issues that have a major impact for some TSOs
  - Art. 27(3): Provision of information from TSOs to ACER
  - Art. 10: Discounts applied at entry points
  - Art. 39: Deletion of protection for "grey zone" contracts
  - Art. 9: Asset cost split
  - Art. 30(2): Provision of an alternative to providing a simplified model

- Issues that have some impact for all TSOs
  - Art. 8: Capacity Weighted Distance as the counterfactual
  - Art. 5: Cost allocation assessments
  - Art. 6: Adjustments limited to rescaling, benchmarking, equalisation and storage only

#### **EU Tariffs Code – application dates**

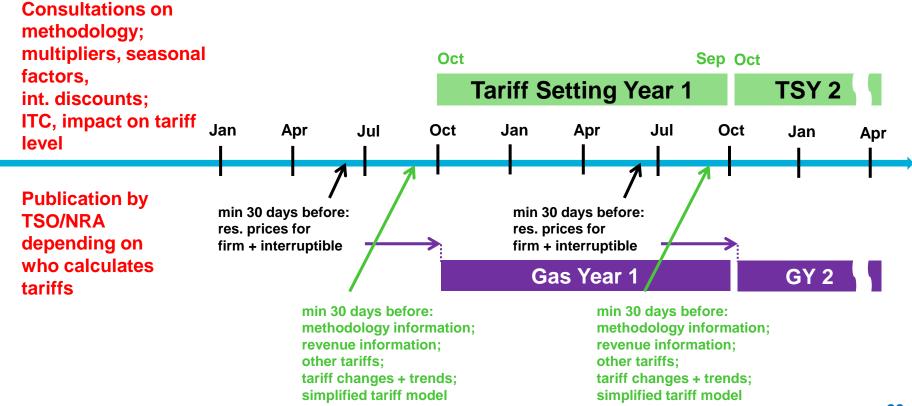
- TAR NC sets different dates for implementation of Articles
  - There are 4 major dates (or types of dates) to comply with:
    - Entry Into Force (about 1 April 2017)
    - Specific application dates (for some Articles)
    - ■1 October 2017
    - ■31 May 2019
  - Implementation of TAR requires a phased approach
  - Requirements gathering for first phase now underway
  - Some requirements already in place

#### **Transparency Requirements**

- Transparency/Publication requirements
  - applicable from 1 Oct. 2017
  - In part, facilitates CAM
- Chapter VIII of TAR NC
  - Art. 29: Information to be published before annual yearly auction
  - Art. 30: Information to be published before tariff period
  - Art. 31: Form of publication
  - Art. 32: Publication notice period



#### **Transparency Requirements: When**



## Information to be published before annual yearly auction (1st Monday July)

- Publication required no later than 30 days before auction
  - This means no later than beginning of June
- Annual prices currently published in January (entry) and May (exit)
- Initial view is that there is no advantage in later publication under current reference price methodology (RPM)
- Earliest publication under TAR NC = January 2018
- Timing could be impacted by choice of RPM

#### **Publication Requirements (content)**

- For firm capacity at IPs: "the reserve price applicable until at least the end of the gas year beginning after the annual yearly auction"
- Information for non-yearly products (multipliers, seasonal factors & their justification) not required until their parameters come in during 2019
- Earliest publication under TAR NC = January 2019

#### **Publication Requirements**

#### For interruptible capacity at IPs:

- List of all types of interruptible capacity products including their probability of interruption and associated discounts
  - GB currently only has day-ahead interruptible
- Also publish how probability calculated including data used in calculation
  - For GB earliest publication could be **January 2019** or **June 2019** (if day ahead only)
  - may be impacted if dual or single regime

# Information to be published before tariff period (1st October)

#### nationalgrid

- Some parameters not required until after May 2019, others from October 2017 such as.....
- Information on revenue and expenditure
  - Allowed revenue (including any information on yearly changes)
  - Types of assets in RAB and aggregated value
  - Cost of capital (plus calculation methodology)
  - Capital and operational expenditures
  - Inflation indices

## Information to be published before tariff period (1st October)

- Transmission services revenue
  - Capacity / commodity split
  - Entry / exit split
  - Cross-border / domestic split
    - related to Cost Allocation Assessment (2019 requirement?)
- Information on reconciliation of regulatory account
  - Actually obtained revenue, under- or over-recovery of allowed revenue
    - Plus sub-accounts, if any, and portion attributed to regulatory account
  - Reconciliation period, incentive mechanisms and intended use of auction premium

## Information to be published before tariff period (1st October)

- Information on transmission and non-transmission services
  - any commodity-based transmission tariffs
  - Any non-transmission tariffs for non-transmission services
  - Reference prices and other prices applicable at non-IPs
- Additional information with regards transmission tariffs
  - Changes in level of transmission tariffs between prevailing and upcoming period
  - Estimated changes in level of tariffs for upcoming and subsequent periods in remainder of price control period.
- Tariff model (plus user guide)

#### Form of Publication

- All information to be published on company website with a link on the ENTSOG Transparency Platform
- Simultaneous publication on ENTSOG Transparency Platform for the following IP information:
  - Reserve prices for firm capacity products
  - Any separate flow-based charge described in Art. 4(3)(a)
    - e.g. if a discrete shrinkage charge is used.
  - To be published in a standardised table

#### Form of Publication

- ENTSOG's standardised table to include tariffs in:
  - kWh/d and in kWh/h
  - In local currency and in euro
    - Tariff in euro non-binding for GB
    - Probably calculated by ENTSOG using ECB exchange rate
  - Table to also include simulation of all charges for flowing 1
    GWh/day/year for each IP (for GB in £ and €)
- ENTSOG Transparency WG to discuss standardised table and other publication requirements on 31 August for deadline of 1 October 2017.

#### **Gas Charging Review**







Proposed Approach for Development

Colin Williams

#### **Overview**

- At August's NTSCMF there was a request for development of a strawman to look at implementation of the EU Tariffs Code / Charging Review; and
- Discussions on the Stakeholder developed Gas Charging Review Objectives to help measure any change against the current framework

What we are looking to do is consider how we can bring all the necessary strands of work together effectively for the Gas Charging Review

#### **Proposed Approach for Development**

Through reviewing the current GB Framework, we propose to:

- Provide modelling of options with stakeholders to review a range of potential changes to meet the objectives; and
- Consider the effectiveness of the current methodology against its original objectives

In combination these will help inform, develop and prioritise potential changes to the GB charging framework

## How is the charging framework meant to work for GB?

In order to help answer this we propose to review:

- What was the current framework there to do?
- How has the system / use of the NTS, and therefore impact on GB Charging, changed since the framework was put in place
- Where relevant, why is the current framework not meeting the objectives the pricing structure / framework was based on?

Reviewing this, in addition to assessing against the stakeholder objectives, will help in considering areas for developing the GB charging framework

#### Optioneering & development of models

Through the optioneering and modelling development for the overall GB charging structure we propose to:

- Develop options and models to facilitate understanding and to encourage discussion
- We will need feedback in order to develop the existing options and ideas for new options to investigate

Through modelling various options, and understanding the interactions and potential impacts, will help in focusing on key areas of change





#### **Summary**

- Through the development work ahead of any initial UNC Modification we will be looking to bring these areas of work together with a view to:
  - Help prioritise areas for change;
  - Help establish key principles and ways to accommodate them for the charging framework;
  - Complement stakeholder objectives

#### **Gas Charging Review**







**Existing Contracts - Booked Entry Capacity** 

Laura Johnson





#### **Existing Contracts Introduction**

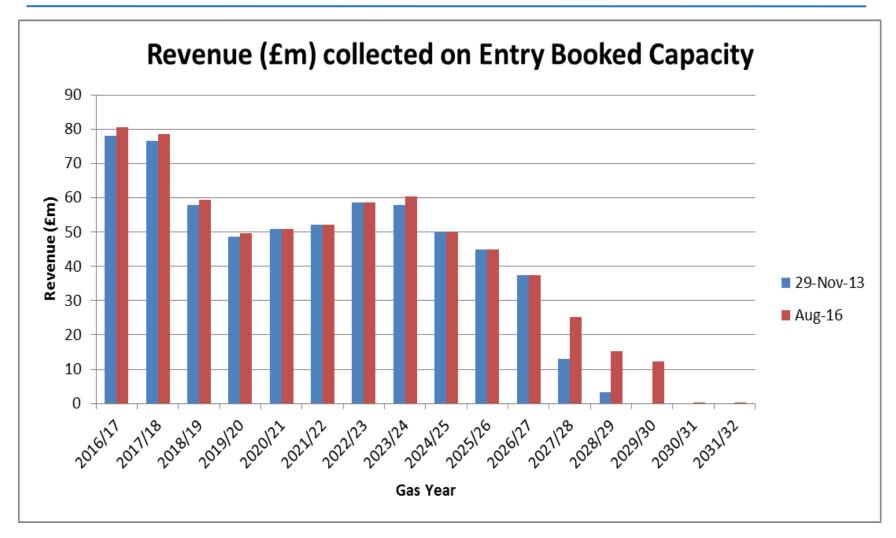
- As part of developing the analysis for any change a key element to look at is the impact of "Existing Contracts"
- Article 35 in EU Tariffs Code: Existing contracts
  - Protection of <u>fixed price element</u> of long-term bookings now applies to all bookings before date of Gas Committee opinion (e.g. 30 September 2016)
- Only applicable to NTS Entry Capacity as these prices are fixed when booked
- Not applicable to NTS Exit Capacity or Commodity Rates as these prices change each year (or more regular)

## Existing Contracts – Booked Entry Capacity Analysis

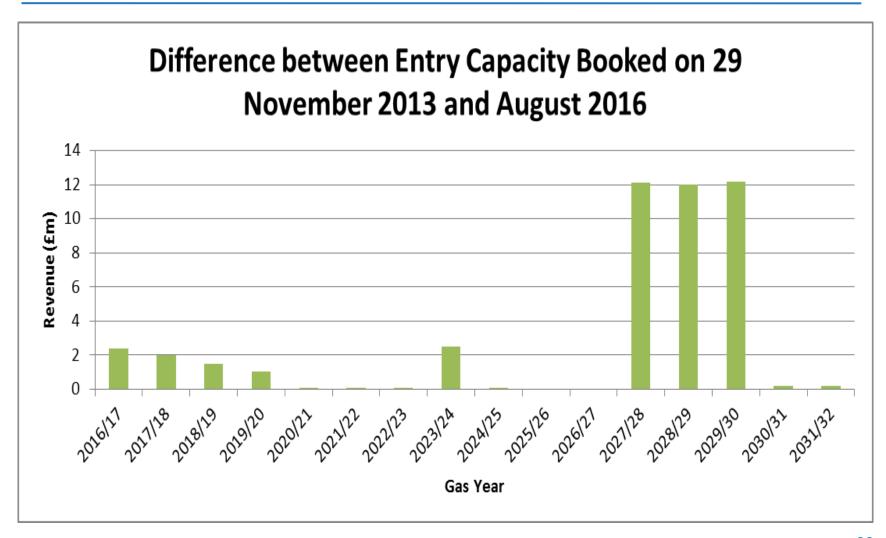
- Entry Capacity concluded before 16 September 2016 (current date in TAR Code)
  - Analysis based on current date (August 2016)
- Comparison back to 29 November 2013 which was date in previous version of EU TAR code
- Assumed that all revenue collected by the existing Entry Capacity bookings feeds into the TO Maximum Allowed Revenue
- TO MAR value from the LT MAR forecast published in May 2016



#### **Entry Booked Capacity**



#### Difference between Entry Capacity booked



#### Revenue (£m) Collection

| Revenue (£m)                               | Forecast | Forecast | Forecast | Forecast | Forecast |
|--|----------|----------|----------|----------|----------|
|  | 2016/17  | 2017/18  | 2018/19  | 2019/20  | 2020/21  |
| TO MAR minus DN pension (Entry proportion) | £ 370.23 | £ 397.15 | £ 389.95 | £ 409.83 | £412.29  |
| Entry Existing Contracts Revenue           | £ 80.69  | £ 78.59  | £ 59.54  | £ 49.78  | £ 50.96  |
| Entry Revenue to be collected              | £ 289.54 | £ 318.56 | £ 330.41 | £ 360.06 | £361.33  |

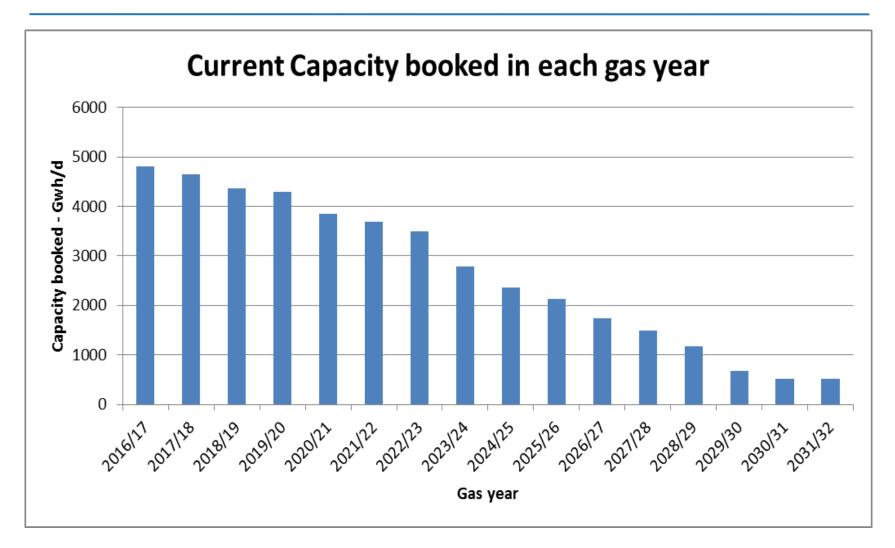
- TO MAR minus DN Pension from May 2016 LT MAR forecast
  - 50:50 Entry/Exit Split to get Entry proportion
- Entry Capacity Revenue from what is booked in Existing contract at August 2016

#### Revenue Collection (percentage)

|   | Forecast | Forecast | Forecast | Forecast | Forecast |
|---|----------|----------|----------|----------|----------|
|   | 2016/17  | 2017/18  | 2018/19  | 2019/20  | 2020/21  |
| Percentage Entry Existing Contracts Revenue | 21.8%    | 19.8%    | 15.3%    | 12.1%    | 12.4%    |
| Percentage Entry Revenue to Collect         | 78.2%    | 80.2%    | 84.7%    | 87.9%    | 87.6%    |

- Proportion of revenue collected from booked (August 2016) capacity is decreasing in future years
- Increase in Entry Revenue to be collected by the TAR Reference Price Methodology

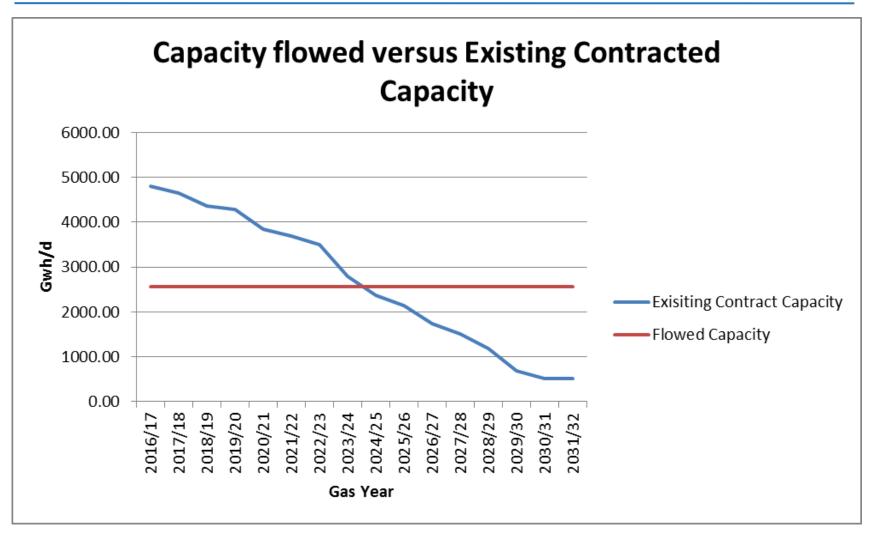
#### Current capacity booked in each gas year



#### Flowed capacity against existing contracts

- Flowed capacity for 2015/16 used as a forecast for future years
- Existing Contracts as at August 2016 for future years
- Existing Contracted capacity is over the flowed capacity for he next couple of years

#### Flowed capacity against existing contracts







#### **Summary**

- Proportion of Entry Revenue is collected through existing contracts
- Existing Contracted capacity is above the flowed capacity\* for the next 8 years
- Between 10% and 20% of TO Allowed Revenue will be collected from Existing Contracted capacity, within each year for at least the next 5 years
- The existing contracts data will be used within the optioneering of the scenarios later on in the presentation

#### **Gas Charging Review**







Transmission and Non-Transmission Services

Colin Williams



### Overview: Transmission and Non Transmission Services

- Transmission and Non Transmission Services are categories required under the EU Tariffs Code
- Categorisation of revenue / charges will need to be considered
- This section is intended to provide an overview of:
  - How, under the EU Tariffs Code, the criteria Transmission Services could be applied to GB
  - How this could impact the revenues / charges for recovery of the Allowed Revenue
  - Comparison to Transmission Owner (TO) and System Operator (SO) through the charges in the current framework

## EU Tariffs Code Transmission and Non Transmission Services

Article 4 (Transmission and non-transmission services and tariffs)

"A given service shall be attributed to transmission services where both of the following criteria are met:

- (a) the costs of such service are caused by the cost drivers of both technical or forecasted contracted capacity and distance;
- (b) the costs of such service are related to the investment in and operation of the infrastructure which is part of the regulated asset base for the provision of transmission services.

Where any of the criteria set out in points (a) and (b) are not complied with, a given service may be attributed to either transmission or non-transmission services subject to the findings of the periodic consultation by the transmission system operator(s) or the national regulatory authority and decision by the national regulatory authority, as set out in Articles 27 and 28."





#### **Transmission and Non Transmission Services**

- At August NTSCMF we mentioned that we had a working assumption that:
  - TO (less DN Pensions) as we have it today equates to Transmission Services
  - SO we have today equates to Non Transmission Services
- Here we show a high level view of how this compares to the current framework of TO and SO revenues and use of specific charges to recover them
- Mapping across to Transmission and Non Transmission may mean some changes from the current setup
  - This will continue to be reviewed





#### **Transmission and Non Transmission Services**

#### Under TO

- Transmission Activities will mostly relate to Transmission Services
- Except for the NTS Pensions Deficit Charge
  - This would sit outside as it is a targeted charge not fitting the core Transmission Services criteria

#### Under SO

- There are elements that may be considered Transmission Services rather than non Transmission Services
- In the following slides we share some thoughts for discussion on the categorisation of Transmission and Non Transmission Services and some high level impacts



#### **Current Allowed Revenue and Collection**

| Current Structure  | Allowed Revenue<br>£m | Recovered by   |  |
|--|-----------------------|--|--|
| <ul><li>Transmission Owner</li><li>Base Allowance</li><li>Rates</li><li>Incentives and Innovation</li></ul>  | 784                   | <ul> <li>DN pensions deficit charge</li> <li>NTS Metering Charge</li> <li>NTS Exit Charges*</li> <li>NTS Entry Charges*</li> </ul>                 |  |
| <ul> <li>System Operator</li> <li>Base Allowance</li> <li>Constraint Management</li> <li>External Costs (including shrinkage)</li> <li>Specific Services contract costs</li> </ul> | 260                   | <ul> <li>Shorthaul</li> <li>St Fergus Compression Charge</li> <li>Legacy Entry and Exit Capacity charges</li> <li>SO Commodity charge**</li> </ul> |  |
| Total Revenue  | 1044                  |  |  |

#### Key points

- These are based on April 2016 charge setting values excluding any under or over recovery from previous years
- \*NTS Exit and Entry charges are a combination of capacity and commodity with commodity there to collect revenue not recovered by other charges
- \*\*SO Commodity is a residual commodity charge to recover balance of allowed revenue not collected from other charges



# Potential changes for discussion: nationalgrid Transmission and Non Transmission Services

| Initial thoughts on applying EU Tariffs Code  | Allowed Revenue £m | Some options how to recover the allowed revenue  |
|---|--------------------|--|
| Transmission Services (current assumption is TO revenue less value of DN Pensions)  | 724                | <ul> <li>NTS Metering Charge</li> <li>NTS Exit Charges*</li> <li>NTS Entry Charges*</li> <li>Charge to discourage inefficient<br/>NTS bypass#</li> </ul> |
| Non Transmission Services<br>(current assumption is SO revenue<br>with DN Pensions) | 320                | <ul> <li>DN pensions deficit charge</li> <li>St Fergus Compression Charge</li> <li>SO Residual charge (e.g.<br/>Commodity charge)</li> </ul>             |
| Total Revenue   | 1044               |  |

#### Key points

- Total allowed revenue does not change as does value of some charges (e.g. DN Pensions)
- Means of collection, thereby the amounts from certain charges, could change
- \*NTS Entry and Exit charges could be a mix of capacity and commodity
- #If there was a replacement charge for Shorthaul, categorised as Transmission, this is where the income from that would sit

#### **Gas Charging Review**







Optioneering

Sarah Chleboun





#### **Optioneering: Overview**

- To build on the work done to date at NTSCMF this is to begin the process of exploring and developing options, refining them and considering additional options / scenarios
- At this stage this does not represent a preference for any particular methodology and is a means by which we can start to:
  - Build the potential options;
  - Share understanding of issues as they arise;
  - Explore and develop the options to show the interactions within an overall framework;
  - Compare to current framework

#### Option 1: Developing an initial CWD Model

- At the August NTSCMF Energy UK presented thoughts on issues that will need to be considered to facilitate understanding
- To prompt discussion it was requested to develop a model & charges based on the CWD Reference Price Methodology and a series of initial parameters
- We have aimed to develop a dynamic model which allows parameters to be adjusted and the results to be generated immediately



#### **Parameters in Initial CWD Model**

| Parameter        | What is used   |
|------------------|--|
| Years Modelled   | Gas Year 2015/16   |
| Revenue          | Allowed Transmission Owner Revenue as provided in the Long Term Revenue Forecast ( <a href="http://www2.nationalgrid.com/UK/Industry-information/System-charges/Gas-transmission/Tools-and-Models/">http://www2.nationalgrid.com/UK/Industry-information/System-charges/Gas-transmission/Tools-and-Models/</a> ) for the given year less DN Pensions with a zero value for "K"* then applying Entry / Exit split. Entry and Exit Split is 50:50  |
| Multipliers      | All Multipliers are set to 1   |
| Storage Discount | 50% discount applied at Entry and Exit storage sites (as per minimum given in EU Tariffs Code)   |
| Network          | <ul> <li>Used to calculate Weighted Average Distance:</li> <li>Based on network as at December 2015</li> <li>Any new points added in, linked to closest node on the existing network</li> </ul>  |
| Capacity Input   | <ul> <li>Forecast Contracted Capacity based on:</li> <li>Obligated Entry Capacity as per Licence</li> <li>Historical Flow Levels</li> <li>Where the Forecast Contracted Capacity for a given point is zero, the calculation results in an error. For the benefit of this illustrative model; where this is the case the price has been set to zero.</li> <li>Where the Existing Contracted Capacity for a given point is greater than the Forecast Contracted Capacity it results in a negative price; where this is the case</li> </ul> |



#### Scenarios that have been modelled

| Scenario | Entry Forecast<br>Contracted Capacity               | Entry Bookings (to test Revenue recovery)           | Exit Forecast Contracted Capacity | Exit Bookings (to test Revenue recovery) |
|----------|---|---|-----------------------------------|--|
| 1        | Obligated Levels (including existing contracts)     | Obligated Levels (excluding existing contracts)     | Obligated Levels                  | Obligated Levels                         |
| 2        | Obligated Levels (including existing contracts)     | Historic Flow Levels (excluding existing contracts) | Obligated Levels                  | Historic Flow Levels                     |
| 3        | Obligated Levels (excluding existing contracts)     | Obligated Levels (excluding existing contracts)     | Obligated Levels                  | Obligated Levels                         |
| 4        | Obligated Levels (excluding existing contracts)     | Historic Flow Levels (excluding existing contracts) | Obligated Levels                  | Historic Flow Levels                     |
| 5        | Historic Flow Levels (including existing contracts) | Historic Flow Levels (excluding existing contracts) | Historic Flow Levels              | Historic Flow Levels                     |



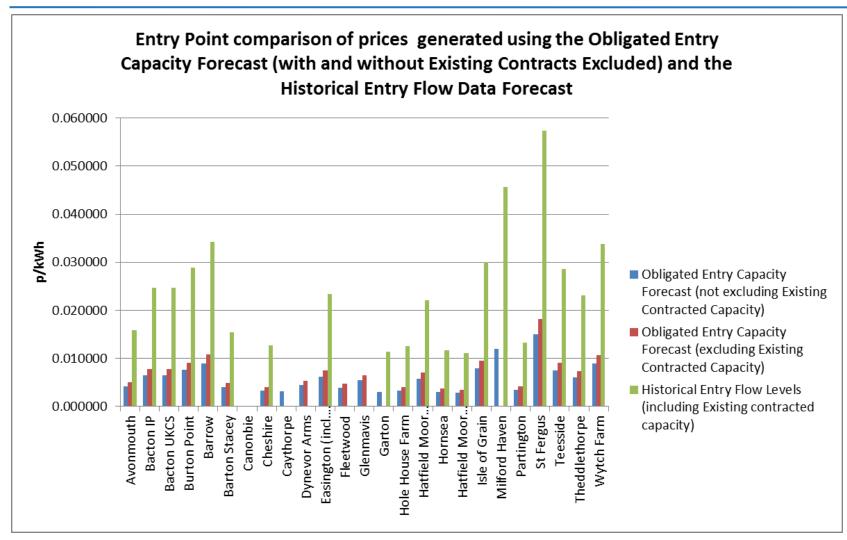


#### What is being shown in each chart

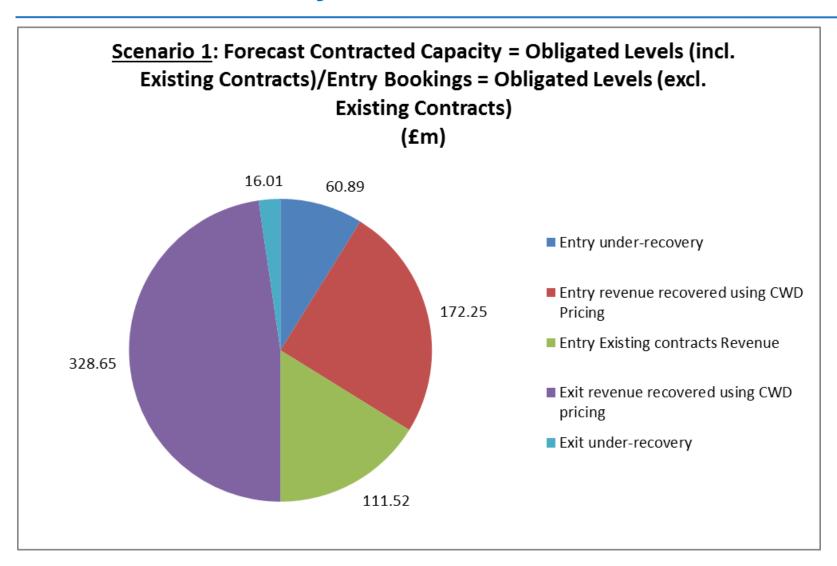
- A comparison of Entry prices has been generated to show the impact of the Forecast Contracted Capacity levels used in the model.
- For each scenario we have calculated the revenue that would be collected and put together a comparison of the proportions of the total revenue that are collected from Existing contracts, capacity booked using the CWD generated prices and any under recovery for Entry and Exit respectively.



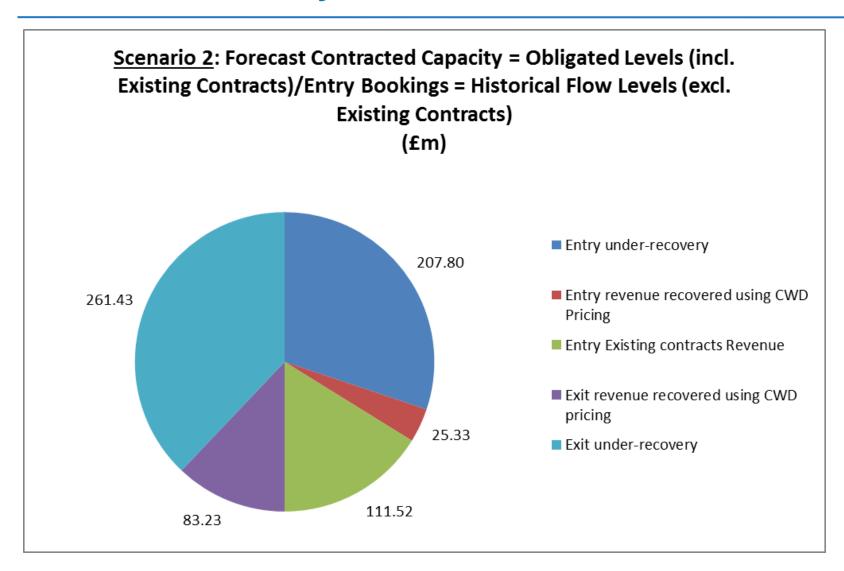
#### **Entry Capacity Price Comparisons**



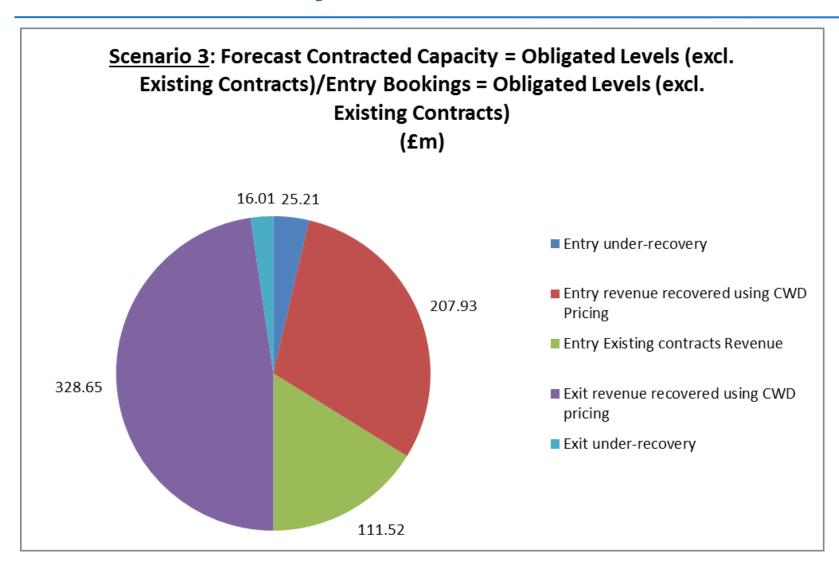




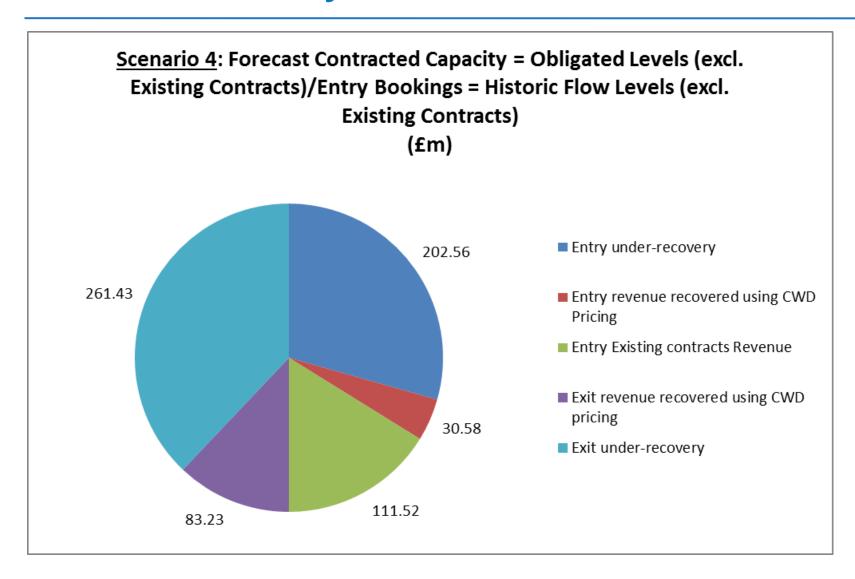




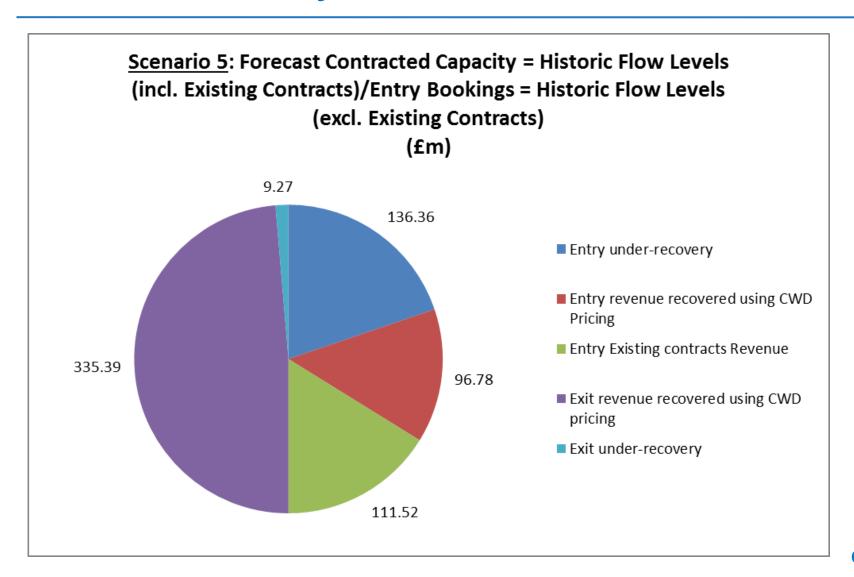
















#### Summary

- In the initial CWD model scenarios (with multipliers all set to 1), under-recovery of revenue for the applicable year is linked to:
  - Prices which are generated based on higher forecast/revenue figures than will be recovered through this mechanism (caused by Existing Contracts being taken off after prices are generated)
  - Application of Storage Discounts
  - A Forecast contracted capacity which is significantly higher than resulting actual bookings

#### **Gas Charging Review**







**Next Steps** 

#### **Next Steps**

- Refine plan with any feedback
- Further development to expand optioneering on initial CWD Model incorporating additional elements building on what has been shown
- Develop for NTSCMF and for additional workshops to complement NTSCMF
  - Feedback welcome on this proposal
- Ideas and scenarios that stakeholders feel would be beneficial to consider / model would be welcome

## 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

Sarah Chleboun Senior Commercial Analyst Tel: +44 (0)1926 65 4246

Email: sarah.chleboun@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

Laura Johnson Commercial Analyst Tel: +44 (0)1926 65 6160

Email: laura.johnson@nationalgrid.com