

Transmission Charging Methodologies Forum & CUSC Issues Steering Group



13th December 2017



Welcome

Jon Wisdom, National Grid

Today's TCMF

CUSC Modifications Update

Co- Location Guidance Note Overview

Financial Impact of Customer Delays

CMP261 - Update

Tariff Update – 5 year forecast

Charging Futures Update

Secondary BMUs and treatment of BSUoS

Today's CISG

Accelerating Connections Update

SO/TO Legal Separation

AOB

CUSC Modifications Update

Urmi Mistry, National Grid

New Modifications and Ofgem decisions

- No new modifications were tabled at the November CUSC Panel
- Ofgem decisions and pending decisions since last TCMF:

Mod Ref	Mod area	Customer impacted	Proposal raised by	Decision
CMP261	Ensuring the TNUoS paid by Generators in GB in Charging Year 2015/16 is in compliance with EU Regulations	Users who pay either Generation or Demand TNUoS tariffs	SSE	Authority rejected CMP261
CMP283	Facilitate the Interconnector Cap and Floor regime through creating the process for data provision between Interconnectors and National Grid within the CUSC	Interconnectors and the SO	NGET	Authority approved CMP283 with an implementation date of 15 November 2017
CMP282	TNUoS tariff setting	Suppliers and Embedded Generators	NGET	Authority approved CMP282 with a revised implementation date of 1 April 2018
CMP251	Ensuring that there is no risk of non-compliance with European Regulation 838/2010 by removing the error margin introduced by CMP224 and by introducing a new charging element to the calculation of TNUoS	Suppliers and Generators	British Gas	With the Authority for decision (expected Dec 17)

Ongoing modification proposals

Mod Ref	Mod area	Customer impacted	Proposal raised by	Process stage	Key activities since last update	Next steps
CMP250	BSUoS: proposing to fix the value of BSUoS over the course of a season, with a notice period for fixing this value being at least 12 months ahead of the charging season.	Customer liable for BSUoS charges	DRAX	Code Admin Consultation issued 24 Nov 17 for 15 WDs (close date 15 Dec 17)	Code Admin Consultation	Draft FMR will be published 3 January and CUSC Panel recommendation vote at the January 2018 meeting

Ongoing modification proposals

Mod Ref	Mod area	Customer impacted	Proposal raised by	Process stage	Key activities since last update	next steps
CMP271	Improving the cost reflectivity of demand transmission charges	Generators, Suppliers, Embedded Generators	RWE	Workgroup meetings ~ suspended	WG received update on impact of SCR on CMP271	<p>Ofgem published further clarity to the industry on the scope of the SCR/TCR on 6 November 2017 and Code Admin discussed impact with the Proposers and the WG.</p> <p>The CUSC Panel at its November 2017 meeting agreed to a further extension to the point that Ofgem issues its minded-to position or another event means that the WG should be re-convened.</p>
CMP274	Winter TNUoS Time of Use Tariff (TToUT) for Demand TNUoS	Generators, Suppliers, Embedded Generation, Transmission Network Operators, HH Demand Customers	UK Power Reserve	Workgroup meetings ~ suspended	WG received update on impact of SCR on CMP274	<p>Ofgem published further clarity to the industry on the scope of the SCR/TCR on 6 November 2017 and Code Admin discussed impact with the Proposers and the WG.</p> <p>The CUSC Panel at its November 2017 meeting agreed to a further extension to the point that Ofgem issues its minded-to position or another event means that the WG should be re-convened.</p>

Given the overlap in the issues to be discussed as part of these two modifications, the Workgroup meetings will be arranged on the same day and are being progressed following a normal timetable.

Ongoing modification proposals

Mod Ref	Mod area	Customer impacted	Proposal raised by	Process stage	Key activities since last update	next steps
CMP275	Preventing BM units from accessing multiple sources of duplicate and overlapping revenue from ancillary services on the same asset	Generators, Transmission Company and Ancillary Service Providers	UK Power Reserve	WG finalising report , legal text and considering any alternatives	WG meeting held 6 October to discuss legal text changes	<p>Work is still progressing on the legal text and from this whether any alternative options should be considered by the Workgroup.</p> <p>The date of the next meeting has not been arranged as is dependent on further clarity from National Grid's legal team.</p> <p>The current timetable has that the Panel at its January 2018 meeting will be asked to approve that the report is issued for Code Admin Consultation. No extension requested this month but this date is at risk.</p>
CMP276	Socialising TO costs associated with 'green polices' (reduction in the demand residual element of the TNUoS £/kW ("Triad") charge by creating two new charge lines for all demand offtakes	Parties that manage demand during Triad periods, i.e. embedded generators and those half hourly metered consumers who respond to Triad	Alkane Energy	Workgroup meetings ~ suspended	WG received update on impact of SCR on CMP276	<p>Ofgem published further clarity to the industry on the scope of the SCR/TCR on 6 November 2017 and Code Admin discussed impact with the Proposers and the WG.</p> <p>The CUSC Panel at its November 2017 meeting agreed to a further extension to the point that Ofgem issues its minded-to position or another event means that the WG should be re-convened.</p>

Ongoing modification proposals

Mod Ref	Mod area	Customer impacted	Proposal raised by	Process stage	Key activities since last update	next steps
CMP280	TNUoS: remove liability from Generators for the Demand Residual element of the TNUoS tariff.	Suppliers	Scottish Power	WG to continue developing the Proposal. Meeting 19 December 17	WG to continue developing the Proposal.	Next meeting due to be held 19 December 2017 Workgroup consultation due to be issued at the start of January 2018. No extension requested at the November CUSC Panel meeting but this date is at risk and post meeting on 19 December 2017 will be looking to request an extension.
CMP281	BSUoS: remove liability from Generators BSUoS charges on imports	Suppliers	Scottish Power	WG to continue developing the Proposal. Meeting 19 December 17	WG to continue developing the Proposal.	Next meeting due to be held 19 December 2017 Workgroup consultation due to be issued at the start of January 2018. No extension requested at the November CUSC Panel meeting but this date is at risk and post meeting on 19 December 2017 will be looking to request an extension.

Ongoing modification proposals

Mod Ref	Mod area	Customer impacted	Proposal raised by	Process stage	Key activities since last update	Next steps
CMP284	Improving TNUoS cost reflectivity (Reference Node)	Suppliers, Generators and end customers that pay TNUoS	PeakGen	<p>The Proposer has withdrawn support for CMP284; in line with the CUSC industry had 5WDs from notification for a Relevant Party to take over as official Proposer of CMP284. No support is received</p> <p>The Proposer has withdrawn support for CMP284; in line with the CUSC industry had 5WDs from notification for a Relevant Party to take over as official Proposer of CMP284. No support is received</p>		CUSC Panel to formally withdrawn CMP284 at its December 2017 meeting. After 5 working days no Relevant Party expressed an interest in taking over as official Proposer of CMP284.
CMP285	CUSC Governance Reform – Levelling the Playing Field	All CUSC Signatories	UKPR	Workgroup is continuing to develop the Proposal	WG meeting held 27 November	Due to issue WG Consultation in Jan but this will be delayed – Meeting is being held on 22 Jan and from this, will determine what additional work is needed prior to issuing WG report for consultation. Once this is known it can be taken to Jan CUSC Panel for an extension request.

Ongoing modification proposals

Mod Ref	Mod area	Customer impacted	Proposal raised by	Process stage	Key activities since last update	next steps
CMP286	Improve the predictability of TNUoS demand charges by bringing forward the date at which the target revenue used in TNUoS tariff setting is fixed to allow customer prices to more accurately reflect final TNUoS rates.	Suppliers, Generators, embedded generators and National Grid	Npower	Workgroup meeting to be arranged	n/a	10 nominations received to sit on the Workgroup. First Workgroup has been scheduled for the 18 th January 2018.
CMP287	Improve the predictability of TNUoS demand charges by bringing forward the date at which certain parameters used in TNUoS tariff setting (such as demand forecasts) are fixed to allow customer prices to more accurately reflect final TNUoS rates	Suppliers, Generators, embedded generators and National Grid	npower	Workgroup meeting to be arranged	n/a	10 nominations received to sit on the Workgroup. First Workgroup has been scheduled for the 18 th January 2018.

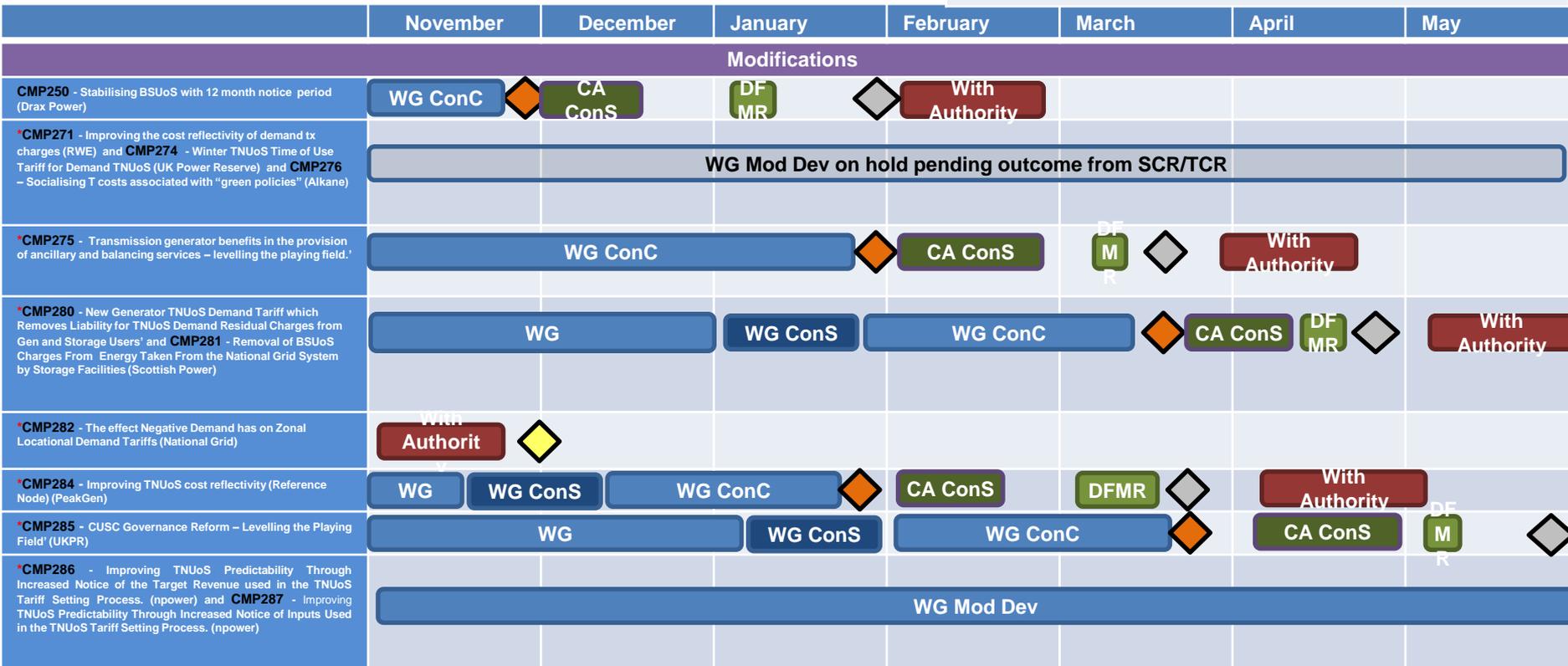
CUSC Modifications

With Authority, awaiting decision – please refer to the following link for further information;
https://www.ofgem.gov.uk/system/files/docs/2017/04/indicative_decision_dates_for_modification_with_ofgem.pdf

Plan on a Page and other CUSC Panel related material can be accessed using the following link:
<http://www2.nationalgrid.com/uk/industry-information/electricity-codes/cusc/Panel-information/>

CMP251 - Remove error margin cap on TNUoS compliance with EU (British Gas)

CMP282 - CMP282 - The effect Negative Demand has on Zonal Locational Demand Tariffs (National Grid)



WG - Workgroup
 Cons - Consultation
 WG ConC - Workgroup Conclusion
 CA - Code Administrator Consultation
 DRMR - Draft Final Modification Report
 * Timetable at risk to be confirmed by Panel



CUSC Panel meeting dates for 2018

- Friday 26 January 2018
- Friday 23 February 2018
- Friday 23 March 2018
- Friday 27 April 2018
- Friday 25 May 2018
- Friday 29 June 2018
- Friday 27 July 2018
- Friday 31 August 2018
- Friday 28 September 2018
- Friday 26 October 2018
- Friday 30 November 2018
- Friday 14 December 2018

Code Governance Team – who to contact

- For **CUSC** related matters Email: cusc.team@nationalgrid.com
- For **Grid Code** related matters Email: Grid.Code@nationalgrid.com
- For **STC** related matters Email: STCTeam@nationalgrid.com
- For **SQSS** related matters contact Email: box.SQSS@nationalgrid.com
- For **JESG** related matters Email: box.europeancodes.electricity@nationalgrid.com

Co-Location Guidance Note Overview

Sarah York, National Grid

Context

On 24th July 2017 the Department for Business, Energy and Industrial Strategy and Ofgem published their Smart Systems and Flexibility Plan to provide clarity on the action being taken by Government, Ofgem and industry to deliver a smarter, more flexible energy system.

Within the Plan a number of actions are documented, some of which relate to the removal of perceived and actual barriers to storage.

National Grid Electricity System Operator is technology neutral but is always looking for ways to remove barriers to effective competition and promote more economic and efficient solutions to benefit consumers.

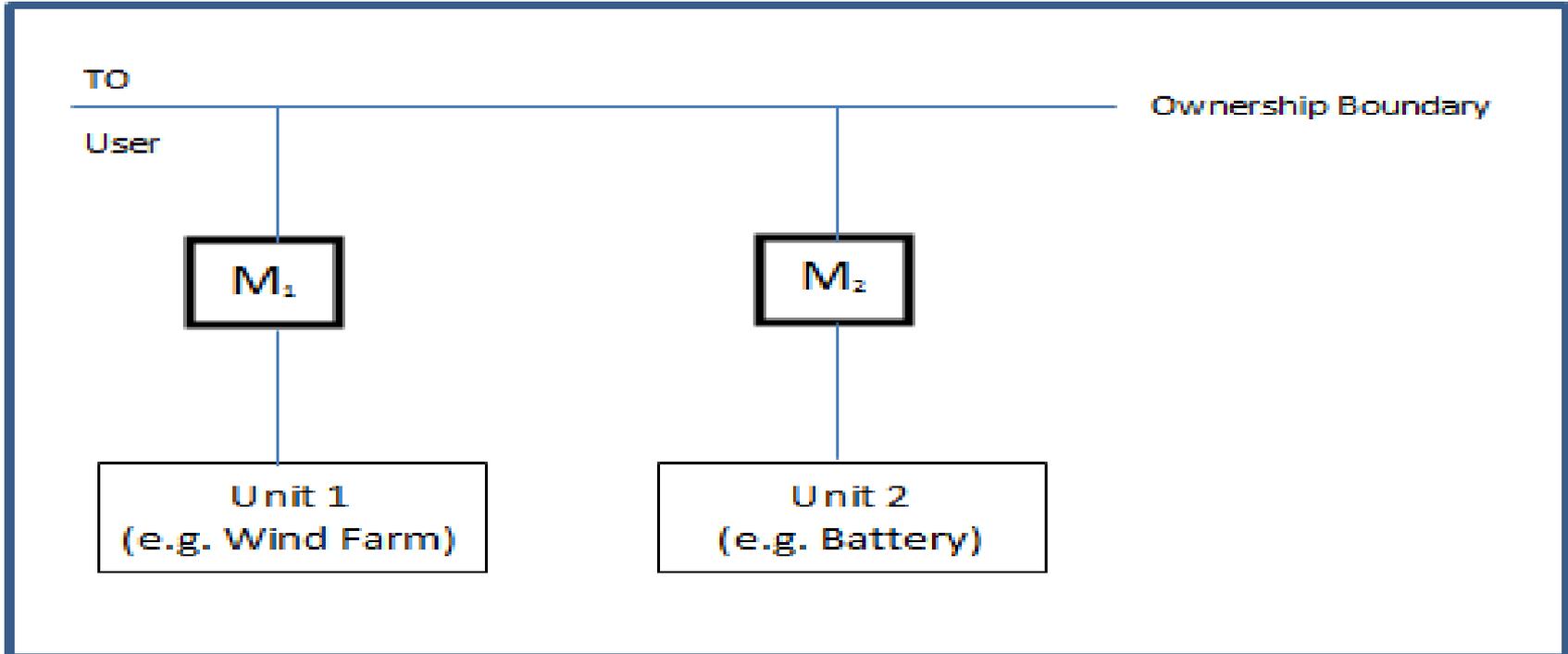
This includes working to ensure a level playing field for Storage.

ESO Guidance Note Overview (1)

-
- ESO intend to publish a guidance note on co-location by end of January 2018;
 - The aim is to provide clarity to parties wishing to co-locate for connection to or use of the Transmission System;
 - It will cover Connection, Compliance and Charging at a high-level;
 - It differentiates between Parallel Connections and Consolidated Connections;
 - It is expected to compliment the upcoming Ofgem RO / FiT guidance note;
 - It is also expected to compliment the output of Open Networks Product 8; and
 - It will be kept under review and evolve as and when required.

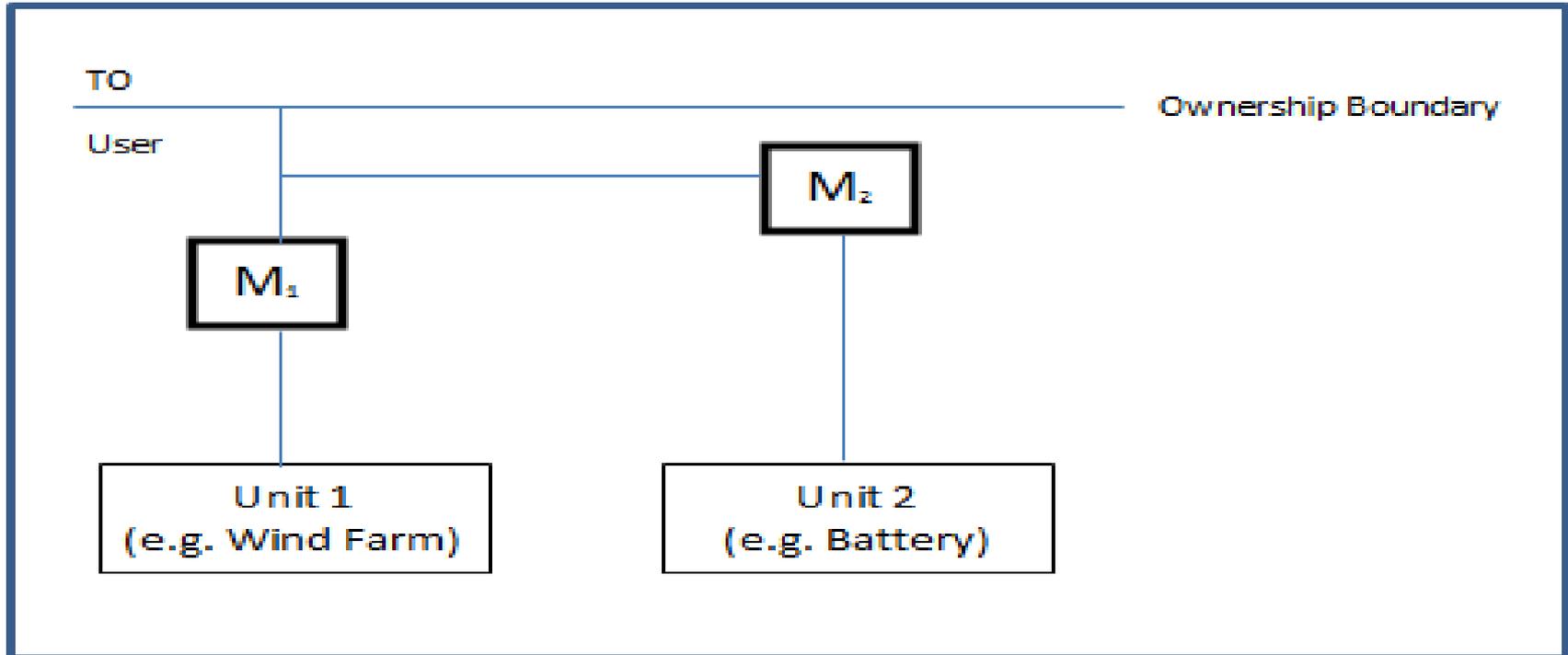
Guidance Note Overview (2)

Parallel Connection



Guidance Note Overview (3)

Consolidated Connection



Guidance Note Overview (4)

	Parallel Connection	Consolidated Connection
Connection	Connection Application New Bilateral Connection Agreement 'First Come, First Served' Existing Connection Site	Modification Application Modified Bilateral Connection Agreement 'First Come, First Served' Existing Connection Site
Compliance	New Connection Point New Power Station	Existing Connection Point Existing Power Station
Charging	Power Station TEC Fuel Type	Power Station TEC Predominant Fuel Type

Consolidated Connection Charging Matrices

For a consolidated connection with multiple fuel types that have common charging characteristics then the current charging methodology would remain appropriate

Transport Model Categories

	Co-Location and Predominant Fuel Type	Carbon	Low Carbon
Tariff Model Categories	Conventional	Coal and Gas	
	Intermittent		Wave and Tidal

For a consolidated connection with multiple fuel types that have different charging characteristics, the current charging arrangements may not adequately cater for a single Power Station being connected to the Transmission System.

Transport Model Categories

	Co-Location and Predominant Fuel Type	Carbon	Low Carbon
Tariff Model Categories	Conventional	Storage	
	Intermittent		Wind

AND

Questions for TCMF

- Do you agree that a guidance note with this scope will be useful to industry?
- Do you think the key areas are covered by the draft guidance note?
- Do you agree that we should consult on the draft prior to finalisation?
- Do you think that a charging modification is required?

Thank you for your time.

If you would like a bilateral discussion on the guidance note please get in touch:

michael.oxenham1@nationalgrid.com / sarah.york@nationalgrid.com

nationalgrid

Financial Impact of Customer Delays

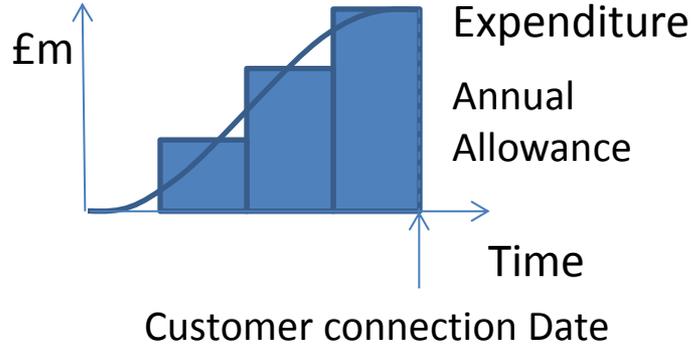
Finding a better way

Wayne Mullins

- There are currently no explicit arrangements within the CUSC to recover costs incurred as a result of customers delaying their connection to the transmission system.
- There are two types of cost that can occur:
 - Incremental costs as a direct result of a delay (e.g. demobilisation/remobilisation); and
 - Financing of investment undertaken earlier than required.
- Whilst one-off charges can be utilised to recover costs, having more explicitly defined charges would aid transparency.
- Additionally, there is a risk of additional costs being borne by consumers as a result of a customer delay. No formal mechanism exists enabling these costs to be refunded.

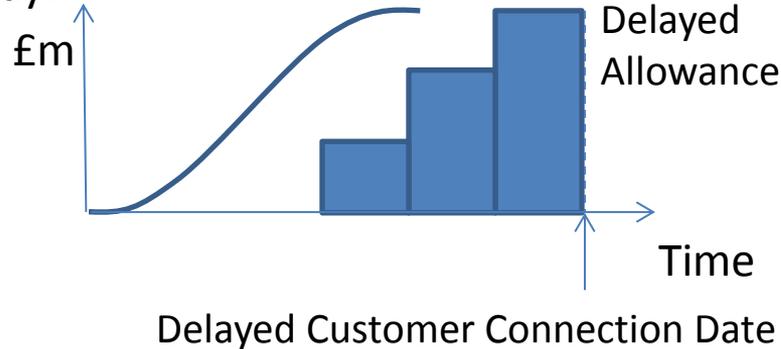
Impact of Delay

No Delay:



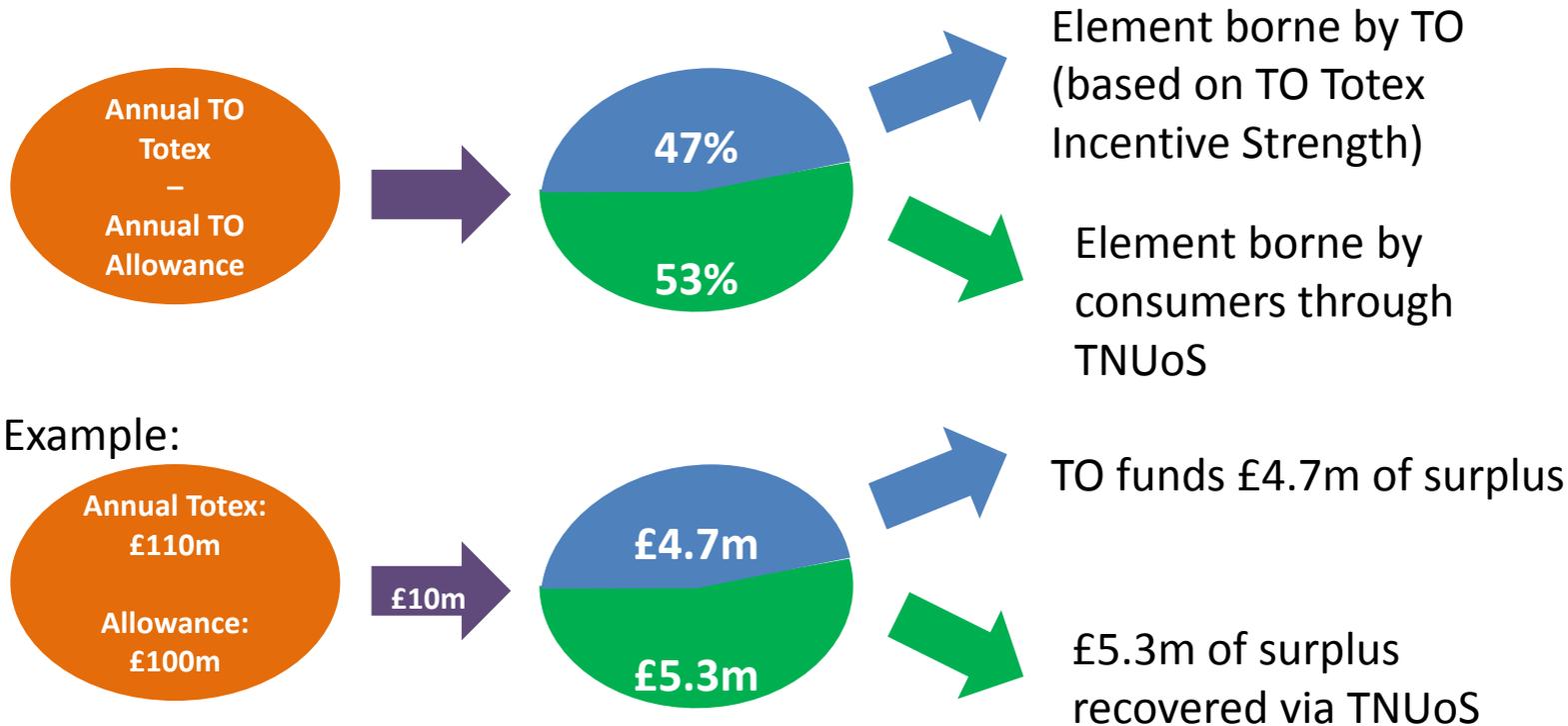
No Delay: Assuming total allowance equals total spend, profiling of allowance ensures TO funding and spend aligns.

Delay:



Delay: using same assumptions, spend occurs ahead of allowance.

Totex Incentive Mechanism



Each TO's price control utilises an assumed **Weighted Average Cost of Capital (WACC)**, which represents their expected cost of financing.

Where TO spend occurs ahead of allowance the WACC would be representative of the associated TO cost of funding.

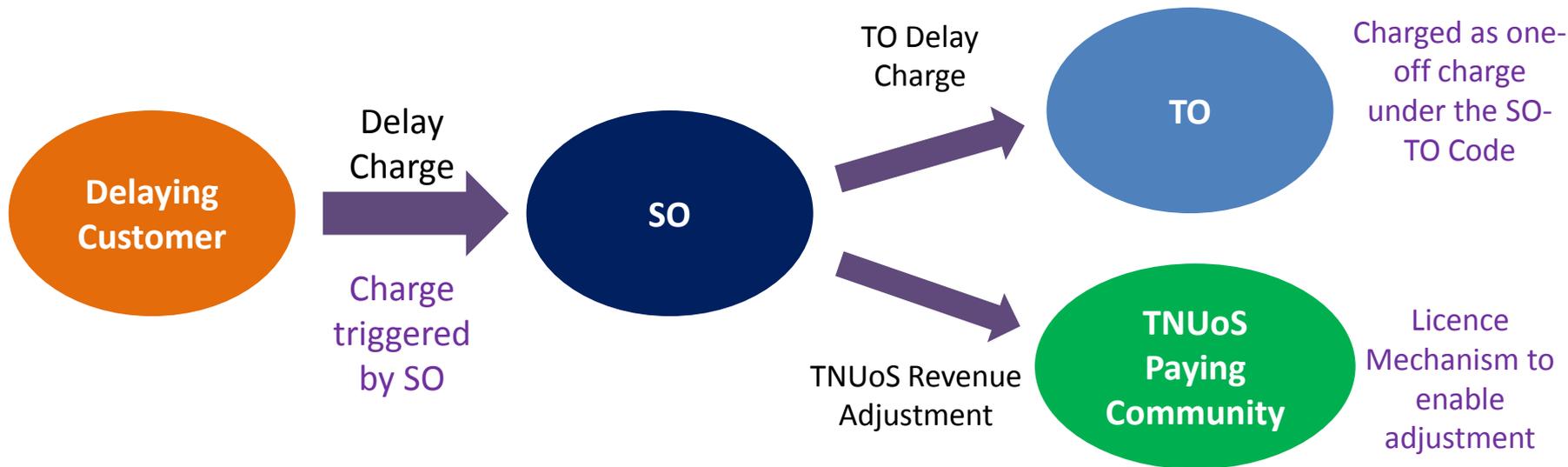
The WACC would also represent a good proxy for funding cost borne by the consumer, as the majority (85%) is capitalised and gradually recovered by the TO (with the TO WACC representing the funding cost).

TO Totex Capitalisation

Amount to be collected within year via TNUoS



Amount capitalised and added TO Regulatory Asset Value (collected gradually via TNUoS i.e. includes cost of capital)



- Delay Charge = Expenditure * Delay Period * WACC+ other incremental costs (e.g. de/re-mobilisation)
- TO Delay Charge = Expenditure * Delay Period * Length of Delay * WACC * Sharing Factor + other incremental costs
- TNUoS Adjustment = Expenditure * Delay Period * Length of Delay * (1- Sharing Factor)

Next Steps

- Further refinement of proposal, following stakeholder feedback;
- Formal CUSC modification proposal targeted for January 2018;

CMP261 - Update

Rachel Tullis, National Grid

261 – Current Position

- Originally sought to reimburse Generators for alleged over-payment of TNUoS in 2015/16;
- Modification was rejected by the Authority in November 2017;
- The Authority determined that a ‘broad’ interpretation of the regulation meant GTNUoS did not exceed €2.50/MWh cap;
- On the 6th December an appeal process to the CMA was launched by SSE and EdF;
- This process will continue into the New Year

261 – Next Steps

- National Grid is considering its position in regards to the appeal process.
- Irrespective of the outcome of any appeal, NG needs to maintain compliance with Regulation 838/2010;
- Following the conclusion of any legal proceedings it is possible that Parties could consider potential CUSC modifications to further amend the methodology;
- We're keen to work with Parties to develop options around approaches for TNUoS charges if they wish to raise them;

Tariff Update – 5 Year Forecast

Jon Wisdom, National Grid

LUNCH



Charging Futures – CDB key messages

Rob Marshall
National Grid



Charging Futures – CDB key messages

Key messages from Charging Delivery Body (CDB) meeting, 28th November

- First forum held on 9th of November, attended by 65 organisations
 - Summary notes will be published in the coming weeks along with additional briefings
- CDB members are interested on industry views. Membership can be found on the [Charging Futures website](#).

If you are interested in attending a future CDB meeting as an observer, contact chargingfutures@nationalgrid.com



Charging Futures – CDB key messages

Access and Forward-looking charges

- Two taskforces have been launched at a joint meeting on 1st December. They will deliver three key outputs:
 - Identify initial options in Dec/Jan 18
 - Provide initial assessment of options in Feb/March 18
 - Reach recommendations, if any, to be taken forward in April 18.

Targeted Charging Review

- Workshops held in Birmingham and London during November
- If Ofgem concludes changes are in the consumers' interest, it will consult in summer 18.

Ofgem's working papers on these areas can be found at chargingfutures.com

Secondary BMUs and treatment of BSUoS

Harriet Harmon, National Grid

Background

- P344 looks at the implementation of EU TERRE arrangements into the GB Market;
- Under this BSC change, non-BSC Parties can choose to become, “Virtual Lead Parties”
- These VLPs will accede to certain sections of the BSC such that they can participate in the BM;
- Relevant sites will be registered to a VLP’s “Secondary BMU” and the Supplier’s Base BMU;
- A VLP won’t be a Trading Party, and won’t submit Notifications;

Interaction with BSUoS

- Only BMUs associated to Interconnectors are currently excluded;
- As sites will remain registered to Supplier Base BMU, the Supplier will still be charged for relevant metered volumes;
- Sites will also be registered to the VLP's Secondary BMU;
- Without a CUSC change, VLPs will also be charged BSUoS;
- We believe that this is, in effect, double-charging of metered volumes

Existing Methodology - unchanged

- Current expectation is that the charging methodology in S14 remains unchanged – billing methodology tbc;
- Working assumption:
 - The CSOBM element of the calculation (Cashflow) will be comprised of the sum of all actions taken within the HH – no separate costs by quarter-hour;
 - To be confirmed with Elexon when P344 solution is finalised

$$\begin{aligned}
 BSUoS_{EXT}_{jd} &= CSOBM_{jd} + BSCCV_{jd} \\
 &+ [(IncpayEXT_d + BSCCA_d + ET_d - OM_d + FIIR_d + BSC_d + SOTOC_d + LBS_d) \\
 &* \{ \left| \sum^+ (QMBSUoS_{ijd} * TLM_{ijd}) \right| + \left| \sum^- (QMBSUoS_{ijd} * TLM_{ijd}) \right| \} / \\
 &\sum_{j \in d} \{ \left| \sum^+ (QMBSUoS_{ij} * TLM_{ij}) \right| + \left| \sum^- (QMBSUoS_{ij} * TLM_{ij}) \right| \}]
 \end{aligned}$$

Next steps

- National Grid to raise a CUSC Modification in January 2018 to extend Interconnector BSUoS exclusion to Secondary BMUs;
- Propose assessment by Workgroup – timescales for P344 are proposed to be April '19 implementation;
- Confirm CSOBM assumption with Elexon;
- Current plan is for P344 to be sent to Authority in June 2018 – try to align timescales for joint decision if possible

CUSC Issues Steering Group (CISG)

Accelerating Connections Update

Rachel Tullis, National Grid

SO/TO Legal Separation



John Martin

13 December 2017

Legal Separation Background

2017											
JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<p>▼</p> <p>Tripartite Statement of Intent by BEIS, Ofgem and NG</p>	<p>▼</p> <p>Ofgem issued two parallel consultations</p>				<p>▼</p> <p>Ofgem Working Paper: Design future regulatory framework for the SO</p>	<p>▼</p> <p>Ofgem Response to Consultation on SO Separation</p>		<p>▼</p> <p>NGET Codes Open Letter</p>			<p>▼</p> <p>Ofgem Informal Consultation: ESO Licence drafting</p>

SO/TO Legal Separation - Modification Approach

- Industry codes will need to be modified to create a legally separate SO and associated novations
- A coordinated set of code of modifications utilising the normal GB code governance arrangements will be proposed by National Grid Electricity Transmission (NGET)
- Anticipate the effect of the Modifications on industry parties to be minimal
- If required open to cross code working to ensure best use of industry time

High level impact to the CUSC

- The high level indicative CUSC documents required for the entity changes are:
 - All sections 1-15
 - Majority of Exhibits and Schedules

Legal Separation – Next significant milestones

- Based on the current timeline the draft modification legal text will be issued to industry participants in late January/ early February
- NGET will submit the formal Modifications to the March 2018 Panel meeting
- Anticipated timescales for an Ofgem Modification decision September or October 2018
- Virtual Separation for National Grid from 1st October 2018 (in the absence of Licence and Code changes)
- Live separation 1st April 2019

Questions

John.martin2@nationalgrid.com or Box.ELSP@nationalgrid.com

AOB

Jon Wisdom, National Grid

Next meetings

January

10

Wednesday

February

14

Wednesday

Will be an 10:30am start unless otherwise notified.

2018 Dates are available on the website.

TCMF Meeting Dates for 2018

- 10th January 2018
- 14th February 2018
- 14th March 2018
- 11th April 2018
- 9th May 2018
- 13th June 2018
- 11th July 2018
- 8th August 2018
- 12th September 2018
- 10th October 2018
- 14th November 2018
- 12th December 2018

We value your feedback and comments

If you have any **questions** or would like to give us **feedback** or share **ideas**, please email us at:

cusc.team@nationalgrid.com

Also, from time to time, we may ask you to participate in surveys to help us to improve our forum – *please look out for these requests*

Close

Have a great Christmas

