

Transmission Charging Methodologies Forum & CUSC Issues Standing Group



Wednesday 6th January 2016

Introduction and Welcome



Wayne Mullins

Agenda

- 11:00 Introduction – Wayne Mullins, National Grid
- 11:10 CUSC Modifications Update – Juliette Richards, National Grid
- 11:20 Update on exporting GSPs work - Andy Wainwright, National Grid
- 11:40 Update on draft TNUoS tariffs – Stuart Boyle, National Grid
- 12:00 AOB – charging issues – Wayne Mullins, National Grid
- 12:10 CISG Introduction and meeting objectives – Wayne Mullins, National Grid
- 12.15 Clarification of CAP76 Payment Process – Rebecca Yang, National Grid
- 12:35 Update on implementation of CMP223 – Wayne Mullins, National Grid
- 12.45 Update on prioritisation of issues for CISG – Nick Pittarello, National Grid and European Codes Update – Bec Thornton, National Grid
- 13:10 AOB and close – Wayne Mullins, National Grid

Ongoing modification proposals



Juliette Richards

Ongoing modification proposals - page 1 of 5

■ **CMP242: Charging arrangements for interlinked offshore transmission solutions connecting to a single onshore substation**

- The Workgroup reported to the October CUSC Panel, followed by the Code Administrator Consultation.
- The Workgroup submitted its final modification report to the Panel in December and this will now go forward to Ofgem for decision. The Panel agreed that all options better facilitate the applicable CUSC objectives but that WACM1 does so best.



■ **CMP243: A fixed response energy payment option for all generating technologies**

- The Workgroup consultation closed on 24th November and the Workgroup is scheduled to report to the January Panel.
- Ofgem will decide on this modification at the same time as CMP237 (response energy payment for low fuel cost generation).



Ongoing modification proposals - page 2 of 5

- **CMP244: Set final TNUoS tariffs at least 15 months ahead of each charging year**
 - 6 Workgroups have taken place so far for this proposal and the Workgroup consultation closed on 19th November.
 - The Workgroup is considering a revised Original looking at a TNUoS tariff notice period of 6-8 months rather than 15. The Workgroup is currently considering how to evidence the benefits of the proposal. The next Workgroup will take place on 19th January.
- **CMP248: Enabling capital contributions for transmission connection assets during commercial operation**
 - The Workgroup reported to the CUSC Panel in November and the Code Administrator consultation closed in early January.
 - The Workgroup will report to the January CUSC Panel.



Ongoing modification proposals – page 3 of 5

■ **CMP249: Clarification of other charges (CUSC 14.4) Charging arrangements for customer requested delay and backfeed**

- The Workgroup consultation is anticipated shortly, and the Workgroup is due to report back to the CUSC Panel in February.



■ **CMP250: Stabilising BSUoS with at least a twelve month notification period**

- Following previous discussions at TCMF this proposal was raised by Drax. 5 Workgroups have been held to date, and the next meeting will be held on 19th January.
- The Workgroup is putting together the draft consultation document, and is due to report to the CUSC Panel in March.



Ongoing modification proposals – page 4 of 5

- **CMP251: Removing the error margin in the cap on total TNUoS recovered by generation and introducing a new charging element to TNUoS to ensure compliance with European Commission Regulation 838/2010**
 - This proposal was raised by British Gas and seeks to set generation charges to €2.5/MWh, followed by post event reconciliation as necessary.
 - The Workgroup has met twice and the draft consultation document has been written. The next Workgroup will be on 11th January and the Workgroup is due to report to the CUSC Panel in February.



Ongoing modification proposals – page 5 of 5

■ **CMP254: Addressing Discrepancies in Disconnection / De-energisation Remedies**



- This proposal was raised by EDF in October and seeks to enable Suppliers to instruct National Grid to disconnect customers in accordance with their rights under the Electricity Act.
- The Panel agreed with the Proposer's recommendation for urgency, however Ofgem decided that the modification should not be treated as urgent, but progressed according to an accelerated timetable.
- 3 Workgroups have taken place to date and the Workgroup consultation closed on 17th December. 2 further Workgroups are scheduled.
- A special meeting of the CUSC Panel will take place on 18th January to discuss this modification.

New modification proposals – page 1 of 3

- **CMP255: ‘Revised definition of the upper limit of Generation Charges in the charging methodology with removal of the reference to the 27% charging cap’**
 - This proposal was raised by RWE in November and seeks to clarify what would happen if EU regulation 838/2010 was removed in line with the recent ACER recommendation.
 - Currently the CUSC references the G proportion as 27% or the €2.5 Euro limit (whichever is lowest) but in recent years the value of these 2 references has diverged, leading to potential uncertainty for generators.



New modification proposals – page 2 of 3

■ **CMP256: ‘Potential Consequential Changes as a result of CMP244’**

- This proposal was raised to ensure that any changes to the CUSC outside of section 14 necessitated by CMP244 could be carried out (as CMP244 is a charging modification and hence can only make changes to section 14 of the CUSC).
- The Workgroup Consultation closed on 15th December and CMP256 will be progressed in parallel with CMP244.



■ **CMP257: ‘CUSC amendment to enable the electronic issue of connection offers and associated notices’**

- The CUSC Panel agreed to progress this proposal as Self Governance and the Code Administrator consultation will close on 8th January.

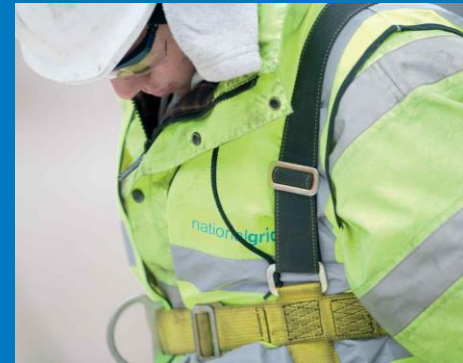


New modification proposals – page 3 of 3

- **CMP258: Rewording of the legal text to align the CUSC with the intentions of CMP235/6**
 - This proposal was raised by National Grid to complete the implementation of CMP235/6 by modifying some minor points in the relevant legal text.
 - The CUSC Panel agreed that CMP258 should be classed as Self-Governance and should be sent directly to Code Administrator Consultation. The Code Administrator consultation opened on 5th January.



Potential Transmission Charging Arrangements at Exporting GSPs – Consultation Responses



Andy Wainwright

Introduction

Stakeholder feedback

Transmission investment drivers

Licence obligations

Growth in distributed generation

Treatment of infrastructure assets



Informal consultation closed 31st October

Local TNUoS charging strawmen

Future commercial arrangements

Specific themes – local options

*Supportive of principles but needs further work;
particularly how exporting GSPs drive investment*

Majority support for;

- *focusing on exporting GSPs only*
- *Charge to DNOs*
- *Charging base (max imp > max exp)*

No consensus;

- *Use of historic metering*
- *MITS node changes*
- *Alignment with longer term needs*

Potential for MWh local option

Further work required on proposed treatment for infrastructure transformers

Specific themes – future commercial arrangements

*General recognition of need to review commercial arrangements at T/D interface
Link to Ofgem flexibility work
Need to collaborate with DNOs*

Level of support for broader review of TNUoS and BSUoS arrangements

Next Steps

Reviewing responses to inform next steps

Particularly interested in some of the broader comments received

Welcome further discussion with interested parties

2016/17 Draft TNUoS Tariffs



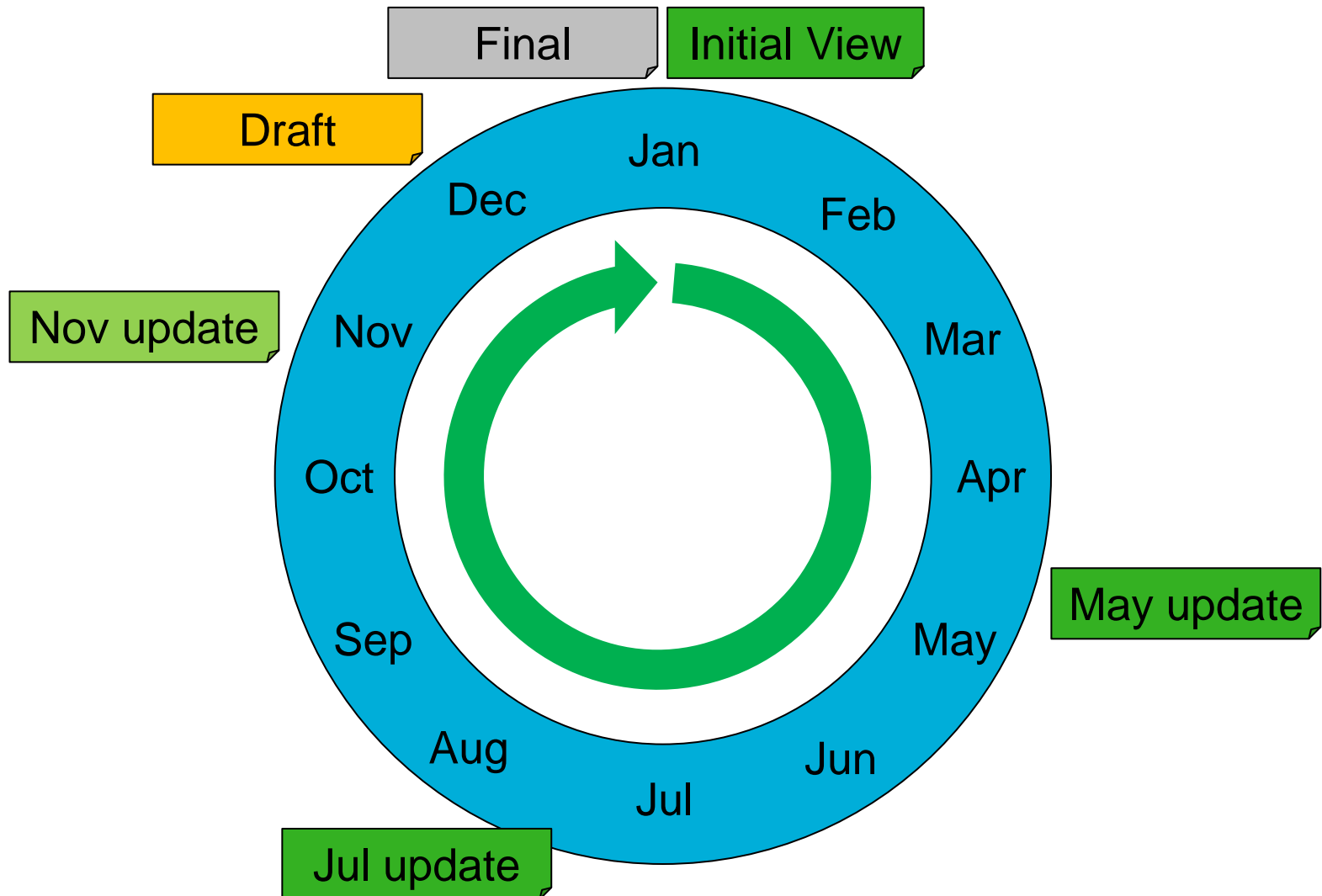
Stuart Boyle, Revenue Manager
January 2016

TNUoS Tariffs

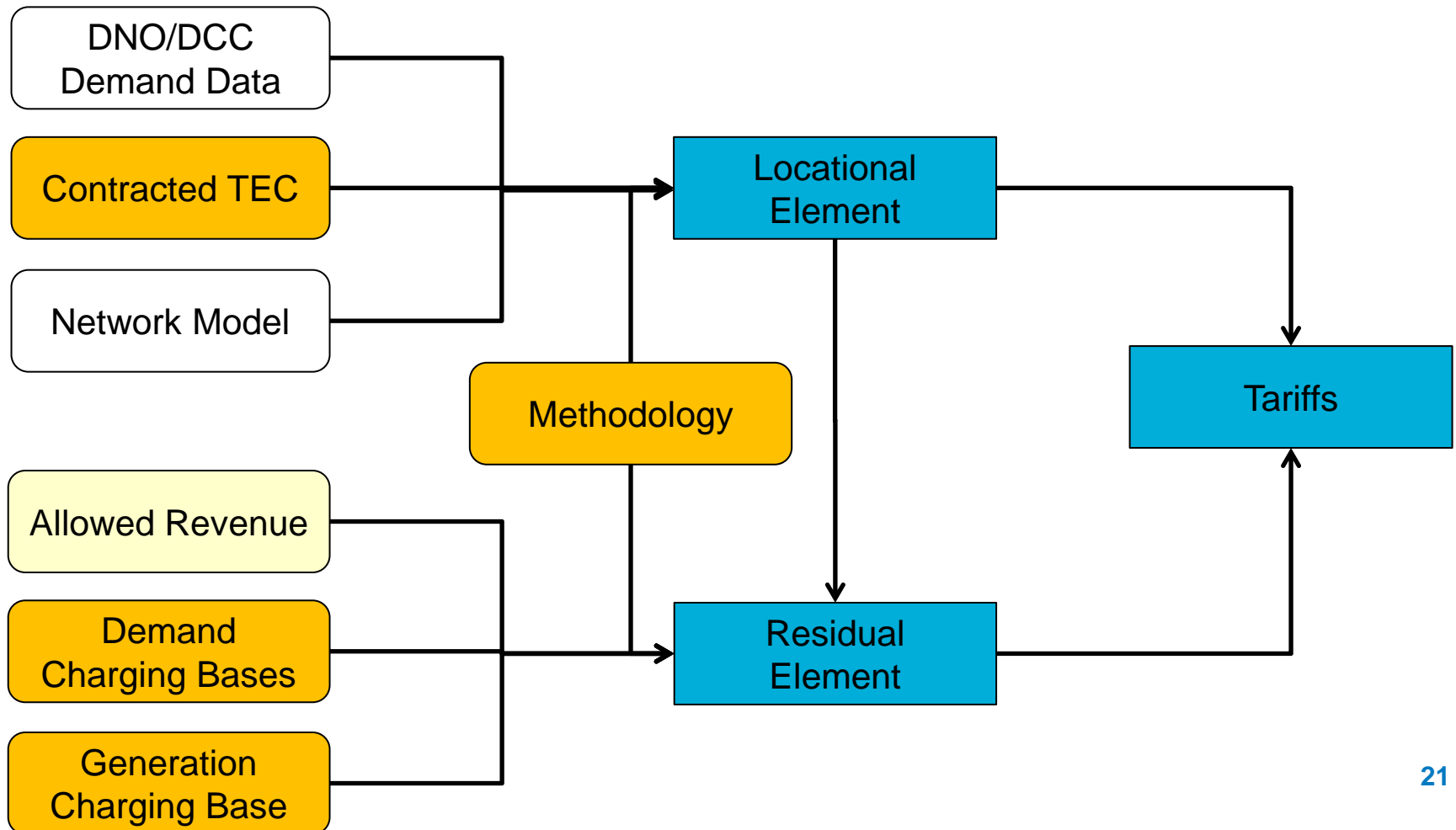
- Timetable & Changes
- Revenue
- Generation
- Demand

<http://www2.nationalgrid.com/UK/Industry-information/System-charges/Electricity-transmission/Approval-conditions/Condition-5/>

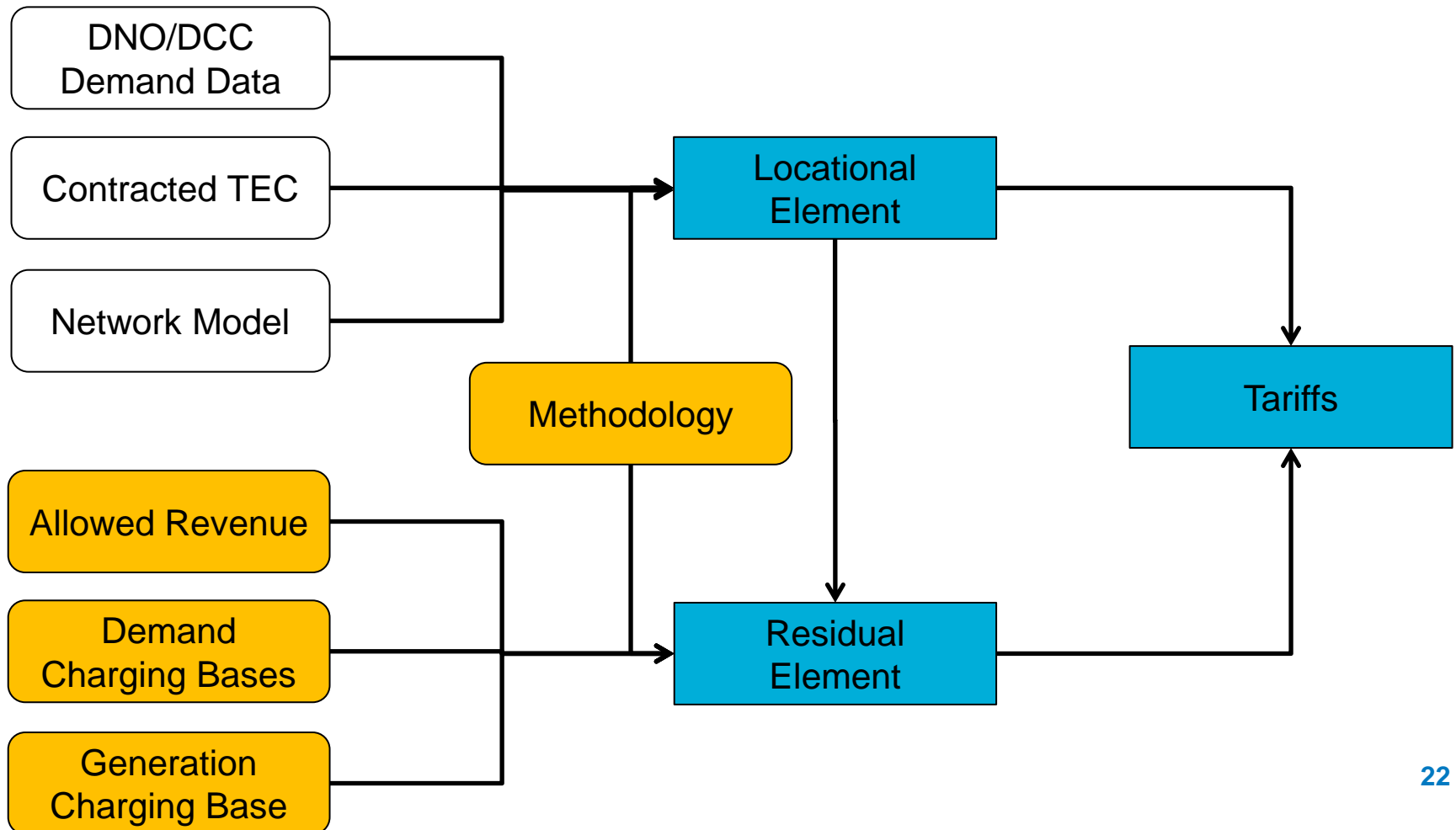
2016/17 TNUoS Tariff Timetable



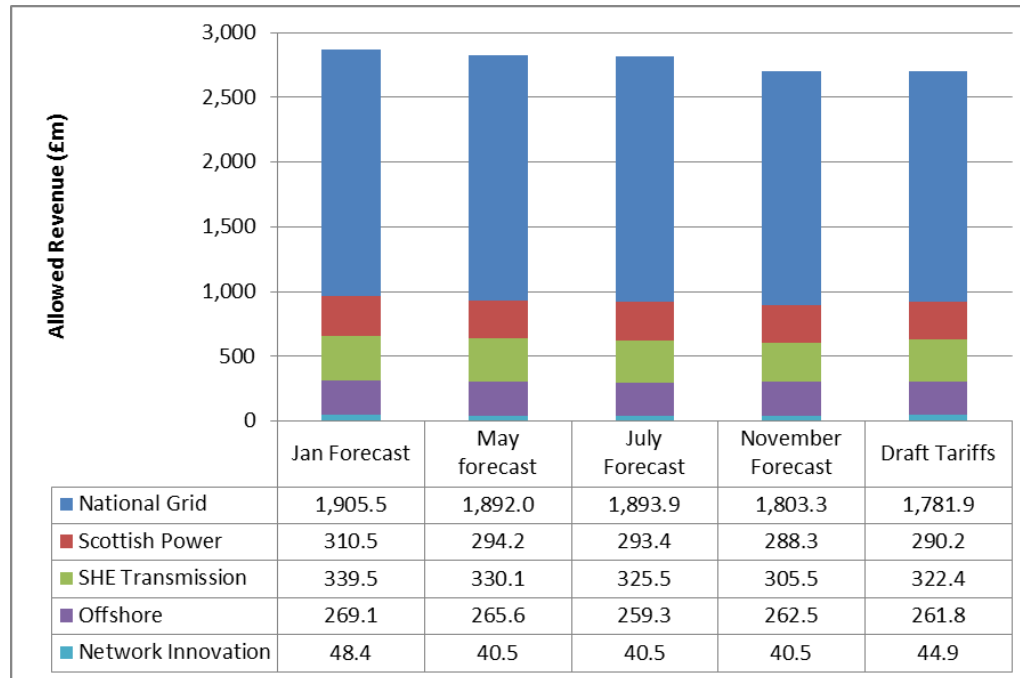
What's changed?



What could still change?

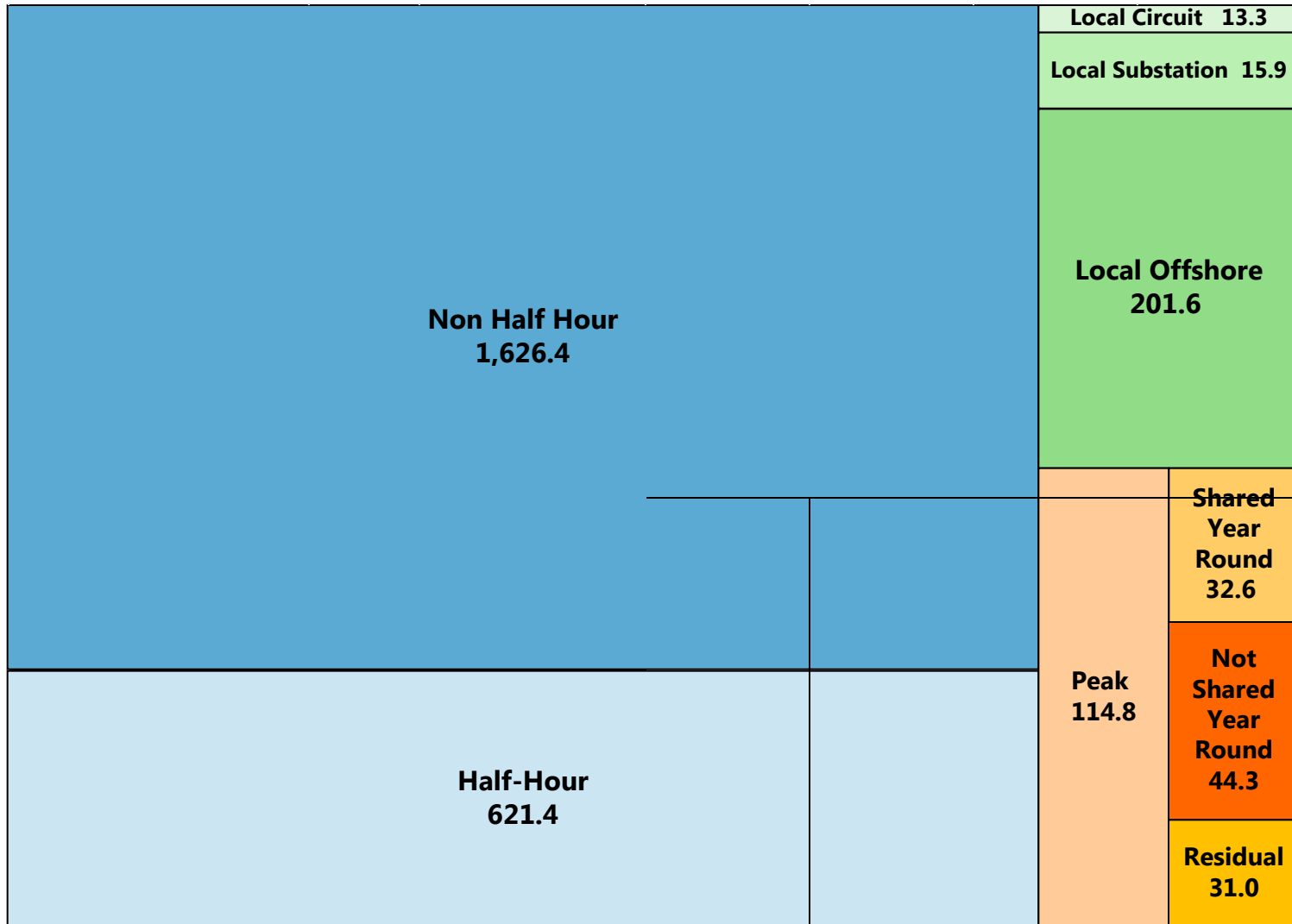


Revenue

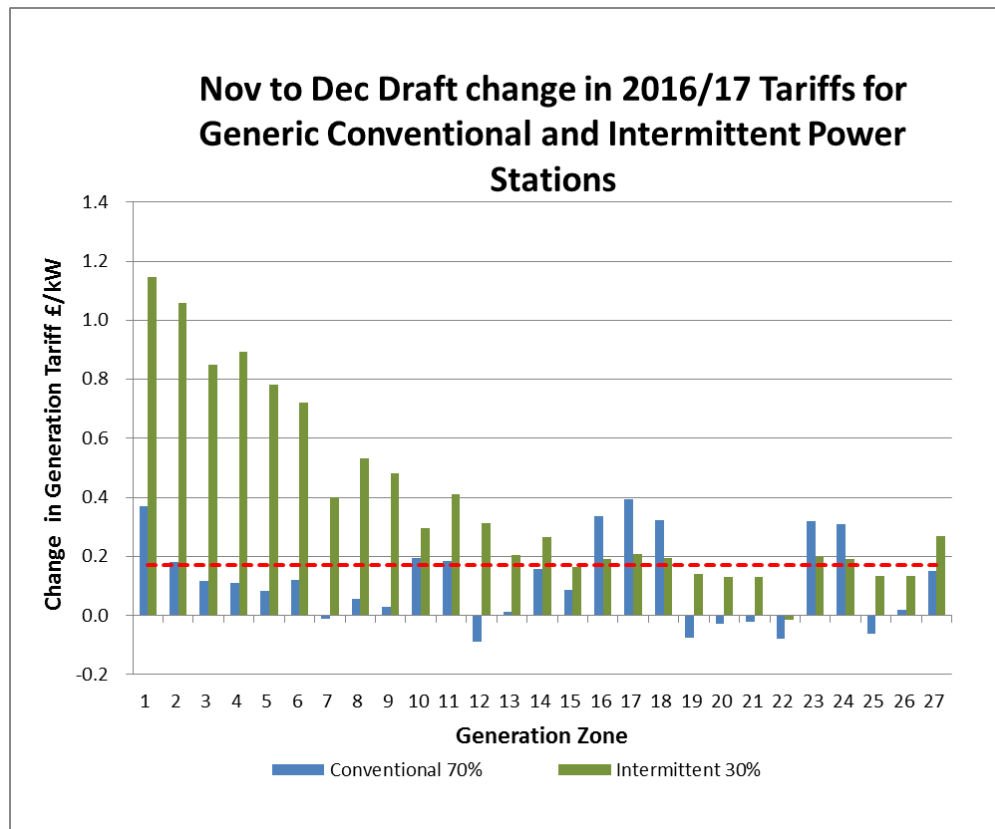


- £1.1m increase from November forecast, includes MOD and Network Innovation Competition determinations
- Final tariffs are expected to include minor adjustments for pre-vesting connection income, Scottish connection income mismatch, inflation true-ups, OFTO availability and OFTO revenue true-up.

Revenue Breakdown (£m)



Generation Tariff Changes



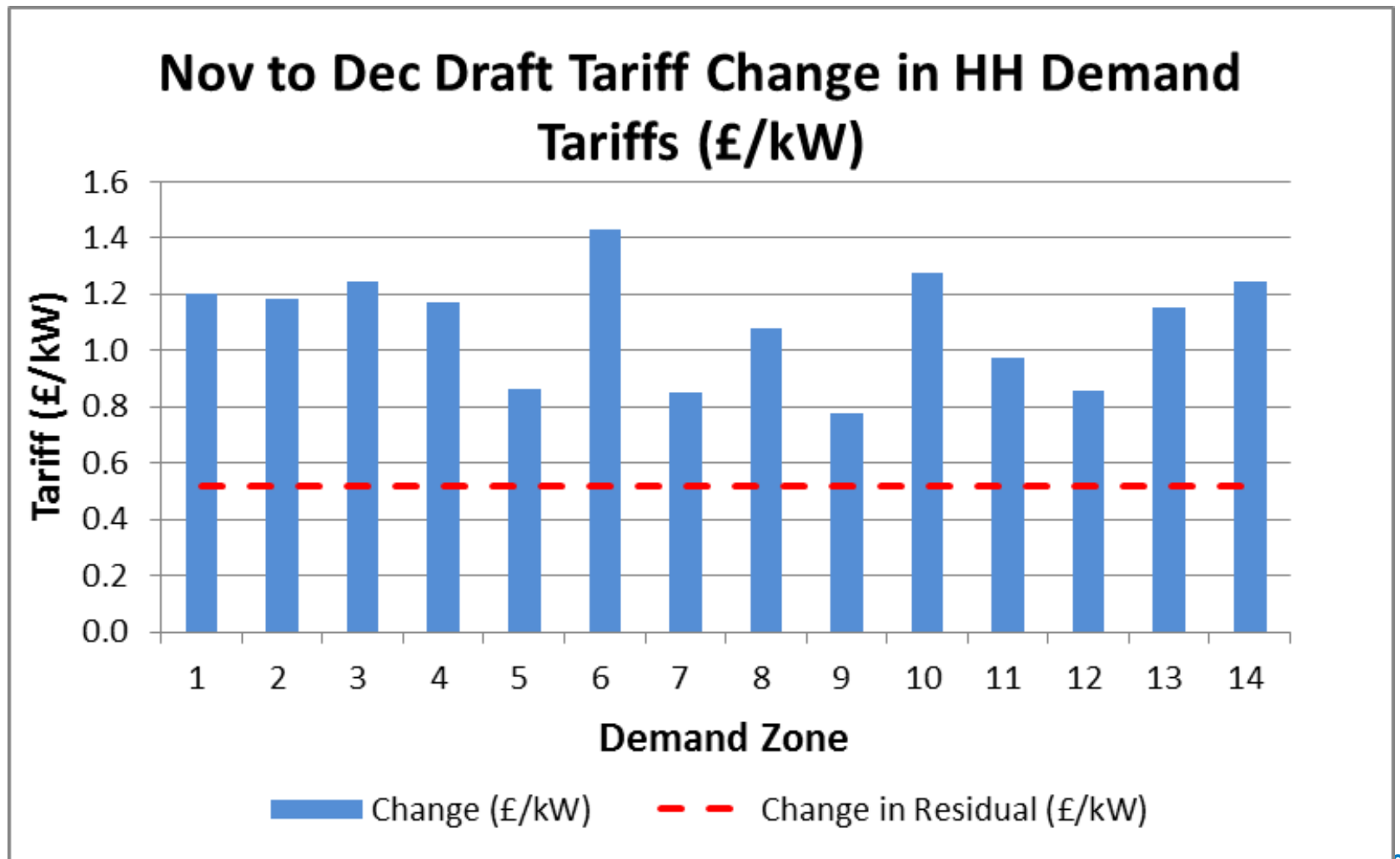
- 17p/kW increase in residual due to lower locational income and 1GW reduction in charging base.
- Additional generation in Scotland increases year-round north to south flows. This flips some circuit costs from peak (offsetting northern tariffs) to year-round (increasing northern tariffs).

Generation Backgrounds

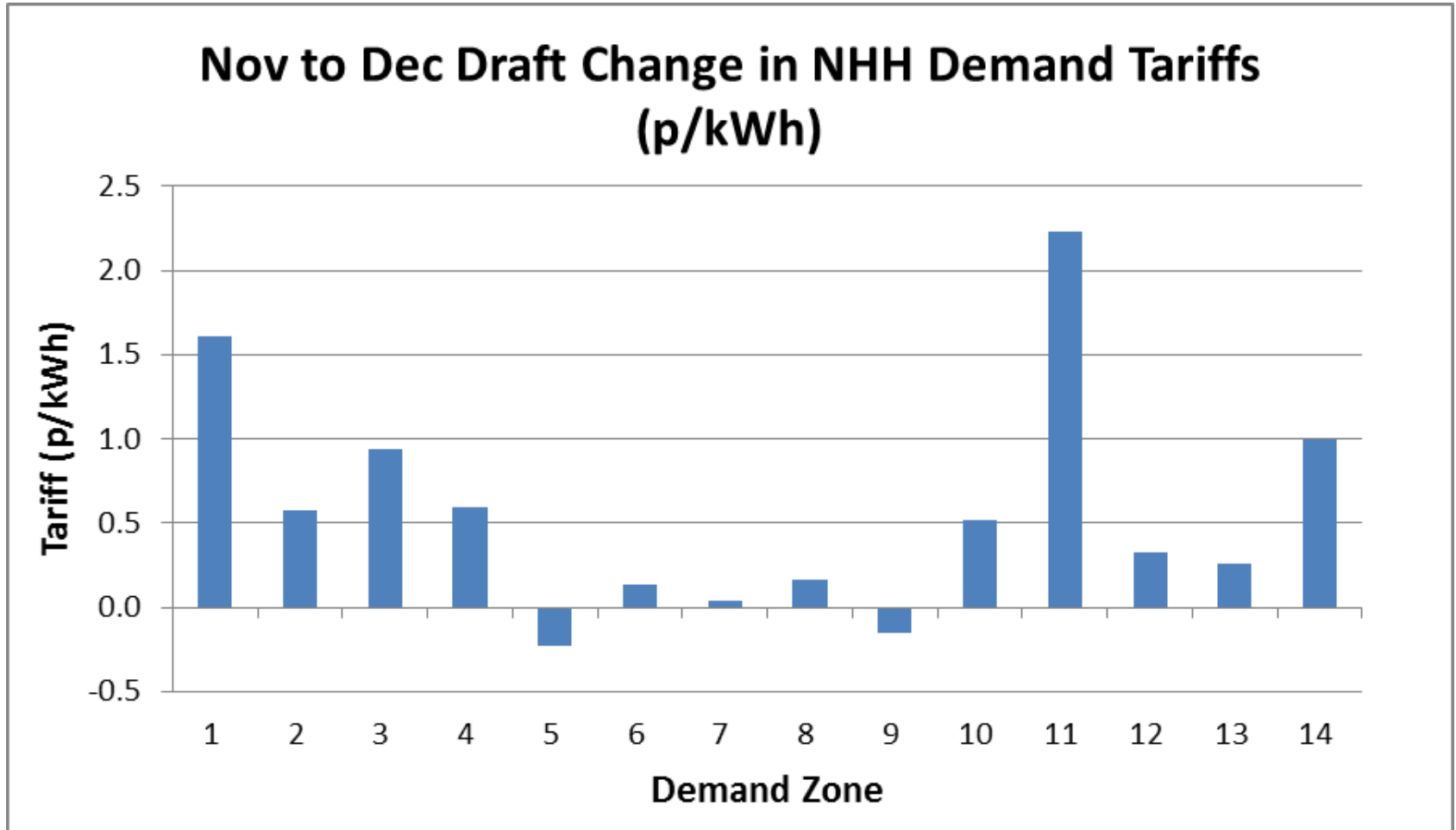
	Jan Forecast	May Forecast	Jul Forecast	Nov Forecast	Draft (Dec)	Final (Jan)
Transport model TEC used for locational element	NGET Best View				31 Oct Contracted	
Tariff model TEC used for residual element	NGET Best View					

- Generators not expected to be contracted in 2016/17 are omitted from NGET best view. However, if they are contracted on 31 October then they are re-included in the transport model from Draft tariffs.

HH Tariff Changes

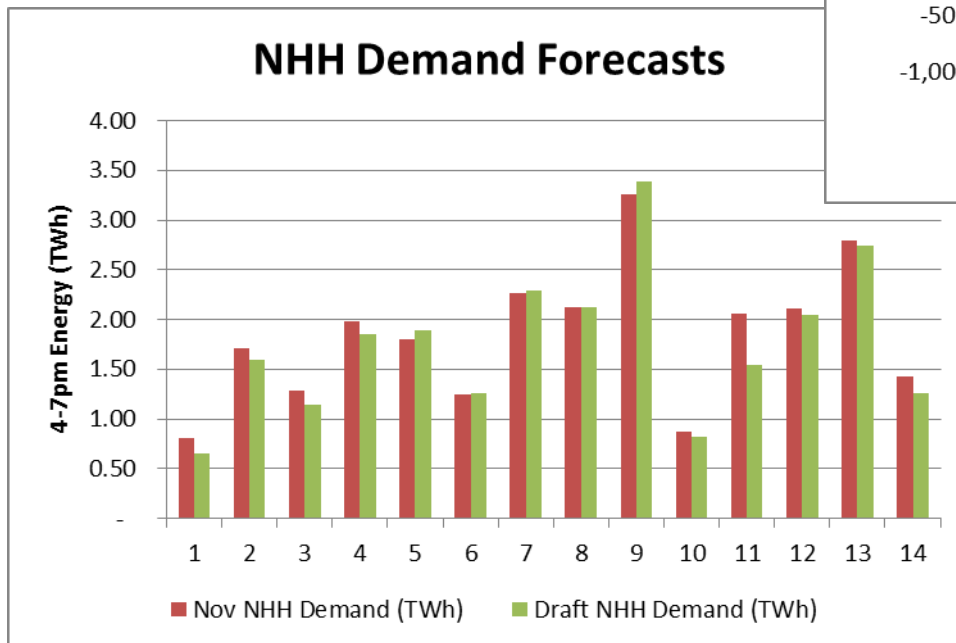
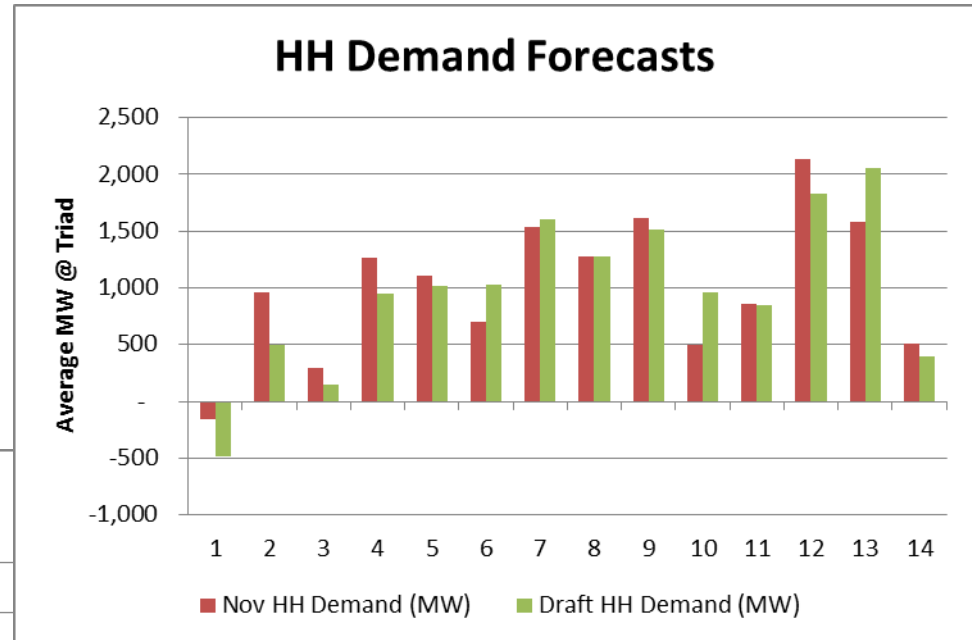


NHH Tariff Changes



Demand Forecast Changes

- Small Gens Discount adds £0.52/kWh to HH and 0.08p/kWh to NHH tariffs (£26.2m overall).
- Otherwise Tariff increases are generally due to lower HH demand and smaller NHH charging bases.



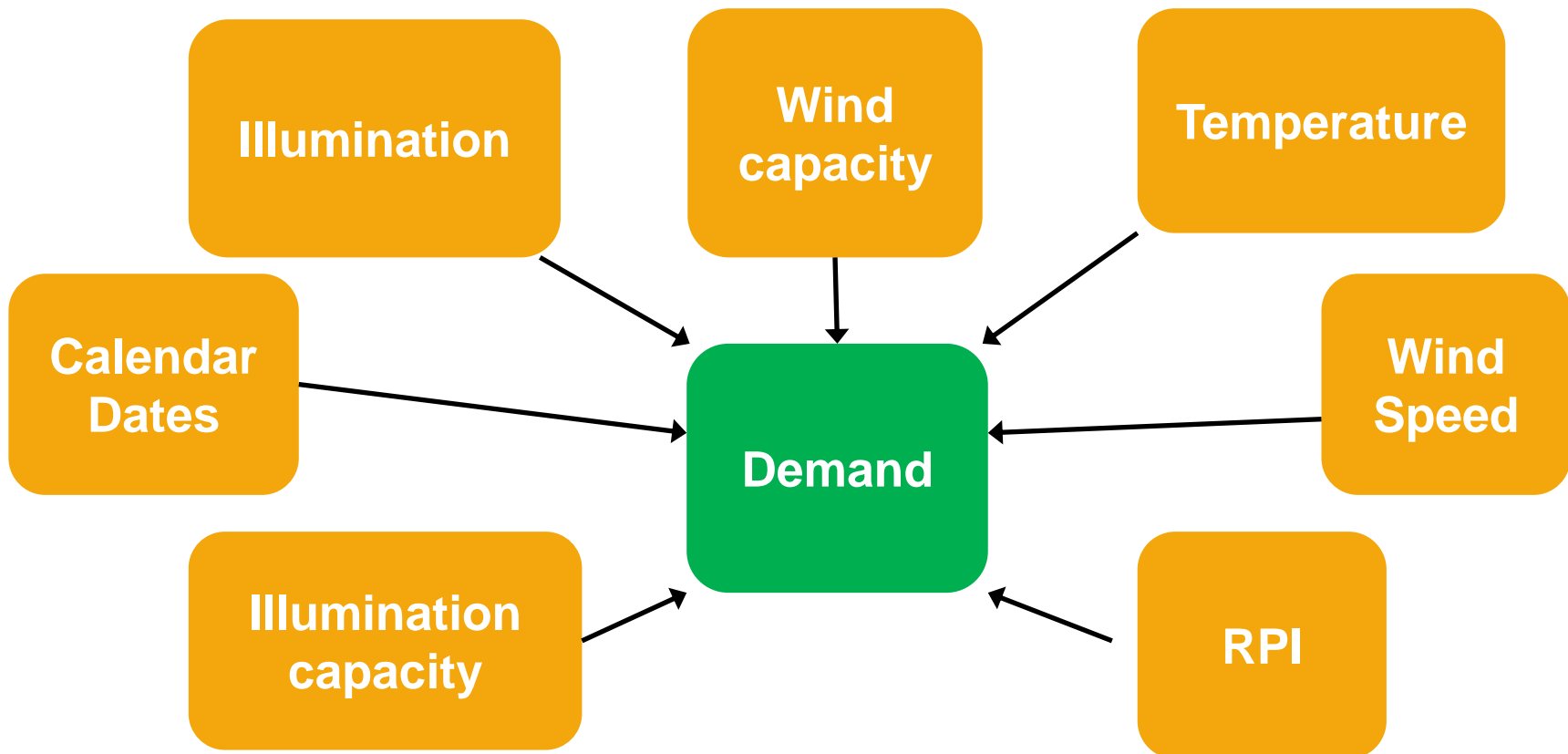
- Lower HH demand due to demand management and embedded generation at triad.
- Lower NHH charging base due to increased efficiency and solar output over the year.

Why Change the Forecasting Methodology?

- Recent years have seen over-forecasts of chargeable demand.
- National Grid decision to have internal review of forecasting methodology in June 2015.
- Input from Forecasting team and the Future Energy Scenarios team.

New Modelling

- Many potential data items examined via regression to determine if they showed significant correspondence to historical demands:



Revised Forecasting

- The coefficients for each data item are applied to:
 - Future calendar
 - A weather profile constructed randomly from the previous 30 years
 - Future Energy Scenario's forecast of wind and solar capacity
 - The Office of National Statistics forecast of RPI
- This is run via Monte Carlo forecasting
- After running the forecast the results are as follows:

NHH (MWh)	System (MWh)	HH (MW)
24,633,653	50,042	13,629

CUSC Issues Standing Group



Wednesday 6th January 2016

CISG – introduction and meeting objectives



Wayne Mullins

Agenda

- Clarification on CAP76 Payment Process (Payment for Operational Intertrip Services)
- Update on CMP223 implementation
- Update on prioritisation of issues for CISG and European Codes Update

Clarification on CAP76 Payment Process (Payment for Operational Intertrip Services)



Rebecca Yang – Senior Account Manager, Commercial Operations

Contents

- Background
- Payment process clarification
- Next steps
- Q&A



Background

What's System to Generator Operational Intertipping?

Four categories defined in the Grid Code

Category 2 & 4 are subject to Capability and Intertrip payments

Payment Provision & Proposed Process

-
- CUSC section 4.2A.4 defines the payments details
 - What's the issue?
 - It is not clear when to commence or cease the Capability payment for Cat 2 & 4
 - National Grid's proposed process for the Capability Payment
 - Commence payment from the later of either ION or Intertripping scheme has been installed and tested by NG
 - Cease payment from the date of disconnection or the Scheme is no longer required
 - Suspend payment from the date that the TEC is reduced to zero and resume when the TEC is revised

Next Steps

- Comments on the proposed process are appreciated
- Possible ways to communicate with the industry about the process -
 - Clarification note?
 - BCA F3?
 - Future CUSC Modification?

Update on CMP223 implementation



Wayne Mullins

Update on CISG Issues



Nick Pittarello with Richard Smith & Bec Thornton

List of Issues

Group A	Group B	Group C
Termination	EU Feedback	TEC Reduction
Re-planting	Transmission Works Register	Interconnector Policy
Ref. of Balancing Services	Liability Cap	Queue Management
Structure of Codes	Interconnector Policy	New Technologies
	Non-BM parties	Accessibility of the CUSC

What we have done so far ...

- EU feedback
 - European Codes Presentation – Bec Thornton



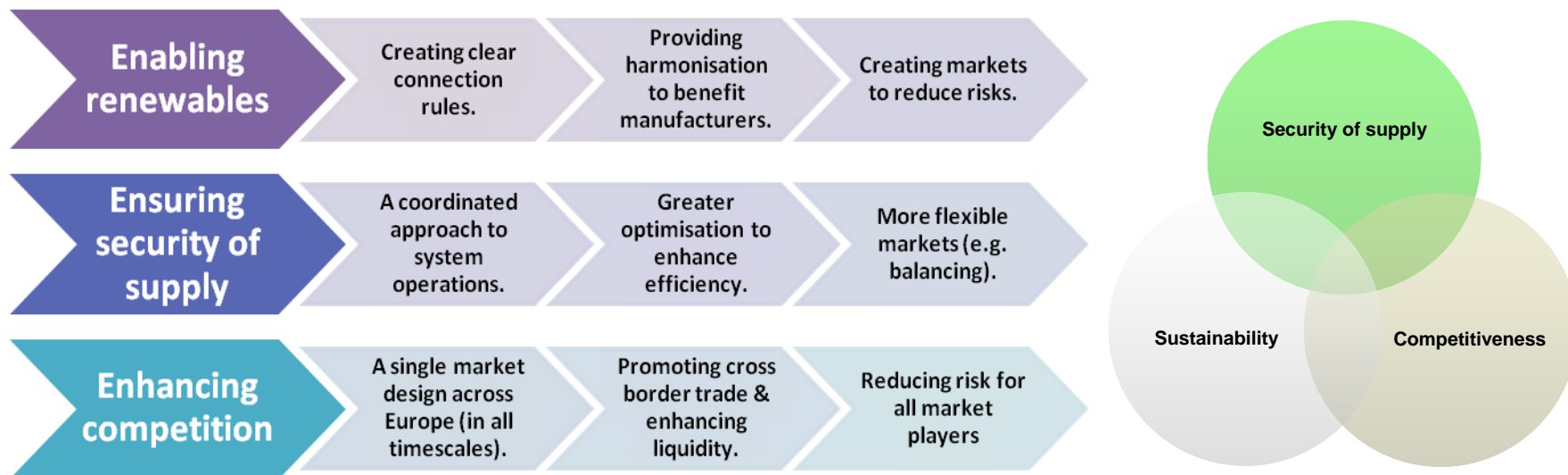
European Network Codes - Status



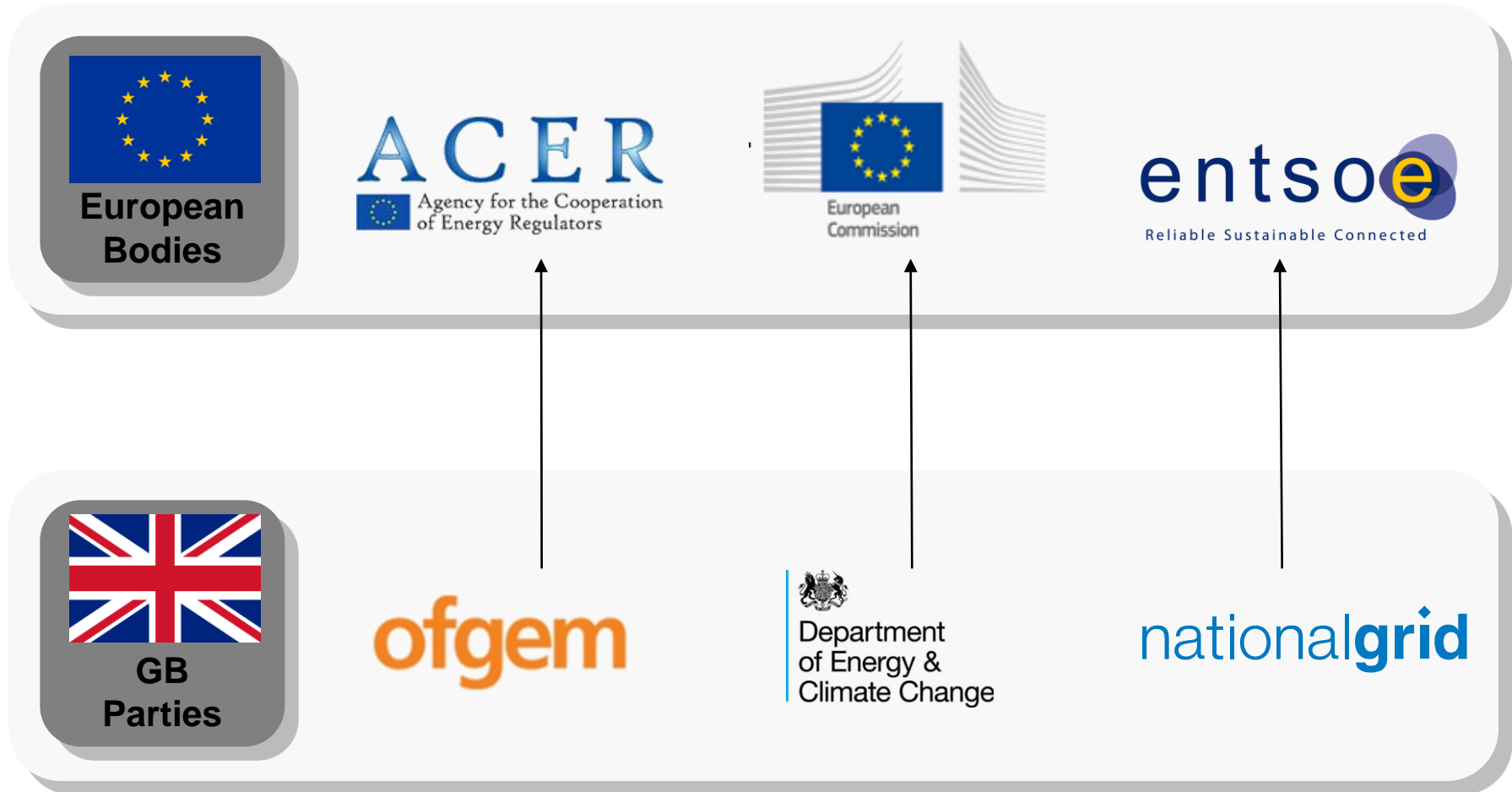
Bec Thornton

The Third Package

- 3 regulations and 2 directives.
- Adopted July 2009, law since March 2011
 - Key step forward in developing a (more) harmonised European energy market
 - Separation of ownership of monopoly energy transmission activities
 - Formation of European Transmission System bodies, ENTSOG and ENTSO-E
 - Formation of ACER – Agency for Cooperation of Energy Regulators



The key players



Note: The following are also members of ENTSO-E
For GB, SHET Plc, SPTL // For UK, SONI

European Network Code Development Process



Commission starts development process

ACER develops FWGL

Commission invites ENTSO to develop Network Code

ENTSO develops Network Code

ACER reviews Network Code

1 year?
Comitology Commission

Stakeholder Engagement

6 months

To fit work programme

1 year

3 months

Network Code becomes Law

The European Network Codes/guidelines

Connection Codes

Requirements for
Generators

Demand
Connection
Code

High Voltage
Direct Current

Market Codes

Capacity
Allocation &
Congestion
Management

Forward Capacity
Allocation

Balancing

Operational Codes

Operational
Security

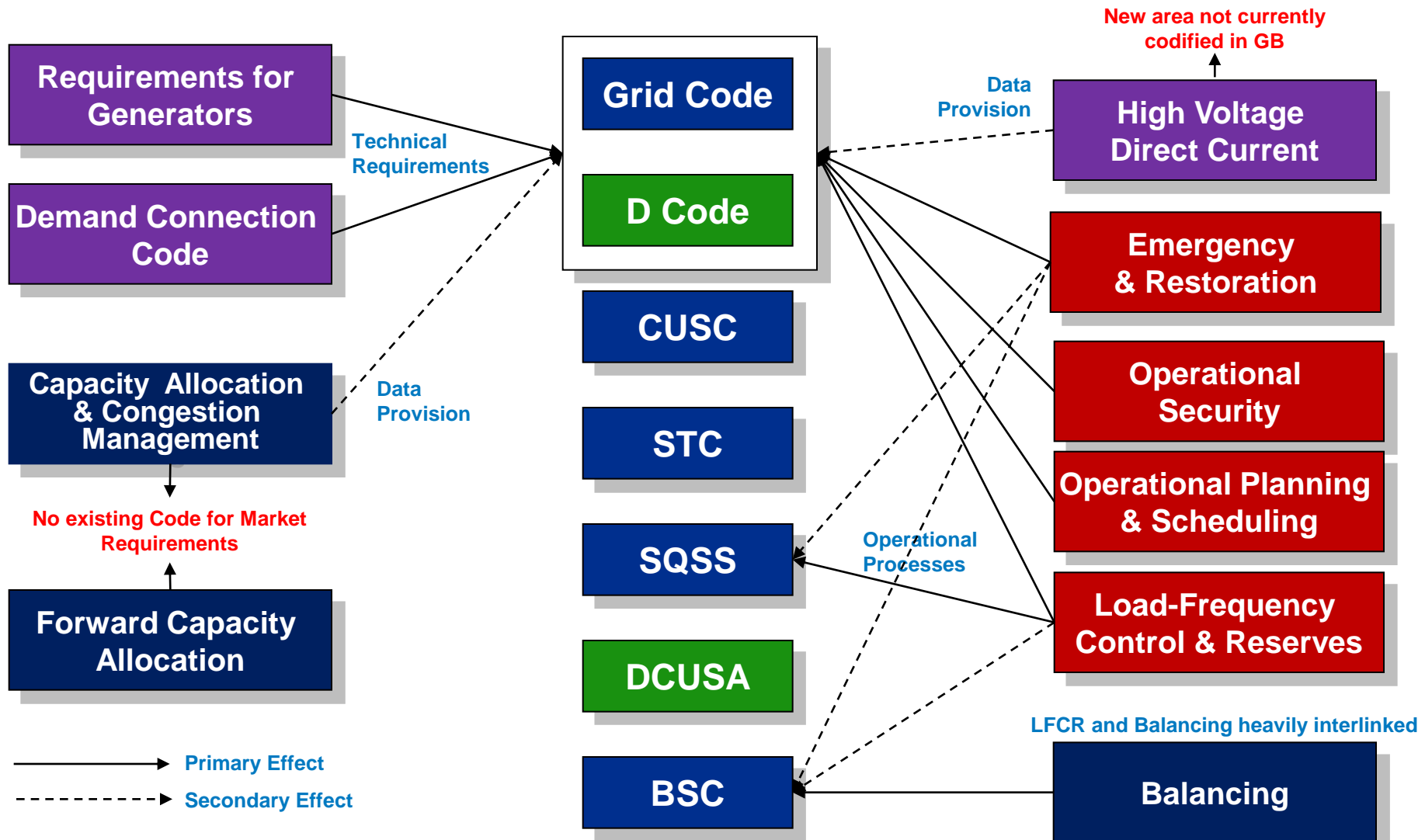
Operational
Planning
& Scheduling

Load-Frequency
Control & Reserves

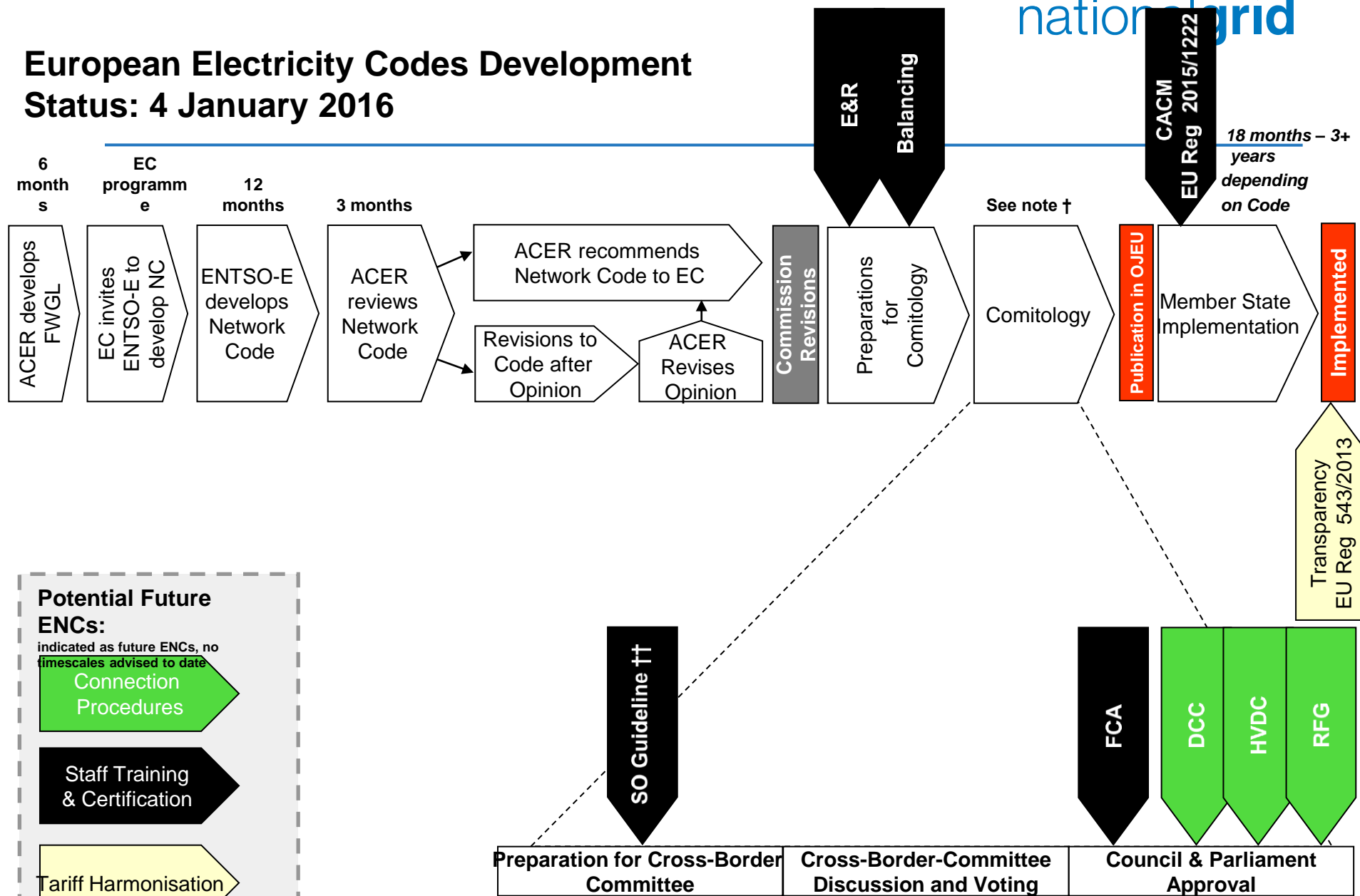
Emergency
& Restoration

One set of rules, delivered as **10** Network Codes/guidelines

Likely changes to the GB Framework...

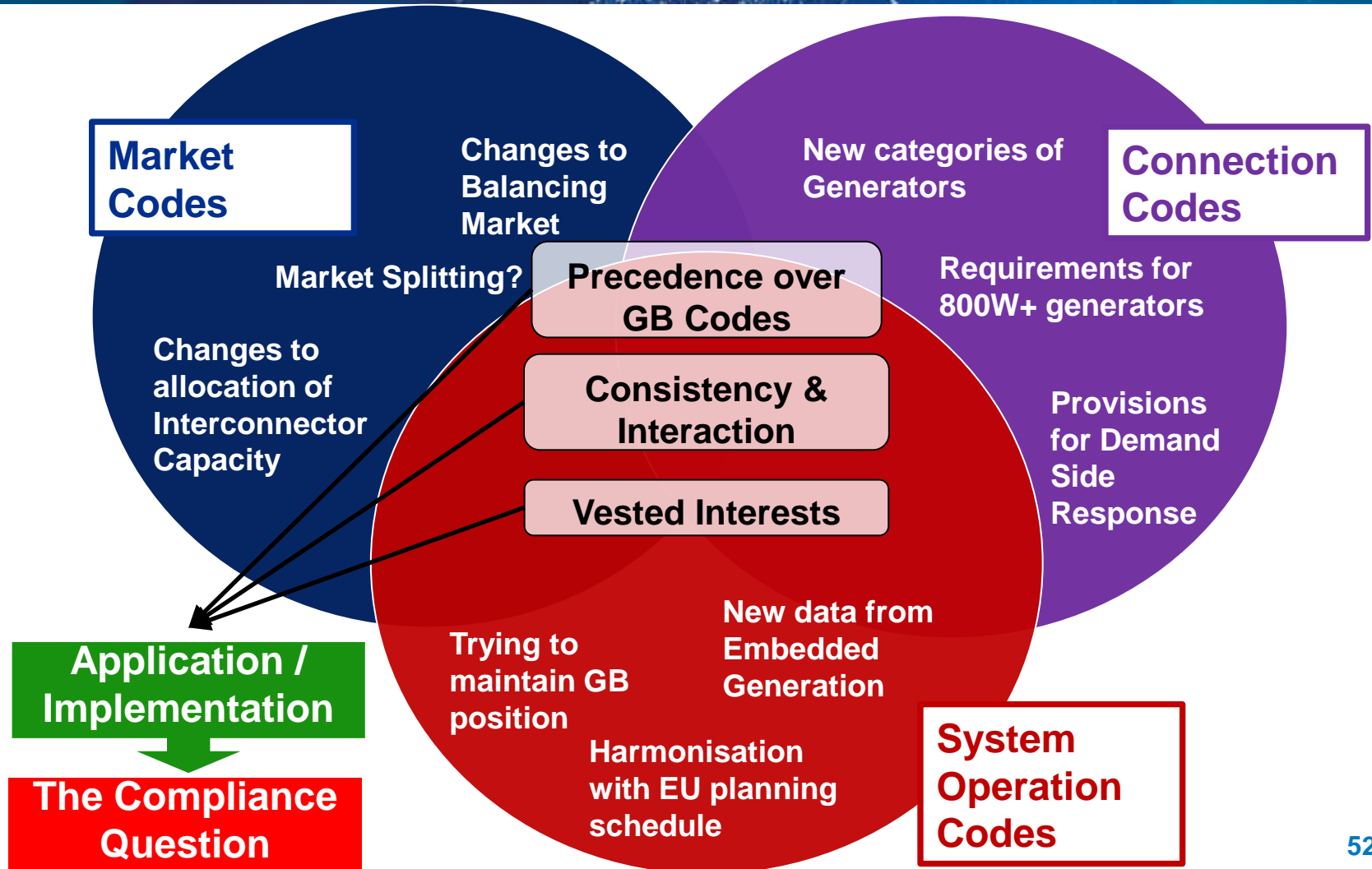


European Electricity Codes Development Status: 4 January 2016



† Timescales for the stages of Comitology are not specified and under the Commission's control
 †† OS, OPS and LFCR have been merged in to form one single System Operation guideline.

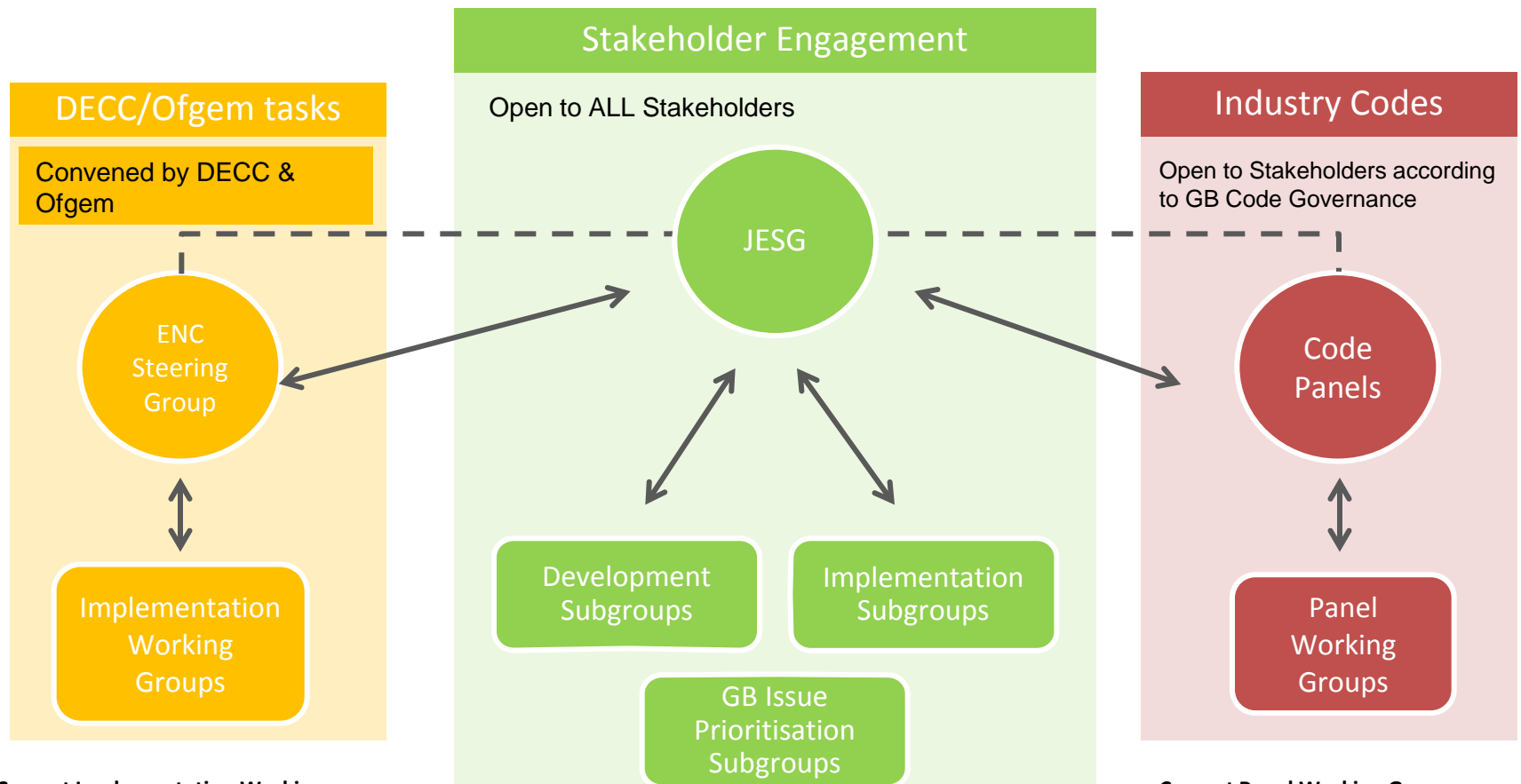
Key Challenges: Electricity Network Codes



GB Stakeholder Engagement



GB Stakeholder Engagement Forums



Current Implementation Working Groups

- CACM + FCA Implementation working group,
- Balancing Implementation Group
- Operational guideline Implementation group

Current Implementation Sub Groups

- CACM + FCA Implementation Sub group,

Current Panel Working Groups

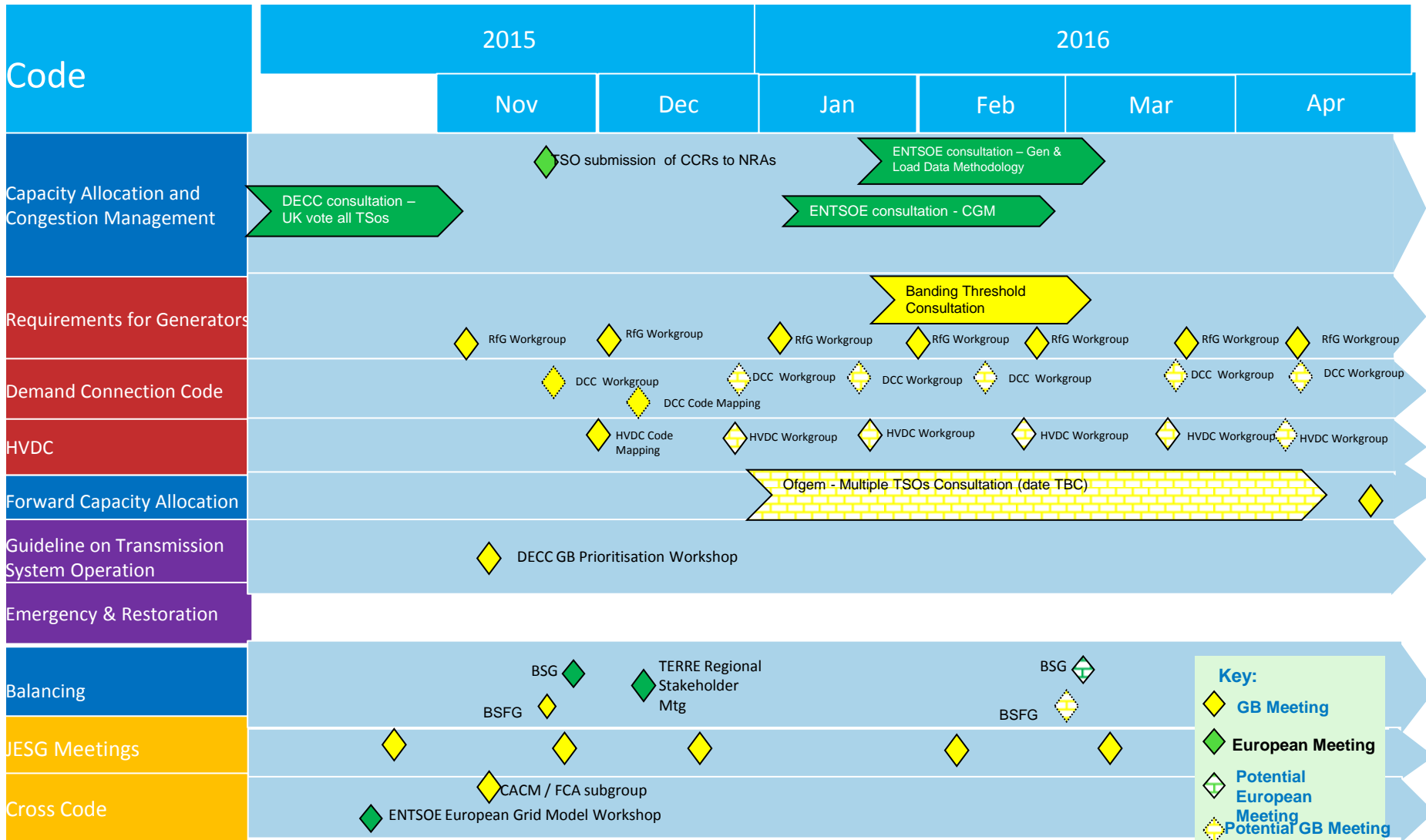
- Connection Code Working Groups, GC0048,GC0090, GC0091

Additional

In addition there are

- Ad hoc GB workshops (information through JESG)
- Ad hoc EU workshops (information through JESG)
- Customer Seminars – Hosted by NGET
- Demand Seminar – Hosted by NGET

Stakeholder Engagement – 6 month view



Information Location

Website Links:

- **JESG** <http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/European-network-code/Joint-European-Stakeholder-Group/>
 - Overview of the EU codes for GB Industry Parties
 - Status diagrams, JESG meeting information
- **ACER** <http://www.acer.europa.eu>
- **ENTSO-E** <http://networkcodes.entsoe.eu/>

For more information contact:

europencodes.electricity@nationalgrid.com

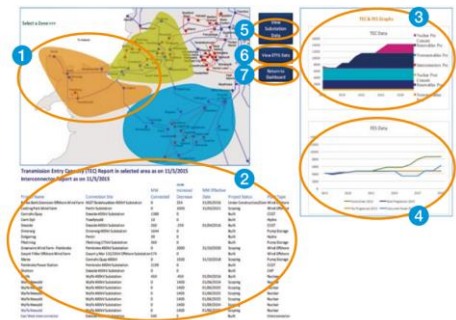
- JESG Weekly Updates – sign up for using above e-mail address

What we have done so far ...

■ Transmission Works Register

- For England & Wales area, the Customer Connection Interface Tool (CCIT) went live on the website in November 2015

<http://www2.nationalgrid.com/UK/Industry-information/Future-of-Energy/Electricity-Ten-Year-Statement/>



- Internal review to better frame it for future challenges: possible to include it in other documentation

What we have done so far ...

- Accessibility of the CUSC

- Policies and Guidance

- <http://www2.nationalgrid.com/uk/services/electricity-connections/policies-and-guidance/>

- Codes Summaries (Grid Code, CUSC and STC)

- <http://www2.nationalgrid.com/UK/Industry-information/Electricity-codes/Code-Summaries/>

- Charging website reviewed, more fundamental review on the website is underway

- Any comments are more than welcome

- Particular anything obviously missing

Other Issues Raised

- Flexibility
 - Non-BM parties
 - New Technologies
 - Reference of balancing services
- EU Codes
 - Interconnector Policy
- Customer Connections
 - Liability Cap
 - Re-planting
 - TEC Reduction
 - Termination
 - Queue Management
- CMA
 - Code Structure

Q & A



Any Other Business

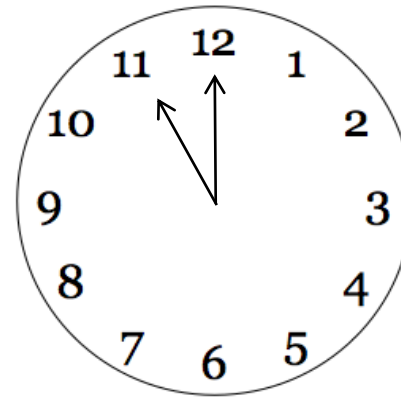


TCMF and CISG – future dates

March

9

Wednesday



Venue: National Grid House, Warwick

11am start

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

