

Customer Connections Steering Group

CCSG

Wednesday 21st October
2020

WESTERN POWER
DISTRIBUTION

Serving the Midlands, South West and Wales

**POWER CUT?
CALL 105**



westernpower.co.uk



CCSG - Introduction

Agenda

Introduction to CCSG	Tim Hughes	10:00 – 10:10
Director's Update	Alison Sleightholm	10:10 – 10:30
G99 – Updates on How the Process is Working	Pete Aston	10:30 – 11:00
Refreshment / Comfort Break		11:00 – 11:10
Targeted Charging Review (TCR) Update	Dave Wornell	11:10 – 11:40
Electric Vehicles - Charging	Peter White	11:40 – 12:10
Connections Strategy – RIIO-ED2	Tim Hughes	12:10 – 12:40
Summary & Feedback <ul style="list-style-type: none">ICE brief update	Tim Hughes & Penny Carolan	12:40 – 13:00

Zoom Guide

- Questions & Feedback – How it works
 - Use Zoom Chat throughout presentation - we will answer the questions at the end of each presentation
- Feedback questionnaire to be emailed at the end of the meeting



CCSG Update – UK Green Recovery

Alison Sleightholm – Resources and External Affairs Director

Wednesday 21st October 2020

UK Green Recovery

WPD is supporting the Government in developing plans for a UK wide Green Recovery from COVID-19

1. Motorway Service Areas
2. EV Charging Hubs
3. Net Zero ready off-gas homes

4. Net Zero ready smarter grids and homes
5. Enterprise zones / Garden cities

6. Accelerated asset replacement
7. Accelerated rural works
8. Active Network Management rollback for firmer connections

Electrification of Transport

We are preparing our network for the millions of electric vehicle drivers who will want to charge their EVs at a time and place to suit them

- Home charging – With our domestic charging innovation projects completed, policies have been changed and an EV capacity map published.
- Car park hub charging – We have developed a 1MVA low-loss hub charging substation which will be tested with local authorities.
- Motorway Service Areas – We have launched an innovation project “Take Charge” to provide a low cost 33kV package substation tailored to EV rapid charging. The project has the support of UK Government and the major service station operators.
- We continue to deliver innovation projects which include:
 - On street charging solutions – DC Share
 - City Centre charging capacity release – Prime EV; and
 - Vehicle to Grid – Electric Nation Powered Up

Charging hubs

will be built in public car parks, supermarkets and taxi ranks



£58million

allocated for Electric Vehicle investments



We predict up to

217,000

chargers will be connected to our network by 2023

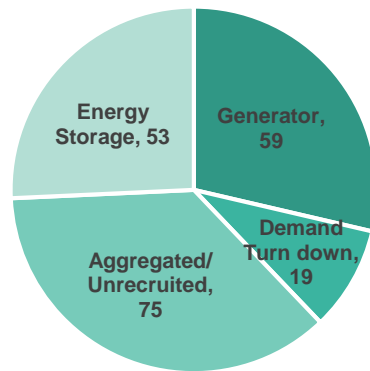


DSO Flexibility

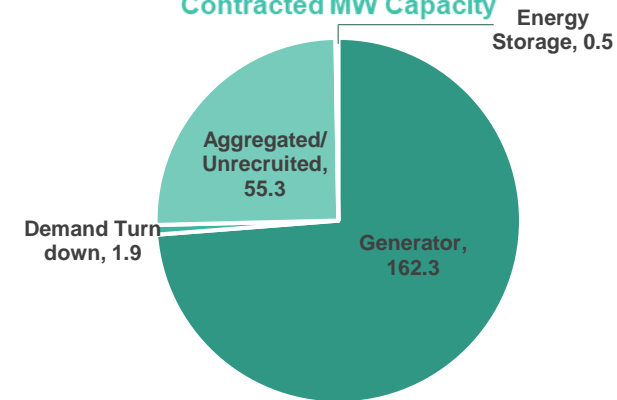
We continue to be leaders in DSO flexibility services, operating the largest DSO flexibility market in the UK.

- Flexibility services became BAU across WPD in 2018
- 2019 saw us procure for 184MW of services across around 15% of our network
- In 2020 we have been able to defer £26.4m of conventional asset build across three areas, for an annual operating cost of £550k
- Our latest tender sought over 300MW of flexibility services and we now operate 220MW of generation turn-up and demand turn-down through commercial contracts

Flexible Power – Number of Assets



Contracted MW Capacity



Digitalisation

- Digitalisation strategy and action plan activity focused on three underpinning elements:



Improved data management

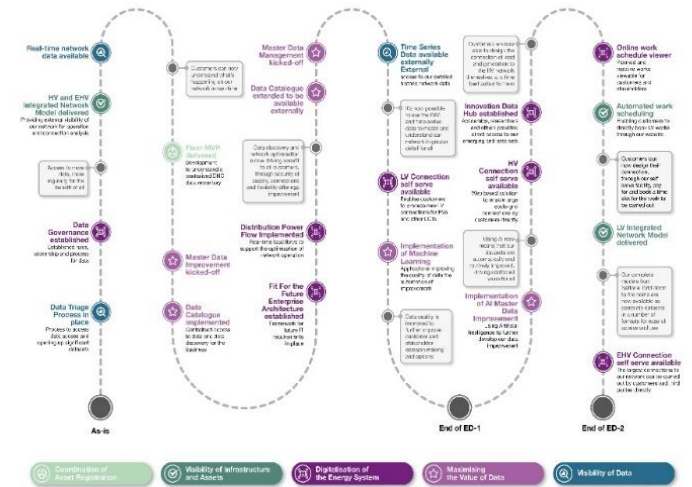


Increased network insight and operation



Presumed open data

- Our digitalisation roadmap is shaped to deliver tangible and impactful change to enable digitalised solutions to benefit customers, network and business operations
- Benefit already being realised through our open access maps and UK DNO first sharing of network data through Common Information Model format
- Ambitious activities underway in the action plan delivering data governance, centralised data access and real-time data to third parties



WPD digitalisation roadmap



Chat Feedback & Any Questions?

Future Stakeholder
Engagement Events - go to

[www.yourpowerfuture.
westernpower.co.uk](http://www.yourpowerfuture.westernpower.co.uk)

G99 – Updates on How the Process is Working

Peter Aston – Primary System Design (PSD) Manager

CCSG – G99 current experience

Overview

- South Wales network transmission capacity
- Accelerated Loss of Mains Change Programme update
- Background to G99
- Exemptions
- Content of G99
- Compliance requirements
- Applications statistics
- Implementation



CCSG – South Wales transmission capacity

South Wales transmission capacity

- May 2016 – restriction imposed by NGENSO on thermal plant connecting in South Wales.
- This included batteries, gas, diesel, etc, anything that could run at peak times.
- Connection dates were 2026.
- NGENSO notified WPD at the end of Sept 2020 that this restriction is now lifted.
- This is due in part to the closure of large thermal plant and changes to contracted background.
- Thermal plant are no longer restricted by wider transmission issues.
- Note, connections are still subject to assessment by WPD, NGET and NGENSO.
- Other more local issues may still cause restrictions.
- <http://www.westernpower.co.uk/our-network/statement-of-works>
- It is advised to book a Connection Surgery with the South Wales connection teams to discuss (wpdconnectappoint@westernpower.co.uk).



CCSG – ALOMCP

Accelerated Loss of Mains Change Programme

- ALOMCP – updating LOM settings for gen connected before Feb18. No Vector Shift, higher ROCOF.
- All generators need to be compliant by end Aug 2022.
- Payment available – up to £4000/site for settings changes, £4000/relay for relay changes.
- Fast Track scheme available – an additional £5000 for changes to ROCOF sites.
- 1 year in, WPD stats (approx.) – 1500 sites applied (3.7GW), 700 sites complete (1.5GW), total sites eligible ~15,000 (10GW).
- Customers have to make these changes.
- We are undertaking an engagement exercise to inform more customers about this.
- Plenty of funding available.
- Please apply!



CCSG – G99 experience to date

Background to G99

- First issued 16th May 2018
- Take account of EU Network Code: Requirements for Generators (RfG)
- Came into force 27th April 2019 and replaced G59 for new sites
- Been implemented now for nearly 1.5 years
- Now up to Issue 1 Amendment 6
- “Requirements for the connection of generation equipment in parallel with public distribution networks on or after 27 April 2019.”
- It’s a big document – 399 pages so far!
- Its counterpart is G98, for type-tested micro-generators up to and including 16A per phase (replaced G83)
- Doesn’t apply to sites already connected (G59 applies to sites already connected)

PRODUCED BY THE OPERATIONS DIRECTORATE OF ENERGY NETWORKS ASSOCIATION



Engineering Recommendation G99

Issue 1 – Amendment 6

09 March 2020

Requirements for the connection of generation equipment in parallel with public distribution networks on or after 27 April 2019



CCSG – G99 experience to date

Exemptions

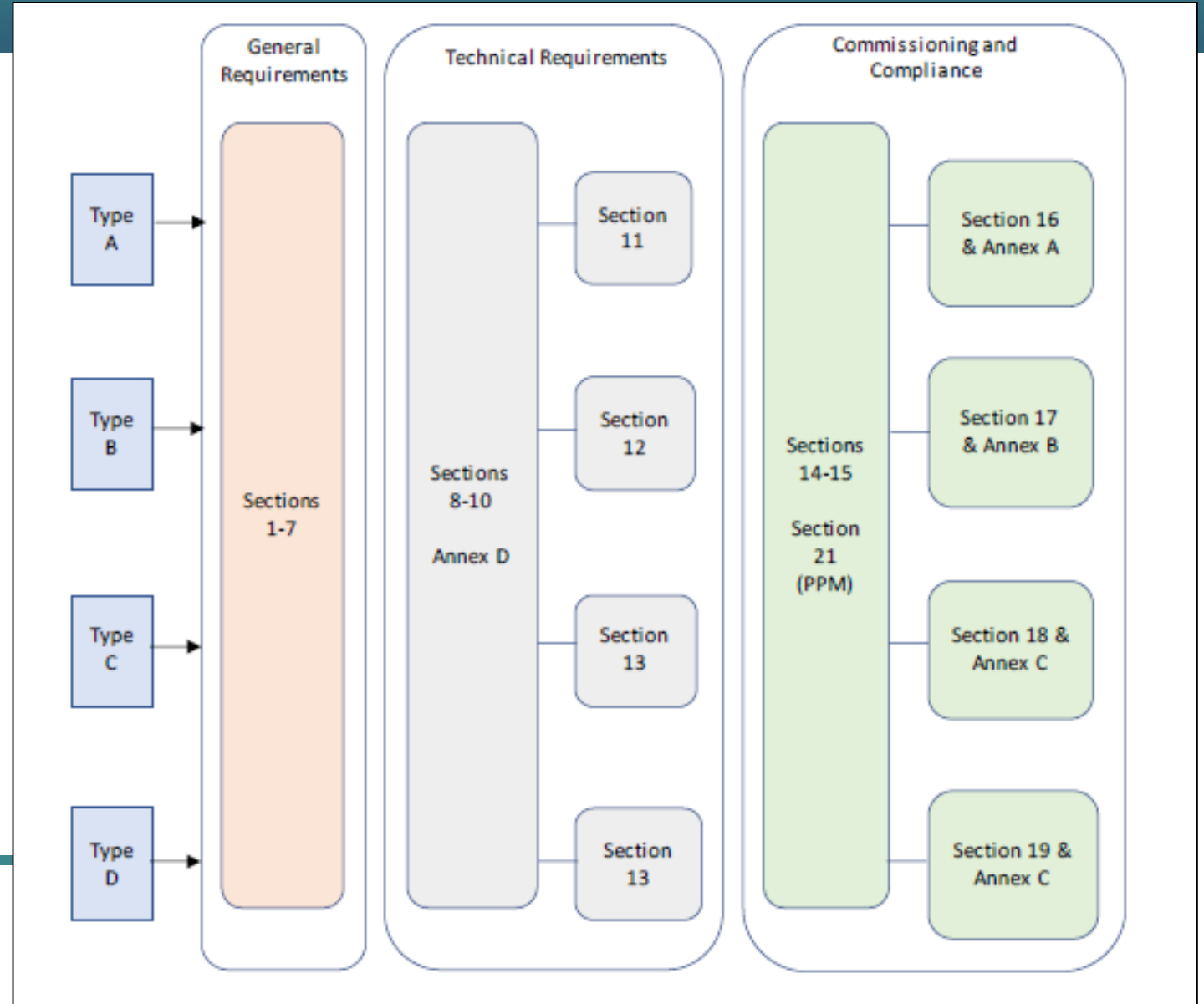
- Exemption for customers who had purchased major plant items prior to 17th May 2018 and who notified the DNO by 17th November 2018.
- Exemption letters sent in summer 2018. Only 18 responded and were granted exemption.



CCSG – G99 experience to date

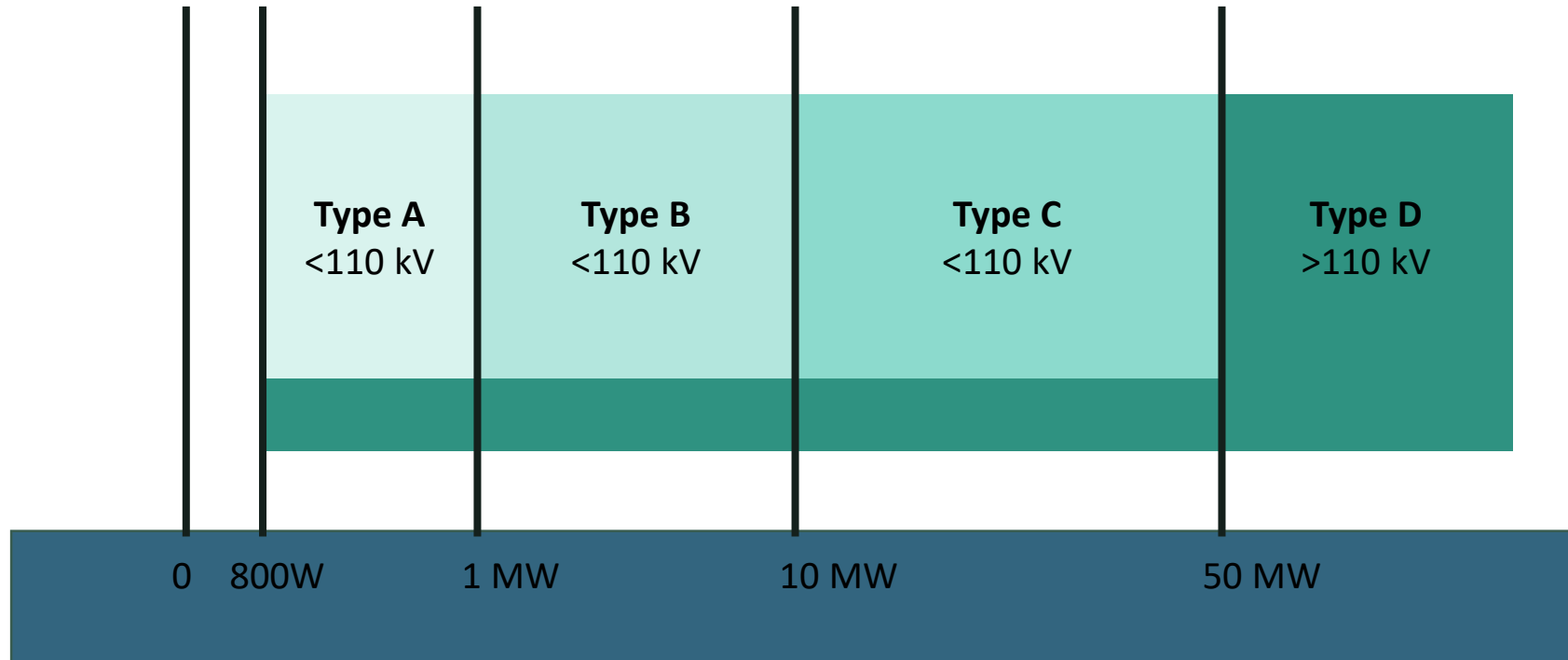
Contents of G99

- Compliance is for the generator to implement and prove



CCSG – G99 experience to date

Generating module types



- Note, any Power Generating Module connected at 132kV or above is deemed to be Type D



CCSG – G99 experience to date

Compliance requirements

- Interface protection, e.g. U/O voltage, U/O frequency, LOM (ROCOF)
- Technical requirements, such as:
 - Limited Frequency Sensitive Mode – Over Frequency (LFSM-O)
 - Limited Frequency Sensitive Mode – Under Frequency (LFSM-U)
 - Frequency Sensitive Mode (FSM)
- Fault ride through
- Voltage limits and control
- Reactive power
- Fast fault current injection
- Black start
- Operational monitoring



CCSG – G99 experience to date

Compliance requirements form

Type C & D

ENA Engineering Recommendation G99
Issue 1 Amendment 6 2020
Page 321

Form C2-1 Part 1 - Compliance Requirements for Synchronous Power Generating Modules				Response	
G99 Reference	Compliance Requirement of the Power Generating Module	Submission Stage	Evidence Requested (and / or)	Compliance Y, O, UR, N,	Generator's Statement <i>(Provide document references with any additional comments)</i>
18.2.1, 18.2.3, 18.4.1	Confirmation that a completed Standard Application Form has been submitted to the DNO	A, IS, ION, FONS	P, MI, D		
14.3	Site Responsibility Schedule	E	D		
9.4.2	Power Quality – Voltage fluctuations and Flicker: The installation shall be designed in accordance with EREC P28	IS, ION	MI, D, TV, S		
9.4.3	Power Quality – Harmonics: The installation shall be designed in accordance with EREC G5	IS, ION	MI, D, TV, S		



CCSG – G99 experience to date

Application statistics

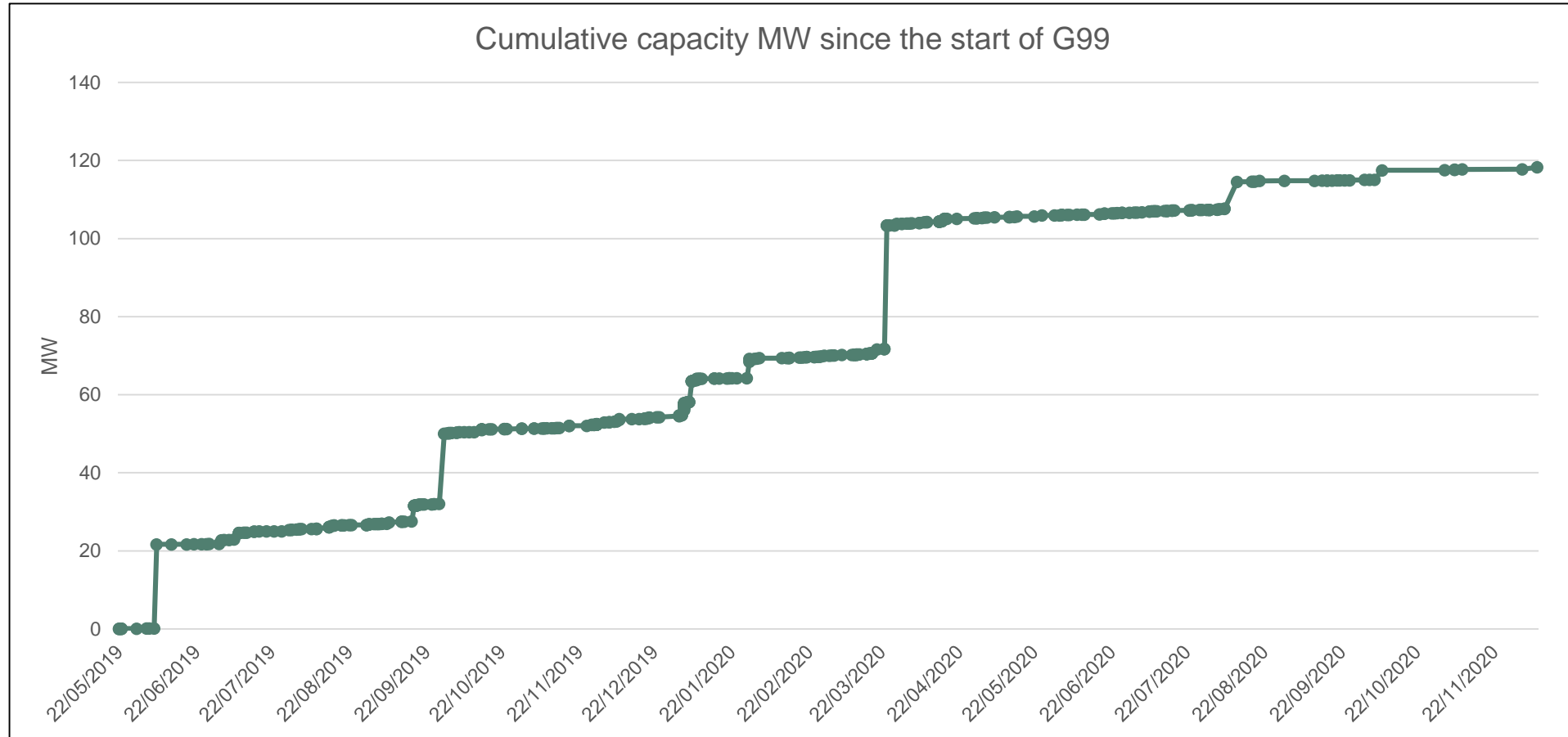
Generation connections since G99 was implemented:

LV – 341 sites, 11kV – 33 sites, 33kV – 3 sites

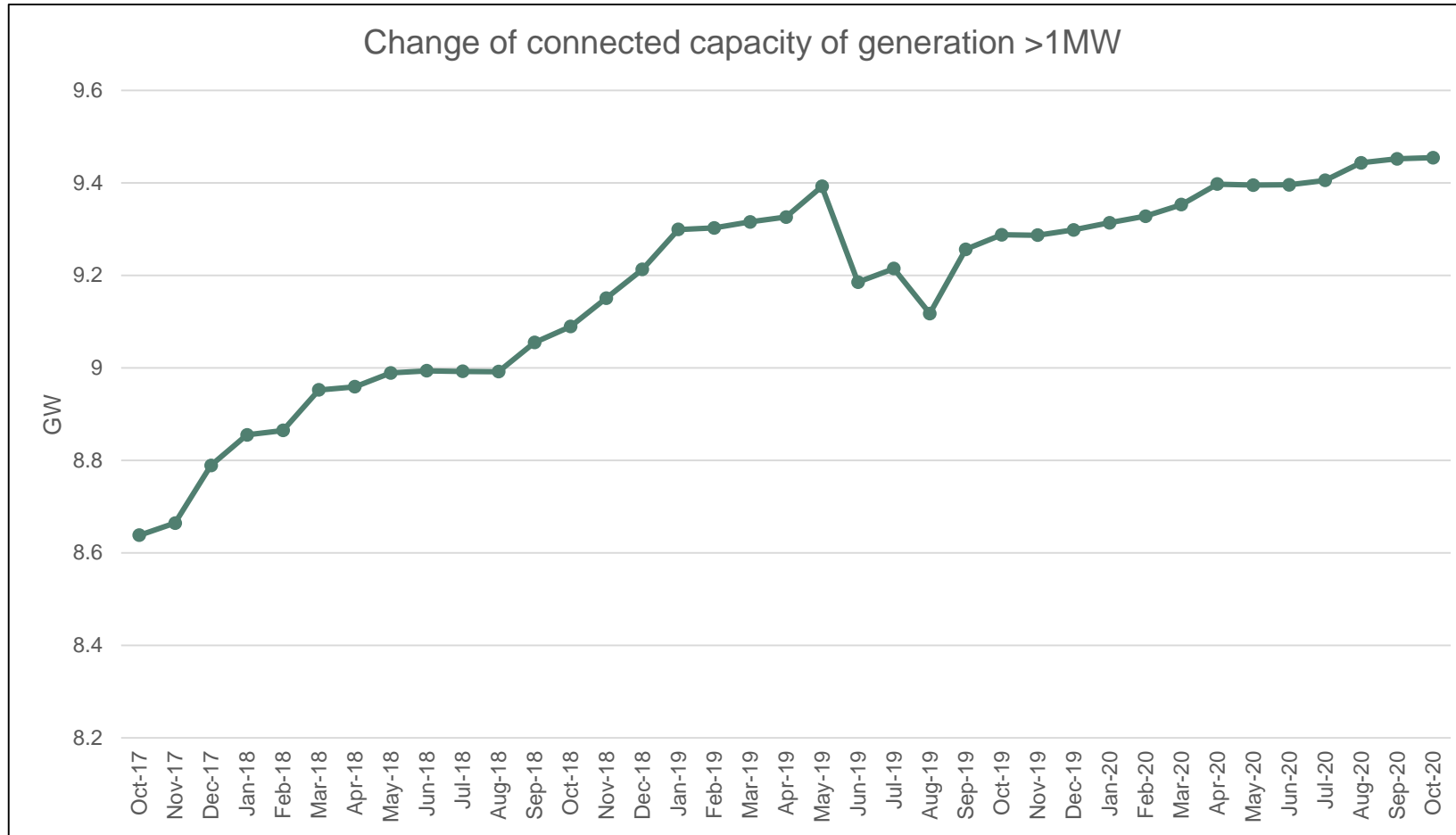
G99 type	Number of connections	Capacity (MW)
Type A (<1MW)	367	21.58
Type B (\geq 1MW, <10MW)	7	25.63
Type C (\geq 10MW, <50MW)	3	71.08
Type D (\geq 50MW)	0	0
Total	377	118.29



CCSG – G99 experience to date



CCSG – G99 experience to date



CCSG – G99 experience to date

Current generation statistics

Status	East Midlands		West Midlands		South West		South Wales		Total	
	Latest Export Capacity [kVA]	Latest Site Count	Latest Export Capacity [kVA]	Latest Site Count	Latest Export Capacity [kVA]	Latest Site Count	Latest Export Capacity [kVA]	Latest Site Count	Latest Export Capacity [kVA]	Latest Site Count
Enquired not yet Offered	575,998	57	543,583	49	189,213	44	560,256	33	1,869,051	183
Offered not yet Accepted	962,411	168	637,067	191	432,895	138	279,841	65	2,312,214	562
Accepted not yet Connected	3,436,477	265	3,021,348	192	1,234,982	185	1,957,188	193	9,649,994	835
Connected	3,686,838	61,916	1,860,206	45,743	2,453,186	58,514	1,977,567	27,502	9,977,797	193,675



CCSG – G99 experience to date

Implementation of G99 in WPD

- Protection witnessing continues much the same as before
- Technical compliance in other areas is new
 - Simulation/reports or on-site testing
- Only had 10 Type B and C so far
- Beginning to build knowledge of all the complexities



CCSG – G99 experience to date

Next steps

- Improving internal knowledge and process
- Continuing to work with customers to help them build knowledge
- Providing additional documentation where required

Any
Questions?



Comfort Break
see you in 10 minutes



TCR- Targeted Charging Review – Update

Dave Wornell – Senior
Business Analyst

21 October 2020

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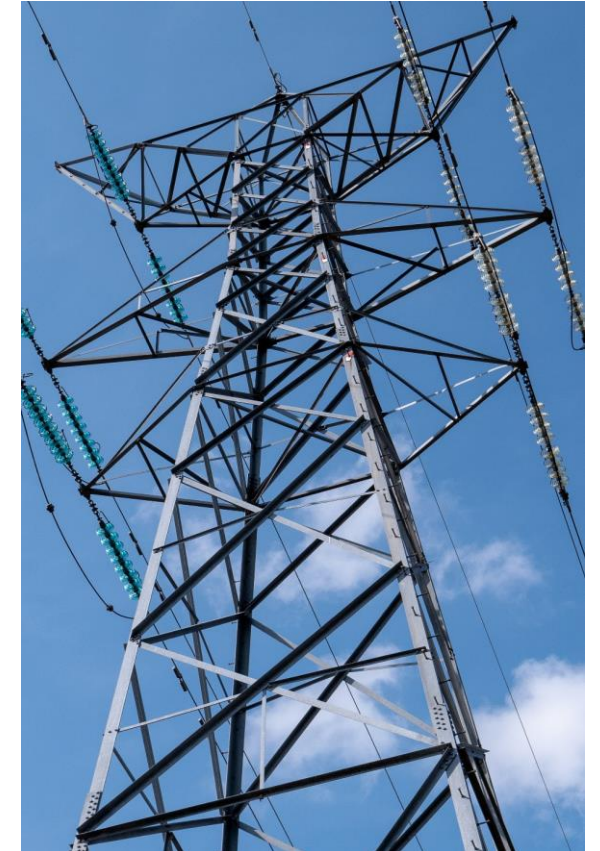
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TCR- Targeted Charging Review

Background

- Background
- Creation of the Bands
- Allocation to the Bands
- Results of May Trial Run of the Banding Process
- Important Definitions
- Process For Generators and Storage Sites
- Disputes Process
- Questions



TCR- Targeted Charging Review

Background

- In November 2019 OFGEM published the decision on the TCR (Targeted Charging Review)
- Involved moving the residual charge from the unit rates in the CDCM (HV and LV Charges) and the capacity charge rates in the EDCM (EHV Charges) to a fixed per site charge
- The charging methodologies use cost models to allocate the forward looking charges. The difference between these and the allowed revenue are classified as the residual charges
- DNOs were directed to make modifications in our charging methodology to introduce the TCR for implementation in April 22 charges



TCR- Targeted Charging Review

Background

- The non domestic customers will be split into four bands for each tariff group
- The bands are created based on the 40th, 70th and 85th percentiles
- Boundaries are rounded up to nearest integer
- They are created nationally
- CDCM and EDCM have different amounts of residual
- These amounts or proportions will remain the same post implementation of the TCR
- Residual fixed charge will then be calculated based on the proportion of forecast units used
- Connections where the demand is used for Generation or Storage Only will not be subject to residual charges

TCR- Targeted Charging Review

Creation Of The Bands

- Domestic customers will not be split into bands
- NHH Non Domestic customers will be split into four bands
Using consumption
- Half hourly metered LV and LV Sub customer groups data will be combined for the creation of the bands
Using latest capacity
- Half hourly metered HV customers will be split into four bands
Using latest capacity
- Half hourly metered EHV customers will be split into four bands
Using latest capacity
- Unmetered supplies customers will continue to be charged residual on a pence per unit basis

TCR- Targeted Charging Review

Creation Of The Bands

- The data for the bands for April 22 was run in August 2020
- The banding agent is the NGSO
- The bands will be communicated to DNOs at the beginning of November
- DNOs will then allocate the customers to bands and communicate these to suppliers
- Bands will be used for price setting in December 20 for April 22 prices

TCR- Targeted Charging Review

Allocation to the Bands

- Domestic Customers will all have the same residual
E.g. A flat and a 4 bedroom house will be charged the same residual
- NHH Non Domestic customers will be split into four bands
Using annual consumption
- Half hourly metered LV customers will be split into four bands
Using 24 months average capacity
- Half hourly metered LV Sub customers will be split into four bands
Using 24 months average capacity
- Half hourly metered HV customers will be split into four bands
Using 24 months average capacity

TCR- Targeted Charging Review

Allocation to the Bands

- Half hourly metered EHV customers will be split into four bands
Using 24 months average capacity
- Sites will be allocated where their capacity/annual consumption (as appropriate) is $>$ min and \leq max boundary
- The bands will be refreshed for the start of each electricity transmission owner price control period

TCR- Targeted Charging Review

Results of May Trial Run Of The Banding Process

Voltage		Percentile		Threshold (kWh or kVA)	
		Lower	Upper	Lower	Upper
LV Non Domestic	(kWh)	0	40	0	4248
LV Non Domestic	(kWh)	40	70	4248	14178
LV Non Domestic	(kWh)	70	85	14178	28836
LV Non Domestic	(kWh)	85	100	28836	∞
LV and LV Sub HH	(kVA)	0	40	0	82
LV and LV Sub HH	(kVA)	40	70	82	150
LV and LV Sub HH	(kVA)	70	85	150	230
LV and LV Sub HH	(kVA)	85	100	230	∞
HV HH	(kVA)	0	40	0	425
HV HH	(kVA)	40	70	425	1000
HV HH	(kVA)	70	85	1000	1800
HV HH	(kVA)	85	100	1800	∞
EHV	(kVA)	0	40	0	4000
EHV	(kVA)	40	70	4000	12000
EHV	(kVA)	70	85	12000	20000
EHV	(kVA)	85	100	20000	∞

TCR- Targeted Charging Review

Important Definitions

- Final Demand - means electricity which is consumed other than for the purposes of generation or export onto the electricity network
- Single Site - means one or more Non-Domestic Premises that are connected to the distribution system pursuant to a single Connection Agreement (whether a Bespoke Connection Agreement or one created via the National Terms of Connection).
- Final Demand Site - means a Single Site at which there is Final Demand

TCR- Targeted Charging Review

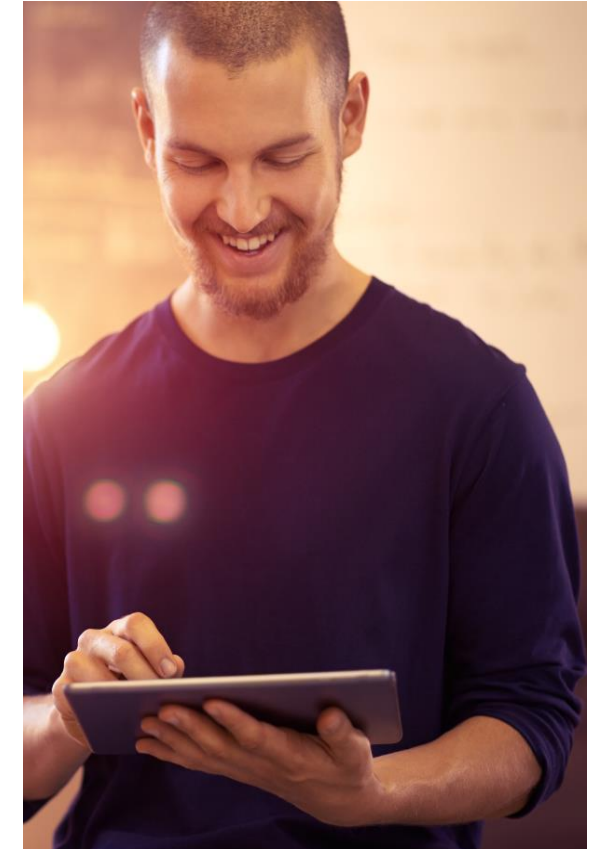
Process For Generators and Storage Sites

- For a Single Site to be a Non-Final Demand Site (i.e. no residual fixed charge), valid certification must be provided to the distributor for distribution-connected sites
- A transitional period will operate to 31 October 2021 where a Single Site may switch between a Final Demand Site and a non-Final Demand Site, and vice versa – certification needed by 31 July 2021
- DNOs will use reasonable endeavours to identify Non-Final Demand Sites for the purposes of setting the charging bands and setting 2022/23 use of system charges in December 2020

TCR- Targeted Charging Review

Disputes Process

- Each DNO shall take reasonable steps to ensure that each Final Demand Site is allocated to the correct charging band
- However, where a customer or someone acting on behalf of the customer disagrees and can provide sufficient information, the DNO party will investigate
- If the DNO and the customer still disagree, then there will be a disputes committee which will be independent of both the customer and the DNO



Chat Feedback & Any Questions?

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westernpower.co.uk](http://www.yourpowerfuture.westernpower.co.uk)

Electric Vehicle - Charging

Paul Jewell & Peter White

PJ - DSO Development Manager & PW - DSO Development Engineer

Net Zero and Low Carbon Technologies

- In 2019 the UK committed to achieving Net Zero by 2050.
- In order to achieve Net Zero, UK Local Authorities are striving towards a low carbon economy using technologies with significantly reduced carbon impact:
 - for example through the decarbonisation of heating and transport.
- Gross Zero would mean reducing all emissions to zero, however Net Zero allows for some emissions as long as they can be offset.
- As a Distribution Network Operator WPD are committed to accelerating Net Zero in communities across our region.



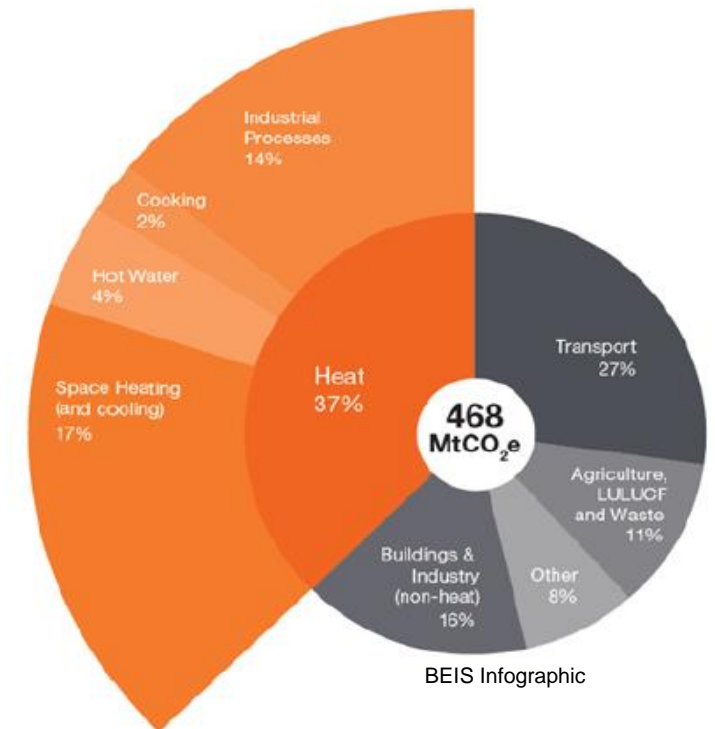
Net-Zero targets

- From the BEIS generated pie chart, transport develops some 27% of the UK's CO₂ and the heating of buildings develops some 37% of the UK's CO₂.
- With the need to de-carbonise heating and transport to meet the legally binding net-zero targets by 2050.

TRANSPORT: -

- Currently the UK has approximately 31m vehicles, the majority of these vehicles have off-street parking but some circa 30 to 40% don't have the ability to charge at home.
- It is WPD's view that EV charging will need to take place in four locations: -
 - 1) Home;
 - 2) Work / Fleet;
 - 3) Destination;
 - 4) En-Route.

Estimated UK Emissions Attributable to Heating, 2016



Net-Zero targets – how to tackle them

- 1) Home - charging will be covered off with the fitting of 7.4kW single phase chargers on all new build houses. This should have been legislated already but has been delayed by Covid.
- 2) Work / Fleet & 3) Destination - As fleets decarbonise WPD expect to see concentrations of charging at work locations. WPD will accommodate this additional demand by adding local transformers.
- The additional transformer model is likely to be applicable to retail car parks i.e. Tesco, Sainsbury's Car Parks etc. and other destination charging. Though there could be head room with existing connection agreements which should be explored first off.
- An issue with Destination charging that needs **serious consideration by all parties** is how to deal with the influx of tourists in to tourist destinations during the high season, the EV charging load could triple the total load of that particular tourist destination during the summer months!! e.g. Currently Tenby have 3 off, type 2 EV chargers on Zap Map, 1 of which is a Tesla destination charger!!
- 4) En Route – OLEV has started Project Rapid - Phase 1 which will mean 130 motorway services sites having 150kW rapid chargers. The average load across the 48 WPD sites is 7MVA! The same load as a small town. Another anomaly currently Welsh DfT rapid chargers at motorway services are proposed at 50kW this will lead to longer dwell times at the chargers. Phase 2 will see an additional 14 sites in Wales and Scotland.

Net-Zero targets - how to tackle them

- September '20 saw BEV EV vehicle sales soar to 21,903 BEV EV's sold in one month information from SMMT. Wales in particular needs a concerted effort to install charge points to catch up!
- The other issue to be considered for En-Route charging is BEV HGV's these vehicles will be on the roads before 2025 because of the new HGV emissions legislation which came into force in June 2019. There will be 200,000 HGV's on European and UK roads by 2025 so OEM's of HGV's don't get faced with huge fines. These vehicles will require 20,000 high power rapid chargers dedicated to HGV's on major trunk roads in Europe and the UK including Wales by 2025!!! These EV chargers start at 150kW, there is a new international HGV EV charging standard being developed called MCS which is for a 1MW EV charger!!
- At his time there does not appear to be any form of HGV charging considered for the MSAs, the current smallest charger being considered by the HGV OEMs is the 150kW as battery sizes are usually 250kWh or larger when Dwell times are factored in there is a need for larger chargers.
- There is the thorny issue is the connection or wayleave issue for CPOs and with the MSAs as most of these locations are on short term lease arrangements with the freehold held by some difficult to engage third party.

Electricity networks to facilitate decarbonisation

Land, rights over land and planning permission

- Majority of UK electricity infrastructure is built on private land.
- Decarbonisation will require extensive targeted reinforcement of networks.
- Delivery of works is dependent on: -
 - Landowner cooperation / agreement for purchase of
 - *Land* - for new / extension of sub stations
 - *Rights over land* - for new overhead lines, underground cables
 - Planning permission
- These factors present a **barrier to decarbonisation**: -
 - *Delays* - landowner negotiations take time – impact project delivery
 - planning process takes time
 - *Cost* - landowner ransom demands are common – impact project costs
 - or drive more expensive engineering solutions (e.g. alternative route)

Electricity networks to facilitate decarbonisation

Land, rights over land and planning permission

- DNO existing statutory powers are unsuitable: -
 - *Expensive* - £30k - £100k each time
 - *Time consuming* - minimum 12 months
- Timely / cost-effective delivery of network reinforcement for decarbonisation requires **modernisation of DNO statutory powers**: -
 - *Expedient, low cost process;*
 - *Recent Telecoms Code as a potential model;*
 - *Energy Bill as legislative opportunity.*
- This is a real issue.

Electricity networks to facilitate decarbonisation

Land, rights over land and planning permission

- Connections for commercial charge point customers usually require a new substation.
- New substations require land purchase.
- Land purchase process can present delays to connection
 - *Charge point operators are usually tenants*
 - *Landowners can be uncooperative or slow to respond*
 - *Legal process involves solicitors*
 - *Pressure on DNOs to connect before legal's complete (and thereby acquire risks which are inconsistent with licence obligations)*
- A sustainable, expedient solution is needed to facilitate timely connections.

Electricity networks to facilitate decarbonisation

Land, rights over land and planning permission

- WPD has been active in this area – draft proposal: -
 - *Design connection specifically for a single customer;*
 - *Single customer connection avoids need for formal land purchase: -*
 - *Land rights are dealt with in connection agreement;*
 - *Connection agreement requires customer to secure rights for DNO equipment;*
 - *De-risks DNO – connection equipment removed if customer’s rights prove inadequate due to due diligence failure from the outset;*
 - *Empowers customer – rights for DNO equipment can be secured as part of customer’s own legal process for charger installation;*
 - *Expedient – no delays due to DNO legal progress;*
 - *Reduced connection cost– DNO equipment for single connection is simpler and therefore to minimal specification.*

Electricity networks to facilitate decarbonisation

Land, rights over land and planning permission


- WPD's proposal is currently being evaluated – then for discussion with customers and ENA members as possible industry standard.
- Ofgem are aware there are issues in this area, WPD have been asked to lead on this and to come up with options which can then be put to all parties of the ENA LCT group, if successful these options will then be sent to Ofgem, BEIS and OLEV for their respective inputs, and ideally their adoption.
- As the ENA Wayleave group is a subset of the ENA Regulation Managers group to explain the issues facing supplies to CPOs, I will be giving a presentation to them on 29/10/20 to explain the issues.

De-carbonising Transport - Electric Vehicles

- WPD are preparing our network for the millions of electric vehicle drivers who will want to charge their EVs at a time and place to suit them.
- With WPD's domestic charging projects completed, policies changed and EV capacity map published, WPD are now looking at other areas where charging will become an issue.
- WPD have developed a 1MVA amorphous cored padmount hub charging substation which is planned to demonstrate at the Cross Hand Services on the A48 in partnership with Carmarthenshire County Council.
- WPD are also developing a charging solution for Motorway Service Areas (MSA's). OLEV's Project Rapid shows MSA's will require large electricity capacities (similar to small towns).
- WPD have launched an innovation project "Take Charge" to provide capacity at Exeter Services with Moto.


Charging hubs

will be built in public car parks, supermarkets and taxi ranks



£58million


allocated for Electric Vehicle investments



We predict up to

217,000

chargers will be connected to our network by 2023



Understanding the impact of LCTs

- WPD continues with its work to understand the impact of LCTs, in particular Electric Vehicle charging data, the base data has been provided by Electric Nation, the on-going projects WPD have will build on this information.
- Through WPDs Electric Nation – PoweredUp NIA project WPD will be trialling 110 homes with Vehicle to Grid (V2G) chargers in order to understand better the impact V2G energy services could have on our network and investigate how V2G could help us manage network demand.
- WPD have also started the NIA Take Charge project, Take Charge has its roots in the OLEV Project Rapid, where Phase 1 of Project Rapid will see 130 motorway service area (MSA) sites be fitted with 150kW rapid chargers. Of these 130 sites WPD has 48 sites and the average MVA required for each site is 7MVA.
- The WPD Take Charge is a project where we will be looking to supply each MSA at 33kV and the transformer and switchgear will be installed into “containers” to reduce the footprint of the substation and will be scalable for transformer size and voltage.

Thinking ahead for the future

- WPD’s network has an asset life of around 50 years. Things WPD build now will still be in use after the 2050 target for Net Zero.
- The current single phase LV service cable used within the UK, is a “serial” connection from the LV Main in the pavement to a customers’ home, this cable is typically the smallest cable on the LV network.
- By upgrading this to a three phase LV service cable means the household have an element of future proofing and in addition allow for more flexibility on our network – all without going back and digging up gardens and driveways in the future.
- WPD have had a consultation running on our proposals to make a three phase service our standard service cable for all new supplies in the future, the responses have been positive and will form part of the audit trail for Ofgem, BEIS and OLEV going forward.

50 year

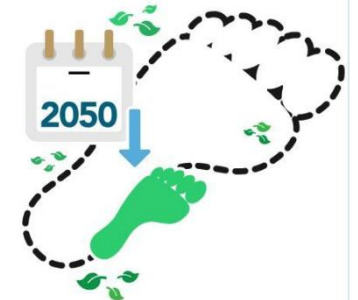
asset life on our network



We predict

**Net
Zero**

CO2 emissions
by 2050



Thank you for your Time
Any Questions



ICE – its future under RII0-ED2 and WPD's Connections Strategy

Tim Hughes – Connections Policy Manager

CCSG - RIIO-ED2 Consultation

Ofgem RIIO-ED2 Methodology Consultation

- The next electricity distribution price control (RIIO-ED2) will start in April 2023
- Ofgem has consulted on the methodology it will use to set this price control
- Ofgem will consider all responses it receives before making a decision on the methodology it will use for RIIO-ED2
- WPD must develop its Business Plan with reference to the methodology



The screenshot shows the Ofgem logo at the top right with the tagline "Making a positive difference for energy consumers". Below it is a table titled "RIIO-ED2 Methodology Consultation: Overview" with the following details:

Publication date	30 July 2020	Contact:	James Veaney
Response deadline	1 October 2020	Team:	Network Price Controls
		Tel:	0207 901 1861
		Email:	RIIO2@ofgem.gov.uk

Below the table, the text states: "The next electricity distribution price control (RIIO-ED2) will start in April 2023. We are consulting on the methodology we will use to set this price control. We invite views from people with an interest in how the electricity distribution networks are operated and developed." It further explains the purpose of the consultation and the key issues to be addressed. At the bottom, it notes that once the consultation has closed, all responses will be considered and published on the website, along with the final decision on the methodology. The reference number "OFG1161" is visible at the bottom left of the document.



CCSG – Incentive on Connections Engagement

Ofgem's views on the success of ICE

- Under the incentive, engagement with larger connection customers has been embedded as a business as usual activity
- Stakeholders have raised concerns around;
 - the continued lack of transparency of the connections process
 - poor communication on the part of the DNO means customers do not feel well informed about their options
 - some DNOs' work plans remain vague and inaccessible
 - an absence of outputs and metrics makes it difficult to measure benefits to customers.

“Overall, we think the ICE has delivered benefits for connection customers in RII0-ED1”

“While the ICE has been a successful mechanism to ensure DNOs have processes in place to identify connections customers' priorities and concerns, we have noted ongoing concerns around the extent to which some DNOs have addressed these priorities and concerns effectively.”

Source: Ofgem's SSMC - RII0-ED2 Sector Methodology Consultation: Annex 1 - Delivering value for money services for consumers



CCSG – Incentive on Connections Engagement

Ofgem's vision surrounding the future of ICE

- Ofgem have said they believe that it is appropriate to retain a mechanism that ensures larger connection customers are well-served in RIIO-ED2
- But they don't believe that ICE is the solution going forward
- They have proposed a new methodology that will;
 - ensure a degree of standardisation in DNO approaches
 - ensure progress made in RIIO-ED1 serves as the minimum expected levels of service provided in RIIO-ED2
 - move from a purely qualitative assessment of performance to a more quantitative measure

“...., we think the current ICE arrangements are no longer fit for purpose and are proposing to remove the incentive for RIIO-ED2”

Source: Ofgem's SSMC - RIIO-ED2 Sector Methodology Consultation: Annex 1 - Delivering value for money services for consumers



CCSG – A new incentive framework

Ofgem's proposed outputs

- DNOs will need to put forward a **Connections Strategy** setting out how they will deliver quality services for major connections
- To introduce an incentive framework to improve service standards for major connections customers in two ways;
 - ✓ Encourage consistent and high-quality Connections Strategies by setting out high-level principles and associated baseline standards of performance
 - ✓ Hold companies to account by carrying out an ex post assessment of performance

Market segments that passed the Competition Test would be exempted

The framework proposes to capture customers in market segments that would not be captured by the TTC incentive or Customer Satisfaction Survey



CCSG – Connections Strategy

Connection Principles

- DNOs' strategies should also be aligned with three high level principles and associated baseline standards of performance

Connection Principles	
Connection Principle 1	Support connection stakeholders to make informed decisions by providing accurate, comprehensive and user-friendly information
Connection Principle 2	Deliver value for customers by ensuring simplicity and transparency at all stages of the connections process
Connection Principle 3	Facilitate the delivery of timely and economical connections that meet customers' needs

"Each strategy should have a clearly articulated vision for meeting major connection customers' needs, with tangible links between the proposed deliverables, the outcomes or the benefits it hopes to deliver and how this compares to its existing service provision."

Source: Ofgem's SSMC - RII0-ED2 Sector Methodology Consultation: Annex 1 - Delivering value for money services for consumers



CCSG – Connections Strategy

Baseline Standards

- Each Connection Principle will have a set of baseline standards associated with it, for example;
 - ✓ Establish and maintain up to date guidance on how, and where, customers can connect to the distribution network
 - ✓ Have clear and simple customer journey process, which accounts for the particular needs of different groups of customers
 - ✓ Where there are slow moving projects that are impacting on other customers, have processes in place for releasing capacity that is not being used.

“The baseline standards proposed are to embed an appropriate minimum level of service, and we would expect companies to seek to exceed these standards within their strategies..”

Source: Ofgem’s SSMC - RII0-ED2 Sector Methodology Consultation: Annex 1 - Delivering value for money services for consumers



CCSG – Connections Strategy

Assessment of performance

- Ofgem will hold DNOs to account for delivery of their strategies through an ex post evaluation, underpinned by a financial ODI
- There will also be an opportunity for rewards if a company can demonstrate it has exceeded baseline standards and delivered additional value for customers
- DNOs will be assessed twice and required to report on the delivery of their strategy on an annual basis, including performance against any metrics
- Ofgem think an annual assessment may give only a partial insight to its effectiveness driving DNOs to favour activities with more immediate impact as opposed to those that may yield greater benefits over time

“Strategies that do not demonstrate how they will meet the baseline standards could be penalised through the BPI.

Strategies that enable us to raise expectations could receive a reward under the BPI”

“We consider that assessing performance once within the price control, as well as at the end, would ensure this remains a proportionate approach and will reduce the burden of annual performance assessments.”

Source: Ofgem’s SSMC - RII0-ED2 Sector Methodology Consultation: Annex 1 - Delivering value for money services for consumers



CCSG – WPD Consultation response

What does WPD think?

- We agree that it is important to retain an output in RIIO-ED2 that drives improvement in service standards for major connections customers
- We believe further discussion is required around how DNOs will be marked on their work
- There is a risk that Ofgem’s proposals for ex-post assessment, where companies may face penalties for failing to deliver their strategies, could result in less ambitious, lower-risk plans
- There should be benchmarking of performance in the ex-post assessment to ensure a DNO is not penalised for being more ambitious than other companies.

Exam question;

“Do you agree with our proposal to remove the Incentive on Connections Engagement for RIIO-ED2?”



CCSG – Enhanced stakeholder engagement

Next steps

- Ofgem methodology decision in November/December 2020

Timeline	
First detailed draft issued for consultation	January 2021
Second detailed draft issued for consultation	March 2021
First submission to Ofgem	1 July 2021
Final submission to Ofgem	1 December 2021
Ofgem final determination	December 2022

- Customer Engagement Groups (CEG) and Challenge Groups already established
- Open Hearings for Ofgem to hear submissions and evidence on various aspects of the Business Plans in an open and transparent way



CCSG – What do you think?

Stakeholder views?

- How do you think ICE should evolve under RIIO-ED2 to meet your requirements?
- Do you think the move away from annual assessments will encourage DNOs to develop more stretching initiatives?
- How much would you like to be involved and what is your preferred method of engagement?

“Higher standards of performance should be supported by stakeholder engagement to demonstrate the planned behaviour better meets customers' needs.”

Source: Ofgem's SSMC - RIIO-ED2 Sector Methodology Consultation: Annex 1 - Delivering value for money services for consumers



Chat Feedback & Any Questions?

Future Stakeholder
Engagement Events - go to

[www.yourpowerfuture.
westernpower.co.uk](http://www.yourpowerfuture.westernpower.co.uk)

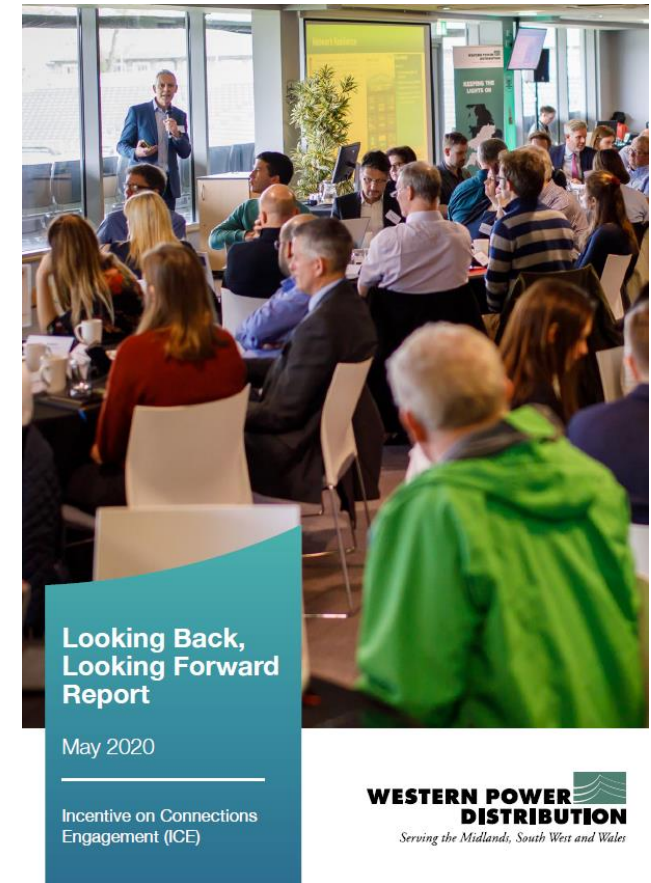
ICE Brief Update and Summary

Tim Hughes & Penny Carolan

ICE - Update

ICE Update

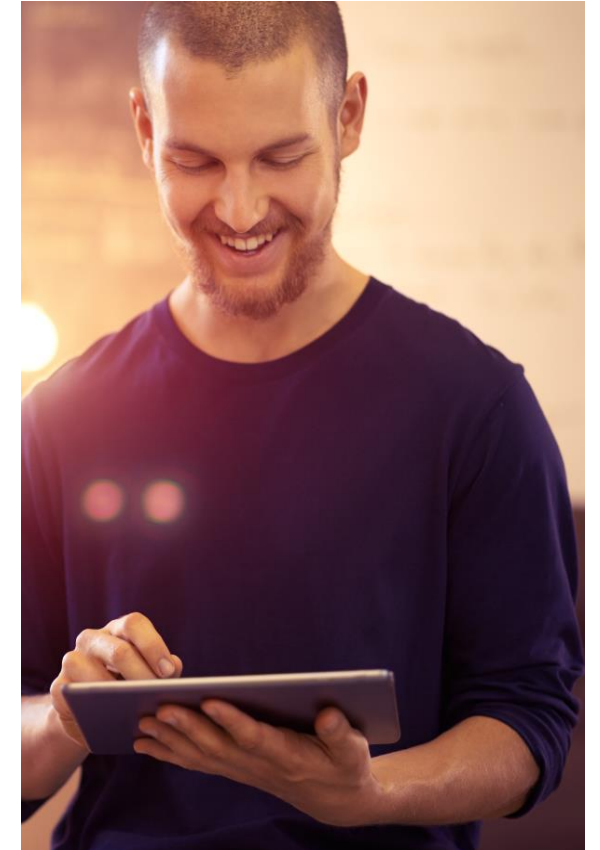
- Our ICE Looking Back and Looking Forward report 2020 has been submitted to Ofgem and published on the WPD website – www.westernpower.co.uk/ice
- The report includes:
 - ✓ Overview of our stakeholder engagement strategy
 - ✓ Looking Back section detailing the engagement & workplan initiatives we undertook & delivered in 2019/20
 - ✓ Looking Forward section sets out how we develop our ICE 2020/21 Plan & engage for the year



ICE - Consultation Update

ICE Consultation

- As a result of the Ofgem ICE consultation, we had 4 consultation responses – thank you to those who responded.
- Feedback was generally positive and we are addressing any concerns.
- We formally responded to Ofgem on 2nd October
- Ofgem internal decisions on the consultation is to be completed by 31st October
- Ofgem publish their decision on any penalties or close the process by mid December



ICE October Submission – Report & Plan

- Our annual updated ICE report will be published and submitted to stakeholders at the end of October. The update provides stakeholders and Ofgem with information on the progress WPD has made against our planned activity as well as any new activities we are undertaking.
- We provide updates on new engagement activities
- The report will include progress updates on the ICE 2020/21 Plan initiatives, outputs and measures along with the new initiatives we have added to the original plan
- We have added 4 New initiatives
 - Feedback from an initial action – Action 16 Unmetered Connection Offers
 - 3 actions following feedback from the ICE consultation around digitalisation and data

ICE – Update

ICE October Submission – New Initiatives

	Action Number & Subject	Initiative Stakeholder feedback	Initiative Outcome	Measure	Target Date (Q2;Q3;Q4;Q1)
Customer Support	29 NEW Common Information Models	Understand any system improvements, to ensure the accuracy of the underlying network information.	We will share our network asset and connectivity information in an recognised standard format that will facilitate the wider use of our network data to inform customers' new connection and operation decisions This will enable customers improved access to our network asset and connectivity information that can be used to understand in greater detail our network to inform their network connection and utilisation decisions.	CIM files (asset & network information) available for download of the 132kV to 11kV network	Q1 March 2021
	30 NEW Real-Time Power Flow Data Access	Improve Real-time data access for each of WPD licence areas.	To provide and enable our customers to understand real-time power flow data on our network. Enabling generator and community energy groups to make informed decisions, from planning the connection of new load and generation on the network to operational decisions.	Demand, import and generation information available for our four licence areas; historic views of data and extract facility available	Q1 March 2021
Communication	31 NEW Unmetered Connection Offers Enhanced 2020/21 Action 16	The respondents from the UMS survey highlighted areas in the unmetered connection offer process that they felt required improvement. Respondents requested simplified unmetered connection offers and some found it difficult to navigate the website and complete the online application.	We will develop a simplified Unmetered Connection Offer. Improve navigation to the Unmetered Connections web page. Review content of the Unmetered Connections web page and provide additional guidance/clarity where necessary.	To undertake a further survey, to quantify if the improvements have met the respondents needs. Compare webpage hits between the old and new pages.	Q1 March 2021
Stakeholder Engagement	32 NEW Digitalisation Programme Updates	Stakeholders fed back to say they would like to see improvements to data quality, including the heat map information.	To inform customers on the latest data available and digitalisation developments. Provide customers access to the latest available data and help them understand, how the data can assist planned developments to support their activities.	Releasing new data sets via social media posts and news articles	Q2 June 2021



Chat Feedback & Any Questions?

Future Stakeholder
Engagement Events - go to

[www.yourpowerfuture.
westernpower.co.uk](http://www.yourpowerfuture.westernpower.co.uk)

Summary

Tim Hughes – Connections Policy Manager

CCSG - Summary

Summary & Next Steps

- Feedback captured from today
 - Minutes and slides sent via email
 - Feedback form emailed to you individually
- Date for 2020 Connection Workshop:

WPD Connections Workshop

- **Address:** Virtually
- **Date:** Wednesday 25th November 2020
- **Time:** Registration from 9.45am; Workshops **10am- 1.00pm**;
- Topics include:
 - Connections Strategy for RIIO-ED2
 - Strategic Investment during ED2
 - Supporting the Transition to Net Zero
 - Digitalisation & Data
- Opportunities for networking with industry colleagues

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