Customer Connections Steering Group



Serving the Midlands, South West and Wales

8<sup>th</sup> June 2022



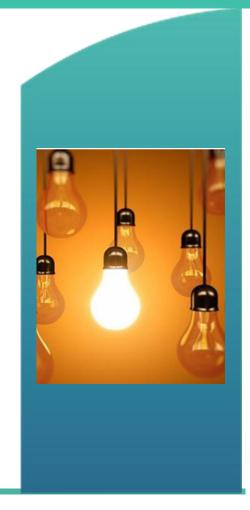
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### **CCSG - Introduction**

Agenda

| Introduction to CCSG            | Kester Jones       | 10:00 – 10:05 |
|---------------------------------|--------------------|---------------|
| Director's update               | Alison Sleightholm | 10:05 – 10:30 |
| Requested capacity management   | Vanessa Buxton     | 10:30 – 10:50 |
| ICE Update                      | Penny Carolan      | 10:50 – 11:00 |
| Refreshment / Comfort Break     | 11:00 – 11:15      |               |
| SCR overview/catch up           | Kester Jones       | 11:15 – 11:30 |
| SCR connection boundary outline | Vanessa Buxton     | 11:30 – 12:00 |
| SCR access outline              | Mike Kaveney       | 12:00 – 12:30 |
| Summary and feedback            | Kester Jones       | 12:30 – 12:45 |
| Lunch                           |                    | 12:45pm       |







### CCSG: An update on our connections approach in RIIO-ED2

Alison Sleightholm Resources and External Affairs Director



Our Business Plan 2023 - 2028 Final Submission

POWER FOR LIFE

December 2021

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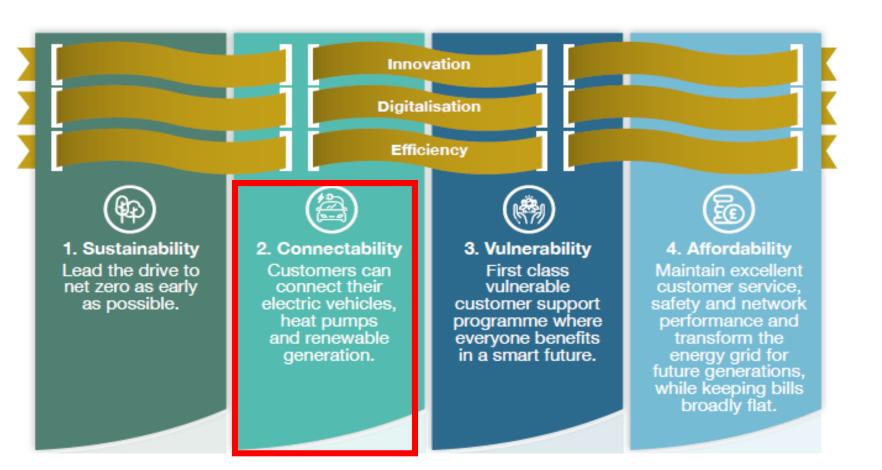
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### **RECAP:** An ambitious vision for the future

Our Business Plan contains 42 core commitments and over 400 wider commitments that we will deliver in RIIO-ED2 while keeping bills broadly flat

 We will achieve the key deliverables based on four strategic outcomes, which have three 'golden threads' running through each:





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#### **RECAP:** Connectability



**Two overarching core commitments** – to ensure customers can easily connect their EVs, heat pumps and renewable generation

| 2.4 | 2.4 Connections  |                    |  |  |   | Justification method                      |  |
|-----|--|--------------------|--|--|---|---|--|
|     | Core<br>commitment   | Commitment<br>Type | Change<br>from<br>RIIO-ED1                             | Positive impact for customers  | Annex 2a<br>- Detailed<br>Justification | Annex 5 -<br>Stakeholder<br>Justification |  |
| 31  | Make it as easy as possible for customers<br>to apply to connect individual domestic low<br>carbon technologies by providing a same day<br>connections response via an online self-<br>assessment tool   | Bespoke<br>ODI-R   | ि<br>New   | Enable customers to receive a<br>rapid response to their connection<br>applications for potentially high volume<br>connection types. | ~                                       | ~   |  |
| 32  | Provide quicker and cheaper connections<br>options for customers by increasing the<br>number of flexible connection offers made,<br>ensuring 100% of schemes receive a flexible<br>alternative to reinforcement where the<br>reinforcement cost is >£75k for LV, 11kV and<br>33kV connections and >£100k for 66kV or<br>132kV connections and/or where works will<br>take more than 12 or 18 months respectively<br>to complete. | Bespoke<br>ODI-R   | Significantly<br>lowered<br>threshold<br>(from >£125k) | More customers can choose between a<br>conventional reinforcement solution,<br>or a cheaper and quicker flexible<br>solution.        |   | ~   |  |







Communication & engagement

Hold an annual connections conference (engage customers on specific connections issues assess our delivery against commitments)

Broaden engagement on Network Strategy to include housing and commercial developers, and strategic landowners







| Communication       Hold an annual connections conference (engage customers on specific connections issues assess our delivery against commitments) |  |  | Broaden engagement on Network Strategy to include housin<br>and commercial developers, and strategic landowners |  |  |
|---|--|--|---|--|--|
| Services  | Enhance our online<br>service to provide a wider<br>range of online quotations | <b>Improve interactive costing tool</b> to combine with mapping system, allowing a cost to be determined from a pin location | m   | Work with ICPs and IDNOs to<br>inimise the number and scope of<br>non-contestable services | Improve online services to allow <b>online payments for larger connections</b> |





| Communication & engagement | Hold an annual connections conference (engage customers on specific connections issues assess our delivery against commitments) |                        |   | Broaden engagement on Network Strategy to include housing and commercial developers, and strategic landowners |  |            |  |
|----------------------------|---|------------------------|---|---|--|------------|--|
| Services                   | Enhance our online<br>service to provide a wider<br>range of online quotations  | combine with mappi     | <b>tive costing tool</b> to<br>ing system, allowing a<br>ed from a pin location | m   | Work with ICPs and ID<br>inimise the number and<br>non-contestable ser | I scope of | Improve online services to allow <b>online payments for larger connections</b> |
| Processes & information    | Develop tailored processes<br>groups' needs for initial applica<br>connection and ene   | ation stage, the final | Provide tipping poin<br>that could be provide<br>to trigger                     | ed wł   |  |            | network connections queues<br>fectively for flexible assets<br>(e.g. storage)  |



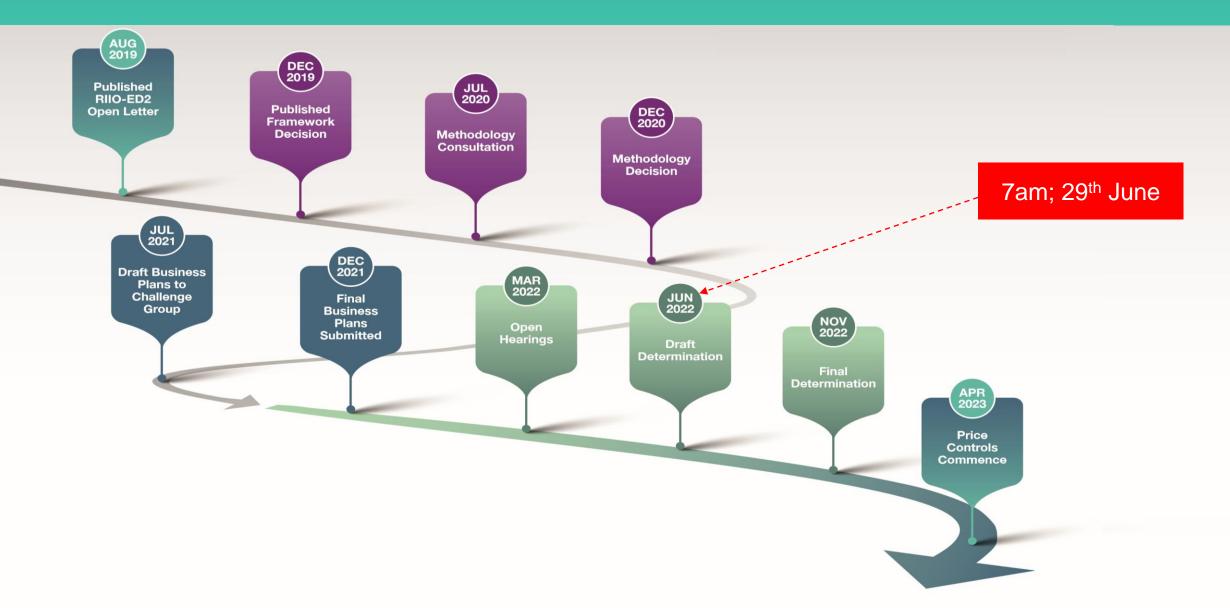


| Communication & engagement | Hold an annual connections conference (engage customers on specific connections issues assess our delivery against commitments)      |                    |  | Broaden engagement on Network Strategy to include housing and commercial developers, and strategic landowners |                |   |
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| Services                   | Enhance our online<br>service to provide a wider<br>range of online quotations   | combine with mapp  | <b>tive costing tool</b> to<br>ing system, allowing a<br>ned from a pin location | Work with ICPs and I<br>minimise the number a<br>non-contestable s  | nd scope of    | Improve online services to allow <b>online payments for larger connections</b>                                |
| Processes & information    | Develop tailored processes to meet specific<br>groups' needs for initial application stage, the final<br>connection and energisation |                    | that could be provid   | at information for capacity<br>ed whilst avoiding the need<br>reinforcement                                   |                | network connections queues<br>fectively for flexible assets<br>(e.g. storage)                                 |
| Smart                      | Explore innovative ways of<br>and introduce large capacity a<br>points at key strategic locati                                       | nd rapid EV charge | also prioritise non  |   | flexible conne | <b>concerning the availability of</b><br><b>ctions</b> and promote access to<br>efficient network utilisation |



#### **Ofgem's timeline for RIIO-ED2**





### **Opportunities to engage with WPD**



#### We have upcoming stakeholder engagement events we'd love you to attend:

• June 2022 – Key strategies and action plans

#### WORKSHOP 1: CONNECTING TO THE ELECTRICITY GRID – Thurs 23<sup>rd</sup> June

- Our Connections strategy and ICE work plan
- Supporting Community Energy projects
- Connecting low carbon technologies including Electric Vehicles and heat pumps to the network
- Flexibility services

#### WORKSHOP 2: SUSTAINABILITY AND THE ENVIRONMENT – Fri 24<sup>th</sup> June

- Helping our customers get to Net Zero through the use of smart technology
- Working with local authorities on their Local Area Energy Plans
- Our Environmental Action plan and how we propose to get to net zero as a business
- Improving biodiversity

#### WORKSHOP 3: VULNERABILITY AND AFFORDABILITY – Tues 28<sup>th</sup> June

- Improving the Priority Services Register to help those customers who most need support
- Supporting vulnerable customers in the transition to Net Zero
- Customer service and network reliability: helping our worst served customers and providing support in severe weather conditions
- September 2022 RIIO-ED2 Business Plan in light of Ofgem's Draft Determination
  - Dates TBC, but likely 6 events in the two week period 12<sup>th</sup>-23<sup>rd</sup> September

#### To register, email: rallcock@westernpower.co.uk

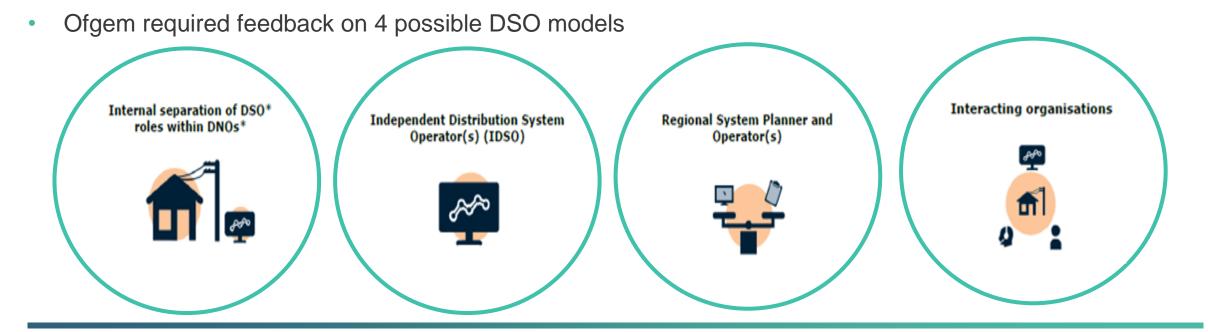




# Call for Input – Future of local energy institutions and governance



- Ofgem have issued a Call for Input(CFI) which closed on 7th June and relates to governance of the DSO
- CFI is based on using the three Ofgem-defined DSO roles of energy system planning, market facilitation of flexibility resources and real-time operation of local energy networks





# Ensuring independent, fair and transparent operation



We will:

- Set up a separate DSO directorate
- Run an independent Distribution System Operator Scrutiny Board
- Three external independent members will be on the Board
- External audit of our DSO
- Formalise DSO-DNO relationship
- Regularly review the effectiveness of our **governance arrangements**





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### Storm Arwen investigation and report



#### Storm Arwen – recap

- Affected all 4 of WPD's networks, including winds
   >92mph in South West and heavy snow falling in areas of the Midlands.
- A months' worth of faults in four days
- More than 1,600 incidents and restored supplies to over 240,000 customers









#### **Recommendations likely to span three pillars:**

| 1. System resilience | 2. Consumer protection | 3. Additional support |
|----------------------|------------------------|-----------------------|
|----------------------|------------------------|-----------------------|

• The latest update is that this report is due to be published this week









## **QUESTIONS?**



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Management of Requested Capacity

Vanessa Buxton Connections Strategy Engineer

8<sup>th</sup> June 2022

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#### Background

- Discussions relating to Motorway Service Area (MSA) vehicle charging solutions are underway between the ENA, Ozev and DNOs.
- The discussions are looking at capacity ramping solutions to ensure that assets can be constructed now to account for future expansion.
- Approach will not be limited to MSAs, it can apply to wider scenarios where there is a justifiable need, e.g. data centers.



#### **Benefits of Changing our Approach**

- Provides assurance that the capacity will be available for the anticipated future demand at the time of need in accordance with a pre-agreed Capacity Ramp-Up Schedule.
- Application of DUoS capacity charge will be in line with anticipated maximum usage as the load grows, as opposed to the full requested capacity from energization.
- Foresight of future requirements enables DNOs to better prepare the network ahead of need, whilst ensuring to continue to construct an economic and efficient system.
- Takes account of Ofgem's Access SCR direction that visibility of future loads does not necessarily mean that a connection is speculative<sup>1</sup>.

<sup>1</sup>Access and Forward-Looking Charges Significant Code Review: Final Decision

Paragraphs 3.68 to 3.79 (pages 50-53) dealing with "DUoS mitigations: speculative developments"

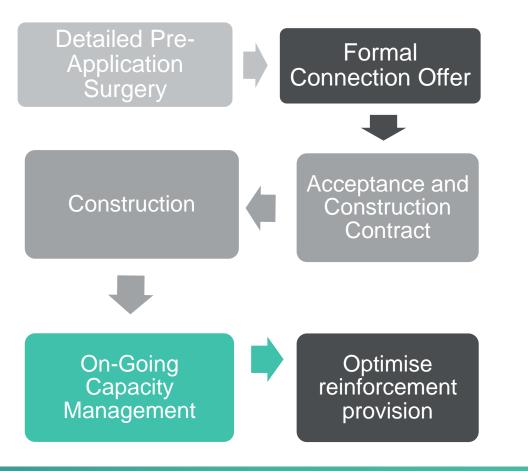


### **Management of Requested Capacity**



**Key Principles** 

- Process should support the minimum overall cost to users of the distribution networks.
- Must be available to all customers.
- Should promote the efficient development and use of the distribution system.



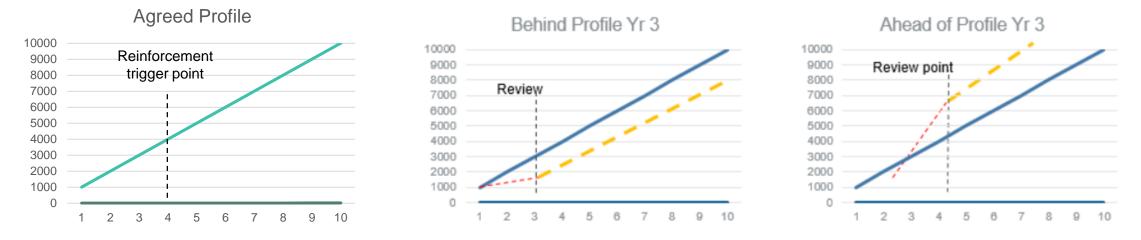
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### **Management of Requested Capacity**





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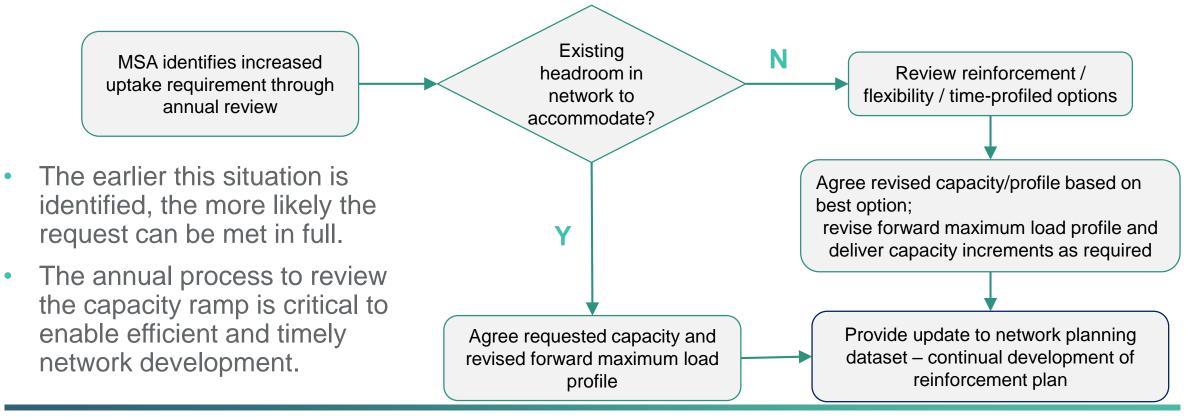
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- Annual increase of agreed capacity will auto-update on the anniversary of energization in line with agreed profile based on Capacity Ramp Up Schedule. This translates to capacity charges.
- Customer to initiate annual review for adjustments Early engagement is beneficial to ensure any material changes in requirements can be delivered on time.

### **Management of Requested Capacity**



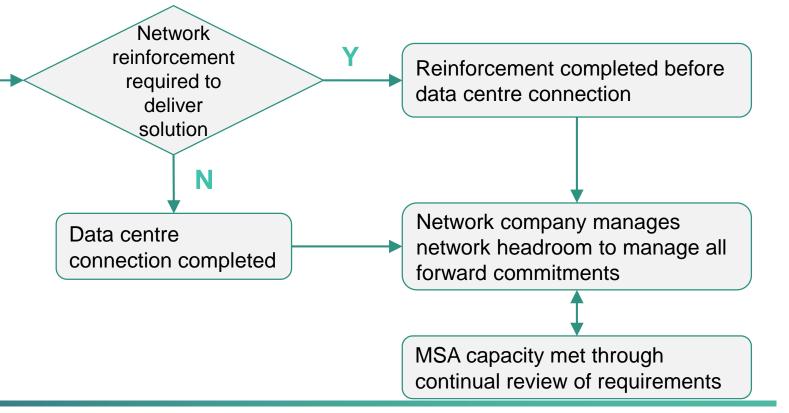
#### **Scenario 1 – Higher Usage / Faster Take-Up**





Load request for data centre (typically greater capacity than MSA)

- The earlier this situation is identified, the more likely the request can be met in full.
- The earlier Capacity for the MSA is known and DNO plans network development with this future need in mind.



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| Ramping<br>Profiles       | <ul><li> Is this the right approach?</li><li>Would you like to see us do anything differently?</li></ul>                  |
|---------------------------|---|
| Pre-application surgeries | <ul> <li>Is this the best method to establish ramping profiles<br/>and potential reinforcement trigger points?</li> </ul> |
| Customer led<br>reviews   | <ul> <li>Is auto-increasing capacity charges the correct<br/>approach to minimise discussions and paper trail?</li> </ul> |







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## Any thoughts?







### WPD ICE update

Penny Carolan Connections Strategy Engineer



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#### CCSG – ICE update

#### **Incentive on Connections Engagement**

- Our ICE 2022 report looking back, looking forward was submitted to Ofgem on 31<sup>st</sup> May and published on the WPD website – <u>www.westernpower.co.uk/ice</u>
- The ICE report content:

We have structured the document into three sections.



• Ofgem will now proceed with the ICE consultation with stakeholders – July 2022







### **ICE - update**

#### **ICE Headlines 2021/22**







### ICE 2022/23 Plan

#### ICE initiatives for 2022/23

**Our new initiatives** 

- Developed using stakeholder priorities and specific feedback
- Our Plan is divided into 5 focus areas

| ICE 2022/23 Plan categories | Actions in each area |
|-----------------------------|----------------------|
| Policy guidance             | 3 actions            |
| Customer support            | 3 actions            |
| Communication               | 2 actions            |
| Process improvement         | 3 actions            |
| Stakeholder engagement      | 3 actions            |

• 14 initiatives in total with corresponding outputs and measures

We publish ICE plan status updates quarterly, informing stakeholders of our progress on the initiatives.





ICE 2022/23 Plan



Incentive on Connections Engagement

ICE 2022/23 Plan

westernpower.co.uk

www.westernpower.co.uk/ice



### ICE – update

#### **ICE Plan key priorities**

- Improving customer service –our ICE initiatives are to enable self-serve applications, automation and digital interactive solutions.
- Improving consistency key consideration when developing and implementing initiatives. Our domestic LCT on-line application and our connections customer portal enquiry tracker.
- Improving connectability for our customers moving towards ED2.







# Thank you and do you have any questions?



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### **SCR Overview**

Kester Jones Connections Strategy Manager



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### Significant Code Review: update



- On 3<sup>rd</sup> May 2022, Ofgem published their final decision on the Access and Forward-Looking Charges Significant Code Review.
- The decision document sets out Ofgem's proposals for changes to:
  - Connections Boundary for charging; and
  - Access Rights



| Access and Forward-Looking Charges Significant Code Review: |             |  |  |  |
|---|-------------|--|--|--|
| Final Decision  |             |  |  |  |
| Subject   | Details     |  |  |  |
| Publication date:   | 03 May 2022 |  |  |  |

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for energy consumers







- 1. DCUSA Change Proposals & Working Groups
- 2. Ofgem's Direction
  - Connection Boundary
  - Access Rights

3. Timelines



## **DCUSA working groups**



• 4 DCUSA working groups have been setup to review and submit change declarations to Ofgem

| Working Group 1: Connection Boundary   | Working Group 2: Access Rights  |
|--|---|
| WPD rep – Vanessa Buxton   | WPD rep – Mike Kaveney  |
| DCP 406: Access SCR: Changes to CCCM<br>- Introducing changes to CCCM including the worked examples                        | DCP 404: Access SCR Changes to Terms of Connection for<br>Curtailable Customers<br>- Introduce a new schedule to DCUSA to cover and changes to CCCM   |
| DCP 407: Access SCR: Speculative Development<br>- Introducing changes to CCCM and Schedule 32 (Residual Charging<br>Bands) | DCP 405: Access SCR: Managing curtailable connections between<br>licensed distribution networks<br>- Introduce changes to Section 2B (Distributor to Distributor/OTSO<br>Arrangements) and update Schedule 13 (Bilateral Connection<br>Agreements). |

- High Level Timeline:
  - The Direction requires DNOs to submit the Change Declarations to Ofgem/the Authority for approval by no later than 31 October 2022.
  - The Authority Decision is dependent on BEIS completing the ECCR changes.



### **SCR Connection Boundary Reforms**

Vanessa Buxton Connections Strategy Engineer



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### **Connection boundary reforms**



#### **Distribution Network Connection Charges**

- The Decision sets out different connection charging depths for Demand and Generation Connections, subject to the application of a High Cost Threshold.
- Demand, DNO fully funds reinforcement and recovers through DUoS
- Generation, customer only contributes to reinforcement at the same voltage level as Point of Connection.

|                                     | Extension assets              | Reinforcement assets at<br>connection voltage                          | Reinforcement assets at<br>connection voltage +1                       |
|-------------------------------------|-------------------------------|--|--|
| Current<br>arrangements             | Connecting customer pays 100% | Connecting customer pays a<br>proportion of the reinforcement<br>costs | Connecting customer pays a<br>proportion of the reinforcement<br>costs |
|                                     |                               |  |  |
| New<br>arrangements<br>(Demand)     | Connecting customer pays 100% | Fully funded by the DNO via DUoS                                       | Fully funded by the DNO via DUoS                                       |
| New<br>arrangements<br>(Generation) | Connecting customer pays 100% | Connecting customer pays a<br>proportion of the reinforcement<br>costs | Fully funded by the DNO via DUoS                                       |





#### High Cost Cap (HCC)

- Both calculated using Reinforcement at the voltage at POC plus the voltage above.
- The following High Cost Cap values have been provided:
  - Generation will be set at £200/kW
  - Demand will be introduced and set at £1720/kVA
- The new Demand cap was determined from DNO data such that it is only designed to capture the extreme outliers in terms of cost vs required capacity.



#### **Connection Boundary – definitions**

- Definitions shall align with the definitions of a Final Demand Site and Non-Final Demand Site as developed in the Targeted Charging Review (TCR):
  - Sites classified as Final Demand (where electricity is consumed for any reason other than for generation or export) will be charged under the demand connection boundary. This also includes mixed use sites.
  - Sites classified as Non-Final Demand (where electricity is only imported for the purpose of exporting electricity) will be charged under the generation connection boundary. Storage will be treated consistently with generation.





#### **Speculative developments**

- DNOs are required to change the criteria for what is deemed to be a Speculative Development in the Common Connection Charging Methodology (CCCM) such that it provides a clear, consistent approach. This allows:
  - A clearer indication of the information required to determine what is treated as a speculative connection.
  - Clarification that phased developments are not always treated as speculative developments i.e. a phased housing development.
  - Introduction of a methodology for connections with planned phases or future expansion which would otherwise be deemed speculative e.g. public EV charging stations with firm plans to increase capacity over time.





#### **Electricity (Connection Charges) Regulation 2017 (the ECCR)**

- The change to the connection boundary requires a change to second comer payment arrangements for reinforcement assets.
- ECCR arrangements for treatment of extension assets does not need to change.
- Ofgem have asked BEIS to consider the impact on historical connections, where the first comer would have assumed that a proportion of the initial connection costs would be recovered via a second comer payment.

BEIS intend to publish a consultation on these changes in June 22 to ensure the changes come into effect in advance of 1 April 23.





### **SCR Access Rights**

Mike Kaveney Primary System Design Team Manager



Serving the Midlands, South West and Wales



#### **Non-Firm Access Arrangements**

- Ofgem have decided to introduce new non-firm (curtailable) access rights for distribution connected users.
- Eligibility:
  - Where there is a need for reinforcement and a need for curtailment to manage local network constraints i.e. if there is sufficient capacity for a firm-connection a curtailable connection will not be offered.
  - Small users will not be eligible.
- Curtailment Definitions:
  - To be defined as 'any action taken by the network operator to restrict the conditions of a connection in response to a constraint on the distribution system'.
  - Excludes customer interruptions from faults
  - Excludes interruptions resulting from the transmission network



#### **Setting Curtailment Limits**

- DNO will set the curtailment limit and include this in the connection offer.
- The DCUSA needs to define the parameters used to measure curtailment including:
  - Definition of 'Curtailable Capacity' i.e. proportion of capacity that is subject to curtailment (can be 100%).
  - Definition of 'Curtailment Hours' as the number of hours the customer has been curtailed multiplied by proportion of Curtailable Capacity which was Curtailed
  - Setting a 'Curtailment Limit' on the number of Curtailable Hours over a 12 month period.
- The process should be based on a set risk tolerance the probability of the limit being exceeded will be a common parameter across companies.



#### **Principles for Calculating Curtailment Limits**

- The process should be as simple as possible whilst achieving the Direction's stated objectives.
- The processes implemented must be common to all DNOs and be repeatable.
- Limits accepted by customers will be included in both their Curtailable Connection offer and connection agreement.
- Customers subject to Curtailment will receive regular reporting on the level of curtailment relative to their accepted limits.



#### **Exceeding Curtailment Limits**

- If the DNO needs to curtail above the agreed limit, then they must procure this service from the market, where it is economic and efficient to do so.
- An 'exceeded curtailment price' will be introduced to cap the unit price of flexibility a DNO must procure in these scenarios.
- This exceeded curtailment price will also be the price paid to customers in any circumstances where their limit is breached.
- The price will be set such that:
  - it enables competitive price discovery in flexibility markets; and
  - is sufficiently high to dis-incentivise DNOs from exceeding Curtailment Limits.





#### **End Dates for Non-Firm Arrangements**

- Non-firm arrangements will have explicit end dates, after which the connection will need to be made firm or non-curtailable.
- Exceptions apply where the customer has not requested a firm connection or if the HCC is triggered and the customer does not wish to contribute to reinforcement costs above the cap.
- End dates intended to ensure that network operators invest in network capacity in a timely way
  and provide certainty to customers on when their connection arrangements are likely to be made
  firm.



### Implementation plan

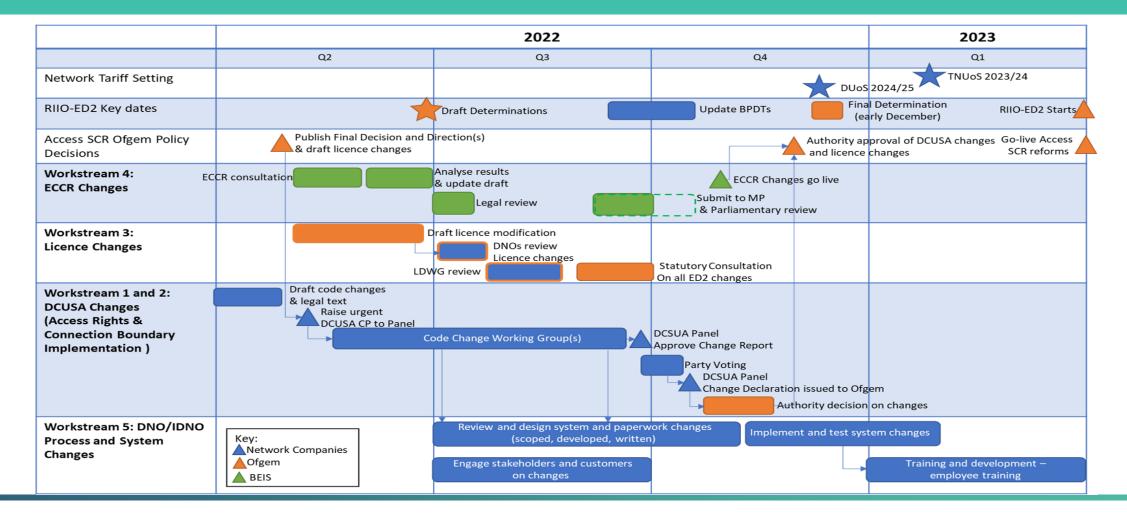
Kester Jones Connections Strategy Manager



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#### Access SCR Plan on a page





### **WPD Transition Plan**



- A WPD working group has been setup to: -
  - "Develop and implement the changes as detailed in Ofgem's final decision of the Access and Connection Boundary SCR in to WPD/NGED business and reporting processes."
  - "Ensure that the changes are disseminated and communicated to staff and external stakeholders and customers, ready for go live 1 April 2023"
- Kester Jones chairs the working group with representation from relevant areas across the WPD business.



#### Other reviews to be aware of:

- Ofgem have announced that they are carrying out a DUoS SCR in 2022. Ofgem's overall
  objective for the DUoS review remains unchanged to ensure electricity networks are used
  efficiently and flexibly, reflecting users' needs and allowing consumers to benefit from new
  technologies and services while avoiding unnecessary costs on energy bills in general. We're
  currently awaiting further information on this.
- Ofgem have asked National Grid Electricity System Operator ("NGESO") to launch and lead Task Forces under the Charging Futures arrangements considering the root causes of unpredictability in TNUoS charges and how they might be addressed, alongside an examination of the input data into the current model used to calculate the locational element of TNUoS, to ensure that charges remain cost-reflective.





### Summary and review feedback

Kester Jones Connections Strategy Manager



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### CCSG – summary and feedback



### Summary and next steps

- Review feedback captured from today.
- Future meetings Connections workshop 16<sup>th</sup> November @ Aston Villa.
- Topics you may like us to cover in our next meeting.
- Slides will be uploaded onto our website and forwarded to yourselves
- Hold the Date: Next CCSG 2022: Thursday 13<sup>th</sup> October 2022

If you would like to be up to date on our previous CCSG meetings, follow us at

https://yourpowerfuture.westernpower.co.uk/our-engagement-groups/connection-customer-steering-group