WESTERN POWER DISTRIBUTION

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Connection Customer Steering Group

Tuesday 29th Oct 2019

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HOUSEKEEPING

- ✓ **No planned Alarm test today**

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AGENDA

10:00 - 10:10	Introduction to CCSG	Alison Sleightholm
10:10 - 10:30	Directors Update	Alison Sleightholm
10:30 - 11:00	Network Charging	Nigel Turvey
11:00 - 11:20	REFRESHMENTS	
11:15 - 11:45	DSO & Flexibility	Ben Godfrey
11:45 - 12:15	Electric Vehicle “moving forward”	Paul Jewell
12:15 - 12:45	LUNCH	
12:45 - 13:15	Connections Policy Update	Tim Hughes
13:15 - 13:30	Mapping Update	Peter Young
13:30 - 14:00	ICE Update	Richard Allcock
14:00 - 14:30	Summary, Feedback and Next Steps	Richard Allcock

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Introduction
&
Directors Update

Alison Sleightholm
Resources & External Affairs Director
Tuesday 29th October 2019

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CCSG OCTOBER 2019: DIRECTOR'S UPDATE

- **RIIO – ED2 Update**
  - **Timetable**
  - **Ofgem's open letter**
  - **Customer Engagement Group**
- **DSO activity**
- **Political outlook**

RIIO-ED2 – timetable

- The next price control period will cover the five year period 2023-2028

Table 1: Indicative timeline for RIIO-ED2

Date	Milestone
August 2019	Open Letter and Framework Consultation
Quarter 4 2019	Framework Decision
June 2020	Sector Methodology Consultation
November 2020	Sector Methodology Decision and Business Plan Data Templates issued
May 2021	Business Plan initial submission to Ofgem and RIIO-2 Challenge Group
Dec 2021	Business Plan final submission to Ofgem and RIIO-2 Challenge Group
Quarter 1 2022	Open Hearings
June 2022	Initial Determination
November 2022	Final Determination Statutory consultation on RIIO-ED2 licence
February 2023	Decision on RIIO-ED2 Licence
1 April 2023	Start of RIIO-ED2

RIIO-ED2 – Ofgem's open letter

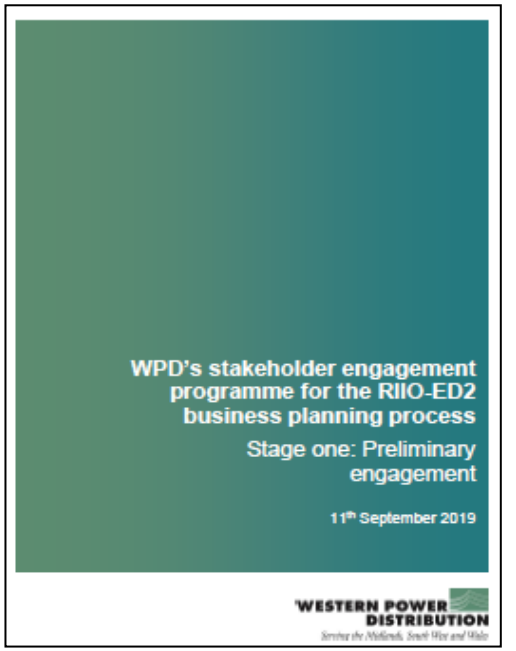
Key framework decisions made by Ofgem:

- Five year price control review
- "Enhanced Engagement" arrangements to give consumers a stronger voice
  - DNOs set up Customer Engagement Groups (CEG); Ofgem Consumer Challenge Group (CCG) and open hearings
- Three core output categories
  I. Meet the needs of consumers and network users
  II. Maintain a safe and resilient network
  III. Deliver an environmentally sustainable network
- Outputs to cover three types: licence obligations; Output Delivery Incentives (ODIs); Price Control Deliverables (PCDs)
- Whole systems planning and supporting the transition to a smarter, more flexible, sustainable low carbon energy system is key
- Fast tracking option removed
- Will introduce a funding pot that targets future-facing strategic challenges and retain Network Innovation Allowance (NIA) funding
- Lower returns clearly signalled

RIIO2 ED2 enhanced engagement
Customer Engagement Group (CEG) Update

- RIIO-ED2 enhanced engagement: a requirement for WPD to design, establish and resource a Customer Engagement Group (CEG) that will scrutinise and challenge their business plan and the quality of engagement undertaken to create it

- CEG now established with 14 members and an independent chair.
- Group is independent and designed to offer robust challenge to WPDs proposals, ensuring our plans reflect and will meet the needs of our customers.
- 5 meetings already held with a range of challenges raised with formal challenge procedure.
- The first challenge to be closed out relates to WPDs engagement plan. As a direct result of the CEG challenge, WPD is now planning a significantly larger, more robust and wide ranging programme of engagement at this initial stage of our ED2 programme.



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WPD DSO progress update

- **Distribution Future Energy Scenarios (DFES)**
  - Second round of DFES reports for WPD's 4 licence areas, scenarios aligned to NG's FES with regional granularity applied (whole system analysis to 2032).

- **Flexible Power**
  - Already dispatched over 195MWh to actively manage demand on our network and defer reinforcement.
  - Signposting published for 5 years (greater detail derived from DFES on requirements)
  - Procurement now provides for up to 3 year contracts (supplier can price 1, 2 or 3 years)
  - Currently tendering for 184MW across 120 primary substations with 56.8MW of flexibility already contracted
  - Issued Consultation "*Delivering a Flexibility First Approach*"

- **Energy Data Hub**
  - Created a single page access 'Energy Data Hub' which is the first step to realising the recommendations of the Energy Data Task Force (aim is to simplify for DER providers)
  - The National Smart Systems Forum recently provided good feedback and commended WPD progress

- **Whole System Co-ordination via WPD/NG inter-control data link**
  - New link to allow visibility between DNO/ESO of network configuration, system headroom and ancillary service forecast and dispatch

Brexit – impact on WPD

- We are closely watching what is a unpredictable and ever changing situation and monitoring the risk of ‘no-deal’
- Internal Audit conducted a ‘no-deal’ risk assessment for the original 29th March 2019 deadline. Reviewed all the published government advice to UK businesses, assessing its relevance to WPD’s business and ensuring WPD process owners were aware of risks and had taken proportionate mitigating actions
- Three main areas of focus
  - Supply chain review by procurement team
  - Strategic stock levels enhanced (up to 12 weeks) by advance buying of equipment and kit as necessary
  - Status of settled EU workers – less than 1% of WPD workforce
- WPD is protected to a great extent by the RIIO-ED1 package agreed to 2023
- Internal Audit is revisiting WPD’s ‘no-deal’ risk assessment to consider any new or changed government advice and to check whether mitigating actions have been rolled forward

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Network Charging

29 October 2019

Nigel Turvey – DSO and Future Networks Manager

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Network Charging

Currently there are two charging reviews in progress:

Targeted charging review – at a ‘minded to’ position looking to:

- Remove further ‘embedded benefits’ which reduces the income that generation connected to the distribution network receive
- Change the way charges are scaled to recover allowed revenues to be a fixed amount per class of customer. Essentially low usage customers will pay more and high usage customers less for using the network

Network Charging

Significant Code Review – started at beginning of the year looking at a wide range of issue including:

- Whether connection charges should only be for very local assets. This would require locational use of system charges to be introduced for many customers
- Wide ranging review of distribution use of system charges
- Review the definition and choice of access rights (when and how much a customer can import or export electricity)
- Improve the allocation of access rights, including enhancing the scope for markets (e.g. being able to trade access rights or curtailment obligations with other customers)

The conclusions of the SCR are expected to be an important contributor to better managing the changing usage of the network that is also being managed by our DSO activity

Ofgem Summary

Aim	Future Charging & Access reforms			ESO/DSO reforms[3]	RIIO price controls[4]
	Access reform	TCR	Balancing Services Taskforce		
Ensure networks are used efficiently and flexibly	✡	✡	To be confirmed	✡	✡
Minimise cost of expansion of network capacity	✡			✡	✡
Reduce distortions to forward-looking charges	✡	✡			
Recover residual charges fairly		✡			

TCR Embedded benefits

- Minded to decision in November 2018 to:
  - Set the Transmission Generation Residual to zero, subject to maintaining compliance with the current cap on overall transmission charges to generators. This will remove a benefit to larger generators which receive a credit from these charges at present
  - Remove the Embedded Benefit relating to charging suppliers for balancing services on the basis of gross demand at the relevant grid supply point
  - Apply balancing services charges to smaller embedded generation
  - Implement these changes in 2020 or 2021(subsequently clarified as being from April 2021)

TCR Embedded benefits

- Subsequent analysis published looking at
  - sensitivity to capacity mechanism (risk of not being re-established)
  - Updated carbon values
- And the BSUoS task force concluded that it's '*not feasible to charge any of the components of BSUoS in a more cost reflective or forward looking manner that would influence user behaviour*'

TCR – Demand Residuals

- Network costs are recovered through two types of charges:
  - ‘forward-looking charges’ which send signals about how much costs will increase (or decrease) with network usage, and
  - ‘residual charges’ which recover the remainder of the costs
- Ofgem are undertaking a review of residual network charges and consider that there are two leading options that they consulted on. They are:
  - **A Fixed Charge**. Charges are set for individuals in customer segments, with these segments being based on an existing industry approach. **This is (was?) Ofgems preferred option**
  - **An Agreed Capacity Charge**. For those larger users who have a specified agreed capacity, a charge would be calculated directly. Capacity for households and smaller business would be based on assumed levels

September – consultation on refined residual charging bands

- Following concerns raised about the diversity of non-domestic users Ofgem consulted on a ‘fixed charge option, with refined segment’
- The consultation outlines an approach which results in 15 separate residual charges that are allocated by voltage and capacity bands
- Some indicative modelling for our EHV connected customers has been undertaken to assess the potential effect

Licence area	Largest residual increase	Largest residual decrease
East Midlands	£147k	(£312k)
West Midlands	£125k	(211k)
S West	£37k	(91k)
S Wales	£275k	(683k)

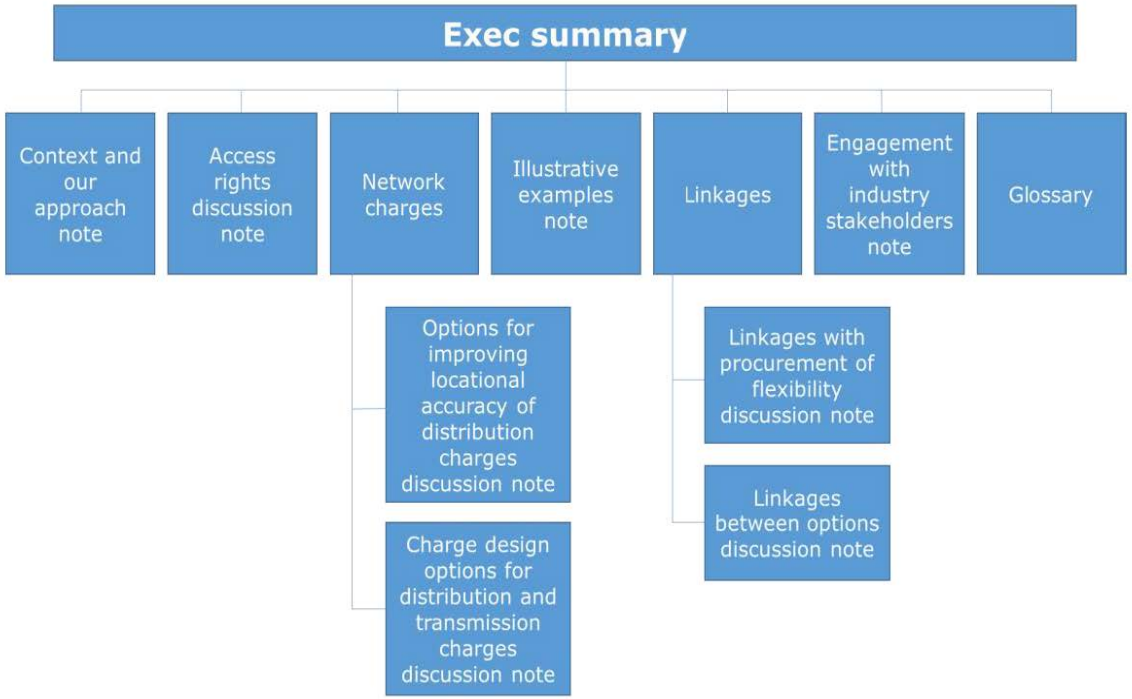
SCR - Scope

- Ofgem-led
  - Review of the definition and choice of transmission and distribution access rights
  - Wide-ranging review of Distribution Use of System (DUoS) network charges
  - Review of distribution connection charging boundary
  - Focussed review of Transmission Network Use of System (TNUoS) charges

- Areas led by industry outside the SCR
  - Review of balancing services charges (BSUoS)
  - Access right allocation

SCR Progress

- 1st working paper: Ofgem published first working paper at the start of Sept. The paper covers:
  - An initial overview and assessment of options for access rights, better locational distribution network charging signals and charge design.
  - The links between access, charging and procurement of flexibility.



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SCR - Progress

- 2nd working paper: Ofgem intend to publish a second working paper at the end of year. The paper will cover:
  - Small user consumer protections
  - Distribution connection charging boundary
  - Focused transmission charging reforms

SCR Ongoing work

- 1C: Is there sufficiently robust evidence of a distortion to justify making the connection boundary more shallow and or other changes?
- 1J: What is the impact of 132kV being a transmission voltage in Scotland on the boundary options? Do the proposed options create any unintended consequences signal?
- 2B: Which of these access choices should be available for small users and which should they be protected from?
- 2C: To what extent do options support the efficient use and development of network capacity? (inc consideration of standardised)
- 2D: To what extent do options reflect the needs of consumers (including behavioural response)? (inc consideration of standardised)
- 2E: How could these access choices be reflected in charging?
- 2F: Identify and assess the options for how distribution-connected users access to the transmission network could be defined
- 2K: What are the respective roles of sharing and trading access?
- 2L: Development of the access “products” PD1: Assessment of network benefits and determination of associated network planning considerations
- PD1: Comparison of Volumetric ToU and Actual Capacity options
- PD2: Assessment of an Agreed Capacity option and its interaction with access rights
- PD3: Evaluation of option to centralise calculation and billing of DUoS charges
- PD4: Assessment of Critical Peak Pricing and how it can operate under the locational cost model
- PD5: Assessment of evidence that Critical Peak Rebates would drive greater behavioural change
- PD6: Assessment of whether real time pricing (RTP) is feasible within the SCR timescales
- PD7: Inputs to support recommendation to GEMA regarding need for small user options
- PD8: Assessment of more granular charging design options
- PD9: Application of the charging design options under a charges and credits cost model approach
- PD10: Identifying the link between network planning and charging design

Expected timetable

- Original timetable had a first working paper being published in July 2019 – this was published in September 2019
- Consequently the second working paper is now expected towards year end
- Ofgem intend to publish a minded-to decision in 2020 and final decision in 2021.
- They currently envisage that any changes will be implemented by April 2023

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Refreshment Break

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DSO & Flexibility

Ben Godfrey
Network Strategy Manager
Tuesday 29th October 2019

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Flexibility First

WPD has always used the flexibility inherent in its networks to provide an economic and secure supply ahead of undertaking conventional reinforcement.

We has expanded this to include market-provided flexibility and will seek this in the areas triggering load related reinforcement within ED1.

149 **Primary substations assessed for flexibility in 2019**

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Throughout the rest of ED1 we will assess 90% of our load related reinforcement investment for a more economic delivery by flexiblity services.

90%
LRR investment asessed against Flexibility

For the remaining 10%, which is predominately at LV, we will continue to develop, test and evaluate other markets.

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Delivering a Flexibility First Approach

Visibility
- Forecasting of system needs
- Publication of flexibility data
- Signposting to where flexibility services will be required

Accessibility
- Multiple routes to market
- Access options for a wide range of participants
- Low barriers to entry

Sustainability
- Investable flexibility products
- Ensures value of flexibility is realised
- Aligned to decarbonisation

Transparency
- Open processes
- Auditable decisions
- Consistent outcomes

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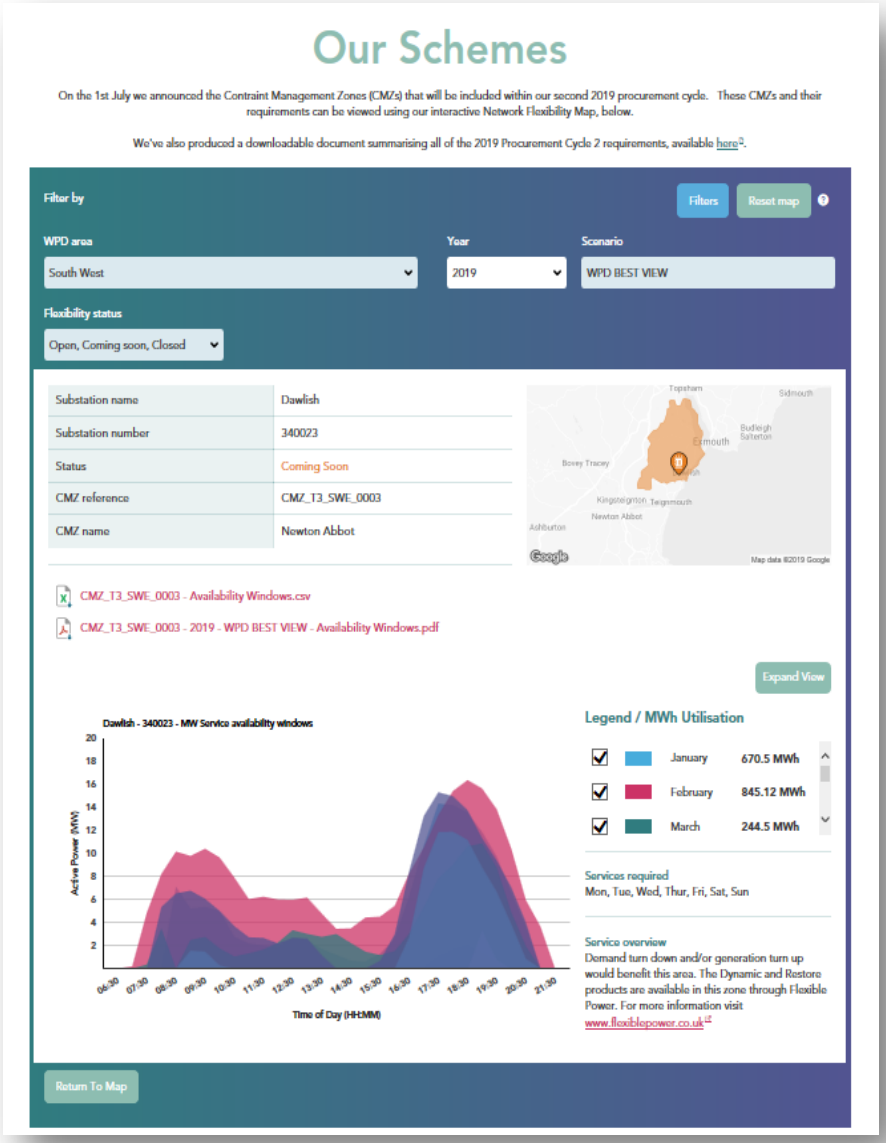
Signposting



Using a similar functionality to our network capacity map, our network flexibility map is publically available on our website:

www.flexiblepower.co.uk/our-schemes

This displays information on:

- Geographic supply area
- MW peak and length for availability
- Estimated MWh utilisation
- Months applicable
- Days applicable
- Raw data downloads

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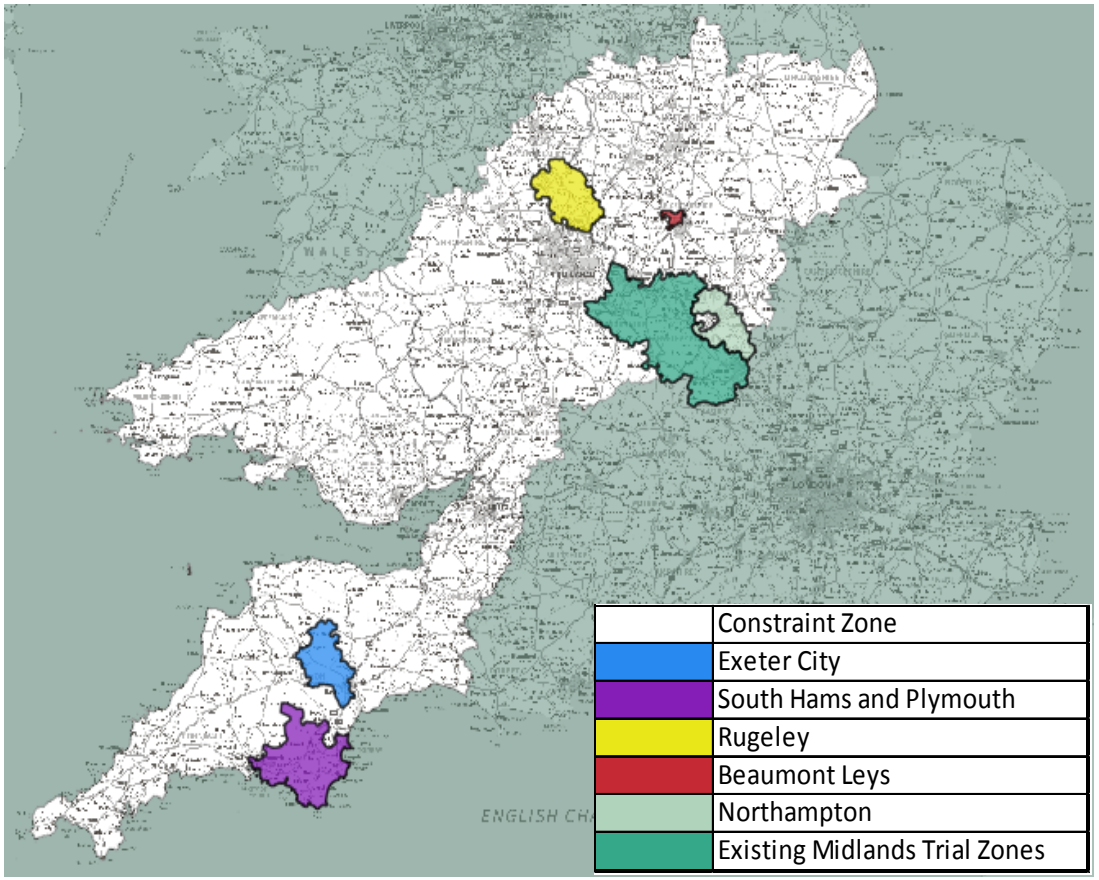
Procurement in 2018

- 5 constraints across 18 primaries
- 63MW required
- To operate over the winter of 2018 and the summer of 2019
- Products agreed across Industry
- Requirements based on forecasting
- Roll out of BAU non-network alternatives to reinforcement



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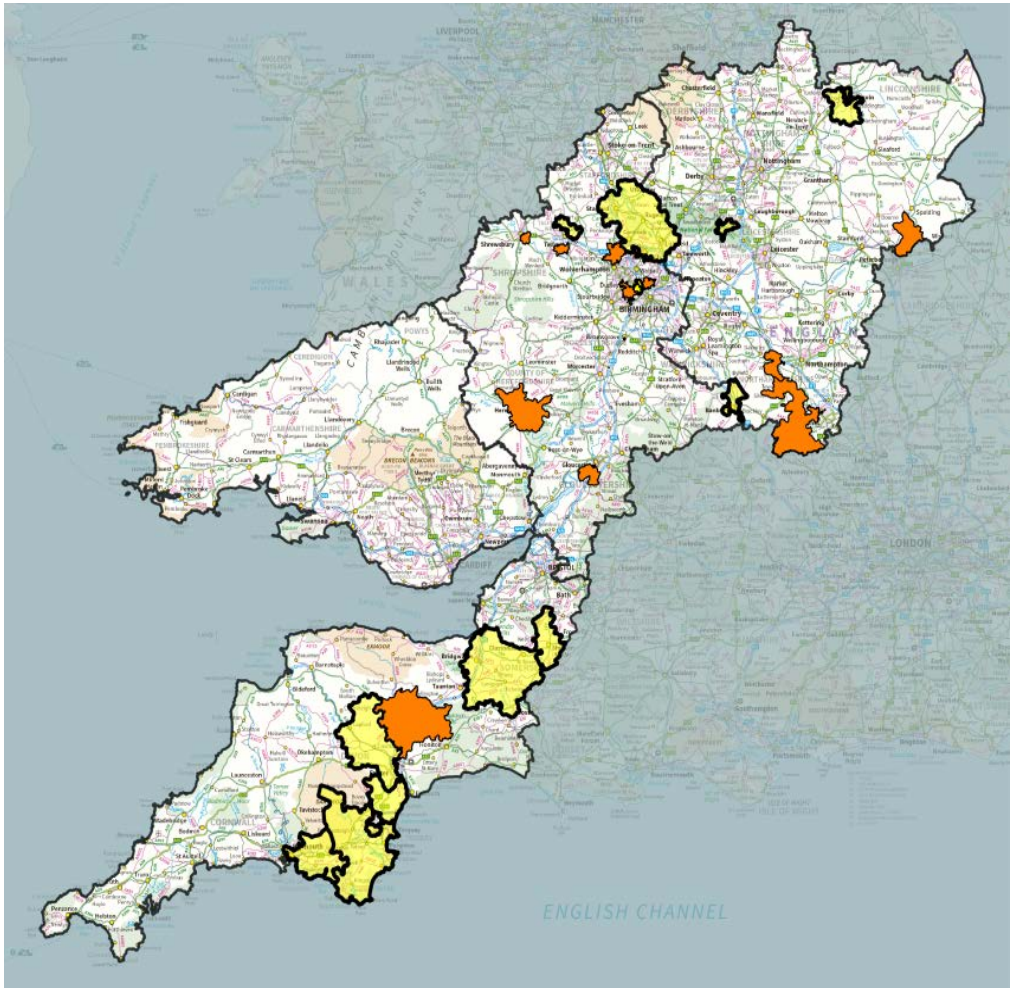
Procurement in 2019 H1

- 12 constraints across 80 primary substations
- 93.4MW required
- ITTs out for March
- To operate over the summer and winter of 2019
- Affects over £25m of reinforcement
- Second round in July/August
- Additional zones signposted with future requirements over 5 years



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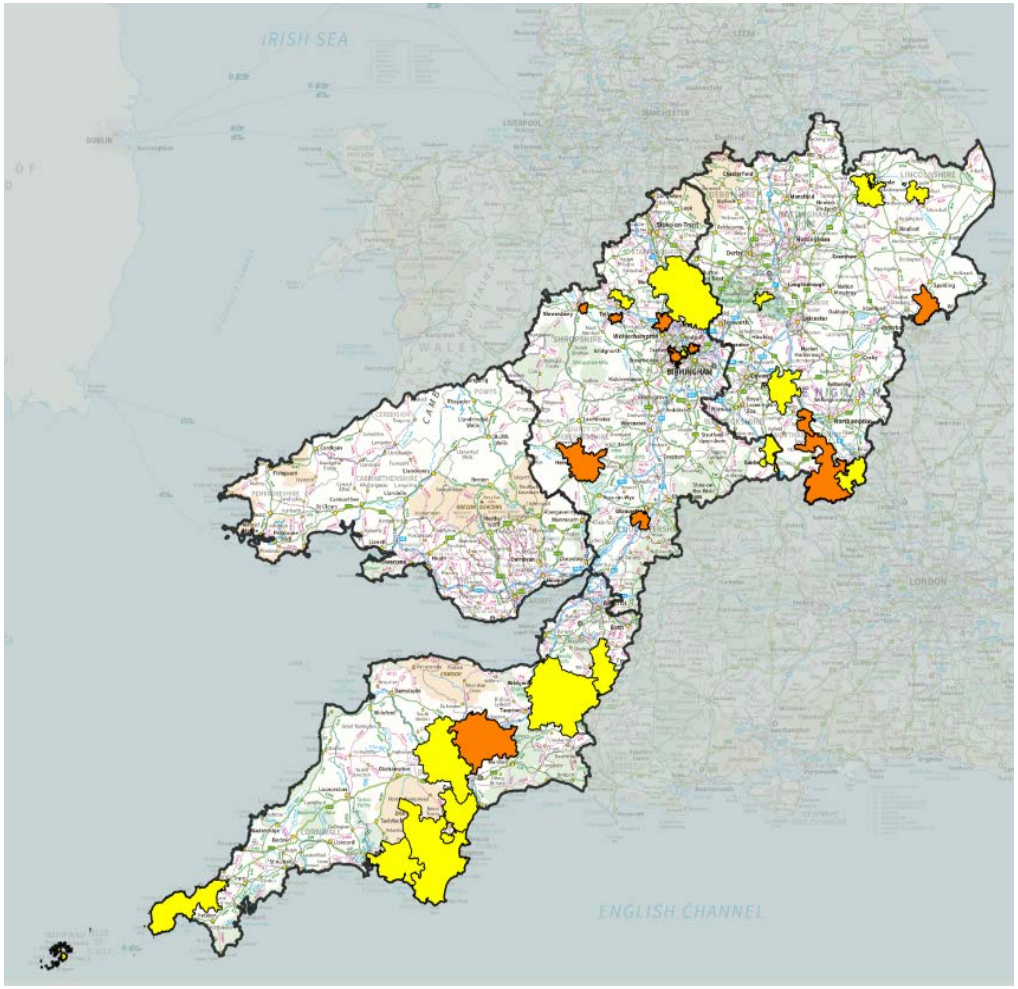
Procurement in 2019 H2

- 18 constraints across 120 primary substations
- 184MW required
- ITTs out in August
- To operate over winter 2019 and summer 2020
- Affects over £35m of reinforcement
- Further procurement in January 2020
- Additional zones signposted with future requirements over 5 years



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Using Flexibility Platforms

piclo®

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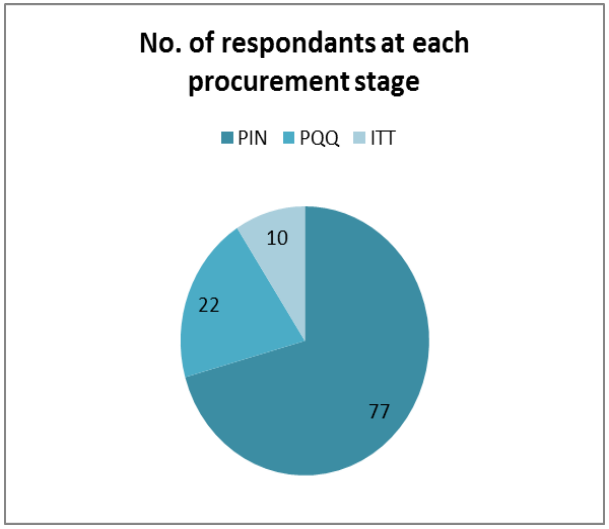
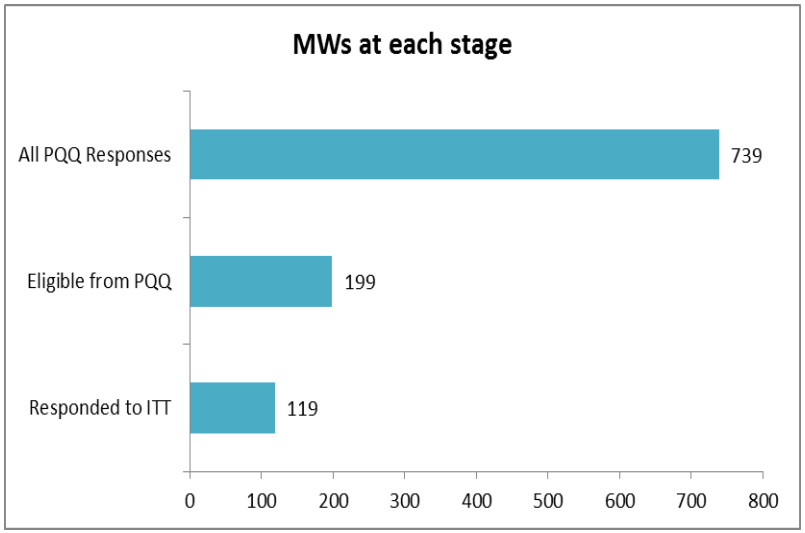
Procurement to date and Results

Procurement Cycle	Primaries Covered	MW Sought	Flexibility Contracted
2018	18	63	35.3
2019 H1	80	93	21.5
2019 H2	120	184	123

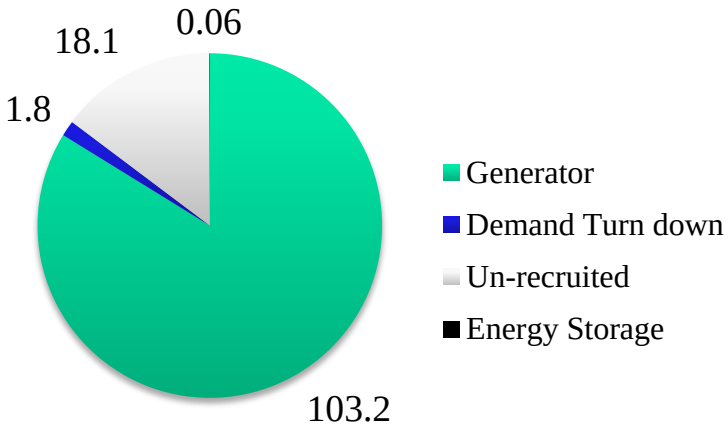
We've also signed a further 10MW of energy storage in 2019 of DSM

Results in 2019

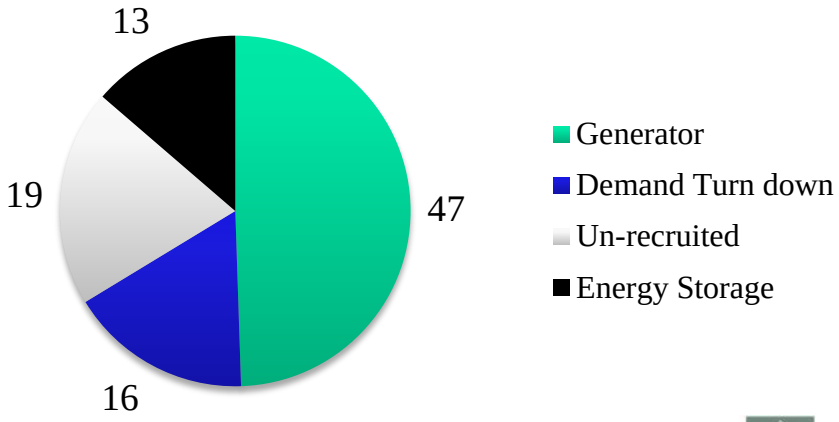




MW Capacity of Flex Contracts



Number of Flex Contracts



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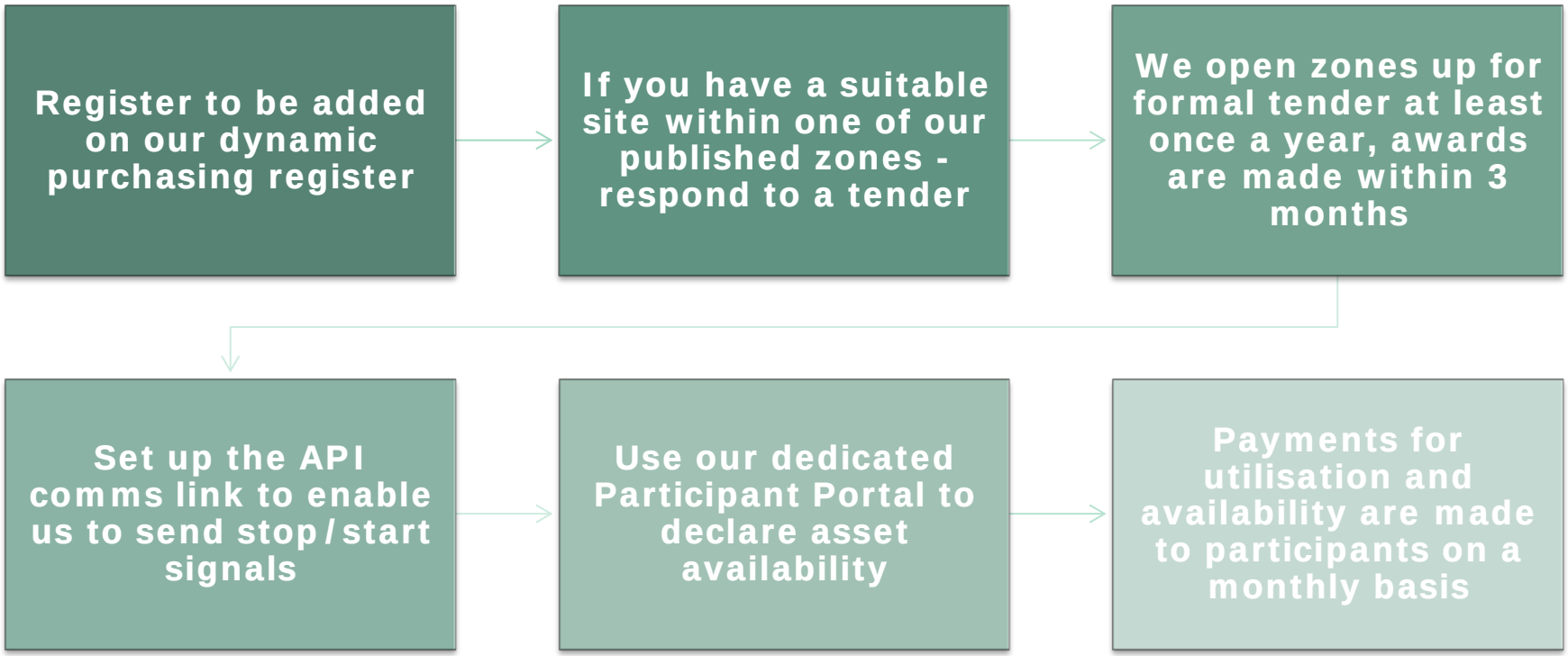
Procurement Process



CMZ T's and C's are signed on a per participant basis and API can be expanded to cater for multiple zones/assets, making it easy to replicate across new areas and scale up.

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Products

	Secure	Dynamic	Restore
Industry Aligned	**Pre-Fault Constraint Management**	**Post-fault Constraint Management**	**Restoration Support**
	Our **Secure** service is used to manage peak demand loading on the network and pre-emptively reduce network loading. It offers a higher availability payment and lower utilisation payment.	Our **Dynamic** service has been developed to support the network in the event of specific fault conditions, such as during maintenance work. It offers a low availability payment and higher utilisation payment.	Our **Restore** service supports power restoration following rare fault conditions. No availability payment, instead it offers a premium utilisation payment.

	Arming	Availability	Utilisation
Secure	£125/MWh	N/A	£175/MWh
Dynamic	N/A	£5/MWh	£300/MWh
Restore	N/A	N/A	£600/MWh

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Pricing Strategy

Phase 1 Fixed

- Where the procurement process finds there is not a sufficient amount of flexibility to provide a competitive market, then we will continue to use a fixed price in that zone.
- This will be set at around £300/MWh for the contract.

Phase 2 Pay-as-Clear

- Where there is sufficient competition within flexibility, the procurement process will derive a clearing price for the zone to be used in the contract.
- This will be based on the highest price submitted by the group of lowest priced participants that can meet the full amount of system needs, including redundancy.

Phase 3 Full Market

- As the liquidity in distribution flexibility markets improves and our visibility, procurement, dispatch and settlement systems mature, we will shorten the length of the window for which the contract price applies to.
- This will be a progression towards close to real-time market operation.

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Procurement Timelines

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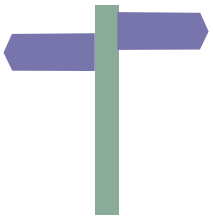
One to four year initial term forming into rolling contracts

Signposting	Dynamic Purchasing	Procure	Integrate/Test	Operate
				
January 2020	February 2020	March to May 2020	May 2020	June 2020 to May 2022

We will follow a 6 monthly procurement cycle, bringing on new flexibility zones and ensuring we meet all our system needs

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Monthly Forecasts

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By Western Power Distribution

This monthly update provides a more accurate short term forecast of our flexibility requirements for active zones and also provides flexibility performance for the previous month.

Performance update - January 2019

Only one zone had an active service window in January 2019, a large amount of our flexibility requirements were unfulfilled.

Exeter Zone				
Service Window: Nov - Feb				
Date	Product		Unfulfilled Flexibility	
			Total	£ value
November '18 Performance	Dynamic	Availability	234MWh	£1,170
		Utilisation	72MWh	£21,600

Short Term Forecast - February 2019

One zone will be active in February 2019, below is our forecast of its flexibility requirem

Exeter Zone						
Service Window: Nov - Feb						
Date		Product		MWh Forecast Requirement	£ Value of our requirement	Window
w/c 11th Feb	M	Dynamic	Availability	0	£0	8AM - 9PM
			Utilisation	0	£0	
	T		Availability	0	£0	8AM - 9PM
			Utilisation	0	£0	
	W		Availability	0	£0	8AM - 9PM
			Utilisation	0	£0	
	T		Availability	0	£0	8AM - 9PM
			Utilisation	0	£0	
	F		Availability	15	£75	8AM - 9PM
			Utilisation	4.5	£1,350	
	S		Availability	0	£0	8AM - 9PM
			Utilisation	0	£0	
	S		Availability	0	£0	8AM - 9PM
			Utilisation	0	£0	
			Utilisation	0	£0	
February Total Forecast			Availability	15	£75	
			Utilisation	4.5	£1,350	

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Dispatch Principles

Fairness	• We will share the dispatch of utilisation across all providers offering availability
Competitive	• Acceptance of availability will be shared across the largest number of providers
Operability	• Providers offering greater operability will maximise their chance of participation
Security	• The needs of the system will be met using flexibility in such a way that supply of security is maintained
Value	• Flexibility will be operated to meet system needs with the minimum level of over-procurement

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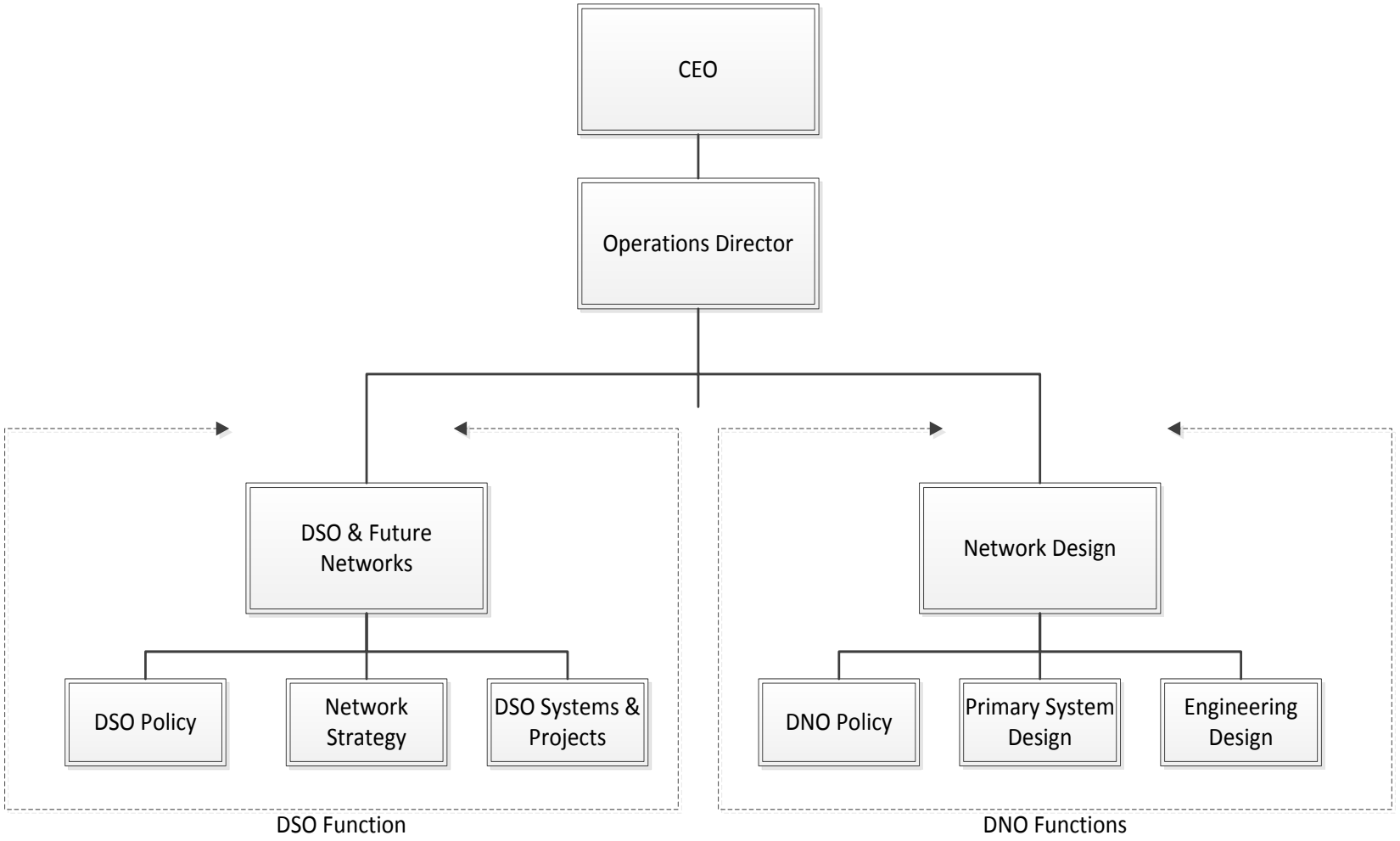
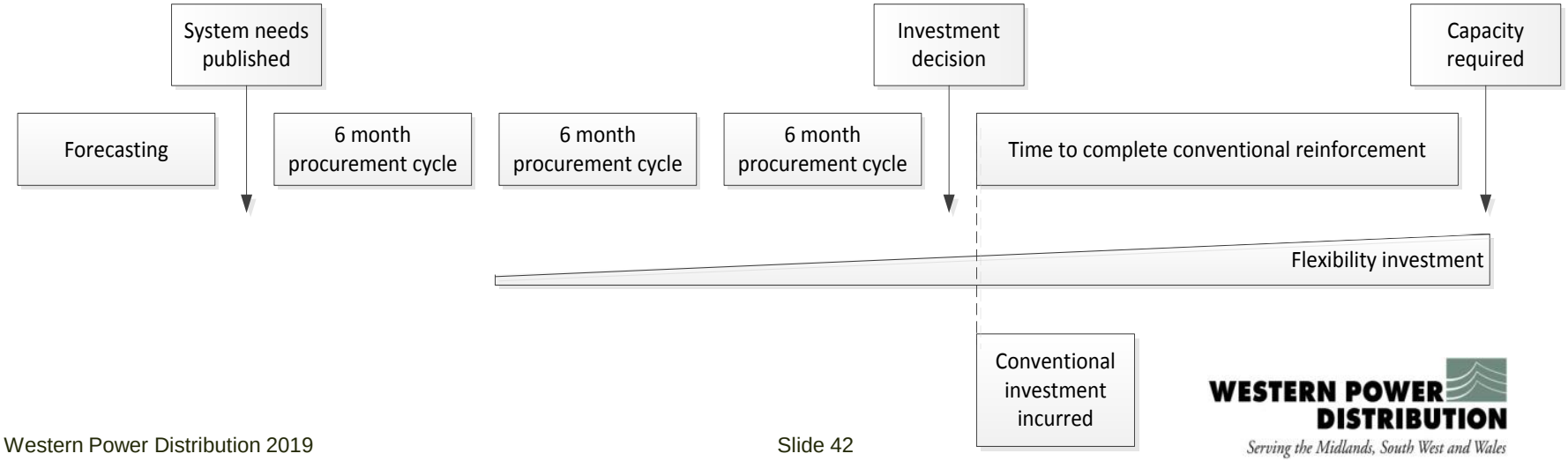
Independence of Decision for DSO



Developing Networks using Flexibility

Network Loading	100%	
Conventional Reinforcement	Accept schemes until network reaches capacity	Reinforce conventionally
Flexibility	Accept schemes until network nearing capacity	Use flexibility to manage network up to capacity and beyond / Reinforce conventionally



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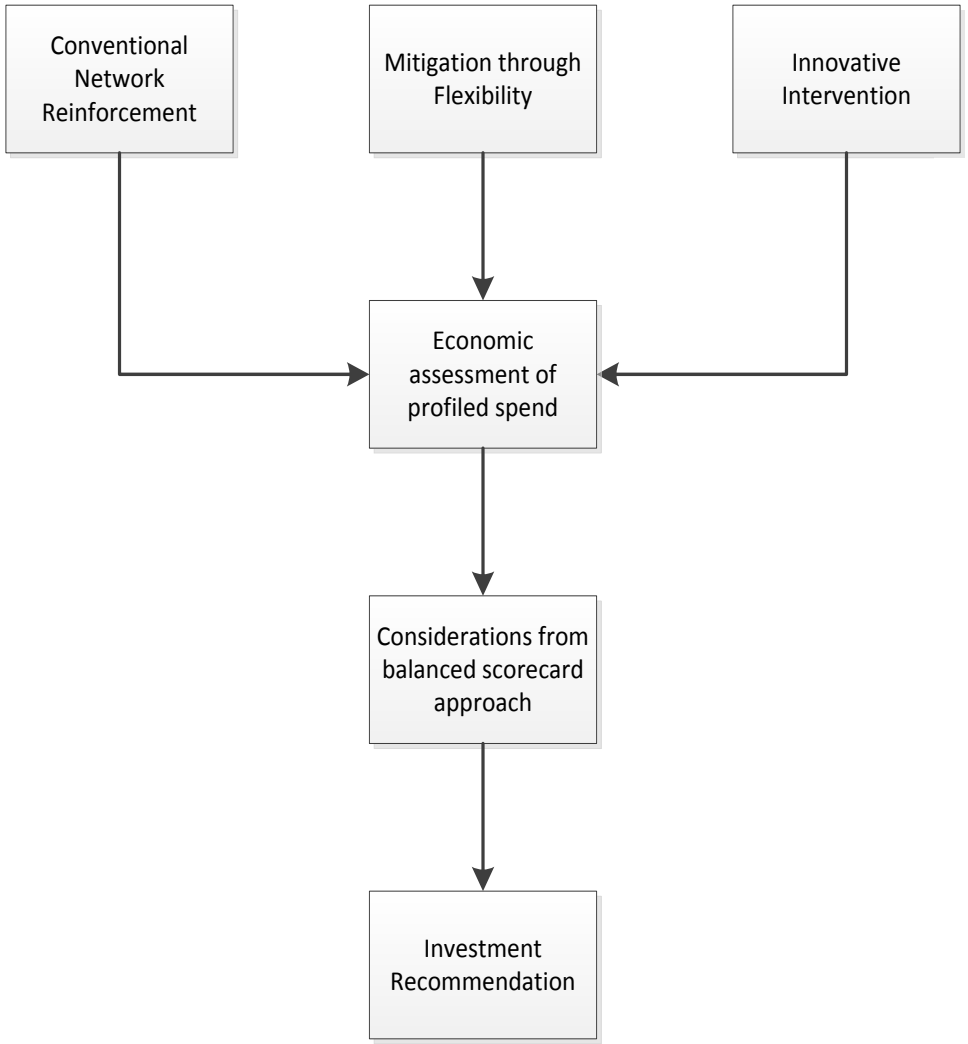
System Investment Assessment



Find out more

Online: www.flexiblepower.co.uk

Email: wpdflexiblepower@westernpower.co.uk

Call: 01332 827436

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Key Developments

- Updated WPD flexibility map with better interface and graphics
- Wider group of areas included in Signposting
- Visibility also provided through Piclo & Cornwall LEM
- WPD-run OJEU compliant procurement process
- Dynamic Purchasing System allows for multiple procurements
- Published Pricing Strategy
- Published Dispatch Principles
- Online valuation tool for flexibility providers in current zones
- Constraint Managed Zones (CMZ) participant terms and conditions published, detailing flexibility provider commitments
- Month ahead short term forecasting for active zones (including financial projections)
- WPD electronic availability and dispatch platform with API

Key Participant Benefits

- ✓ Transparency of process – all documents published and online
- ✓ Pricing strategy which provides stability in early markets but also allows for price discovery in mature markets
- ✓ Mutual and capped liabilities
- ✓ No exclusivity clauses
- ✓ No obligation to provide availability
- ✓ No penalties for non-delivery, only loss of potential revenue
- ✓ Stackable with other revenue streams
- ✓ Routes for direct entry or through aggregation
- ✓ Electronic availability and dispatch platform
- ✓ Automated performance reporting to enable monthly settlement

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Electric Vehicle Strategy

Paul Jewell
DSO Development Manager
Tuesday 29th October 2019

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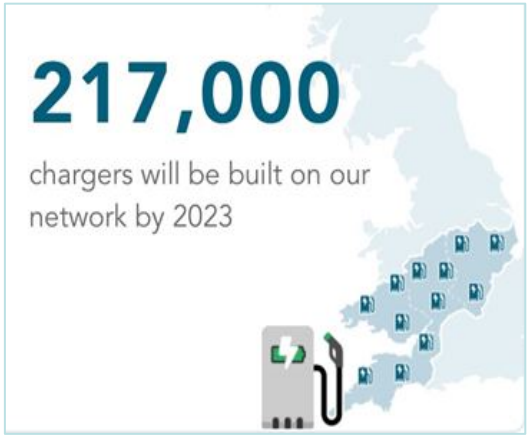
Agenda

- Forecasts and the changing horizon
- WPD's Electric Vehicle Strategy document
- Stakeholder Engagement
- Changes to policy implemented over the past year
- Innovation Projects

Electric Vehicles and the changing horizon

- Our forecasts for Electric Vehicle adoption predict around 37,000 across our region now rising to 3,064,000 in 2030.
- In simple terms, each Electric Vehicle uses the same kWhs of energy per year as a standard domestic home.
- The What Car “Car of the Year” for 2019 being the Kia e-Niro and it being described as “sensibly priced” and will “fit into most people’s lives”.
- Company Car Taxation (BIK) changes in 2020 will promote EV ownership to business users.



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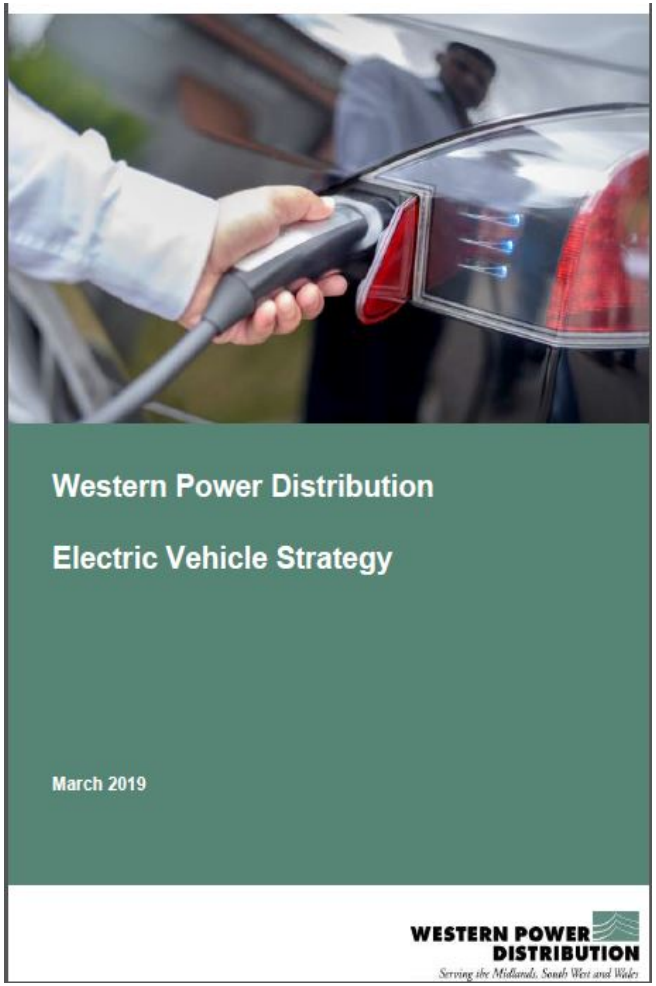
Electric Vehicle Strategy Document

- Our first Electric Vehicle strategy document was issued in March 2019. It covers areas including;
  - Our forecasts and assumptions
  - Technical considerations
  - Stakeholder Engagement
  - Our plans to support connections
  - Innovation Projects
  - Transitioning to Business as Usual

- hhtps://www.westernpower.co.uk/electric-vehicles



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Making use of existing capacity

- We predict that many of our local transformers would support one 35kWh charge every five days for each connected customer
- 35kWh equates to around 150 miles range in many EVs
- The DoT National Transport Survey 2017 sets average annual mileage for all cars at 7,800 miles (and dropping).
- We will continue to identify heavily loaded assets and hotspots, and uprate them through the normal reinforcement process.

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Engagement with Local Authorities

- During 2018 we saw an increase in interest from Local Authorities who were planning to support Electric Vehicle deployment. Government grants have become available to help them with infrastructure.

- We held two Local Authority stakeholder Electric Vehicle events (Bristol & Birmingham) in November with 130 participants.

- Since the Electric Vehicle event we have revised our guidance to LAs based on their feedback and comments.
- https://www.westernpower.co.uk/downloads/15766

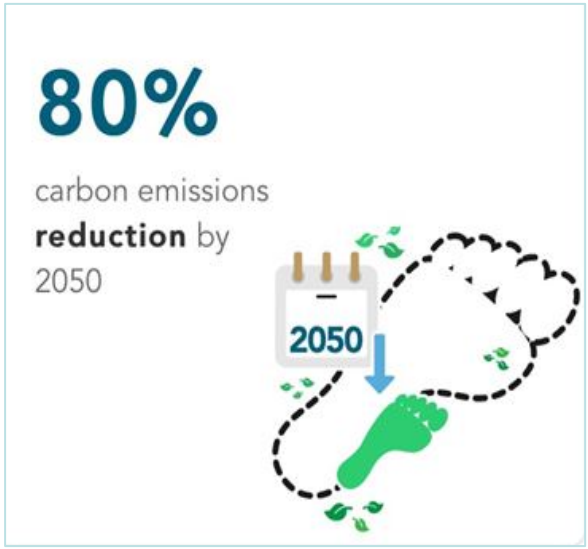
Engagement with Government

- We are working with OLEV and have engaged with them following the EU changes to the Building Performance Regulations. We want to ensure that changes to the regulations accommodate all future LCTs

- OLEV published consultations in May 2019 covering the provision of charge equipment in new homes and the provision of functionality for chargers to become smart

- Our “Superfast Electricity” projects have been developed with Welsh Government support

- We engage on the Electric Vehicle Energy Taskforce with Innovate UK and Catapult Energy Systems



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Accommodating EV demands

- At a domestic level we will use Electric Nation results and plan to install three phase services as a minimum standard
- On our low voltage network we expect to connect streetside chargers and also offer single high capacity charger connections at fuel stations.
- Using bespoke transformers we will connect Hub charging for car parks, and also connect multiple high capacity chargers. We will also connect some depot charging installations
- Using HV connections we will connect larger charger installations and high capacity depot chargers, such as bus depots

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Changes to Policy

- Technical considerations affect how Electric Vehicle chargers can be accommodated on our network. They include Harmonic effects and Earthing

- We have tested the harmonic effects of chargers through our “Electric Vehicle Emissions Testing” project. As a result we have changed policy to discount the harmonic effect of 7kW or 32A domestic chargers making their connection quicker and simpler.

- We have recalculated the segregation with specific modelling for Electric Vehicle chargers and reduced the segregation to 0.3m (3 phase) or 3.6m (single phase). Our design policy reflects this distance.

- We offer PME earthing to streetside applications up to 5kW

Innovation Projects

- Back in 2009 we participated in the CABLED project, an early demonstrator of Electric Vehicle technology.
- We started the Electric Boulevards project in 2013, charging buses through Inductive Power Transfer.
- In 2016 we developed Electric Nation to understand how Electric Vehicle charging will affect our low voltage network and how this can be modelled and mitigated on our network.
- In 2019 we are progressing our Superfast Electricity project which will show how future domestic electricity installations may change.

Future Innovation Projects

- We are planning projects to cover a wide range of Electric Vehicle charge installations and use models
- Electric Vehicle filling stations will look at options to provide capacity at concentrated charging locations
- On street charging will work with local authorities to provide solutions on existing streets. This may include the provision of a dedicated EV charging mains cable in the street and triggers for reinforcement
- Smart Homes (Electric Vehicle and storage) will use data from homes in the Superfast Electricity trial and establish how overall grid use could be reduced by the combined effect of LCTs

Future Innovation Projects

- Connect and Manage will take the development of an LCT load controller into BAU. It will provide an interim solution to allow EV charging whilst upgrades are completed on constrained networks.

- Self Assessment is being delivered across the UK via the Energy Networks Association. It will help DNOs get pertinent service information from customers quickly and help speed up assessment

- Hub Charging will develop a transformer solution that can be deployed in areas where multiple chargers are planned, such as car parks.

Publications and Advice

- Our Strategy and all related documents
  - hhtps://www.westernpower.co.uk/electric-vehicles
- Guide on electric vehicle charging and DNO engagement for local authorities
  - https://www.westernpower.co.uk/downloads/15766
- Getting electric vehicles moving guide
  - https://www.westernpower.co.uk/downloads/3220
- Electric Vehicle Emissions Testing report
  - https://www.westernpower.co.uk/downloads/1957

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Thanks for listening

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LUNCH

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Connection Policy Update

Tim Hughes
Connection Policy Manager
29th October 2019

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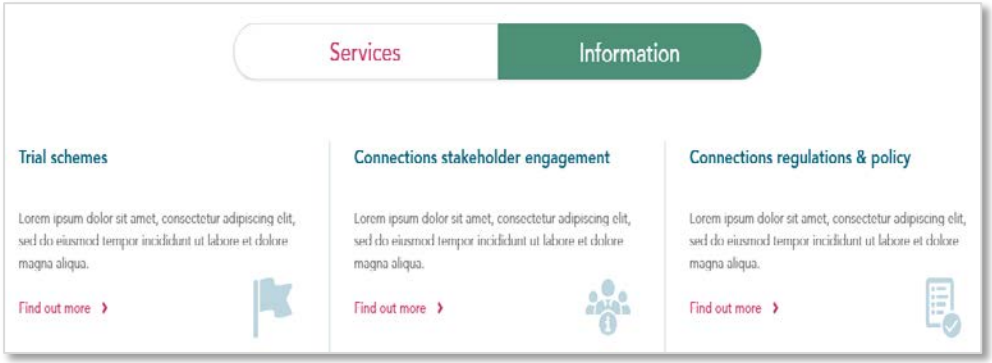
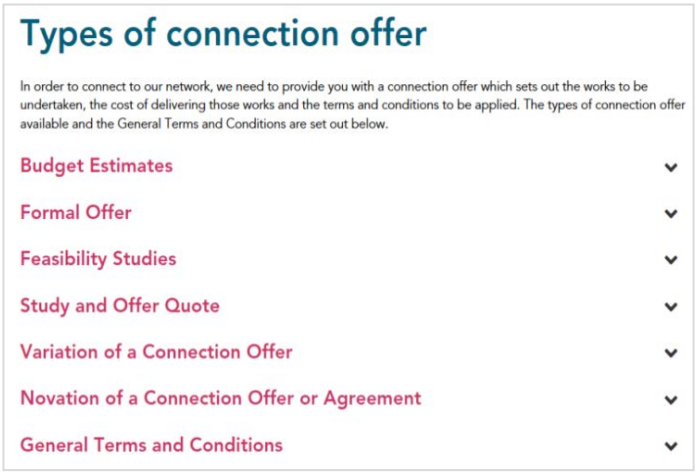
Progress on our ICE priorities for 2019/20

3.8 Further improve “Connections Information” on webpages

In addition to reviewing the content within the information pages, we have improved the
navigation to relevant information:



A new toggle approach to minimise page scrolling



Use of expanding sub-headings in of text heavy single information

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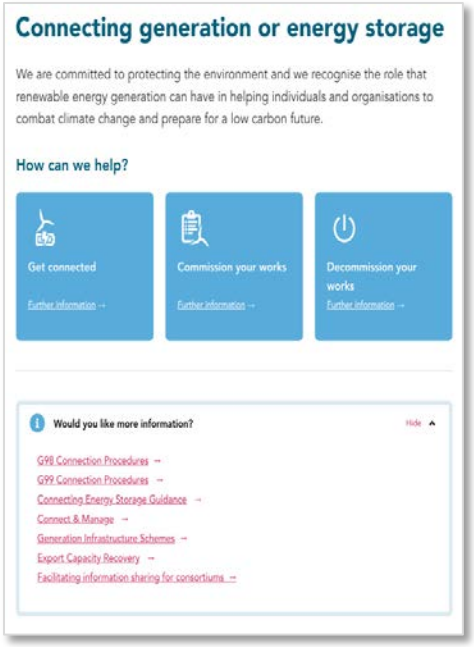
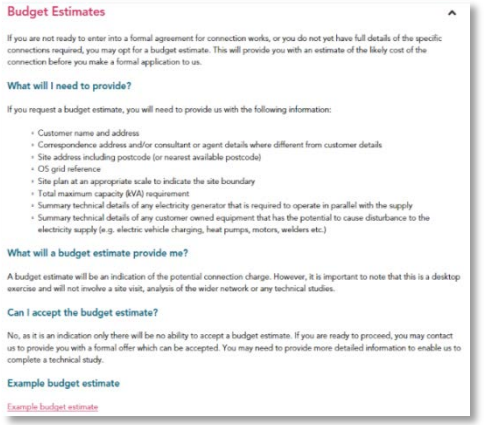
Progress on our ICE priorities for 2019/20

3.8 Further improve “Connections Information” on webpages

Requests for a service and information directly associated with that specific service type are available to access from a single location removing the requirement for users to navigate through two separate areas of the website





Accordion approach to information pages

Expanding sub-headings to view detail

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Progress on our ICE priorities for 2019/20

6.1 CIC guidance on variations

We have developed guidance to provide clarity over the processes that must be followed when an ICP requests a change to their connection requirements

This includes changes to which party is undertaking;

a) The final connection works

b) Design approval

c) Any other associated contestable works

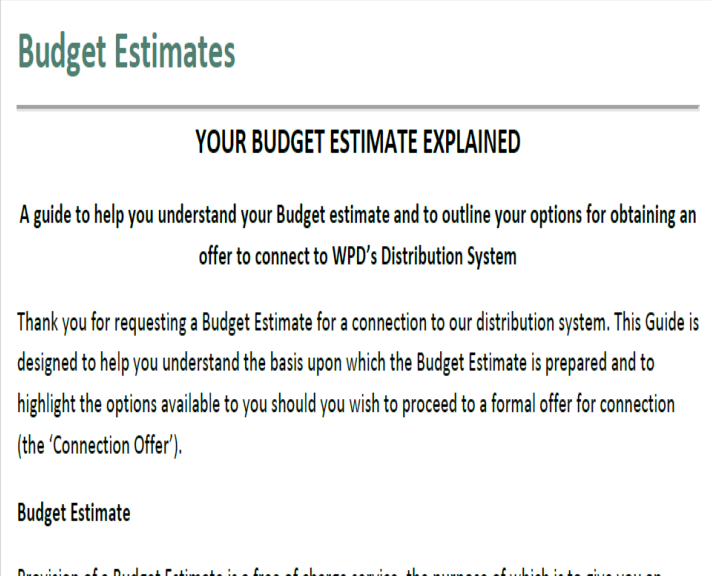
The guidance has been issued to all ICPs operating within WPD regions and is accessible via the “Information for ICPs and IDNOs” section of our website.

Progress on our ICE priorities for 2019/20

9.1 Consistency in budget estimates

We have reviewed the budget estimates process, taking the opportunity to update policy and implement improvements to the Budget Estimate letter including:

- One simplified budget estimate letter available for all voltages
- The estimated Connection Charge is now prominent on the first page of the letter
- Visual presentation aligned with other Connection Offer letter templates



Budget Estimates

YOUR BUDGET ESTIMATE EXPLAINED

A guide to help you understand your Budget estimate and to outline your options for obtaining an offer to connect to WPD's Distribution System

Thank you for requesting a Budget Estimate for a connection to our distribution system. This Guide is designed to help you understand the basis upon which the Budget Estimate is prepared and to highlight the options available to you should you wish to proceed to a formal offer for connection (the 'Connection Offer').

Budget Estimate

We have also produced a summary guide to help applicants to understand what is, and what is not, included in a budget estimate.

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Progress on our ICE priorities for 2019/20

3.5 Major Customer Engagement Event

Our major customer engagement event has been scheduled and will take place on:

Wednesday 6th November 2019

Aston Villa Football Stadium

We will be discussing:

- ✓ RIIO-ED2 priorities – high level overview and planned engagement process
- ✓ EVs - overview of EVs strategy, future projection models and existing processes
- ✓ Infrastructure plans – capacity allocation and reservation
- ✓ Connections networking session

If you wish to attend and have not received the invitation, please contact:
wpdconnectionpolmids@westernpower.co.uk

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Progress on our ICE priorities for 2019/20

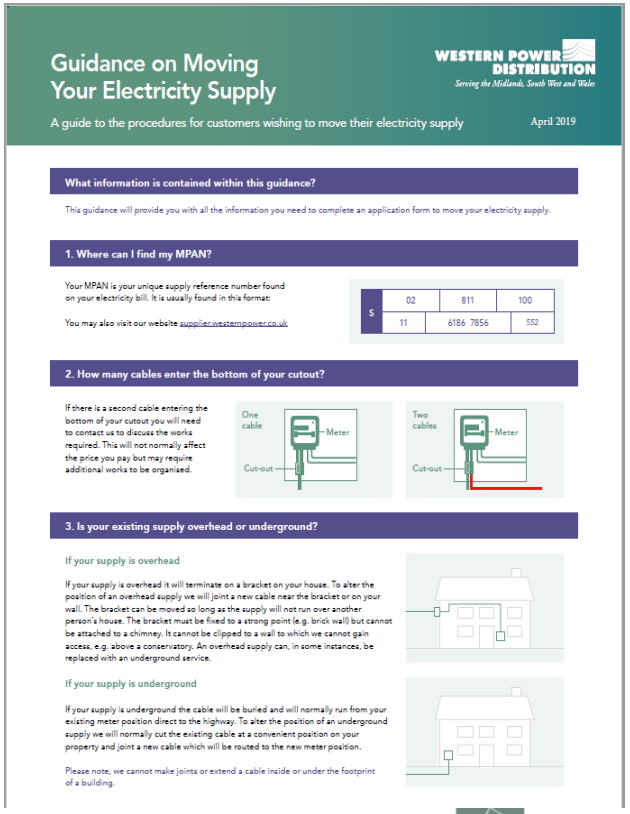
3.6 Provide a guidance document for new connections application forms

Feedback from stakeholders suggested a guidance document to help applicants complete the new connections application form would be useful

Builds on our guidance for moving electricity connections

The Guide will allow:

- ✓ Navigate the customer through the application process
- ✓ Clarifies information requirements
- ✓ Reduce the potential need to request further advice
- ✓ Reduce the potential for aborted applications



Guidance on Moving Your Electricity Supply

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A guide to the procedures for customers wishing to move their electricity supply

April 2019

What information is contained within this guidance?

This guidance will provide you with all the information you need to complete an application form to move your electricity supply.

1. Where can I find my MPAN?

Your MPAN is your unique supply reference number found on your electricity bill. It is usually found in this format:

You may also visit our website supplier.westernpower.co.uk

S	02	811	100
	11	6186 7856	552

2. How many cables enter the bottom of your cutout?

If there is a second cable entering the bottom of your cutout you will need to contact us to discuss the works required. This will not normally affect the price you pay but may require additional works to be organised.

3. Is your existing supply overhead or underground?

If your supply is overhead

If your supply is overhead it will terminate on a bracket on your house. To alter the position of an overhead supply we will joint a new cable near the bracket or on your wall. The bracket can be moved so long as the supply will not run over another person's house. The bracket must be fixed to a strong point (e.g. brick wall) but cannot be attached to a chimney. It cannot be clipped to a wall to which we cannot gain access, e.g. above a conservatory. An overhead supply can, in some instances, be replaced with an underground service.

If your supply is underground

If your supply is underground the cable will be buried and will normally run from your existing meter position direct to the highway. To alter the position of an underground supply we will normally cut the existing cable at a convenient position on your property and joint a new cable which will be routed to the new meter position.

Please note, we cannot make joints or extend a cable inside or under the footprint of a building.

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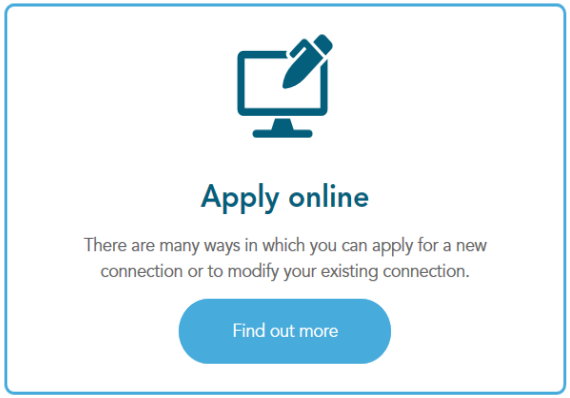
Progress on our ICE priorities for 2019/20

3.7 Improve online application process

A review of feedback from the online application survey has been completed and a number of improvements have already been implemented:



- ✓ Ability to request an increase or decrease of capacity via the website
- ✓ Additional free-format comments field
- ✓ Aligning the online application with offline versions

Further improvements will include:

- ✓ A PDF summary of responses to application questions to print/save
- ✓ Ability to link additional supporting documents
- ✓ Option to enter grid reference for sites with no allocated postcode
- ✓ Improved guidance throughout the step by step process

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Progress on our ICE priorities for 2019/20

3.9 Improve clarity of process when requesting a modification to a connection

We have examined our approach to requests to modify a connection

Such requests could include, changing the distributed energy resources (DER) technologies connected at a site and changes to operational regimes for example

We have committed to:

- ✓ Improve the information and guidance available
- ✓ Provide improved navigation on the WPD website connection pages for modifications
- ✓ Review on-line and off-line application forms to ensure they assist customers seeking modifications
- ✓ Develop shorter more relevant application forms to make requesting changes clearer and easier

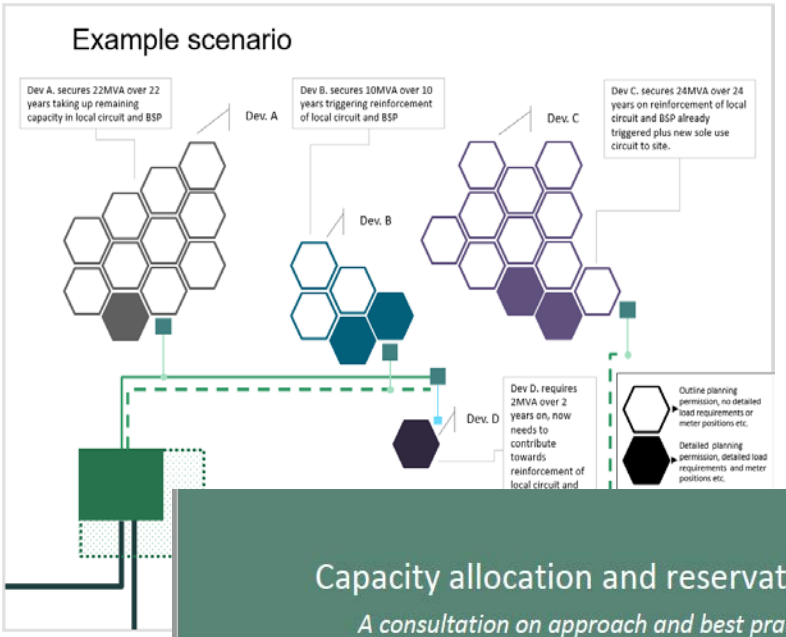
Progress on our ICE priorities for 2019/20

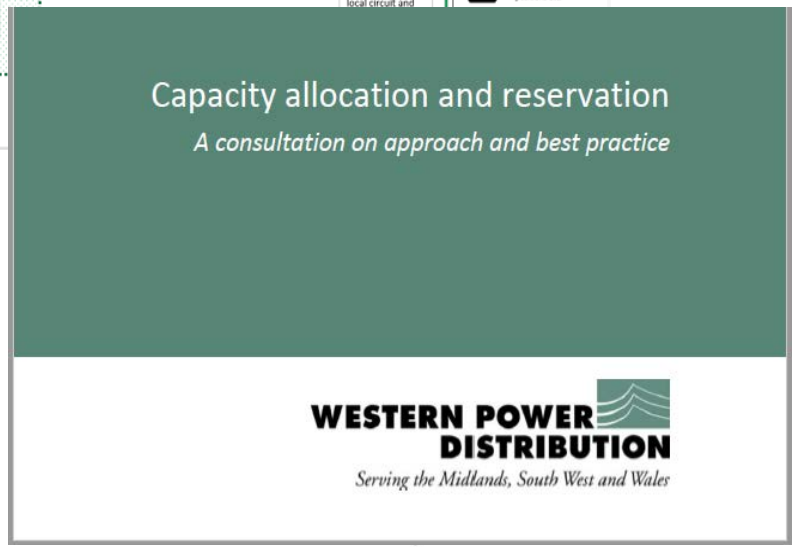
1.4 Implement policy regarding allocation and reservation of capacity

Our proposals are currently being reviewed internally in response to further feedback received from stakeholders. As a result, implementation has been temporarily delayed

We want to ensure a fair allocation of capacity

An update will be provided upon completion of this review





Mobile Planning App

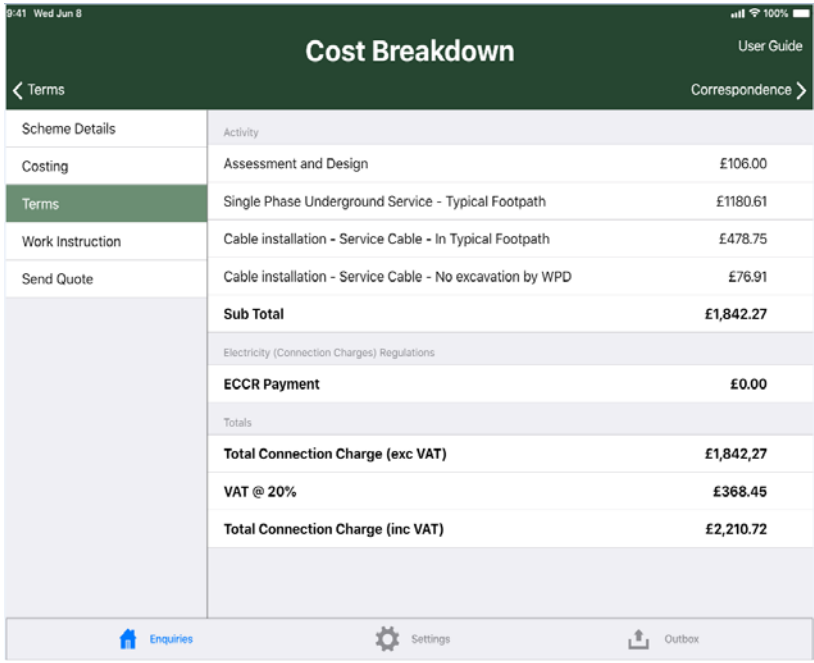
We set out a scope to improve customer service by allowing more on-site interaction and faster delivery of connection charges for high volume, small scale connections

To enable earlier implementation, we were able to break the project down into stages, with the first stage now live

This option is available to customers within the LVSSA and LVSSB Market

Segments, consisting of:

- Single phase single service connection
- Small project (1-4 domestic, one off small commercial)
- Single service alteration



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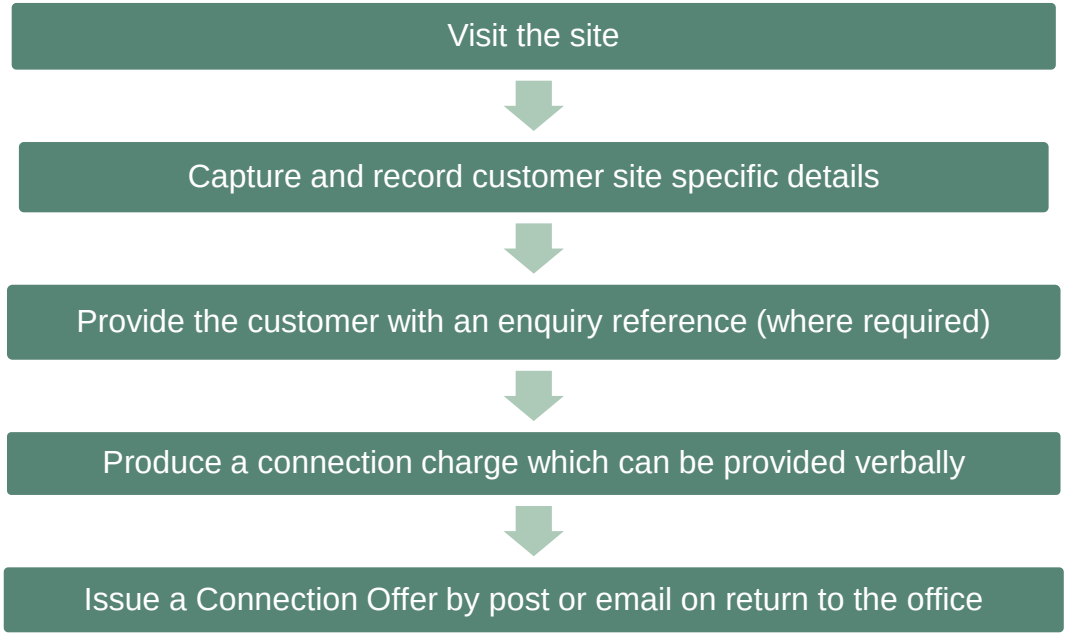
Mobile Planning App

Phase 1 enables our Network Services teams to:



We are aiming to implement Phase 2 by the end of the year which will enable our Network Services teams to:

- Email a copy of the Connection Offer before leaving site

Progress on our ICE priorities for 2019/20

Have your say!

If you have specific improvements you would like to see for the ongoing initiative, and you have not already discussed these with us, please let us know

wpdconnectionspolicy@westernpower.co.uk

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Mapping Update

Peter Young
Records Manager
Tuesday 29th October 2019

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INTRODUCTION

- Peter Young - WPD Records Manager
  Email – pyoung@westernpower.co.uk

- Dave Burnford - WPD Technical Mapping Team Manager
  Email – dburnford@westernpower.co.uk

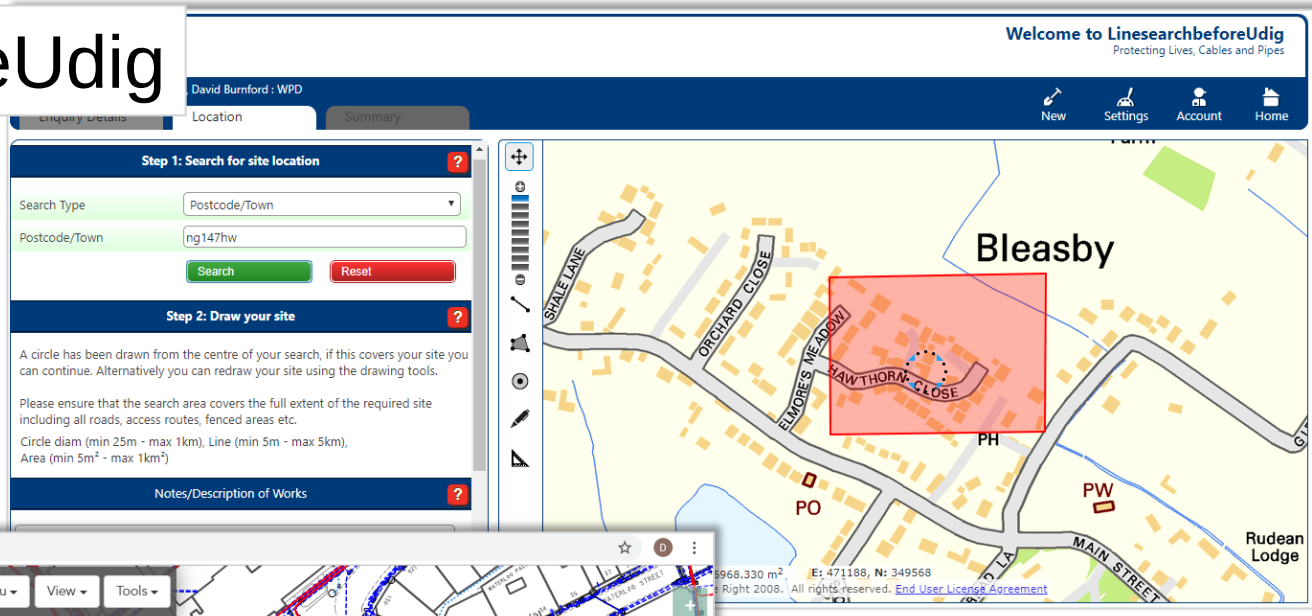
Recap CCSG Meeting June 2019

WPD Mapping Systems & Data

- Overview of current systems and functionality.
- What are we currently working on.
- Feedback

WPD CURRENT ONLINE ENQUIRY SYSTEMS

LinesearchbeforeUdig



WPD DataPortal2

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Brief Update on our GIS system

- November will see completion of the initial core phase i.e. migration of data from the old CAD system to GIS

- The secondary phase will then begin and over the next 12 months we will develop the tools and functionality to roll out to our main business, and enhance the service we offer our stakeholders

Feedback

- Possibility of more intelligent data provided for LV, also LV data export?

When we have migrated from the current CAD based Mapping system to our new more intelligent GIS product, we will have a platform on which we can enhance our LV data by adding attribution and connectivity. The WPD network coverage is considerable , hence it will not be a quick fix.
However, we plan to offer LV data export functionality through DataPortal 2, this is currently on the roadmap for Q4 2020.

- Print size availability?

We are governed by our agreement with OS which restricts our PDF print size to A3. We have however increased our plot scale to 1:10,000 recently to aid our Vegetation Management Contractors. These PDF's can be plotted at A1 if required, without losing too much print clarity.

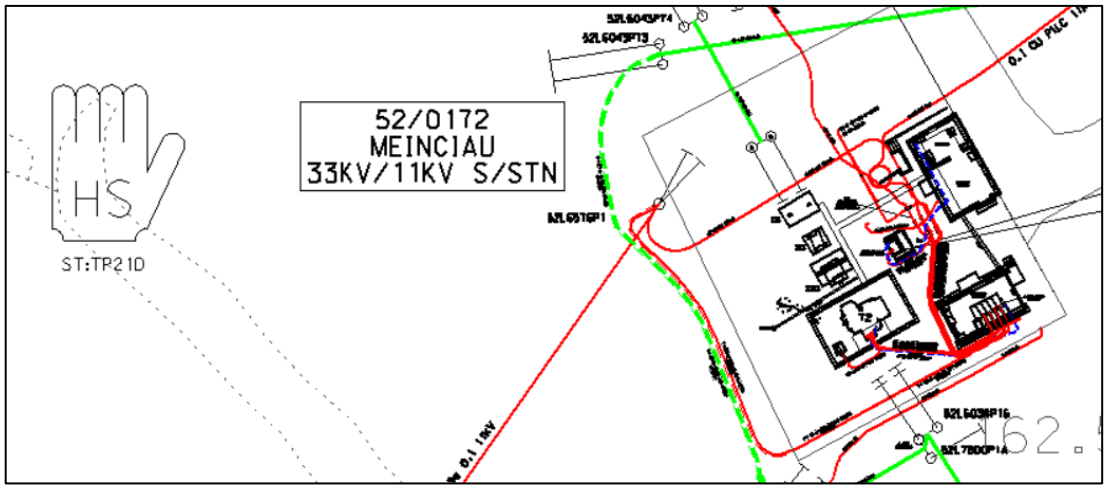
- Could the schematic line diagram have the ability to trace a feeder?

The current schematic line diagram displayed in DataPortal 2 and our in-house equivalent EMU is completely unattributed, and as a result it would be impossible to add trace functionality to it. We are currently looking at replicating this functionality in the new GIS system, so will continue to investigate if it is possible to add intelligence to this data.

Feedback

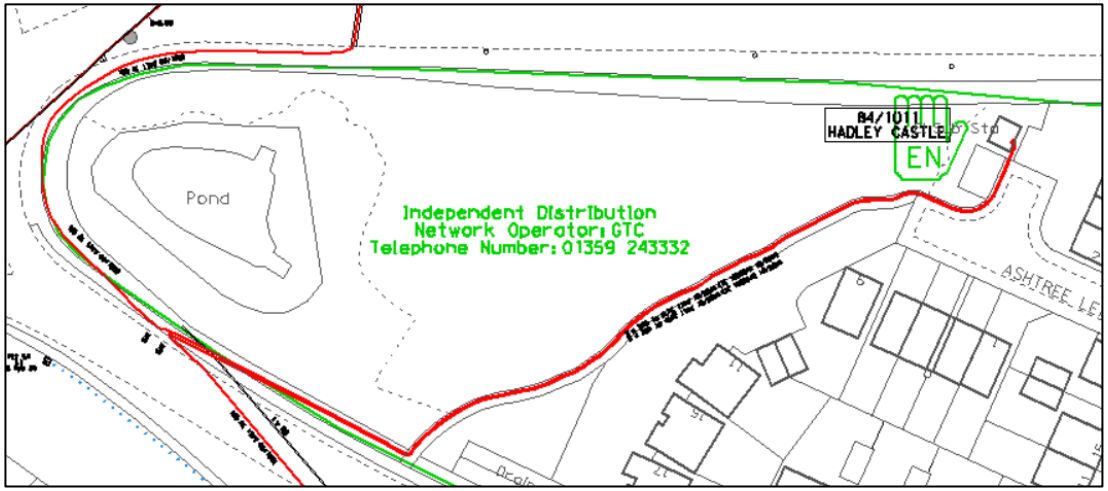
- Can WPD show Hot Sites in their GIS?

  Hot Substation Sites are denoted by a 'HS' hand symbol in GIS.



- GTC hold site boundary & design in GIS. Consider how this could be transferred to WPD electric office?

  WPD show warning boundaries and hands to denote IDNO sites in GIS. It is WPD policy to not show third party network, as we cannot control its currency.



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ICE Update

Richard Allcock

Connection Policy Engineer

Tuesday 29th October 2019

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ICE update

- Our 2019 ICE looking forward and looking back report was submitted in May
- Following their stakeholder consultation and further DNO engagement, Ofgem have concluded the ICE assessment process for 2018/19:
  - **All DNOs have met the minimum criteria** and have therefore 'passed' the ICE incentive.
- A number of overall concerns were raised by Ofgem:
  - *Lack of notification on ICE plans*
  - *Difficulties signing up for communication*
  - *Request for additional engagement methods*
  - *More quantitative outputs*
  - *Connections process*

- We will ensure that our ICE activities address these concerns where issues raised with WPD.
- We are also seeking to collaborate with other DNOs on best practice.

ICE October update

- Our annual updated ICE report will be published an 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 will provide updates on new engagement activities
- The report will include progress updates on the ICE Workplan initiatives, out puts and measures along with the new initiatives we have added to the original workplan
- 4 New initiatives including:
  - Development of a trial to notify customers of planned outages for critical broadband telecoms infrastructure with unmetered supplies
  - Enhancing our DG Owner Operator portal to provide information on reasons why an outage is changed
  - Develop a published KPI pack with DGOO stakeholders providing measures of outage activity, timeliness and accuracy of notifications.

Preparing our 2020/21 ICE workplan

Identifying our stakeholders' priority areas for our 2020/21 ICE Workplan

- Our next ICE Workplan will be published in April 2020, therefore the assessment of stakeholder priorities is now required to ensure we can plan initiatives which will deliver stakeholder requirements.
- Our ongoing engagement is identifying a continued increased focus on future networks: DSO transition, flexibility, availability of network capacity, electric vehicles and interest in the changes which may be delivered by the Ofgem Significant Code Review (SCR) and Targeted Charging Review (TCR)
- We will be using our stakeholder engagement over the coming months and to identify priorities and actions. The CCSG is a key source for this as well as providing a sounding board for the priorities and initiatives we identify.

We are seeking CCSG member's views on the priorities which WPD should be focussing on to ensure we are undertaking the appropriate initiatives to deliver for our stakeholders

Preparing our 2020/21 ICE workplan

CCSG priorities

- A recap of our **2019/20** ICE priorities:

ICE Priority	Summary
Transition to DSO	Continue to quickly transition to become a DSO, deliver tangible services and opportunities for customers to input and benefit from. Actively engage stakeholders our DSO plans and seek input into how we can best deliver new services.
Availability of Information	Continue to make improvements to the range and quality of information provided to customers to support their connection requirement and planning. Continue to improve assistance to customers at application and post-acceptance of offer and to those wanting to modify their connection.
Network capacity allocation and reservation	Continue to improve the engagement collaboration with stakeholders on capacity forecasting and planning. Deliver improvements to the processes for the allocation and reservation of network capacity for connections
Competition in Connections	Improve the consistency in approach where customers wish to vary their schemes. Update information available for major connection designs
Low Carbon Technology	Facilitate the rollout of EVs with continued focused engagement for EV stakeholders, and develop guidance, policies and services to support this.
Community Energy	Continue to engage community stakeholders to support them in the transition to a smart and flexible network
Assessment & Design fees	Work with industry to provide improved clarity in the application of fees.

Overarching commitments which remain a focus throughout the development of connection service improvements:
Improving customer service - which applies across the board with our ICE initiatives
Improving consistency - this is a key consideration in the way we develop and implement initiatives

Preparing our 2020/21 ICE workplan

CCSG priorities

- Which priorities are still important to you?
- Are their new priorities which have become important to you?
- Are their any specific improvement actions you would want WPD to focus on?
- Is their any best practice undertaken by other DNOs which WPD should consider?

Please include your comments and suggestions on the feedback form provided

ICE next steps

- WPD will publish and submit an update on our 2018/19 ICE Workplan at the end of October
- At the February CCSG we will present the refined ICE priority areas and outline the initiatives for the next ICE workplan.

WPD Connections Workshop

- **Address**: Villa Park, Trinity Rd, Birmingham, B6 6HE
- **Date**: Wednesday 6th November 2019
- **Time**: Registration from 9.30am; Workshops **10am-2pm**; lunch 1pm
- Topics include:
  - RIIO-ED2
  - Electric Vehicles
  - Infrastructure schemes and large developments
- Opportunities for networking with industry colleagues

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Summary, Feedback & Next Steps

Richard Allcock

Connection Policy Engineer

Tuesday 29th October 2019

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Summary and next steps

- Issues
- Feedback captured from today
- Dates of next workshops – placeholders will be sent to members
- Topics for next workshop – do you have an requests?

Dates	topics
February	- Transparency of information in connection offers for PSD schemes
June	TBC
October	TBC

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