



Western Power Distribution - DG Owner Operator Forum

30 November 2021



[Our Customer Engagement Group](#)

[Connection Customer Engagement](#)

[Customer Panel](#)

Future Forum Meeting Dates



30 November 2021 (webinar)

If you or a colleague would like to join the forum then please contact Olly at Regen on: ofrankland@regen.co.uk for further details.

Attendance is free of charge and limited to MW scale owner/operators of DG assets.

Distributed Generation Owner Operator Forum

We hold a regular forum aimed at owners and operators of MW scale renewables connected to WPD's network. Working in partnership with Regen, these meetings provide an opportunity for DG owners and operators to engage with us, contribute towards improved processes and tackle arising issues.

Previous areas of discussion have included:

- WPD work to address grid constraints;
- Improving communication with generators on outages and constraints; and
- Potential approaches for forecasting and mitigating outages.

Meeting notes & slides from previous events

2021



[3 August presentation slides](#)

PDF / 3 MiB



[3 August notes](#)

PDF / 263 KiB



[28 April presentation slides](#)

PDF / 1 MiB



**Western Power
Distribution
Generation Portal**

[Click here for our Post Energisation Document](#)

This leaflet has been designed to try to offer you a synoptic review of some areas you may wish to investigate further with us and that may pop into your mind once you have a connection to your site.

Remember, we are here to help you generate onto our network, so please take a moment to familiarise yourself with the document's contents, and for those of you who are familiar with WPD, hopefully it will be a handy aid memoir on who to contact within our organisation.

Log in

You are being granted access to Western Power Distribution's Generation Portal. You understand that your access to this website is subject to the website's [Terms of Use](#) and [Privacy Policy](#).

User name:

Password:

PLEASE NOTE, THESE TERMS AND CONDITIONS GOVERN THE USE OF OUR GENERATOR PORTAL. BY CLICKING ON THE "ACCEPT" BUTTON BELOW OR USING THE GENERATOR PORTAL, YOU AGREE TO THESE TERMS AND CONDITIONS, WHICH WILL BIND YOU. IF YOU DO NOT AGREE TO THESE TERMS AND CONDITIONS, YOU MAY NOT USE THE GENERATOR PORTAL AND YOU AGREE THAT YOU WILL CEASE TO DO SO IMMEDIATELY.

WPD Post-energisation Guide

WPD operate a Distributed Generation Online Portal where users can view upcoming outages/export constraints and access general background information for each generator site.

This information is focussed, at the moment, on generator connections at 33kV, 66kV and 132kV. Please visit generation.westernpower.co.uk to access the portal. To sign up to the portal, or if any contact details (and gate access codes etc.) have changed for a generator site within our area please contact; wpdswestwalesgen@westernpower.co.uk.

Please ensure WPD have up to date contact details for your generation site.

Timescales for Planned Outages

WPD receive notification from National Grid of Year Ahead (April through until end of March) planned outages on the England & Wales Transmission System at the end of Week 49 every year. WPD then begin planning the Year Ahead work on our Distribution System. All outages (including National Grid outages) are entered into WPDs Outage Management

Export Constraints/ Interruption to Supply

For certain system planned outages WPD might apply a full or partial export constraint to a generation site. In some cases, the generation connection may be within the isolated section where WPD wishes to undertake work.

In such cases, the generator site will be temporarily disconnected from

Outage Notification

DG customers can access any upcoming planned outages via the Generation Portal. A Four Week Report is also sent out by our Control Centre every Friday. This report details any export constraints/ interruptions to supply that a DG customer can expect at their generation site within the next four weeks.



Chair: Olly Frankland, project manager, Regen

13.00 Introduction, action review and objective setting from the chair and WPD

13.10 Improving industry and WPD communications to address outages/constraints

- Forum member feedback on communication
- Latest information regarding the generation portal and the recent issues
- Overview of upcoming planned outage plans

13.35 Data and digitisation update

Howard Thomas, data science analyst, Western Power Distribution

14.00 Break

14.10 Accelerated Loss of Mains Change Programme update

Andrew Akani, primary system design manager, Western Power Distribution

14.25 Discussion/AOB

15.00 Close

Improving industry and WPD communications to address outages and constraints

Gwyn Jones



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Data and Digitalisation

Background of the D&D Team



Who are we?

- A unified team of people working with data.
- Including data extraction, insight & manipulation as well as solution implementation



What do we do?

- Data extraction, translation and loading.
- Improve existing data quality
- Create new processes and systems around data
- Share data with internal & external customers.

Why were we formed?

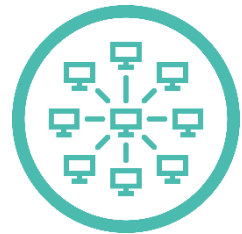
- A growing need to use data to drive operational decision
- Need to unify the approach
- Follow a shared Data and Digitalisation strategy



Our Core Principles



Improved data management



**Increased network insight
and operation**



Presumed open data



What Is Open Data?

Open Data

“Open data and content can be freely used, modified, and shared by anyone for any purpose”

Open Knowledge Foundation



WPD Connected Data Portal

Welcome to Western Power Distribution's Connected Data Portal

Search data

E.g. innovation



60

Datasets

6

Data Groups

Data Groups



Demand

This data group houses historic data and real time electricity demand.

[Find Out More](#)



Flexibility

The data sets contained here focus on Network Flexibility and zones.

[Find Out More](#)

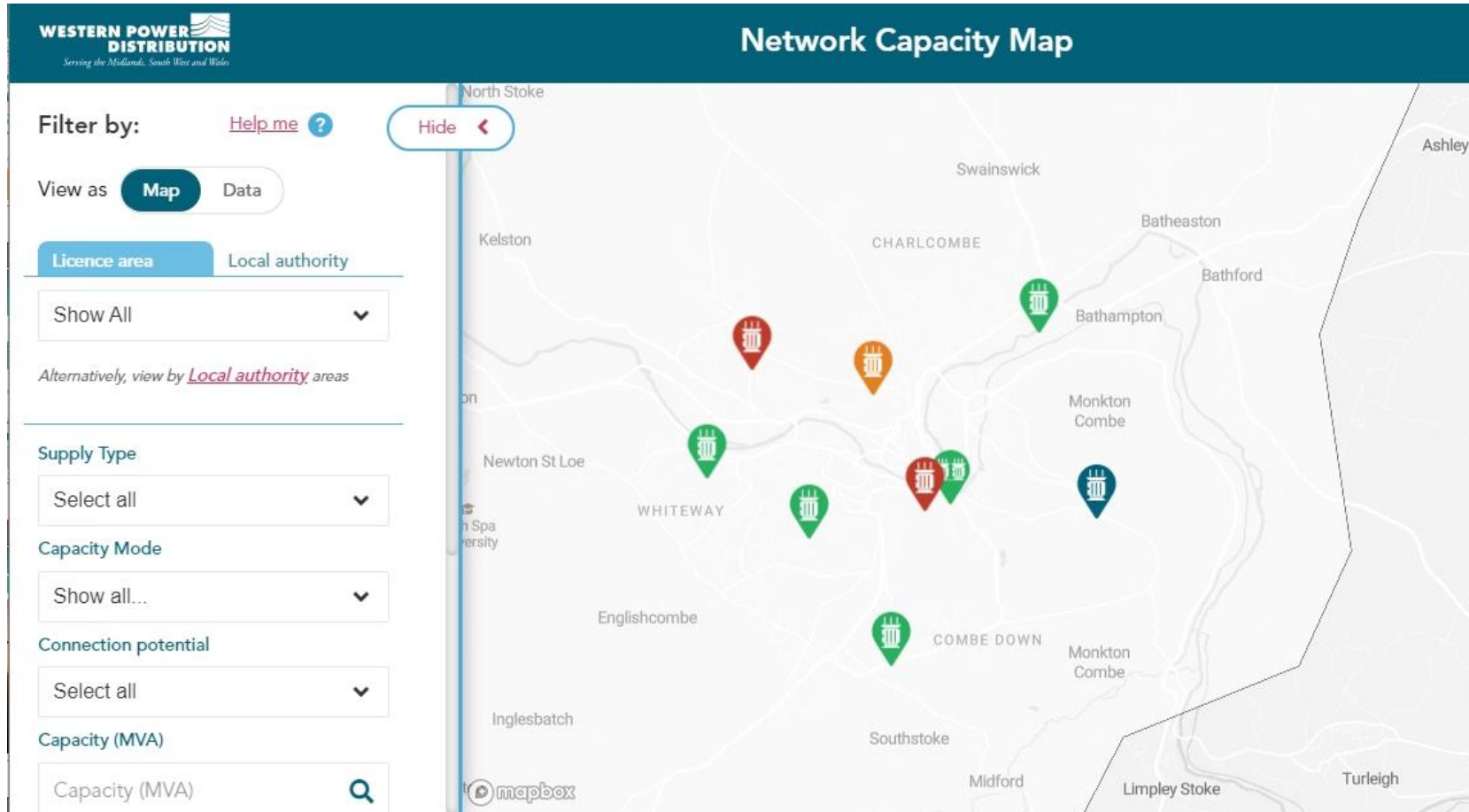


Future Energy Scenarios













Future Energy Scenarios represent a range of different, credible ways to decarbonise our energy system as we strive towards the 2050 target. FES has an important role to play in stimulating debate and helping shape the energy system of the future.

[Find Out More](#)

WPD Network Capacity Map

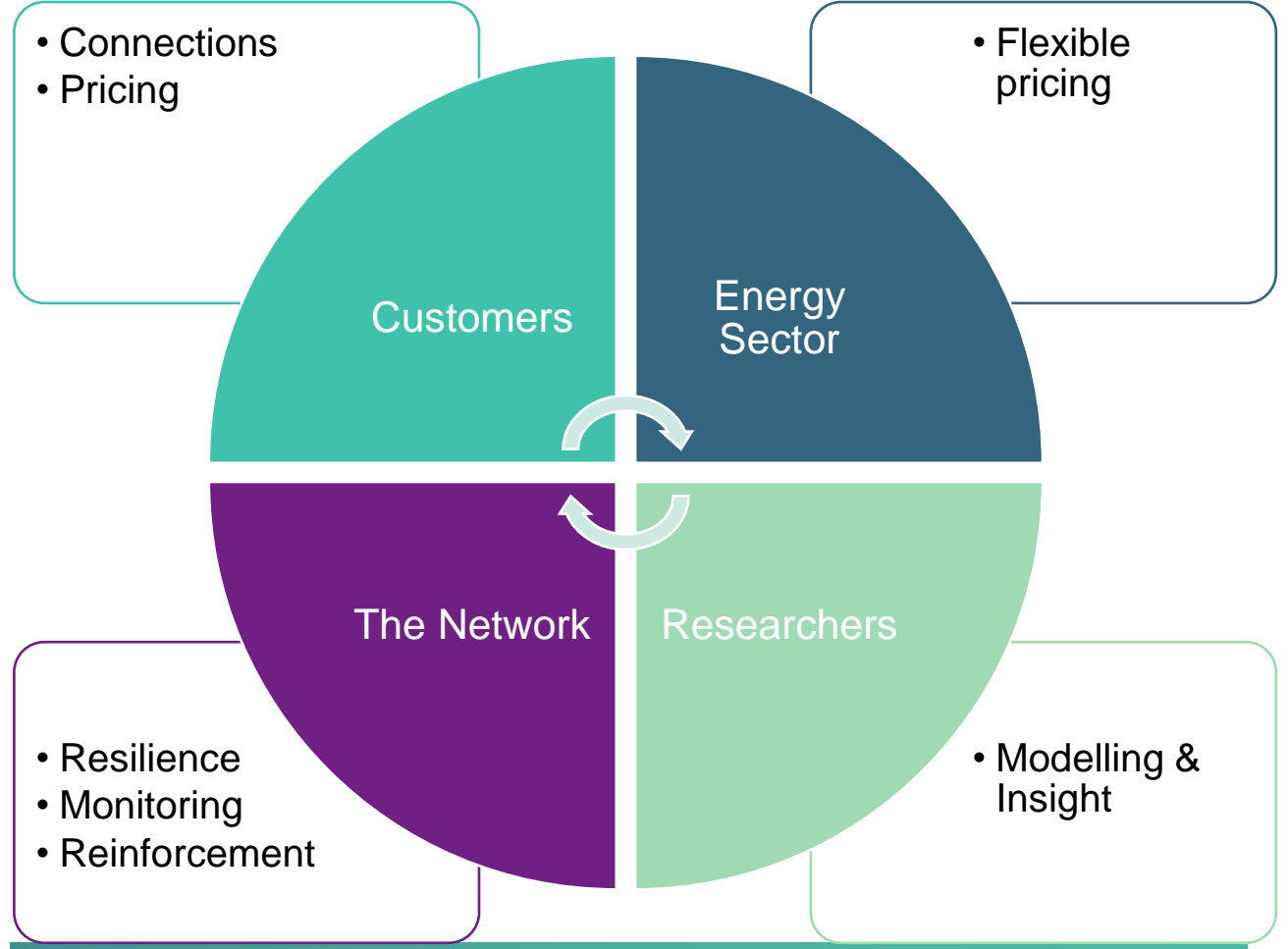
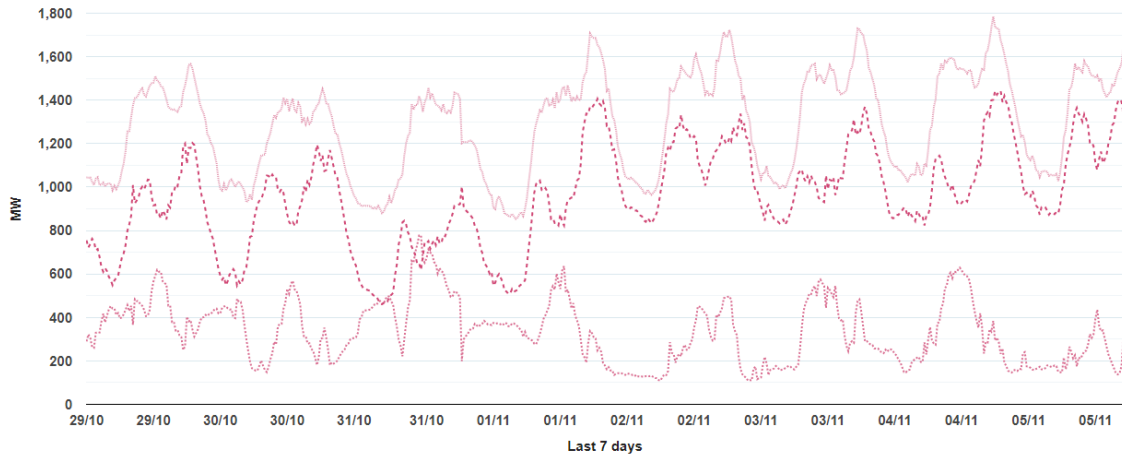


Why should our data be open

	Today	Tomorrow
Power generation structure	 <p>Large centralised power plants</p>	 <p>Many small energy generators</p>
Electricity market	 <p>Centralised</p>	 <p>Decentralised</p>
Transmission	 <p>Simple transmission structure</p>	 <p>Small-scale clusters, regional balance of supply</p>
Distribution		
Metering	 <p>Electro-mechanical meter</p>	 <p>Smart meter</p>
End consumers		



Who benefits



Is any data not suitable for being open?

Personally Identifiable Information

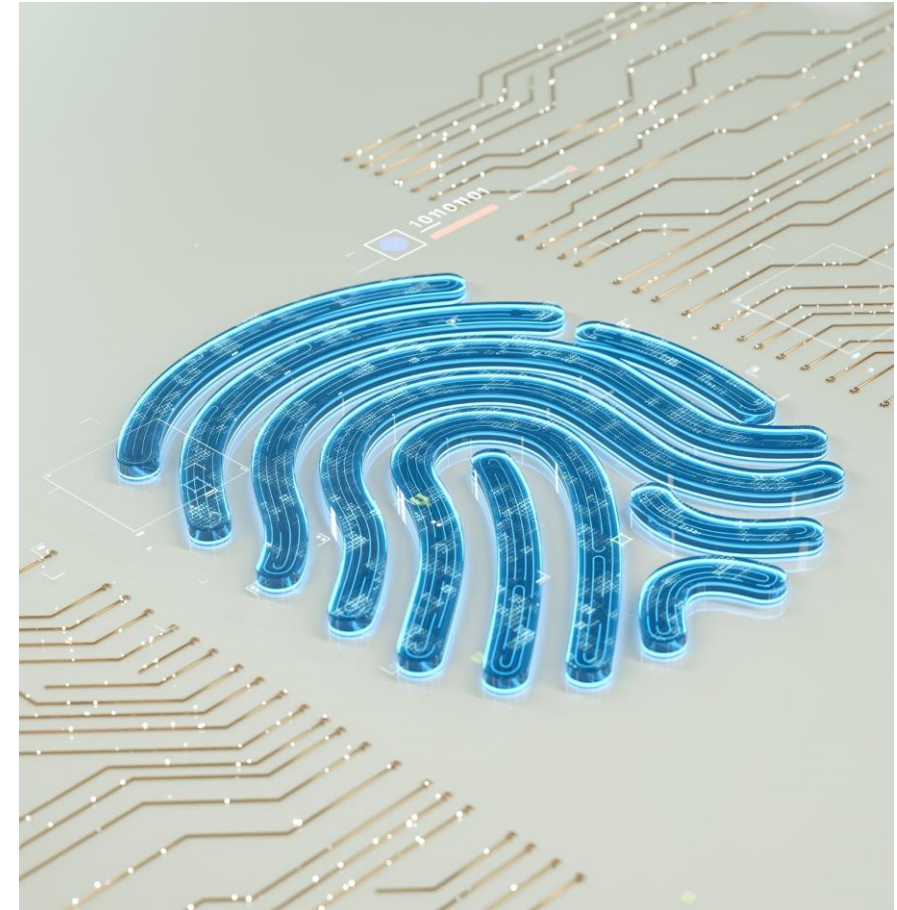
- Names, Addresses, PSR Status

Commercially Sensitive

- Financial, Contracts, Future Projects

Safety & Security

- Safety of our Physical & Digital Networks





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Accelerated Loss of Mains Change Programme update

Andrew Akani

Primary System Design Manager



Serving the Midlands, South West and Wales

ALoMCP Background

- The ALoMCP is a joint initiative with the NGENSO, Energy Networks Association, distribution network operators and independent distribution network operators.
- The ALoMCP is offering funding to non-domestic distributed generators that were connected before 1 February 2018 to upgrade their hardware in a move that will improve network resilience, and support wider initiatives helping meet the UK's net zero targets.
- Grants are available through quarterly application windows. Generators are encouraged to apply as soon as they can on the [registration portal](#) ahead of the final application deadline on 10 May 2022.
- By making them in the ALoMCP, owners can take advantage of financial support to carry out the work.



ALoMCP Background

- G59/3-3 published on 1 Feb 2018 to include new LOM settings:
 - Removed **Vector Shift** as Loss of Mains protection.
 - Increased **ROCOF settings** to 1Hz/s, 500ms time delay.
 - Retrospective for existing sites, implementation by **31st Aug 2022**.
 - Non-Domestic generators greater than 16A/phase (3.68kW single phase, 11.04kW three phase).
- Inverters may contain G59 settings
 - These settings also need to either be changed or disabled
 - ENA guidance on inverters <https://www.ena-eng.org/ALoMCP/mankb>



ALoMCP Background

- Incentive payment is **£4,000** + VAT per relay replacement* and **£1,500** + VAT (capped at £4,000) for settings changes/disablement of protection settings.
- Applies to G59 protection settings on relays and inverters on site.
- £500 + VAT per site if a Post-Work Sample Site Visit is required.
- Link to ENA webpage: <https://www.ena-eng.org/ALoMCP/>
- Recognised contractors list published <https://www.westernpower.co.uk/our-network/loss-of-mains>
- There is additional information and support for generators at www.futureproofyourpower.co.uk to help determine next steps at their site

** Applies to Synchronous Generation only*



ALoMCP Background

- Tapered payments are likely to be brought in
 - Current thinking is 80% in Q1 2022
 - 70% in Q2 2022
- Plenty of funding left – please apply!
- From 1st Sept 2022, all generators need to comply with the new settings. Enforcement actions may be placed on generators.
- Currently in Window 10



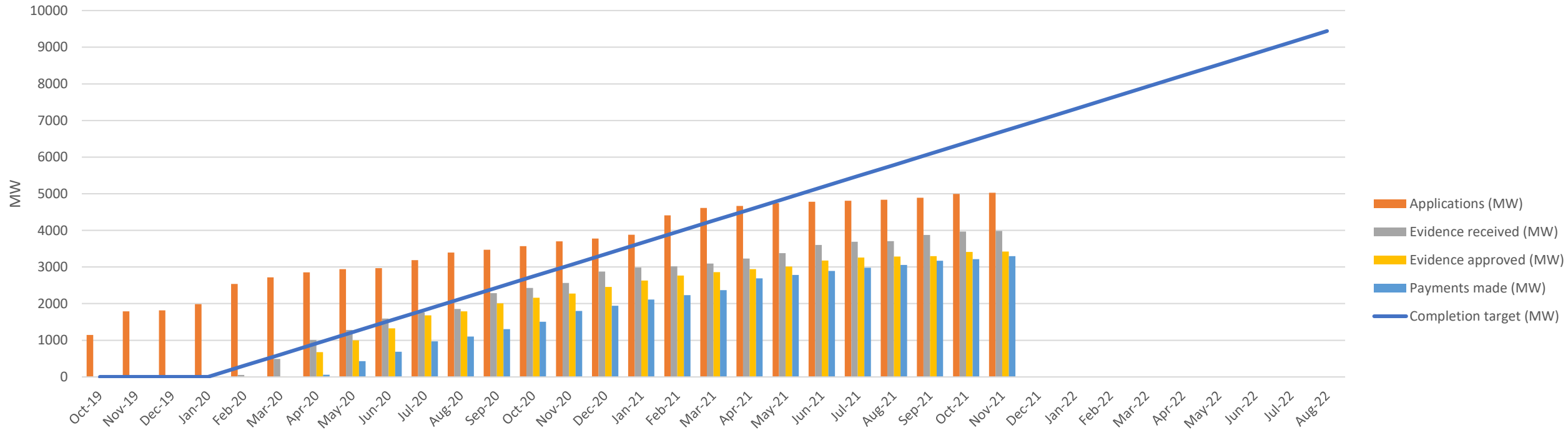
ALoMCP Progress Update

- 2,335 applications received (5.02GW) out of approx. 21,000 sites (approx. 8.6GW).
 - 1,747 sites completed works (evidence received 3.98GW).
 - 1,530 sites paid, over £4.80m.
 - 317+ sites have been selected for a virtual sample site visit. 260 Completed.
- Cost and risk to system operation is reducing as a result of changes through the programme.
- More engagement underway. Enforcement strategies being discussed
- Window 9 closed on 9th November 2021
- Window 10 is now open and close on 8th February 2022



ALoMCP Progress Update

ALOMCP Key Milestone Tracker (Capacity MW) - Data as at 12/11/2021



ALoMCP Customer Engagement

- Multiple attempts to make contact via direct mail.
- Contact through Supplier Channels.
- We are attempting to contact larger generating sites directly as these sites will provide most benefit to the programme – Challenge is finding relevant contact within organisations.
- National PR campaign is underway targeting specific industries and sectors using social media platforms and other media.
- Creation of ALoMC Programme landing page and self-serve tool to help guide all types of generating customer (www.futureproofyourpower.co.uk).



Compliance Outside ALoMCP

- There maybe sites not participating through the programme either due to already having achieved compliance in the past or choosing to not receive funding. **These Customers MUST notify the programme of their compliance:**
 - Customers are able to Self-Declare compliance via the ENA Portal.
 - Customers can also contact ALoMCP mailbox to notify us of any G59/3 compliance outside of the programme.
- 1.86GW of Compliance Outside of the Programme declared so far
- Evidence requirements to confirm compliance consist of:
 - Completed Compliance Declaration Form provided by DNO
 - G59/3 Test sheets for all generation that shows the compliant settings, or
 - Manufacturer Data sheet/Picture of device model (to confirm compliance at inverters).



ALoMCP Contact Details

- WPD ALoMCP Contact details:

- Email: ALOMCP@westernpower.co.uk

- Telephone: 0800 0328880

- **Please contact us with any queries**

Any
questions?



westernpower.co.uk



Questions ?