



Western Power Distribution - DG Owner Operator Forum

28 April 2021

Our Engagement Groups

Our Customer Engagement Group

Connection Customer Engagement

Customer Panel

Future Forum Meeting

28 April 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



28 January notes PDF / 638 KiB





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:	



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

13.15 Improving industry and WPD communications to address outages/constraints

- Update on the impact of COVID-19 on outages and communication
- Forum member feedback on communication
- Report back from single point of contact
- Latest information regarding the outage portal
- Update on WPD work to merge and minimise length of planned outages
- Update on WPD KPI's
- Overview of upcoming planned outage plans

14.00 Break

14.10 Accelerated Loss of Mains Change Programme and Active Network Management update

Peter Aston, primary system design manager, Western Power Distribution

14.50 AOB

15.00 Close

WPD Outage Plan / Merging of Outages



WPD 132/33kV Outage Plan for 2021/22 now complete.

- All planned NGC outages from Week 49 report now in WPDs Outage Management System.
- WPD planned 132kV / 33kV outages that affect DG customers reflected on DG Portal.
- Each outage planner has the the task of coordinating / merging outages where possible.
- DG customers can also contact WPD to let us know when they would like to do planned maintenance at their sites. We can then inform local area to see if we have any works to complete on the circuit in question. If yes, the outages can then be merged into one single outage, therefore reducing the impact on DG sites.

WPD Control Centre - Outage Planning South West and South Wales				
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WPD 11kV Outages

- Currently not on WPDs OMS due to number of 11kV circuits / outages on our network.
- Dealt with by WPD Control Rooms on a day to day basis.
- Currently no plans to adopt same process of 132/33kV outages.
- Any queries regarding 11kV outages should go to the local area person undertaking the work.





DG Support Assistant Role



- The role of WPD DG Support Assistant is being disseminated as of Tuesday 4th May 2021.
- Role being split between WPD Control Room Assistants (Cardiff Control Room & Pegasus Control Room) and Outage Planners, who will all have access to the below email inboxes.
- Going forward, please can all correspondence to be sent to relevant Generation inbox;
 - WPD, Generators East Mids <u>wpdeastmidgen@westernpower.co.uk</u>
 - WPD, Generators West Mids <u>wpdwestmidgen@westernpower.co.uk</u>
 - WPD, Generators South West & Wales wpdswestwalesgen@westernpower.co.uk



WPD Control ICE Commitments 2020



• All achieved by Quarter 4 – December 2020.

Stakeholder feedback	Our action	Measures of success	Connection areas	Status
Publish a guidance document on the information and service provided post energisation of DG, with particular regard to outage planning.	To publish a DG post energisation guidance document providing information including WPD process for outages and constraints and to communicate to the stakeholders using the DGOO workshops and the DG webpages on the WPD website.	Stakeholder Feedback. Webpages hits.	DMD DG UMS	Complete - Q1 March 2020

Stakeholder feedback	Our action	Measures of success	Connection areas	Status
Develop information and guidance for DG customers to promote the ability to approach WPD to assess options to enhance their DG connection arrangements in order to reduce curtailment and the impact of planned outages.	Develop information and guidance for DG customers to promote the ability to approach WPD to assess options to enhance their DG connection arrangements in order to reduce curtailment and the impact of planned outages.	Stakeholder feedback. Positive feedback.	DMD DG UMS	Complete - Q1 March 2020



WPD Control ICE Commitments 2020



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Stakeholder feedback	Our action	Measures of success	Connection areas	Status
Enhance DGOO portal to be able to record and communicate reasons for changes to planned outages.	Enhance DGOO portal to be able to record and communicate reasons for changes to planned outages.	Stakeholder feedback. Positive feedback.	DMD DG UMS	IN PROGRESS ICE 2020/21 Plan NEW Number 22 - Q3 Sept 2020



REQUEST FOR EMAIL NOTIFICATIONS

• Discussion at January 2021 DG forum regarding the possibility of a notification / ping system that would send an instant email informing site of changes to 'significant outages'.

1. What would you consider a 'sign	nificant outage'?
over 3 days	(4) 20%
over 5 days	(13) 65%
over 10 days	(3) 15%
over 15 days	(0) 0%
higher	(0) 0%

- WPD working with our Web Developers to introduce a new notification system for every time a planned outage is added / changed / updated in our OMS.
- Initial thoughts are to introduce this for all 132/66/33kV outages, regardless of duration / work involved.
- Email addresses will need to be kept up to date for this to be successful.
- ICE Plan 2021 Implementation Date = End of June 2021

Accelerated Loss of Mains Change Programme update

Peter Aston, Primary System Design Manager









WPD business plan

- •Another round of consultation closed 25th April
- •We have incorporated many items of feedback into the plan
- **•**Total investment of around £6 billion in the network
- •We are moving towards Net Zero as a company in 2028
- •First submission to Ofgem is on 1st July







NGESO – ODFM

ODFM – Optional Downward Flexibility Management

- **Launched for summer 2020 as a temporary service to manage low demand from Covid-19**
- •4.7GW were contracted
- It was used on five occasions during summer 2020 and helped to prevent emergency disconnection of embedded generation.
- •Will be re-established for summer 2021 to help if low demand scenarios occur again
- Not to be used in place of other existing commercial services
- •To end 31 Oct 2021
- •Open to existing and new providers submit from 12th April 2021

•More information: <u>https://data.nationalgrideso.com/ancillary-services/optional-downward-flexibility-management-odfm1</u>







NGESO – GC0147 Last resort disconnection

GC0147 – Last resort disconnection of embedded generation – enduring

•Current grid code wording allows for emergency disconnection of demand, but is unclear on embedded generation.

•GC0143 was urgently implemented 7 May 2020 up to 25 October 2020 due to low demand from COVID-19, to provide emergency last resort disconnection of embedded generation.

- **•GC0147** was proposed in July 2020 as an enduring solution.
- •Final report was issued 6 April 2021 and implementation is 30 April 2021

•The general requirement is for the ESO to be able to have emergency control embedded generators during periods of low demand, once all other BM or commercial actions have been used.

•NGESO will instruct the DNOs to disconnect embedded generation under emergency conditions.

•More information: <u>https://www.nationalgrideso.com/industry-information/codes/grid-code-</u>

old/modifications/gc0147-last-resort-disconnection-embedded







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 31 Aug 2022. Everything greater than 16A/phase (3.68kW single phase, 11.04kW three phase).

Payment is up to £4000 per site for settings change/disabling, or £4000 per relay for a relay change

•Applies to relays and inverters

Link to ENA webpage: <u>https://www.ena-eng.org/ALoMCP/</u>

Recognised contractors list published <u>https://www.westernpower.co.uk/our-network/loss-of-mains</u>





Inverters

- Inverters may contain G59 settings
- •These settings need to either be changed or disabled
- •ENA guidance on inverters <u>https://www.ena-eng.org/ALoMCP/mankb</u>







Tapered payments

Tapered payments are likely to be brought in

•Current thinking is 80% in Q1 2022, 70% in Q2 2022







Progress

- •1955 applications received (4.72GW) out of approx. 21,000 sites (about 8.6GW)
- •1397 sites completed works (evidence received)
- 1137 sites paid, over £3.57m
- **•178** sites have had a virtual sample site visit
- •There are starting to be positive impacts for NGESO, reducing cost and risk to system operation
- More engagement underway
- Window 7 closes 11th May
- 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.





Fast track – closes 28/05/21

- •An additional £5000 payment per site
- •Make the required changes within 4 weeks
- Specific criteria for the current scheme:

 Site capacity: >=500kW
 Existing Protection: ROCOF, up to and including 0.2Hz/s

 https://www.ena-eng.org/ALoMCP/

eng nationalgridESO	Home 🕹 Guest 🗸 😧 Assistance 🗸 🖾 Contact
ACTIONS	Welcome to the ENA's Accelerated Loss of Mains Change Programme (ALoMCP)
Register Accelerated Loss of Mains Fast Track Scheme 1: Criti	Fast Track Scheme 1: Critical NoCoF ALoMCP - Coronavirus Pandemic Response Minister Coronavirus Pandemic Response (Updated 17 th June 2020) The Energy Networks Association (ENA) represents the interests of all energy network companies in the UK. For more information about the ENA, please visit the corporate website. For more detail on the Accelerated Loss of Mains Change Programme, please click here. For a FAQ on technical issues, please click here. The proforma for submitting evidence of the changes made can be downloaded here. Registered users can login here. Unregistered users should register here. The first users at a generator company is colf registered but subcoguent users is at the
	t there are additional savings to overall system balancing costs in making
0	t tracked through the application process and are eligible for the additional acking Scheme can be found in the Payment Process Specification which is
Item	Description
Scheme becomes active on	29 June 2020
Сар	The Fast Track is open to 100 sites initially and the programme will review whether to extend this based upon market response and the ability of the supply chain to sustain it.
Criteria	 Site Registered Capacity: minimum 500 kW but less than 5MW Type of LoM protection: RoCoF Pre-change RoCoF settings: Up to and including 0.2Hz/s Lead time: Less than or equal to 4 weeks
Fast-tracking payment	£5000 (plus VAT) per site

Compliance

Compliance outside the programme

•There may be sites who will not be participating through the programme either due to already having achieved compliance in the past or choosing to not receive funding.

 Customers need to contact ALoMCP mailbox to notify us of any G59/3 compliance outside of the programme

•Customers to complete details on "Compliance Form" sent by DNO

Some form of evidence will be required to confirm compliance has been met, either:
 G59/3 Test sheets that show the compliant settings, or
 Manufacturer Data sheet/Picture of device model (to confirm compliance at inverters)

•This will allow us to log ALL compliance internally and also pass this information onto NGESO to adjust baseline assumptions of risk.





Contact WPD about the programme

- Email: <u>ALOMCP@westernpower.co.uk</u>
- Telephone: 0800 0328880







