Accelerated Loss of Mains Change Programme A note for local and community renewable energy generators



The Accelerated Loss of Mains Change Programme (ALoMCP) is an industry-wide project taking place across Great Britain.

There is an obligation to be compliant by 31 August 2022. This means that all applicable generators installed prior to February 2018 must either alter Loss of Mains (LoM) settings on existing equipment or replace equipment.

To encourage generators to make the Loss of Mains settings change required, some funding is available for early adopters.

The programme is run by the National Grid, Distribution Network Operators (DNOs), Independent Distribution Network Operators (IDNOs) and the Energy Networks Association.

The purpose of the programme is to update LoM protection for renewable electricity generators, like wind turbines, hydro schemes, and solar PV, to reduce the risk of needless tripping and subsequent loss of generation/income. The approach taken to achieve this aim is to relax the RoCoF (rate-of-change-of-frequency) limits on the grid.

What is Loss of Mains (LoM)?

Loss of Mains (LoM) is part of the/your generator grid interface protection and ensures that generators disconnect from the distribution system when there is a system event.

However, the historic LoM settings mean that in some instances generation disconnects unnecessarily resulting in both lost generation revenue and loss of generation support to the network, exacerbating the effect of the event. This is being rectified by the accelerated loss of mains change programme which applies to all generation that was connected under Engineering Recommendation (EREC) G59 before 1 February 2018. G59 connected renewable energy generators are those connected to the grid and generating more than 16 Amps per phase / 3.68kW per phase.

To implement the new LoM, the recommended process to follow has been outlined by the Energy Network Association and is reproduced in Figure 1.







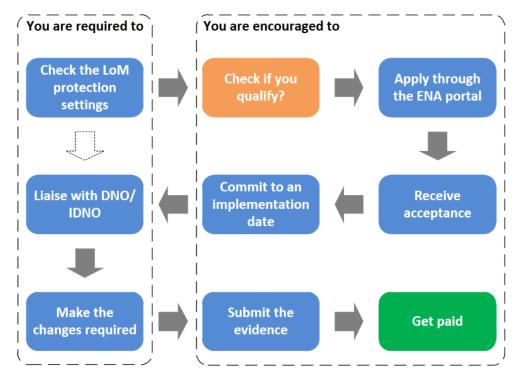


Figure 1: Recommended process to follow for implementing the new LoM protection settings (taken from ENA)

How to check your LoM settings

If you have just one interface protection device, you should be able to access the specific LoM setting via the electronic user interface to make the necessary changes. If you have several protection devices, you will need to identify which is the LoM protection device and use the electronic user interface.

If you need help, contact the installer or operation and maintenance provider for your generator. Alternatively, this is a list of companies who have offered their services.

How to apply for ALoMCP funding

To apply for payment for implementing the LoM protection settings, applications must be sent via the application portal on the Energy Networks Association website.

You can apply at any time, however, applications submitted within each window are likely to be progressed together according to the timetables in the sections in Figure 2. The earlier a generator project applies, the more likely it is that funding will be secured - funding is not guaranteed.

Note that windows 1 to 5 are now closed, and window 6 closes in February 2021. The ALoMCP has recently been extended to May 2022, with window 7 due to open shortly for renewable generation owners and followed by future windows.







Application Window	Opening Day	Closure Date
Window 1	02/10/2019	12/11/2019
Window 2	13/11/2019	11/02/2020
Window 3	12/02/2020	12/05/2020
Window 4	13/05/2020	11/08/2020
Window 5	12/08/2020	10/11/2020
Window 6	11/11/2020	09/02/2021
Window 7	10/02/2021	11/05/2021
Window 8	12/05/2021	10/08/2021
Window 9	11/08/2021	09/11/2021
Window 10	10/11/2021	08/02/2022
Window 11	09/02/2022	10/05/2022

Figure 2: ALoMCP application window opening and closure dates

To applicants who apply, the following amounts of funding are available:

- £4,000 to cover protection relay replacements
- £500 £1,500 to cover protection function/relay deactivation and/or protection settings change
- £500 to cover sample site visit (post work completion).

The amount of funding available also depends on the number of devices requiring updating.

Fast Track Process

The unprecedented low demand due to the COVID-19 lockdown resulted in an increase in the Loss of Mains risk and an increase in costs for managing renewable generators which have sensitive RoCoF protection settings. For this reason, the fast-track scheme was put in place at the end of June 2020 and is open to 100 sites at each stage. The scheme aims to incentivise eligible generators to make required Loss of Mains protection changes quickly over a 4-week period by offering an additional payment.

Owners of renewable generation sites that meet the following criteria are encouraged to apply via the Energy Networks Association website:

- Minimum generation capacity of 500 kW
- Type of Loss of Mains protection is RoCoF
- Sensitive protection settings up to and including 0.2Hz/s
- Completion of required changes over a 4-week period

An additional payment of £5,000 will be made available to each generator that meets the fast-track scheme criteria. Applications must be made on Energy Networks Association's application portal. Owners of generation sites are encouraged to apply before April 2021.







Who needs to do this?

The change made to EREC G59 in September 2019 requires all generators connected under EREC G59 to change their LoM protection settings to meet the new LoM protection settings. All generators have until 31 August 2022 to update their LoM protection settings.

It is the responsibility of the generator to comply with the Distribution Code and its associated document EREC G59, and therefore all generators must update their grid interface protection with the new LoM protection settings by September 2022. You should consult your DNO/IDNO (Independent DNO) before you facilitate and implement any changes required to meet the new LoM protection settings.

Any generation connected under EREC G59/G99 after 1 February 2018 will already comply with the new LoM protection settings, therefore, no changes are required, and generation connected under EREC G83 (up to 16A / 3.68kW per phase) is not required to make any LoM modifications.

COVID-19 precautions

DNOs and IDNOs have responded to the COVID-19 pandemic by undertaking remote witness testing and conducting sample site visits as applicable. Speak to your local DNO for more information.

Useful links

The <u>Energy Networks Association</u> has more details about the accelerated loss of mains programme on its website. It has also published an overview and a guidance note which contain more information.

- Information about the Accelerated Loss of Mains Change Programme (ALoMP)
- Overview
- Payment process specification

NB: This note was updated by Local Energy Scotland in January 2021 to help communities and rural businesses to take action. For definitive guidance, please refer to the Energy Networks Association website.





