

## Company Directive

### STANDARD TECHNIQUE: TP50J

#### Process for Assessing and Recognising Contractors for Retrospective Changes to G59 Loss of Mains Protection

##### Summary

This document specifies the process for assessing and recognising contractors involved in Accelerated Loss of Mains Change Programme.

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**Implementation Date:** January 2020

**Approved by**



Paul Jewell  
DSO Development Manager

**Date:**

2 January 2020

Target Staff Group	Planners, Primary System Designers and all staff involved with witnessing generator protection tests
Impact of Change	Amber – All staff within the target group shall read and follow the requirements of this document.
Planned Assurance checks	The author will check the G59 / G99 Recognised Contractor Database 6 months after the issue of this document

*All references to Western Power Distribution or WPD must be read as National Grid Electricity Distribution or NGED*

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## **IMPLEMENTATION PLAN**

### **Introduction**

This document specifies the process for assessing and recognising contractors involved in Accelerated Loss of Mains Change Programme.

### **Main Changes**

This is a new document.

### **Impact of Changes**

<b>Target Staff Group</b>	<b>Planners, Primary System Design staff and all staff involved in the construction, modification, maintenance and replacement of generation connections including those who witness G59 and / or G99 commissioning tests or who carry out assurance checks associated with the Accelerated Loss of Mains Change Programme (ALoMCP)</b>
<b>Impact of Change</b>	<b>Amber – Defines the process for recognising contractors involved with the Accelerated Loss of Mains Change Program</b>

### **Implementation Actions**

Managers responsible for staff involved within the Accelerated Loss of Mains Change Programme shall ensure their staff are aware of and follow the requirements of this Standard Technique.

### **Implementation Timetable**

This document shall be implemented on issue.

## REVISION HISTORY

Document Revision & Review Table		
Date	Comments	Author
January 2020	<ul style="list-style-type: none"><li>• New Document</li></ul>	Andy Hood

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## **1.0 INTRODUCTION**

- 1.1 [EREC G59](#) requires retrospective action to check and where necessary modify the loss of mains (LoM) protection associated with Power Generating Modules connected prior to the issue of [EREC G99](#). This work must be completed by 1<sup>st</sup> September 2022. A summary of these requirements is included in the background section of this document.

This Standard Technique specifies the process for assessing contractors that are employed by Generators to carry out these protection changes. Contractors that meet Western Power Distribution's requirements will be given a "recognised contractor" status that allows them to carry out this work without the need for Western Power Distribution to witness their EREC G59 commissioning tests.

## **2.0 POLICY**

### **2.1 General**

- 2.1.1 Under the requirements of the Accelerated Loss of Mains Change (ALoMCP) programme WPD are normally required to witness the Generator's EREC G59 commissioning tests where:

- an existing protection device (relay, inverter, controller or otherwise) is to be replaced by a new device, or;
- the loss of mains protection function of an existing protection device is to be disabled

Witnessing may be waived for the above scenarios where the works are being completed by a Recognised Contractor. Further guidance on recognised contractors is included in section 2.2.

- 2.1.2 The Generator must self-certify the changes where:

- only a protection setting is required, or;
- the requirement for witnessing testing has been waived due to the works being carried out by a Recognised Contractor

As part of the self-certification process the Generator or their contractor must submit a completed proforma to WPD for each site / change and provide supporting evidence that demonstrates that the work has been completed satisfactorily. This evidence should consist of:

- time stamped photographic evidence showing the LoM device and its settings before and after the changes, and;

- time stamped photographic evidence of any other relevant works on site (e.g. disconnected tripping circuits etc.) and;
- printouts, screenshots or other details of protection settings or setting files, and;
- records of tests undertaken and/or any associated test certificates

Further information on self-certification is included in the [ALoMCP Delivery Assurance Policy](#).

2.1.3 In addition, WPD must carry out sample site visits at a percentage of the sites where commissioning tests were not witnessed. Further guidance on these aspects, including the proportion of sites that must be visited, is also included in the ALoMCP Delivery Assurance Policy.

## 2.2 **Recognised Contractors**

2.2.1 A Recognised Contractor is deemed to be a person or company that:

- a) is competent to undertake generator protection commissioning and testing, and;
- b) provides evidence of their competence and their ability to maintain this level of competence to WPD, for example, by providing method statements, risk assessments, details of training and authorisation requirements / procedures etc. on request, and;
- c) has their G59 / G99 tests commissioning tests and procedures witnessed by an appropriate witnessing engineer, at least once, to WPD's satisfaction, and;
- d) accepts that WPD may audit their documentation / work at any time, on request.

A Recognised Contractor must be capable of carrying out all the tests and checks specified in Section 12.3 and 12.4 of EREC G59, including:

- Inspection of the installation to confirm compliance with BS7671 etc.
- Checking that suitable points of isolation have been provided
- Checking adequate safety labels have been provided
- Checking interlocking functions correctly (i.e. prevents out of synchronism closure of switches / circuit breakers etc.)
- Checking protection settings
- Completing connection, disconnection and synchronising functional tests.
- Completing protection functional tests
- Completing re-connection time delay
- Checking that the loss of supplies to tripping relays or protection relays results in either the Generating Units being disconnecting or an alarm being sent to a 24 hour staffed Control centre.
- Completing protection operation and protection stability tests for under-voltage, over-voltage, under-frequency, over-frequency and loss of main protection.

The ALoMCP Team within Primary System Design will maintain WPD's list of Recognised Contractors and hold copies of the evidence that has been provided including records of audits etc. This team will also notify NGESO of the names and company details (i.e. name and address of their contracting company) of each Recognised Contractor but will not share other information such as supporting evidence etc.

The Recognised Contractor Database is available from the following link:

[List of Recognised Contractors](#)

2.2.2 A contractor who wishes to be recognised by Western Power Distribution for the Accelerated Loss of Mains Change Programme shall fill in and submit an ALoMCP Recognised Contractor Application Form (see Appendix A) to the ALoMCP Team and provide the following information:

- Company Details (company name, address, telephone and mobile phone number/s, email address etc.)
- Accreditation and processes for training / authorising staff
- Details of relevant installation and commissioning experience including examples of G59 or G99 commissioning witnessed by WPD staff for each of their commissioning engineers
- Method statements and generic risk assessments for accessing sites and for testing / commissioning G59 protection

2.2.3 The Accelerated Loss of Mains Change Program (ALoMCP) Team will assess this information and discuss the application with WPD staff who have witnessed G59 or G99 commissioning tests carried out by the contractor. Where appropriate information has been provided, WPD have witnessed at least one set of G59 or G99 tests performed by the applicant and WPD are satisfied with the contractor's performance then the ALoMCP Team will allocate the contractor / company with a Recognised Contractor status.

2.2.4 The ALoMCP Team may withdraw the Recognised Contractor status from a contractor or company if, in WPD's view the contractor or company is not performing adequately or they are not capable of carrying out the tests checks specified in 2.2.1.

### **3.0 BACKGROUND INFORMATION**

3.1 On 1<sup>st</sup> September 2019 OFGEM published a decision letter agreeing to retrospective changes to loss of mains protection associated with parallel embedded generation. These changes have been incorporated into EREC 59 and, once completed, will allow the GB electricity network to be operated in such a way as to allow higher levels of Rate of Change of Frequency to occur during large changes in generation and demand. A copy of OFGEM's decision letter is provided below:

[DC0079 OFGEM Decision Letter](#)

**Application for Accelerated Loss of Mains Change Programme (ALoMCP) Recognised Contractor Status**

An application form is available from the following link:

[Recognised Contractor Application Form](#)



## **APPENDIX B**

### **SUPERSEDED DOCUMENTATION**

None.

## **APPENDIX C**

### **RECORD OF COMMENT DURING CONSULTATION**

A list of comments which were provided as part of the formal consultation are provided via the following link:

[Comments Table - ST: TP50J.xlsx](#)

## **APPENDIX D**

### **ASSOCIATED DOCUMENTATION**

EREC G59 Requirements for the connection of generation plant to the distribution systems of licensed distribution network operators

EREC G99 Requirements for the connection of generation equipment in parallel with public distribution networks on or after 27<sup>th</sup> April 2019

ALoMCP Delivery Assurance Policy

## **APPENDIX E**

### **KEY WORDS**

Loss of Mains, Rate of Change of Frequency, RoCoF, Vector Shift, ALoMCP, Generator, Generating, Generation, Storage.