

Grid Code Review Panel

Grid Code Requirement for Electronic System Warning Communication between NGET and Users Issue 1

Summary

1. This paper proposes a change to the Grid Code in relation to the notification and delivery of National Grid Electricity Transmission (NGET) system warning messages to Users. This is currently achieved through the existing National Grid Operational Broadcast System (OBS) which has become obsolete. This proposed change shall provide flexibility in upgrading the OBS to provide notification and delivery of system warning messages in line with current technology.
2. The proposed change relates to:
 - The existing required process to confirm NGET system warning messages via fax after possible notification by telephone.
 - The increase in flexibility in the notification and deliverability of warning messages so as to allow an alternative to fax.

Introduction

3. As National Electricity Transmission System Operator (NETSO), National Grid Electricity Transmission plc (NGET) is required to send messages concerning instructions to generators (and/or DNO's where applicable) for simultaneous tap change and target frequency along with other normal and emergency messages.
4. This paper proposes changes to the Grid Code to allow sufficient flexibility in modernising our technical ability in communication with Users to allow us to carry out our duties in accordance with the requirements of our transmission licence.

Summary of Current Grid Code Requirements

5. The Grid Code (OC7.4.8.3) places the following requirements on NGET and Users in respect of electronic data communication of National Electricity Transmission System Warning messages:

OC7.4.8.3

...

- (c) **National Electricity Transmission System Warnings** will be issued by fax, to the facsimile number(s) and locations agreed between **NGET** and **Users**, or by such electronic data transmission facilities as have been agreed. In the case of **Generators** with **Gensets** this will normally be at their **Trading Points** (if they have notified **NGET** that they have a **Trading Point**)
- (d) **Users** may at times be informed by telephone or other means of **National Electricity Transmission System Warnings** and in these circumstances confirmation will be sent to those **Users** so notified, by fax as soon as possible.

The Issue

6. Currently the installed OBS is at end of life, expensive support, with old hardware and obsolete data causing reluctance from users to use a system that has incidents of erroneous messages. The system currently uses a form of automatic telephone notification with a user triggered automatic facsimile response to receive the current message. The usage of confirmation via fax being deterministic in creation of an auditable trail of processed messages to Users. The required volume of faxes to all relevant parties has resulted in a bottleneck in the existing number of fax lines available at the Electricity National Control Centre (ENCC). This is highlighted at times of emergency in which the ENCC cannot effectively send messages using the existing system and revert to manual processes.
7. Current Grid Code provisions state in **OC7.4.8.3 (d)** that confirmation of the notified system warning message will be sent *only* by fax as soon as possible.

Proposed Solution

8. The required solution is therefore to create an improved communication system, that consists of a hosted service by a third party service provider. In particular, each user recipient may choose to receive either a fax or email (using an auditable link).
9. The existing Grid Code text in **OC7.4.8.3 (c)** and **OC7.4.8.3 (d)** may infer the primary form of communication as fax. The changes propose to remove any such assertion for Users to require the need to receive warning messages by fax.
10. The proposed changes are contained in the annex to this paper.

Implementation

11. We propose that the changes outlined in this paper will be forward looking and take effect from a fixed point in time (to be agreed).

Impact of OBS Replacement Project

12. Our current OBS system consists of old hardware and is out of support. An upgraded system, will allow increased efficiency and accuracy in the notification and availability of OBS messages to Users.

Way Forward

13. GCRP members are invited:
 - To consider the issue described in this paper.
 - To agree that National Grid should proceed to approve the proposed changes.

ANNEX: Proposed Changes to Grid Code Text

This annex contains the suggested changes to the Grid Code text that will give effect to the proposal contained within this paper.

Operating Code No. 7

Operational Liaison

Preparatory Action

OC7.4.8.3

- (c) **National Electricity Transmission System Warnings** will be made available by any such data transmission facilities as have been agreed to the locations agreed between NGET and Users. In the case of **Generators** with **Gensets** this will normally be at their **Trading Points** (if they have notified **NGET** that they have a **Trading Point**).

- (d) **Users** may at times be informed by telephone ~~or other means~~ of **National Electricity Transmission System Warnings** and in these circumstances confirmation will be sent to those **Users** so notified by any other such data transmission facilities as have been agreed as soon as possible.