

# Consultation Regarding Small Scale Generation Setting Schedule

11/01/2017

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1. Introduction .....	3
2. Purpose of Setting Schedule .....	3
3. Setting Schedule Content.....	3
4. Proposed Amendments to the Distribution Code .....	4
5. Next Steps.....	5

## 1. INTRODUCTION

- 1.1 The purpose of this consultation paper is to seek the views of stakeholders on the proposed Small Scale Generation Setting Schedule and accompanying amendments to the NI Distribution Code.
- 1.2 This Setting Schedule applies to Power Stations connected on or after 1<sup>st</sup> January 2010 with a registered capacity from 100kW to under 5MW.
- 1.3 This document has changed significantly since the previous draft was published for consultation. As a result it is not practical to highlight every amendment and so the version submitted here should be considered in its entirety.
- 1.4 This Setting Schedule provides additional technical clarity for SCADA and Reactive Power control requirements stated in the Distribution Code.
- 1.5 A copy of the proposed Setting Schedule can be found on the NIE Networks website at:
- 1.6 <http://www.nienetworks.co.uk/documents/D-code/Proposed-Setting-Schedule-January-2017.aspx>

## 2. PURPOSE OF SETTING SCHEDULE

- 2.1 In accordance with its Electricity Distribution Licence<sup>1</sup>, Northern Ireland Electricity Networks Ltd is required to prepare a Distribution Code covering all material technical aspects relating to, connections to and operation & use of the Distribution System which is designed to permit the development, maintenance and operation of an efficient, co-ordinated and economical system for the distribution of electricity.
- 2.2 Within the Distribution Code the Connection Conditions (CC) specify the technical, design and certain operational criteria which must be complied with by the DNO and by Users whose Plant and Apparatus is connected to, or who are seeking a connection to, the Distribution System.
- 2.3 Connection Conditions 7 and 11 of the Distribution Code set out technical and compliance test criteria that Generators must comply with in respect of their Power Station. This Setting Schedule provides additional technical clarity on these requirements.
- 2.4 In the event of any inconsistency between the provisions of CC7 & CC11 and this Setting Schedule, the provisions of the Setting Schedule shall prevail.<sup>2</sup>

## 3. SETTING SCHEDULE CONTENT

- 3.1 NIE Networks would draw consultees attention to the following 4 key areas of the Setting Schedule for comments:
- 3.2 SCADA and RTU requirements set in Section 3

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<sup>1</sup> Condition 27, Paragraph 1 (March 2013)

<sup>2</sup>As per CC 6.3 D-Code 2015

- 3.3 Reactive power requirements set in Section 4 and in particular the requirements for complex sites in Section 4.3
- 3.4 Control Mode requirements set in Section 5 and in particular the speed of response requirements in Section 5.1
- 3.5 The Compliance Process detailed in Section 7

## 4. PROPOSED AMENDMENTS TO THE DISTRIBUTION CODE

4.1 In order to accommodate the Setting Schedule the following amendments to the Distribution Code are required. Sections of new or altered text have been highlighted in yellow.

### 4.2 Connection Condition 7.15.4

Additional signal formats to be defined in the Setting Schedules. Point (d) to be appended to CC 7.15.4

#### 4.2.1 Proposed

*The following signal formats shall be used where required by the particular connection:*

- a) *Analogue signals: 4 to 20 mA*
- b) *Digital pulse from the DNO: 24V dc*
- c) *Digital input from the User: 0 and 24V dc*
- d) *The use of any additional signal formats will be detailed in the appropriate Setting Schedules*

### 4.3 Definitions

In order to accommodate the Setting Schedule, the following amendments and additions are required to the set definitions in the Distribution Code

#### 4.3.1 Setting Schedule

Propose name change to SSG Setting Schedule and some rephrasing to improve clarity.

Existing

*Documents that, depending on the type and MW rating of the Power Station, set out in accordance with CC6.2 certain technical criteria that the Generator must comply with. For Power Stations of 5 MW or more, the applicable settings schedule is the "WFPS Settings Schedule". For Power Stations less than 5 MW, the applicable setting schedule is the "Setting Schedule for Power Stations less than 5 MW Exporting onto the NIE System".*

Proposed

*Documents that, depending on the type and MW rating of the Power Station, in accordance with CC6.2 set out certain technical criteria that the Generator must comply with. For Power Stations of 5 MW or more, the applicable Setting Schedule is the "WFPS Settings Schedule". For Power Stations less than 5 MW, the applicable setting schedule is the "SSG Setting Schedule".*

#### 4.3.2 Small Scale Generation

New definition to simplify references to power stations that fall under this proposed Setting Schedule

Proposed

*Small Scale Generation or SSG – A Power Station with a registered capacity from 100kW to under 5MW*

## 5. NEXT STEPS

- 5.1 The consultation period will run for 6 weeks. Stakeholders are invited to express a view on any aspect of the proposed Setting Schedule. In particular, NIE Networks welcomes responses from consultees with regards to the capability of Power Stations to meet the reactive power control requirements set out in Section 5.1 of the Setting Schedule. Responses should be received by NIE Networks by **1700 on 28th February 2016** and should be addressed to:

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Northern Ireland Electricity Networks  
120 Malone Road  
Belfast  
BT9 5HT  
Tel: 02890689145  
E-mail: [carl.hashim@nienetworks.co.uk](mailto:carl.hashim@nienetworks.co.uk)

- 5.2 During the consultation period, should any stakeholder have any specific queries on any aspect of this document, or on the proposed Distribution Code changes, or require a meeting with NIE Networks, they should contact Carl Hashim as set out above. Recognising that similar queries may be raised by separate stakeholders, NIE Networks may determine it is more appropriate to address these collectively by arranging a workshop. For unique queries regarding specific generator types or complex site arrangements, NIE Networks would be happy to engage with parties on an individual basis during the consultation period. NIE Networks intends to collate all responses received to this consultation as part of its report to the Utility Regulator.
- 5.3 Following the end of the consultation period and receipt of responses from consultees, NIE Networks will, in accordance with its Electricity Distribution Licence send to the Utility Regulator:

- 5.3.1 A report on the outcome of its review;
- 5.3.2 The proposed revisions to the Setting Schedule and Distribution Code which NIE Networks (having regard to the outcome of such review) reasonably thinks fit for the achievement of the objectives of the Distribution Code referred to in paragraph 1(b) of Condition 27 of NIE Networks' Licence; and
- 5.3.3 Any written representations or objections from any electricity undertakings (including any proposals by such persons for revisions to the Distribution Code not accepted by NIE Networks in the course of the review) arising during the consultation process and subsequently maintained.
- 5.3.4 Following the end of the consultation, NIE will collate the responses and discuss these with the Distribution Code Review Panel. Amendments to the proposed Setting Schedule will be made where appropriate and a final version issued for approval by the Utility Regulator.
- 5.4 As discussed at the Distribution Code Review Panel meeting of 13<sup>th</sup> December 2016, following the approval of this Setting Schedule NIE Networks will begin an enforcement process for new and existing power stations to ensure they fulfil their Distribution Code obligations and in particular the requirement for SCADA.