

DRAFT DEMAND RESPONSE SERVICES CODE - LEGAL TEXT

- 1) Blue Highlighted Text – Taken from GC0102 Code Administrator Consultation dated 12/01/2018 - Not relevant for DCC
- 2) Black – Relevant text for GC0104
- 3) Track change marked text – relevant changes for GC0104
- 4) Areas for Discussion / further work
- 5) Fomattting / items for inclusion

**DEMAND RESPONSE SERVICES CODE
(DRS)**

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PART I

DRSC.1 INTRODUCTION

DRSC.1.1 The **Demand Response Services Code** is concerned with the technical requirements of any **Demand Side Provider** who wishes to contract with **NGET** for the provision of **Commercial Ancillary Services**.

DRSC.1.2 **Commercial Ancillary Services** are non-mandatory services used by **NGET** in operating the **Total System**. They are provided by **Demand Response Providers** with payment being dealt with under the terms of the relevant agreement for the **Ancillary Service**.

DRSC.1.3 The commercial arrangements applicable to **Demand Side Providers** are defined in the relevant agreement with the technical and compliance requirements being defined in this **Demand Response Services Code**.

DRSC.1.4 The **Demand Response Code** applies only to **Demand Response Providers** who have contracted with **NGET** to provide **Ancillary Services**. This **Demand Response Services Code** does not apply to **EU Code Users** who have not entered into an agreement to provide **Ancillary Services**.

DRSC.1.5 For the avoidance of doubt, **EU Code Users** in respect of **Network Operators** and **Non Embedded Customers** are required to satisfy the compliance requirements specified in the **European Compliance Processes** (ECPs) and not those defined in section DRSC.11 of this code unless they are both an **EU Code User** and a **Demand Response Provider**.

DRSC.2 OBJECTIVE

The objectives of the **DRSC** are to:

DRSC.2.1 Detail the minimum technical, data submission and compliance requirements, **Demand Side Providers** are required to satisfy if they enter into an agreement for **Ancillary Services** with **NGET**.

DRSC.3 SCOPE

DRSC.3.1 The **DRSC** applies to **NGET** and to **Demand Response Providers** which in this **DRSC** means:

- (a) **Non Embedded Customers** who are defined as an **EU Code User** and have an agreement with **NGET** to provide **Ancillary Services**.
- (b) Any party who has entered into an agreement to provide **Ancillary Services** with **NGET** from a **Demand Facility**.

DRSC.3.2 The **DRSC** does not apply to:

- (a) Any **EU Code User** which does not have an agreement with **NGET** to provide **Ancillary Services**; or
- (b) **Network Operators** or
- (c) **GB Code Users**

DRSC.4 GENERAL PROVISIONS

DRSC.4.1 **Demand Response Providers** who have and agreement with **NGET** to provide **Ancillary Services** shall be based on the following categories.

Comment [A1]: Need to check - The Ancillary Services Agreement makes reference to User's is this correct.

Comment [A2]: Need to check applicability here with Legal

- (a) Controlled by instruction from **NGET**
 - (i) **Demand Response Active Power Control**
 - (ii) **Demand Response Reactive Power Control**
 - (iii) **Demand Response Transmission Constraint Management**
- (b) Automatic operation once the facility has been instructed into operation upon instruction from **NGET** pursuant to the terms of the **Ancillary Services** agreement.
 - (i) **Demand Response System Frequency Control**
 - (ii) **Demand Response Very Fast Active Power Control**

DRSC.4.2 **Demand Facilities** and **Closed Distribution Systems** may provide **Demand Response Services** to **NGET**. **Demand Response Providers** can offer **Demand Response Services** on an individual or collective basis and increase or decrease their **Demand** in accordance with the terms of their **Ancillary Services** agreement.

DRSC.4.3 The **Demand Response Services** specified in DRSC.4.1 are not exclusive and do not preclude **Demand Response Providers** from negotiating other services with **NGET**. These requirements would be pursuant to the terms of the **Ancillary Services** agreement.

DRSC.5 SPECIFIC PROVISIONS FOR DEMAND UNITS WITH DEMAND RESPONSE ACTIVE POWER CONTROL AND TRANSMISSION CONSTRAINT MANAGEMENT

DRSC.5.1 Where a **Demand Response Provider** (including **Demand Facilities** or **Closed Distribution Systems**) provide **Demand Response Active Power Control**, **Demand Response Reactive Power Control** or **Demand Response Transmission Constraint Management** to **NGET**, then the following requirements as detailed below shall apply. For the avoidance of doubt these requirements shall apply either individually or where it is not part of a **Demand Facility**, collectively as part of a **Demand** aggregation scheme through a **Demand Response Provider**. **Demand Response Providers** shall ensure that any of their **Plant and Apparatus** which provides the **Demand Response Services** as detailed in DRSC.5.1 shall:-

- (a) Be capable of satisfying the **Frequency** range requirements as specified in ECC.6.1.2.1.
- (b) Be capable of satisfying the voltage range requirements as specified in ECC.6.1.4.1.
- (c) Be capable of controlling the power consumption from the **Total System** in accordance with the terms of the **Ancillary Services** agreement.
- (d) Be capable of receiving instructions from **NGET** either directly or through a thirty party to modify their demand in accordance with the terms of the **Ancillary Services** agreement. The requirements for data transfer shall be in accordance with the requirements of **DRSC.5**. For **Demand Units** connected at a voltage level below 110kV, the same requirements shall apply as those applicable to **Demand Response Providers** who are not **Users**.
- (e) Be capable of adjusting its power consumption within a time period pursuant to the terms of the **Ancillary Services** agreement.
- (f) Be capable of full execution of an instruction issued by **NGET** to modify its power consumption in accordance with the requirements of the **Ancillary Services** agreement.

Comment [A3]: No reference is made here to Electrical Protection or replacement of the contribution (including Aggregated Demand facilities through a third party) as it is not believed these requirements are necessary. Issue for Workgroup discussion

(g) Be capable of further demand changes as instructed by **NGET**, prior to a previous instruction having been issued by **NGET** where specified in the **Ancillary Services** agreement. Any such instruction shall not exceed the normal safe operating conditions of the **Demand Response Providers Plant** and **Apparatus** which could cause such equipment to trip. Instructions to modify power consumption may have immediate or delayed effects but in any event would need to comply with the requirements of the Ancillary Services agreement.

(h) Notify **NGET** of any change in the available capacity in accordance with the relevant **Ancillary Services** agreement.

(i) Be capable of withstanding a rate of change of **System Frequency** of upto a maximum of 1Hz/s measured over a 500ms time frame.

Comment [A4]: Reference to third parties and replacement of their contribution has been removed - discuss with workgroup

DRSC.5.2 In addition to the requirements of DRSC.5.1, where a **Demand Response Provider** automatically modifies its **Demand** in response to changes in **System Frequency** or **System** voltage or both, **NGET** will previously have instructed the **Demand Response Provider** to switch these facilities into service in accordance with the terms of the **Ancillary Services** agreement. The ability for **NGET** to issue instructions, receive acknowledgement of those instructions and receive operational metering data (for example voltage, current, **Active Power** and **Reactive Power** signals) from the **Demand Response Provider** are defined in **DRSC.X**.

Comment [A5]: This requirement would also apply to demand units connected at a voltage level below 110kV to ensure consistency with Type A Power Generating Modules which are largely expected to be connected below 110kV.

DRSC.5.3 **Non Embedded Customers** shall be able to provide **Demand Response Reactive Power Control** by switching static compensation equipment into or out of service in accordance with the terms of the **Ancillary Services** agreement. This service could be provided by the **Non-Embedded Customer** either directly or indirectly as part of a demand aggregation scheme through a third party in response to an instruction from **NGET** and pursuant to the terms of the **Ancillary Services** agreement..

Comment [A6]: For connections below 110kV the same requirements would apply as any other provider who is not a CUSC party.

Comment [A7]: Do we publish these standards / requirements in the contracts and are they in the public domain.

Comment [A8]: Does this include Closed Distribution Systems

DRSC.6 SPECIFIC PROVISIONS FOR DEMAND UNITS WITH DEMAND RESPONSE FREQUENCY CONTROL

Comment [A9]: This is more or less a direct lift from DCC and does not make a huge amount of sense though I have attempted to convert it into some form of English. There appears to be a mix up between the provider who has the contract and the equipment providing the service but I think we can square this issue

DRSC.6.1 Where a **User** or **Demand Response Provider** (including **Demand Facilities** or **Closed Distribution Systems**) provide **Demand Response System Frequency Control** to **NGET**, then the following requirements as detailed below shall apply. For the avoidance of doubt these requirements shall apply either individually or where it is not part of a **Non-Embedded Customers System**, collectively as part of a **Demand** aggregation scheme through a **Demand Response Provider**. **Demand Response Providers** shall ensure that any of their **Plant and Apparatus** which provides the **Demand Response Services** as detailed in DRSC.6.1 shall:-

Comment [A10]: Check with Legal that this maps across correctly with DCC Art 29(2)

(a) Be capable of satisfying the **Frequency** range requirements as specified in ECC.6.1.2.1.

(b) Be capable of satisfying the voltage range requirements as specified in ECC.6.1.4.1.

(c) Be fitted with a deadband facility no greater than 0.03Hz unless otherwise specified in the **Ancillary Services** agreement. This requirement shall not apply to **Demand Side Providers** where only a **Non-Dynamic Frequency** response service is provided.

(d) Be capable of continuous operation. The envelop of operation of the **Demand Response System Frequency Control** shall be in accordance with the terms of the **Ancillary Services** agreement. For the avoidance of doubt a **Non-Dynamic Frequency response service** are required to be capable of repeating their capability within 5 minutes.

- (e) Be fitted with a control system which is capable of responding to changes in **System Frequency** outside the limits of 50Hz±**deadband** in accordance with the requirement of the **Ancillary Services** agreement.
- (f) Be equipped with a controller that measures the actual **System Frequency**. The refresh rate for this controller shall be no longer than 0.2 seconds.
- (g) Be able to detect a change in **System Frequency** of 0.01Hz. The **Demand** unit shall be capable of a rapid detection and response to changes in **System Frequency** which shall be pursuant to the terms of the **Ancillary Services** agreement. **An offset in the steady state measurement of Frequency shall be acceptable up to 0.05Hz.** **Frequency** measurements must be recorded at each site and must not be derived on an aggregated basis.

Comment [A11]: The words here probably need a bit of tidying up

DRSC.7 SPECIFIC PROVISIONS FOR DEMAND UNITS WITH DEMAND RESPONSE VERY FAST ACTIVE POWER CONTROL

DRSC.7.1 Where a **Demand Response Provider** provides **Demand Response Very Fast Active Power Control** to **NGET**, then the applicable requirements shall be pursuant to the terms of the **Ancillary Services** agreement which shall specify:-

- (a) The relationship between the change in **Active Power** and the rate of change of **System Frequency** over the **Demand** range of the **Demand Response Provider**.
- (b) The operating principles of the **Demand Response Very Fast Active Power Control** and associated performance parameters.
- (c) The response time of the **Demand Response Very Fast Active Power Control** which shall be no longer than 2 seconds from the inception of the **System Frequency** change.

DRSC.8 DATA REQUIRED BY NGET FROM DEMAND RESPONSE PROVIDERS

DRSC.8.1 All **Demand Response Providers** who have a contract with **NGET** to provide **Demand Response Services** are required to provide the data required pursuant to the terms of the **Ancillary Services** agreement.

DRSC.9 OPERATIONAL METERING REQUIREMENTS

DRSC.9.1 All **Demand Response Providers** who have a contract with **NGET** to provide **Demand Response Services** are required to supply operational metering data to **NGET** for the purposes of facilitating the **Demand Response Service**.

DRSC.9.2 In addition to the requirements of DRSC.9.1, **Demand Side Providers** are required to supply operational metering signals to **NGET** pursuant to the terms of the **Ancillary Services** agreement.

DRSC.10 INSTRUCTIONS ISSUED TO DEMAND RESPONSE PROVIDERS

DRSC.10.1 To enable **NGET** to instruct **Demand Response Providers** in the operational environment the requirement for **Demand Response Providers** shall be in accordance with the terms of the **Ancillary Services** agreement.

PART II

COMPLIANCE REQUIREMENTS FOR DEMAND RESPONSE SERVICES

DRSC.11 OPERATIONAL NOTIFICATION PROCEDURE

DRSC.11.1 General Provisions

DRSC.11.1.1 All **Demand Response Providers** who enter into an agreement with **NGET** to provide **Ancillary Services** are required to undertake a compliance process to ensure the **Demand Response Providers Plant and Apparatus** satisfies the requirements of the **Ancillary Services** agreement. For the avoidance of doubt, **Demand Response Providers** who are also **User's**, will also be required to satisfy the requirements of the applicable requirements of the **European Compliance Processes (ECP's)**.

DRSC.11.1.2 The operational notification procedure applicable to **Demand Response Providers** are split into the following categories dependent upon the following criteria.

- (a) **Demand Response Providers Plant and Apparatus** connected to the **Total System** at a nominal **System** voltage of 1000 Volts or less; or
- (b) **Demand Response Providers Plant and Apparatus** connected to the **Total System** at a nominal **System** voltage of greater than 1000 Volts.

DRSC.11.1.3 Each **Demand Response Provider**, shall confirm to **NGET** its ability to comply with the requirements of the **Ancillary Services** agreement.

DRSC.11.1.4 Each **Demand Response Provider** shall notify **NGET** of any change to its **Plant** or **Apparatus** such that it is no longer able to satisfy the conditions specified in the **Ancillary Services** agreement. Such changes shall be notified to **NGET** in accordance with the terms of the **Ancillary Services** agreement.

DRSC.11.2 Procedures for Demand Response Providers Plant and Apparatus connected to the Total System at a nominal System voltage of 1000 Volts or less

DRSC.11.2.1 The operational notification procedure for a **Demand Response Provider** whose **Plant** and **Apparatus** is connect to the **Total System** at a nominal **System** voltage of 1000 volts or less shall comprise an **Installation Document**.

DRSC.11.2.2 The format of the **Installation Document** shall take the format shown in **DRSC.A.1**. This shall not preclude the requirements for additional information or data which would be pursuant to the terms of the **Ancillary Services** agreement.

DRSC.11.2.3 **Demand Response Providers** should submit the data required in the **Installation Document** to **NGET**. **NGET** shall only initiate the **Demand Response Service** as defined in the **Ancillary Services** agreement once the required data has been submitted. The **Installation Document** shall differentiate between different types of connection and between different categories of **Demand Response Service**.

DRSC.11.2.4 **Demand Response Providers** are required to supply a separate **Installation Document** in

respect of each **Demand Unit**.

Comment [A12]: This could generate a lot of data / paperwork - is this the correct interpretation.

DRSC.11.2.5 As part of this operational notification process, **NGET** may aggregate the **Installation Documents** supplied by a **Demand Response Provider** in respect of their **Demand Units**.

DRSC.11.2.6 The **Installation Document** shall contain but not limited to the following items:-

- (a) The location at which the **Demand Unit** is connected to the **System**.
- (b) The **Maximum Import Capability** and **Maximum Export Capability** of the **Demand Unit** in kW.
- (c) The type of **Demand Response Services** provided.
- (d) The **Demand Unit** certificate or **Equipment Certificate** or equivalent information as agreed by **NGET**.
- (e) Contact details of the **Demand Response Provider**.

DRSC.11.3 Procedures for Demand Response Providers Plant and Apparatus connected to the Total System at a nominal System voltage above 1000 Volts

DRSC.11.3.1 The operational notification procedure for a **Demand Response Provider** whose **Plant and Apparatus** is connecting to the **Total System** at a nominal **System** voltage of above 1000 volts shall comprise a **Demand Response Unit Document (DRUD)**.

DRSC.11.3.2 The format of the **Demand Response Unit Document (DRUD)** shall take the format shown in **DRSC.A.2** and shall provide sufficient information to demonstrate the **Demand Response Provider's Plant and Apparatus** is capable of satisfying the full requirements of the **Ancillary Services** agreement. The compliance requirements can be simplified to a single operational notification stage as well as be reduced. **Demand Response Providers** shall be required to submit a new **DRUD** for each subsequent **Demand Unit** added to its fleet.

DRSC.11.3.3 When the **Demand Response Provider** has submitted a final **DRUD** to the satisfaction of **NGET** which clearly demonstrates full compliance with the **Ancillary Services** agreement, **NGET** shall issue a **Final Operational Notification** to the **Demand Response Provider**.

DRSC.11.4 COMPLIANCE

DRSC.11.4.1 Responsibility of the Demand Response Provider

DRSC.11.4.1.1 **Network Operators** and **Non Embedded Customers** are required to satisfy the requirements in **ECPX**.

Comment [A13]: Do we need to say this bearing in mind it is already an implicit requirement of the ECP.

DRSC.11.4.1.2 **Demand Response Providers** are required to satisfy the requirements of the **Ancillary Services** agreement which shall include satisfying the applicable requirements of this **Demand Response Services Code**.

DRSC.11.4.1.3 Should the **Demand Response Provider** wish to modify the technical capabilities of its **Plant and Apparatus** which affects its compliance with the **Ancillary Services Agreement**, it should

notify and agree any timescales for the change with **NGET** prior to making any change to its **Plant and Apparatus**.

DRSC.11.4.1.4 Any operational incidents or failure of the **Demand Response Provider's Plant and Apparatus** which impacts its ability to satisfy the compliance requirements detailed in this **Demand Response Services Code** shall be notified to **NGET** as soon as possible after occurrence of the incident.

DRSC.11.4.1.5 Any planned test schedules and procedures to verify compliance of the **Demand Response Providers Plant and Apparatus** shall be submitted to **NGET** in advance of the tests. **NGET** shall assess the test schedules and procedures in a timely manner prior to agreeing that the **Demand Response Provider** can carry out the tests.

DRSC.11.4.1.6 **NGET** may witness such tests and record the performance of the **Demand Response Providers Plant and Apparatus** to verify compliance with the **Ancillary Services** agreement and the **Demand Response Services Code**.

DRSC.11.4.2 Role of NGET

DRSC.11.4.2.1 **NGET** shall assess the compliance of the **Demand Response Provider** and shall undertake monitoring throughout the life time of the **Demand Response Providers Plant and Apparatus** to ensure compliance with the requirements of the **Ancillary Services** agreement.

DRSC.11.4.2.2 **NGET** may require **Demand Response Providers** to carry out compliance tests and simulations according to a repeat plan or general scheme or replacement of equipment which may have an impact on the compliance of the **Demand Response Providers Plant and Apparatus** as detailed in DRSC.11.4.1.3 and DRSC.11.4.1.4. **NGET** shall inform the **Demand Response Provider** of the results of these tests.

DRSC.11.4.2.3 As part of this compliance process, the **Demand Response Provider** shall provide the following items:-

- (a) All documentation and certificates
- (b) Details of the technical data required to ensure compliance with the **Ancillary Services** agreement.
- (c) Steady state and dynamic models of their **Plant and Apparatus**.
- (d) Timelines for the submission of system data required to perform **System** studies
- (e) Study results showing the expected steady state and dynamic performance of the **Plant and Apparatus**
- (f) Conditions and procedures including the scope for registering **Equipment Certificates** or otherwise as agreed with **NGET**.

- (g) Conditions and procedures for the use of relevant **Equipment Certificates** issued by an **Authorised Certifier** to a **Demand Response Provider**.

DRSC.11.4.2.4 If compliance tests or simulations cannot be carried out as agreed between the **Demand Response Provider** and **NGET** due to reasons attributable to **NGET**, then **NGET** shall not unreasonably withhold the operational notification referred to in **DRSC.11.3.3**.

DRSC.11.5 Compliance Testing

DRSC.11.5.1 Common Provisions for Compliance Testing

DRSC.11.5.1.1 The purpose of Compliance testing is to ensure that the **Demand Response Providers Plant** and **Apparatus** is capable of satisfying the requirements of the **Ancillary Services** agreement and applicable sections of this **Demand Response Services Code** in addition to verify that the models and data submitted provide a true and accurate representation of the **Plant** as built.

DRSC.11.5.1.2 Notwithstanding the minimum requirements for compliance testing detailed in **DRSC.11.5** of this **Demand Response Services Code**, **NGET** shall:-

- (a) Allow the **Demand Response Provider** to carry out an alternative set of tests provided that they are efficient and sufficient to demonstrate that the **Demand Response Providers Plant** and **Apparatus** is capable of satisfying the requirements of the **Ancillary Services** agreement and the applicable sections of the **Demand Response Services Code**.
- (b) Require the **Demand Response Provider** to carry out additional or alternative tests to those specified in **DRSC.11.6** where they would otherwise be insufficient to demonstrate compliance with the **Ancillary Services** agreement.
- (c) Require the **Demand Response Provider** to be responsible for carrying out the tests in accordance with the requirements specified in **DRSC.11.6** of the **Demand Response Services Code**. **NGET** shall cooperate with the **Demand Response Provider** and will not unduly delay the scheduling of the tests.

DRSC.11.5.1.3 **NGET** may witness such tests (either on site or remotely from **NGET's** control room) to record the performance of the **Demand Response Providers Plant** and **Apparatus** to verify compliance with the **Ancillary Services** agreement and the **Demand Response Services Code**. Where **NGET** witnesses the tests remotely, the **Demand Response Provider** shall provide the monitoring equipment necessary to record all relevant test signals and measurements in addition to ensuring that necessary representatives from the **Demand Response Provider** are available on site for the entire testing period. Signals specified by **NGET** shall be provided for selected tests, **NGET** wishes to use its own equipment to record performance. **NGET** will inform the **Demand Response Provider** if it wishes to witness the tests.

DRSC.11.6 Compliance Testing for Demand Response Providers with Demand Response Active Power Control, Reactive Power Control and Transmission Constraint Management.

DRSC.11.6.1 Demand Modification Tests

DRSC.11.6.1.1 **Demand Response Providers** who have signed an **Ancillary Services** agreement with **NGET**

to provide **Demand Response Active Power Control, Demand Response Reactive Power Control** or **Demand Response Transmission Constraint Management** are required to demonstrate (through site tests) the capability of their **Plant and Apparatus** to satisfy the requirements of the **Ancillary Services** agreement and applicable requirements of **DRSC.5**. The site tests should demonstrate the capability of the **Demand Response Providers** ability to operate with instruction over the agreed timeframes, **Demand** range and duration pursuant to the terms of the **Ancillary Services** agreement. The tests can be completed individually or as part of a **Demand** aggregation scheme.

DRSC.11.6.1.2 The tests shall be carried out either by instruction from **NGETs Control Centre** or by site tests through injections applied to the **Demand Response Providers Plant and Apparatus**.

DRSC.11.6.1.3 The test shall be deemed as passed if the requirements of the **Ancillary Services** agreement have been satisfied and the applicable requirements of **DRSC.5** demonstrated to the satisfaction of **NGET**.

DRSC.11.6.1.4 A list of references to **Equipment Certificates** issued by an **Authorised Certifier** or otherwise agreed with **NGET** used for equipment that is installed at the site or copies of the relevant **Equipment Certificates** issued by an **Authorised Certifier** or otherwise, can be supplied by the **Demand Response Provider** to demonstrate part of the evidence of compliance;

DRSC.11.6.2 Disconnection and Reconnection of Static Compensation Facilities

DRSC.11.6.2.1 **Demand Response Providers** who have signed an **Ancillary Services** agreement with **NGET** to provide **Demand Response Active Power Control, Demand Response Reactive Power Control** or **Demand Response Transmission Constraint Management** and have also agreed to disconnect or reconnect (or both) its static compensation facilities when receiving an instruction from **NGET** in accordance with the requirements of the **Ancillary Services** agreement and **DRSC.5.3**, shall be required to demonstrate the performance of their **Plant and Apparatus** in satisfying these requirements. These requirements can be demonstrated individually or collectively as part of a demand aggregation scheme.

DRSC.11.6.1.2 The tests shall be carried out either by instruction from **NGETs Control Centre** or by site tests resulting in the disconnection and subsequent re-connection of the static compensation facilities.

DRSC.11.6.1.3 The test shall be deemed as passed if the requirements of the **Ancillary Services** agreement have been satisfied and the applicable requirements of **DRSC.5.3** demonstrated to the satisfaction of **NGET**.

DRSC.11.7 Compliance Simulation

DRSC.11.7.1 Common Provisions on Compliance Simulations

DRSC.11.7.1.1 **Demand Response Providers** who agree to provide **Demand Response Very Fast Active Power Control** in accordance with the terms of the **Ancillary Services** agreement and **DRSC.7** are required to demonstrate their ability to satisfy the requirements of the **Ancillary Services** agreement and **DRSC.7** through necessary simulation studies to the satisfaction of **NGET**.

DRSC.11.7.1.2 **Demand Response Providers** are required to submit further simulation studies in respect of **Demand Response Very Fast Active Power Control** where there has been a development, replacement or modernisation of the **Demand Response Providers Plant and Apparatus** or **NGET** has identified a non-compliance with the **Demand Response Providers** ability to satisfy the requirements of the **Ancillary Services** agreement and **DRSC.7**.

DRSC.11.7.1.3 Notwithstanding the requirements of DRSC.11.7.1.1 and DRSC.11.7.1.2 **NGET** shall be entitled to:-

- (a) Allow the **Demand Response Provider** to carry out an alternative set of tests provided that they are efficient and sufficient to demonstrate that the **Demand Response Providers Plant and Apparatus** is capable of satisfying the requirements of the **Ancillary Services** agreement and the applicable sections of the **Demand Response Services Code**.
- (b) Require the **Demand Response Provider** to carry out additional or alternative simulations to those specified in **DRSC11.7** and **DRSC.11.8** where they would otherwise be insufficient to demonstrate compliance with the **Ancillary Services** agreement.

DRSC.11.7.1.4 **NGET** may check that the **Demand Response Provider** complies with the requirements of the **Ancillary Services** agreement and the applicable sections of the **Demand Response Services Code** by carrying out its own compliance simulations based on the simulation reports, models and test measurements.

DRSC.11.7.1.5 **NGET** will supply upon request, data to enable the **Demand Response Provider** to carry out the required simulations in accordance with the requirements of the **Ancillary Services** agreement and DRSC.11.7.

DRSC.11.8 Compliance Simulations for Demand Units with Demand Response Very Fast Active Power Control

DRSC.11.8.1 **Demand Response Providers** shall supply a model to **NGET** to demonstrate the technical capability of the **Demand Response Providers Plant and Apparatus** to provide **Very Fast Active Power Control** in accordance with the terms of the **Ancillary Services** agreement and DRSC.7.

DRSC.11.8 The simulation shall be deemed successful provided the **Demand Response Providers Plant and Apparatus** satisfies the requirements to the **Ancillary Services** agreement and DRSC.7 to the satisfaction of **NGET**.

DRSC.12 TESTING GUIDANCE DOCUMENT

DRSC.12.1 To assist **Demand Side Providers** in satisfying the testing and compliance requirements in the **Ancillary Services** agreement and this DRSC, **NGET** has produced a **Testing Guidance Document** which is available on **NGETs website**.

Comment [A14]: Check phrasing with Legal.

APPENDIX I - DRSC.A.1 - Format of the Installation Document

To be inserted

APPENDIX II – DRSC.A.2 - format of the Demand Response Unit Document (DRUD)

To be inserted

< END OF DEMAND RESPONSE SERVICES CODE >

