

DEMAND RESPONSE SERVICES CODE (DRSC)

CONTENTS

(This contents page does not form part of the Grid Code)

<u>Paragraph No/Title</u>	<u>Page Number</u>
DRSC.1 INTRODUCTION	2
DRSC.2 OBJECTIVE	2
DRSC.3 SCOPE	2
DRSC.4 GENERAL PROVISIONS	3
DRSC.5 SPECIFIC PROVISIONS FOR DEMAND UNITS WITH DEMAND RESPONSE ACTIVE POWER CONTROL AND TRANSMISSION CONSTRAINT MANAGEMENT	3
DRSC.6 SPECIFIC PROVISIONS FOR DEMAND UNITS WITH DEMAND RESPONSE FREQUENCY CONTROL	4
DRSC.7 SPECIFIC PROVISIONS FOR DEMAND UNITS WITH DEMAND RESPONSE VERY FAST ACTIVE POWER CONTROL	4
DRSC.8 DATA REQUIRED BY THE COMPANY FROM DEMAND RESPONSE PROVIDER'S	5
DRSC.9 OPERATIONAL METERING REQUIREMENTS	5
DRSC.10 INSTRUCTIONS ISSUED TO DEMAND RESPONSE PROVIDER'S	5
DRSC.11 OPERATIONAL NOTIFICATION PROCEDURE	5
DRSC.11.1 GENERAL PROVISIONS	5
DRSC 11.2 OPERATIONAL NOTIFICATION PROCEDURES FOR DEMAND RESPONSE PROVIDERS	6
DRSC.11.3 COMPLIANCE	6
DRSC.11.4 COMPLIANCE TESTING	7
DRSC.11.5 COMPLIANCE TESTING FOR DEMAND RESPONSE PROVIDER'S WITH DEMAND RESPONSE ACTIVE POWER CONTROL, REACTIVE POWER CONTROL AND TRANSMISSION CONSTRAINT MANAGEMENT	8
DRSC.11.6 COMPLIANCE SIMULATION	9
APPENDIX I - DRSC.A.2 - DEMAND RESPONSE UNIT DOCUMENT (DRUD) STATEMENT OF COMPLIANCE FOR DEMAND RESPONSE PROVIDER'S	10

PART I

DRSC.1 INTRODUCTION

- DRSC.1.1 The **Demand Response Services Code** is concerned with **Demand Response Providers** who contract with **The Company** for the provision of **Ancillary Services**.
- DRSC.1.2 **Ancillary Services** are non-mandatory services used by **The Company** in operating the **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 Where a **Demand Response Provider** is interested in offering an **Ancillary Service** to **The Company**, then further details and additional information of the **Ancillary Services** are available from the Balancing Services section of the **Website**.
- DRSC.1.4 Where **The Company** and a **Demand Response Provider** enter into an **Ancillary Services** agreement, it shall be in accordance with ~~Transmission Licence~~**ESO Licence** condition **C16C9** and the **Standard Contract Terms**.
- DRSC.1.5 **The Demand Response Services Code** which would form part of an **Ancillary Services** agreement between a **Demand Response Provider** and **The Company** and to discharge the obligations under ~~Retained Assimilated~~ **EU Law** (Commission Regulation (EU) 2016/1388). The **Ancillary Services** agreement will include an obligation on the **Demand Response Provider** to satisfy the applicable requirements of this **Demand Response Services Code**.
- DRSC.1.6 The **Demand Response Services Code** applies only to **Demand Response Providers** who have entered into an agreement with **The Company** to provide an **Ancillary Service**. This **Demand Response Services Code** does not apply to **Users** who are not **Demand Response Providers**.
- DRSC.1.7 For the avoidance of doubt, **Network Operators** and **Non Embedded Customers** in respect of **EU Grid Supply Points** are required to satisfy the compliance requirements in section DRSC.11 of this code in addition to the **European Compliance Processes** only if they are also a **Demand Response Provider**.

DRSC.2 OBJECTIVE

- The objectives of the **DRSC** are to
- DRSC.2.1 Ensure the obligations of ~~Retained Assimilated~~ **EU Law** (Commission Regulation (EU) 2016/1388) have been discharged; and
- DRSC.2.2 Complement the requirements of the **Ancillary Services** agreement between **The Company** and a **Demand Response Provider**; and
- DRSC.2.3 Define the minimum technical and compliance requirements **Demand Response Providers** are required to satisfy if they provide a **Demand Response Service** to **The Company** under an **Ancillary Services** agreement.

DRSC.3 SCOPE

- DRSC.3.1 The **DRSC** applies to any **Demand Response Provider** who has entered into an agreement to provide **Ancillary Services** with **The Company**.
- DRSC.3.2 The **DRSC** does not apply to **Users**, **BM Participants** or other parties unless they are also a **Demand Response Provider**.

DRSC.4 GENERAL PROVISIONS

- DRSC.4.1 **Demand Response Services** shall be based on the following categories.

(a) Controlled by instruction from **The Company**

- (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 **The Company** 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 Response Providers** who own, operate, control or manage **Plant** and **Apparatus** or **Demand Unit(s)** within a **Demand Facility** and/or **Closed Distribution System(s)** or on an aggregated basis may provide **Demand Response Services** to **The Company**. **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 **The Company**. These services 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** provides **Demand Response Active Power Control**, **Demand Response Reactive Power Control** or **Demand Response Transmission Constraint Management** to **The Company**, 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 **Demand Unit** which they own, operate, control or manage and which is used to provide **Demand Response Services** 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 **The Company** either directly or through a third party to modify their demand in accordance with the **Demand Response Service** they have agreed to provide..
- (e) Be capable of adjusting its **Real Power** or **Reactive Power** flow within a time period pursuant to the terms of the **Ancillary Services** agreement.
- (f) Be capable of full execution of an instruction issued by **The Company** to modify its power flow.
- (g) Be capable of further demand changes as instructed by **The Company**, following the execution of a previous instruction issued by **The Company** in accordance with the **Ancillary Services** agreement. Any such instruction shall not exceed the normal safe operating conditions of the **Demand Response Provider's Plant** and **Apparatus** or **Demand Unit(s)** which could cause such equipment to trip. Instructions to modify **Active Power** or **Reactive Power** flow may have immediate or delayed effects but in any event would need to comply with the requirements of the **Ancillary Services** agreement.
- (h) Notify **The Company** 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 up to a maximum of 1Hz/s measured over a 500ms time frame.

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, **The Company** will have previously instructed the **Demand Response Provider** to switch these facilities into service in accordance with the terms of the **Ancillary Services** agreement prior to any automatic action taking place. The ability for **The Company** 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** will be dependent upon the type of **Demand Response Service** provided and shall be defined in the **Ancillary Services** agreement which shall be pursuant to the **Standard Contract Terms**.

DRSC.5.3 **Non Embedded Customers** who are also **Demand Response Provider's** shall be capable of providing **Demand Response Reactive Power Control** by switching static compensation equipment into or out of service.

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

DRSC.6.1 Where a **Demand Response Provider** provides **Demand Response System Frequency Control** to **The Company**, then the following requirements as detailed below shall apply. For the avoidance of doubt, these requirements 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 **Plant** and **Apparatus** or **Demand Unit(s)** which they own, operate, control or manage, and which is used to provide **Demand Response System Frequency Control** 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 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 Response Providers** where only a **Non-Dynamic Frequency Response Service** is provided.
- (d) The envelope 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, continuous operation would not be required in respect of a static **Frequency** response service.
- (e) Be fitted with a control system which is capable of responding to changes in **System Frequency** outside the nominal value of 50Hz. A deadband either side of nominal **Frequency** shall be permitted which shall be 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. Each **Demand Unit** owned, operated, controlled or managed by a **Demand Response Provider** shall be capable of a rapid detection and respond 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 **Demand Facility** and must not be derived on an aggregated basis.

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 **The Company**, 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's Demand Unit(s)** which they own, operate, control or manage.
- (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 THE COMPANY FROM DEMAND RESPONSE PROVIDER'S

DRSC.8.1 The data required to be submitted to **The Company** by a **Demand Response Provider** will vary depending upon the type of **Demand Response Service** provided and will be set out in the **Ancillary Services** agreement.

DRSC.9 OPERATIONAL METERING REQUIREMENTS

DRSC.9.1 The operational metering data required to be submitted to **The Company** will vary depending upon the type of **Demand Response Service** provided. **Demand Response Providers** may be required to install such operational metering equipment in accordance with the **Ancillary Services** agreement.

DRSC.10 INSTRUCTIONS ISSUED TO DEMAND RESPONSE PROVIDER'S

DRSC.10.1 **Demand Response Providers** may be required to be fitted with communication and instruction facilities to enable **The Company** to instruct them in the operational timeframe. These requirements will vary depending upon the type of **Demand Response Service** provided and will be set out in 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 **Demand Response Providers** who enter into an agreement with **The Company** to provide **Ancillary Services** are required to undertake a compliance process to ensure the **Plant** and **Apparatus** or **Demand Unit(s)** which they own, operate, control or manage, satisfies the requirements of the **Ancillary Services** agreement and the **Demand Response Services Code**. For the avoidance of doubt, **Demand Response Providers** who are also **EU Code Users**, will also be required to satisfy the requirements of the applicable requirements of the **European Compliance Processes (ECP's)**.

DRSC.11.1.2 Each **Demand Response Provider**, shall confirm to **The Company** its ability to comply with the requirements of the **Ancillary Services** agreement.

DRSC.11.1.3 Each **Demand Response Provider** shall notify **The Company** of any change to the **Plant** or **Apparatus** which they own, operate, control or manage such they are no longer able to satisfy the conditions specified in the **Ancillary Services** agreement and/or the relevant provisions of the **DRSC**. Such changes shall be notified to **The Company** in accordance with the terms of the **Ancillary Services** agreement.

DRSC.11.2 Operational Notification Procedures for Demand Response Providers

- DRSC.11.2.1 All **Demand Response Providers** are required to undertake an **Operational Notification** procedure which shall comprise a **Demand Response Unit Document (DRUD)**.
- DRSC.11.2.2 The format of the **Demand Response Unit Document (DRUD)** shall take the form shown in DRSC.A.1 and shall provide sufficient information to demonstrate the **Plant** and **Apparatus** or **Demand Unit(s)** which a **Demand Response Provider** owns, operates, controls or manages, is capable of satisfying the full requirements of the **Ancillary Services** agreement and the applicable requirements of the **DRSC**. The compliance requirements can be simplified to a single operational notification stage as well as be reduced as agreed with **The Company**. **Demand Response Providers** shall be required to submit a new **DRUD** for each subsequent **Demand Unit** added to its portfolio.
- DRSC.11.2.3 When the **Demand Response Provider** has submitted a final **DRUD** to the satisfaction of **The Company**, which clearly demonstrates full compliance with the **Ancillary Services** agreement, **The Company** shall issue a **Final Operational Notification** to the **Demand Response Provider**.
- DRSC.11.3 COMPLIANCE
- DRSC.11.3.1 Responsibility of the Demand Response Provider
- DRSC.11.3.1.1 **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.11.3.1.2 Should the **Demand Response Provider** wish to modify the technical capability of the **Plant** and **Apparatus** or **Demand Unit(s)** which it owns, operates, controls or manages and which affects its compliance with the **Ancillary Services** agreement, it should notify and agree any timescales for the change with **The Company** prior to making any change.
- DRSC.11.3.1.3 Any operational incidents or failure of the **Plant** and **Apparatus** or **Demand Unit(s)** owned, operated, controlled or managed by the **Demand Response Provider** which impacts its ability to satisfy the compliance requirements detailed in this **Demand Response Services Code** shall be notified to **The Company** as soon as possible after occurrence of the incident.
- DRSC.11.3.1.4 Any planned test schedules and procedures to verify compliance of the **Plant** and **Apparatus** or **Demand Unit(s)** owned, operated, controlled or managed by the **Demand Response Provider** shall be submitted to **The Company** in advance of the tests. **The Company** 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.11.3.1.5 **The Company** may witness such tests and record the performance of the **Plant** and **Apparatus** owned, operated, controlled or managed by the **Demand Response Provider** to verify compliance with the **Ancillary Services** agreement and the **Demand Response Services Code**.
- DRSC.11.3.2 Role of The Company
- DRSC.11.3.2.1 **The Company** shall assess the compliance of the **Demand Response Provider** and shall undertake monitoring throughout the life time of the **Plant** and **Apparatus** or **Demand Unit(s)** owned, operated, controlled or managed by the **Demand Response Provider** to ensure compliance with the requirements of the **Ancillary Services** agreement. **The Company** shall inform the **Demand Response Provider** of the

outcome of such assessment.

- DRSC.11.3.2.2 **The Company** 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 **Plant** and **Apparatus** or **Demand Units** owned, operated, controlled or managed by the **Demand Response Provider** as detailed in DRSC.11.3.1.3 and DRSC.11.3.1.4. **The Company** shall inform the **Demand Response Provider** of the results of these tests.
- DRSC.11.3.2.3 As part of this compliance process, the **Demand Response Provider** shall provide the following items:-
- (a) Relevant documentation and certificates associated with the compliance process.
 - (b) Details of the technical data required to ensure compliance with the **Ancillary Services** agreement.
 - (c) Steady state and dynamic models (as applicable) of their **Demand Units** or **Plant** and **Apparatus** (or equivalent) as required and agreed with **The Company**.
 - (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** or **Demand Unit(s)** or the performance of their **Demand Response Service** on an aggregated basis as required and agreed with **The Company**.
 - (f) Submission of registered **Equipment Certificates** or otherwise as agreed with **The Company**.
 - (g) Conditions and procedures for the use of relevant **Equipment Certificates** issued by an **Authorised Certifier** to a **Demand Response Provider** or equivalent to the satisfaction of **The Company**.
- DRSC.11.3.2.4 If compliance tests or simulations cannot be carried out as agreed between the **Demand Response Provider** and **The Company** due to reasons attributable to **The Company**, then **The Company** shall not unreasonably withhold the **Operational Notification** referred to in DRSC.11.2.3.
- DRSC.11.4 Compliance Testing
- DRSC.11.4.1 Common Provisions for Compliance Testing
- DRSC.11.4.1.1 The purpose of compliance testing is to ensure that the **Plant** and **Apparatus** or **Demand Unit(s)** owned, operated, controlled or managed by a **Demand Response Provider** is capable of satisfying the requirements of the **Ancillary Services** agreement and applicable sections of this **Demand Response Services Code** in addition to verifying that the models and data submitted provide a true and accurate representation of the **Plant** as built.
- DRSC.11.4.1.2 Notwithstanding the minimum requirements for compliance testing detailed in DRSC.11.4 of this **Demand Response Services Code**, **The Company** 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 **Plant** and **Apparatus** or **Demand Unit(s)** owned, operated, controlled or managed by a **Demand Response Provider** 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 (where reasonable) to those specified in DRSC.11.5 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.11.4 and DRSC.11.5 of the **Demand Response Services Code**. **The Company** shall cooperate with the **Demand Response Provider** and will not unduly delay the scheduling of the tests.

DRSC.11.4.1.3 **The Company** may witness such tests (either on site or remotely from **The Company's** control room) to record the performance of the **Demand Response Providers** capability to verify compliance with the **Ancillary Services** agreement and the **Demand Response Services Code**. Where **The Company** 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 **The Company** shall be provided, if for selected tests, **The Company** wishes to use its own equipment to record performance. **The Company** will inform the **Demand Response Provider** if it wishes to witness the tests.

DRSC.11.5 Compliance Testing for Demand Response Providers with Demand Response Active Power Control, Reactive Power Control and Transmission Constraint Management.

DRSC.11.5.1 Demand Modification Tests

DRSC.11.5.1.1 **Demand Response Providers** who have signed an **Ancillary Services** agreement with **The Company** 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 the **Plant and Apparatus or Demand Unit(s)** they own, operate, control or manage to satisfy the requirements of the **Ancillary Services** agreement and the 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.11.5.1.2 The tests shall be carried out either by instruction from **The Company's Control Centre** or by site tests through injections applied to the **Plant and Apparatus or Demand Unit(s)** owned, operated, controlled or managed by the **Demand Response Provider**.

DRSC.11.5.1.3 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 **The Company**.

DRSC.11.5.1.4 A list of references to **Equipment Certificates** issued by an **Authorised Certifier** (or otherwise) as agreed with **The Company**, which can be supplied by the **Demand Response Provider** to demonstrate part of the evidence of compliance;

DRSC.11.5.2 Disconnection and Reconnection of Static Compensation Facilities

DRSC.11.5.2.1 **Demand Response Providers** who have signed an **Ancillary Services** agreement with **The Company** 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) static compensation facilities when receiving an instruction from **The Company** in accordance with the requirements of the **Ancillary Services** agreement and DRSC.5.3,

shall be required to demonstrate the performance of the **Plant** and **Apparatus** or **Demand Unit(s)** they own, operate, control or manage to satisfy these requirements. These requirements can be demonstrated individually or collectively as part of a demand aggregation scheme.

DRSC.11.5.2.2 The tests shall be carried out either by instruction from **The Company's Control Centre** or by site tests resulting in the disconnection and subsequent re-connection of the static compensation facilities.

DRSC.11.5.2.3 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 **The Company**.

DRSC.11.6 Compliance Simulation

DRSC.11.6.1 Common Provisions on Compliance Simulations

DRSC.11.6.1.1 **Demand Response Providers** who agree to provide **Demand Response Very Fast Active Power Control** 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 **The Company**.

DRSC.11.6.1.2 **Demand Response Providers** who have contracted to provide a **Demand Response Very Fast Active Power Control** service, are required to submit further simulation studies where there has been a development, replacement or modernisation of the **Plant** and **Apparatus** or **Demand Unit(s)** owned, operated, controlled or managed by the **Demand Response Provider**, or **The Company** has identified a non-compliance with the **Demand Response Provider's** ability to satisfy the requirements of the **Ancillary Services** agreement or DRSC.7.

DRSC.11.6.1.3 Notwithstanding the requirements of DRSC.11.6.1.1 and DRSC.11.6.1.2 **The Company** shall be entitled to:-

- (a) Allow the **Demand Response Provider** to carry out an alternative set of simulations provided that they are efficient and sufficient to demonstrate that the **Plant** and **Apparatus** or **Demand Unit(s)** owned, operated, controlled or managed by the **Demand Response Provider** 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 DRSC.11.6.1.1 and DRSC.11.6.1.28 where they would otherwise be insufficient to demonstrate compliance with the **Ancillary Services** agreement.

DRSC.11.6.1.4 **The Company** 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.11.6.1.5 **The Company** will supply upon request from the **Demand Response Provider**, 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.11.6.

DRSC.11.7 Additional Testing requirements for Non-Embedded Customers and CUSC Parties who are also Demand Response Providers

DRSC.11.7.1 **Non-Embedded Customers** and **CUSC Parties** who are also **Demand Response**

Providers shall be required to execute a demand modification test after two consecutive unsuccessful responses in the operational environment or at least every year as agreed with **The Company**.

DRSC.11.7.2 Each **Non-Embedded Customer** and **CUSC Party** who are also **Demand Response Providers** and provide demand response low frequency demand disconnection shall execute a low frequency demand disconnection test at least once every three years.

APPENDIX I – DRSC.A.1

Format of the **Demand Response Unit Document (DRUD)**

Demand Response Unit Document (DRUD) **Statement of Compliance for Demand Response Providers**

Contract company details

Contracted company name	
Primary contact name	
Contact number /s	
Email address	

Demand Response Service Details

Contract ID	
Type of Demand Response Service type,	
Asset type,	
Unit make up	
Aggregation methodology (if appropriate)	
Maximum capacity of the Demand Response Service (MW)	
Equipment Certificates (as applicable)_	
Unit location/ connection point / ID	
Contract signed date	
Service start date	
Desired test date	

Compliance Requirements

DRSC Requirement	Compliance Y/N	Demand Response Provider Statement
All documentation and certificates demonstrating compliance with the DRSC .		
Details of the technical data required to ensure compliance with the Ancillary Services agreement.		
Steady state and dynamic models (or equivalent information) of Plant and Apparatus or Demand Unit(s) .		
Timelines for the submission of system studies or equivalent data.		

DRSC Requirement	Compliance Y/N	Demand Response Provider Statement
Study results showing the expected steady state and dynamic performance of the Plant and Apparatus or Demand Unit(s)		
Conditions and procedures including the scope for registering Equipment Certificates or otherwise as agreed with The Company .		
Conditions and procedures for the use of relevant Equipment Certificates issued by an Authorised Certifier to a Demand Response Provider .		
Operational Metering Data to be submitted in accordance with Ancillary Services agreement.		
Ability to receive instructions to and from The Company accordance with the Ancillary Services agreement.		
Ability to operate over Frequency range as specified in DRSC.5.1(a).		
Ability to operate over voltage range as specified in DRSC.5.1(b).		
Ability to withstand a rate of change of system frequency up to a maximum of 1Hz per second as measured over a 500ms timeframe as specified in DRSC.5.1(i).		
Non-Embedded Customers who are also Demand Response Providers ability to switch static compensation equipment into or out of service in accordance with DRSC5.3 as applicable.		
Deadband settings as applicable.		
Control system block diagrams, parameters and settings as applicable.		

Declaration

Declaration – to be completed by **Customer** or the **Demand Response Provider's** appointed technical representative

I declare that for all the **Demand Response Provider's** information associated with this contract:

1. Compliance with the requirements of the **Demand Response Services Code** is achieved.
2. The commissioning checks have been successfully completed.

Name:

Signature:

Company Name:

Position:

Declaration – to be completed by **The Company** Witnessing Representative if applicable. Delete if not witnessed by the **The Company**.

I confirm that I have witnessed the commissioning checks in this document on behalf of

_____ and that the results are an accurate record of the checks

Name:

Signature:

Company Name:

< END OF DEMAND RESPONSE SERVICES CODE >