

DRAFT CHANGES TO GRID CODE TO INTRODUCE ASPECTS OF COMPLIANCE PROCESS FOR WORKING GROUP DISCUSSION

AUGUST 2008

THIS DRAFT VERSION OF THE GRID CODE ALREADY INCLUDES PROVISIONS

ON:

- (i) CONNECTING NEW POWER STATIONS AND**
(ii) THE LIFETIME COMPLIANCE PROCESS (LON)

CHANGES FOR LEEMPS ARE SHOWN MARKED FROM SUCH DRAFT VERSION OF THE GRID CODE

GLOSSARY & DEFINITIONS

New defined terms for inclusion in the G&D:

Compliance Statement	A statement, utilising the form provided by NGET , to be duly completed by a Generator or DC Converter Station owner detailing the compliance against the relevant Grid Code provisions, and the supporting evidence in respect of such compliance, of the <u>its</u> : Generating Unit(s), CCGT Module(s), Power Park Module(s) or DC Converter(s) in the form provided by NGET to the Generator or DC Converter Station owner.
<u>DCUSA</u>	<u>The Distribution Connection and Use of System Agreement approved by the Authority and required to be maintained in force by each Electricity Distribution Licence holder.</u>
Energisation Operational Notification	Notification <u>A notification</u> by NGET to a User confirming that the User can in accordance with the Bilateral Agreement and/or Construction Agreement , and in the case of Embedded Medium Power Stations in accordance with the CUSC , energise such User's Plant and Apparatus specified in such notification.
Final Operational Notification	Notification <u>In respect only of Plant and Apparatus other than LEEMPS/DCCS, a notification</u> by NGET to a Generator or DC Converter Station owner confirming <u>stating that NGET confirms</u> that the Generator or DC Converter Station owner has demonstrated compliance with the Grid Code to NGET's

	<p>satisfaction (and/or where applicable they <u>apply</u>, that the relevant Derogations have been granted) and where applicable, with Appendices F1 to F5 of the Bilateral Agreement in respect of the User's Plant and Apparatus specified in such notification. [Need to capture Appendix E when addressing LEEMPS]</p>
<u>Grid Code CC Compliance Assessment</u>	<u>The compliance assessment to be undertaken by NGET or the Network Operator in respect of LEEMPS/DCCS in accordance with CC.3.3.5.</u>
Interim Operational Notification	<p>Notification <u>In respect only of Plant and Apparatus other than LEEMPS/DCCS, a notification</u> by NGET to a Generator or DC Converter Station owner acknowledging <u>stating</u> that <u>NGET has acknowledged</u> that the Generator or DC Converter Station owner has demonstrated compliance, to NGET's satisfaction except for the Unresolved Compliance Issues, with the Grid Code and where applicable, with Appendices F1 to F5 of the Bilateral Agreement in respect of the User's Plant and Apparatus specified in such notification. [Need to capture Appendix E when addressing LEEMPS]</p>
<u>LEEMPS/DCCS</u>	<u>Each of, as the context so requires, an Embedded Medium Power Station and a DC Converter Station not subject to a Bilateral Agreement.</u>
Limited Operational Notification	<p>Notification <u>A notification</u> by NGET to a Generator or DC Converter Station owner detailing <u>stating</u> that certain of the User's Plant and/or Apparatus specified in such notification may be <u>is</u> or <u>is</u> unable to comply with the specified provisions of the Grid Code <u>specified in the notice</u>, and where applicable, with Appendices F1 to F5 of the Bilateral Agreement and detailing <u>specifying</u> the Unresolved Compliance Issues. [Need to capture Appendix E when addressing LEEMPS. NOTE: Further consideration required as to how LONs work in respect of LEEMPS?]</p>
Operational Notifications	Any Energisation Operational Notification , Interim Operational Notification , Final Operational Notification or Limited Operational Notification issued by NGET.

<u>NGET CC Compliance Role</u>	<u>Has the meaning set out in CC.3.3.5(a).</u>
<u>NO CC Compliance Notice</u>	<u>Has the meaning set out in CC.3.3.5(d).</u>
Notification of Users Intention to Synchronise	Notification <u>A notification</u> by a Generator or DC Converter Station owner, <u>or in the case of LEEMPS/DCCS, the relevant Network Operator,</u> to NGET informing NGET of the date upon which a Generating Unit(s), CCGT Module(s), Power Park Module(s) or DC Converter(s) will be ready to be Synchronised to the Total System .
<u>Statement of Works Process</u>	<u>The process in respect of a Statement of Works under the CUSC and/or CUSC Contract(s).</u>
Unresolved Compliance Issues	Any compliance issues identified by NGET as not having been demonstrated by the Generator or DC Converter Station owner to NGET's satisfaction at a certain date and detailed in the Interim Operational Notification and/or Limited Operational Notification .
User Data Library	A file structure (a specimen of which is included for information <u>illustrative</u> purposes at DRCXXX) which will be provided <u>to each User</u> by NGET under <u>and using</u> which a Generator or DC Converter Station owner shall for the purposes of CC.5 submit DRC data Schedules and information demonstrating compliance with the Grid Code and, where appropriate <u>applicable</u> , with the CUSC Contract(s) .
User Self Certification of Compliance	A certificate, in the form attached at CC.A.XX, signed by a Generator or DC Converter Station owner to which the Compliance Statement is attached and , <u>or in the case of LEEMPS/DCCS (unless CC.3.3.5(a) applies) from the Network Operator to which the Generator or DC Converter Station owner's User Self Certification of Compliance is attached, and in all cases</u> provided to NGET in the required timescales in respect of its Plant and Apparatus which is the subject of the procedure set out at CC.4 and CC.5 which certifies that such Plant and Apparatus complies with the Grid Code and where appropriate, with the CUSC Contract(s) , and, if appropriate, identifies any Unresolved Compliance Issues and/or any exceptions to such compliance and details the Derogation(s)

	granted in respect of such exceptions.
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CONNECTION CONDITIONS

CC.1 INTRODUCTION

CC.1.1 The **Connection Conditions** ("**CC**") specify both:
(a) the minimum technical, design and operational criteria which must be complied with by (i) any **User** connected to or seeking connection with the **GB Transmission System** or (ii) **Generators** (other than in respect of **Small Power Stations**) or **DC Converter Station** owners connected to or seeking connection to a **User's System** which is located in **Great Britain**; and
(b) the minimum technical, design and operational criteria with which **NGET** will comply in relation to the part of the **GB Transmission System** at the **Connection Site** with **Users**.

CC.1.2 The **CC** also ~~details~~specifies the process which must be followed by ~~any~~each **Generator** ~~or~~and **DC Converter Station** owner to demonstrate its compliance with the **Grid Code in relation to its Plant and Apparatus**. This process shall be followed prior to and during the course of the **User's relevant Plant** and **Apparatus** being energised and **Synchronised**. ~~[Note need to adapt for LEEMPS]~~

CC.1.3 The **CC** also ~~details~~specifies the process which will be followed by **NGET** and ~~any~~each **Generator** ~~or~~and **DC Converter Station** owner where any of ~~such Generator's or DC Converter Station owner's~~its **Plant** and/or **Apparatus** is unable to comply with any provisions of the **Grid Code**, and where applicable with Appendices F1 to F5 of the **Bilateral Agreement**, or in the case of a LEEMPS/DCCS, Appendix E to the relevant Network Operator's Bilateral Agreement. This process is ~~designed~~ to be followed during the period after **Plant** and/or **Apparatus** has become **Operational** and continues until **Disconnected** from the **Total System**.

CC.2 OBJECTIVE

CC.2.1 The objective of the **CC** is to ensure that by specifying minimum technical, design and operational criteria the basic rules for connection to the **GB Transmission System** and (for certain **Users**) to a **User's System** are similar for all **Users** of an equivalent category and will enable **NGET** to comply with its statutory and **Transmission Licence** obligations.

CC.3 SCOPE

CC.3.1 The **CC** applies to **NGET** and to **Users**, which in the **CC** means:

- (a) **Generators** (other than those which only have **Embedded Small Power Stations**)

- (b) **Network Operators;**
- (c) **Non-Embedded Customers;**
- (d) **DC Converter Station** owners; and
- (e) **BM Participants** and **Externally Interconnected System Operators** in respect of CC.6.5 only.

CC.3.2 The above categories of **User** will become bound by the **CC** prior to them generating, distributing, supplying or consuming, as the case may be, and references to the various categories should, therefore, be taken as referring to them in that prospective role as well as to **Users** actually connected.

CC.3.3 [LEEMPS/DCCS Provisions](#)

[The following provisions apply to LEEMPS/DCCS.](#)

[CC.3.3.1](#) The obligations within the **CC** that are expressed to be applicable to **Generators** ~~in respect of Embedded Medium Power Stations not subject to a Bilateral Agreement and/or~~ **DC Converter Station Owners** ~~owners~~ in respect of ~~Embedded DC Converter Stations not subject to a Bilateral Agreement~~ [LEEMPS/DCCS](#) (where the obligations are in each case listed in [this CC.3.43.3](#)) shall be read and construed as obligations that the **Network Operator** within whose **System** any such ~~Medium Power Station or DC Converter Station~~ [LEEMPS/DCCS](#) is **Embedded** must ensure are performed and discharged by the **Generator** or the **DC Converter Station** owner.

[CC.3.43.3.2](#) [Compliance with the requirements of the CC may be demonstrated in one of two ways in respect of LEEMPS/DCCS:](#)

[\(a\) where the Network Operator has that role in accordance with the provisions of CC.3.3.5 below, the Network Operator shall apply its processes relating to compliance assessment, with the Generator or the DC Converter Station owner providing a User Self Certification of Compliance to the Network Operator in relation to compliance, which the Network Operator can then pass on to NGET attached to its own User Self Certification of Compliance addressed to NGET;](#)

[\(b\) where NGET has that role in accordance with the provisions of CC.3.3.5 below, it will apply its processes relating to compliance assessment, with the Generator or the DC Converter Station owner providing a User Self Certification of Compliance to NGET in relation to compliance.](#)

[CC.3.3.3](#) The **Network Operator** within whose **System** a ~~Medium Power Station not subject to a Bilateral Agreement is Embedded or a DC Converter Station not subject to a Bilateral Agreement~~ [LEEMPS/DCCS](#) is **Embedded** must ensure that the following obligations in the **CC** are performed and discharged by the

~~Generator in respect of each such Embedded Medium Power Station~~ or the **DC Converter Station** owner ~~in, as the case of an Embedded DC Converter Station~~ may be, in respect of each such LEEMPS/DCCS:

CC.5.1

CC.5.2.2

~~CC.5.3~~

CC.6.1.3

CC.6.1.5 (b)

CC.6.3.2, CC.6.3.3, CC.6.3.4, CC.6.3.6, CC.6.3.7, CC.6.3.8,

CC.6.3.9, CC.6.3.10, CC.6.3.12, CC.6.3.13, CC.6.3.15, CC.6.3.16

CC.6.4.4

and that the process under section 6.5 of the CUSC has been followed.

In respect of CC.6.2.2.2, CC.6.2.2.3, CC.6.2.2.5, CC.6.1.5(a), CC.6.1.5(b) and CC.6.3.11 equivalent provisions as co-ordinated and agreed with the **Network Operator** and **Generator** or **DC Converter Station** owner may be required. Details of any such requirements will be notified to the **Network Operator** in accordance with CC.3.5.

CC.3.53.3.4 In the case of ~~Embedded Medium Power Stations not subject to a Bilateral Agreement and Embedded DC Converter Stations not subject to a Bilateral Agreement~~ LEEMPS/DCCS the requirements in:

CC.6.1.6

CC.6.3.8

CC.6.3.12

CC.6.3.15

CC.6.3.16

that would otherwise have been specified in a **Bilateral Agreement** will be notified to the relevant **Network Operator** in writing in accordance with the provisions of the **CUSC** and the **Network Operator** must ensure such requirements are performed and discharged by the **Generator** or the **DC Converter Station** owner.

CC.3.3.5 NGET CC Compliance Role

(a) NGET shall undertake the Grid Code CC Compliance Assessment in place of the Network Operator from [the date of the implementation of the Grid Code change] in respect of all LEEMPS/DCCS connected, or to be connected, to each Network Operator's User System.

(b) This role will not apply to those LEEMPS/DCCS which have already been notified to NGET before that date under the Statement of Works Process under the CUSC and/or CUSC Contract(s).

(c) In addition this role will not apply in respect of LEEMPS/DCCCS where a Network Operator has served a NO CC Compliance Notice, as provided below.

(d) A Network Operator may, by written notification to NGET (a "NO CC Compliance Notice") elect that, in respect of all LEEMPS/DCCCS connected to its User System, the Network Operator shall undertake the Grid Code CC Compliance Assessment in place of NGET from the date specified in the NO CC Compliance Notice.

(e) A NO CC Compliance Notice may only:

(i) be served to take effect no earlier than 12 months after its date of receipt by NGET;

(ii) be in respect of all LEEMPS/DCCCS to be connected to its User System, which will be notified to NGET under the Statement of Works Process under the CUSC and/or CUSC Contract(s) after the expiry of the 12 months' notice period referred to above;

[NOTE: Further consideration needs to be given to how the LON process applies to LEEMPS]

(f) The CUSC Contract(s), the DCUSA and the Embedded Development Agreement for the connection and the Distribution Code also contain relevant provisions dealing with NGET undertaking the Grid Code CC Compliance Assessment in place of the Network Operator.

CC.4 PROCEDURE AND CONNECTION PROCESS

CC.4.1 The **CUSC Contract(s)** contain certain provisions relating to the procedure for connection to the **GB Transmission System** or, in the case of ~~Embedded Power Stations or Embedded DC Converter Stations~~ **LEEMPS/DCCCS**, becoming operational and include provisions relating to certain conditions to be complied with by **Users** prior to and during the course of **NGET** notifying the **User** that it has the right to become operational.

Connection Process

CC.4.2 The provisions contained in CC.4.2 to CC.4.3 and CC.5 relate to:

(a) the connection of **User's Plant and Apparatus** to the **GB Transmission System** or where **Embedded**, to a **User's System**, and **additionally**

(b) for **Generators** and **DC Converter Station** owners the process for demonstrating compliance by such **Generators** and **DC Converter Station** owners with the **Grid Code** and with, where **appropriate** applicable, the **CUSC Contract(s)** prior

to and during the course of such **User's Plant** and **Apparatus** becoming operational.

The compliance assessment process will in the case of LEEMPS/DCCS connected to a User System, be undertaken by NGET under the arrangement with the Network Operator referred to in CC.3.3, (except where the Network Operator has served a NO CC Compliance Notice on NGET, in which case the Network Operator shall undertake that process to the extent that that notice applies).

CC.4.2.1 CC.4.2 to CC.4.3 contains details of the process to be followed in order for the **User's Plant** and **Apparatus** to become operational.

CC.4.2.2 CC.5 specifies the details which must be submitted by the **User** to **NGET** at specific times in the process of becoming operational.

CC.4.2.3 In addition CC.5 specifies the testing requirements that must be performed and which must be demonstrated to **NGET's** satisfaction at specific times in the process of becoming operational. For illustration purposes only this process is ~~illustrated~~ shown diagrammatically at CC.A.XX. [NOTE: Consider process diagram for LEEMPS]

CC.4.2.4 The provisions contained in CC.4.4 relate to the process to be followed when a **Generator's** or **DC Converter Station** owner's **Plant** and/or **Apparatus** is unable to comply with any provisions of the **Grid Code** and where applicable with Appendices F1 to F5 of the **Bilateral Agreement**. For illustration purposes only, this process is shown diagrammatically at CC.A.YY.

Operational Notifications

CUSC Connection Site Issues, Energisation Operational Notification-Notifications & Introduction

CC.4.3 (a) Certain provisions relating to the connection and energisation of the User's Plant and Apparatus at the Connection Site and in certain cases of Embedded Plant and Apparatus are specified in the CUSC and/or CUSC Contract(s) ~~(CC.5.1 refers)~~. For other Embedded Plant and Apparatus the Distribution Code, the DCUSA [and the Embedded Development Agreement for the connection] specify equivalent provisions. Further detail on this is set out in CC.5.1 below.

(b) The obligations under the provisions of the CUSC and/or CUSC Contract(s) must have been completed to NGET's satisfaction and an Energisation Operational Notification must have been issued by NGET prior to the remainder of this CC.4.3 being completed.

(c) The remainder of this CC.4.3 details the requirements that apply to the Generator or DC Converter Station owner before and during

the process of demonstrating compliance with the **Grid Code**. Progression through this process is dependent on submission by the **Generator** or **DC Converter Station** owner of the items referred to at CC.5.3 and CC.5.4.

Interim Operational Notification

CC.4.3.1 Not less than 28 days prior to the **Generator** or **DC Converter Station** owner wishing to **Synchronise its Plant and Apparatus**, the **Generator** or **DC Converter Station** owner will:

- i. notify **NGET** that the **Generating Unit(s)**, **CCGT Module(s)**, **Power Park Module(s)** or **DC Converter(s)** as applicable will be ready to be **Synchronised** to the **Total System** through the delivery to **NGET** of a **Notification of Users Intention to Synchronise**, and
- ii. submit to **NGET** the items referred to at CC.5.3.

CC.4.3.2 **(a) Directly Connected:** No **Generating Unit(s)**, **CCGT Module(s)**, **Power Park Module(s)** or **DC Converter(s)** shall be **Synchronised** to the **GB Transmission System**, ~~or where Embedded, to a User System~~, until the later of:

- (i) the date specified by **NGET** in the **Interim Operational Notification**; ~~and~~
- (ii) in the case of **Synchronous Generating Unit(s)** only, written confirmation from **NGET** that the **Generating Unit(s)** or **CCGT Module(s)** as applicable, ~~have~~**has** performed the tests detailed at CC.4.3.3 to **NGET's** satisfaction; ~~and~~

(b) Embedded: No **Generating Unit, CCGT Module, Power Park Module** or **DC Converter** which is **Embedded** (other than **LEEMPS/DCCS**) shall be **Synchronised** to a **User System**, until the later of:

- (i) the date specified by **NGET** in the **Interim Operational Notification** provided to the **Generator** or **DC Converter** owner, as the case may be;
- (ii) in the case of **Synchronous Generating Unit(s)** only the requirements of CC.4.3.3 has been completed to **NGET's** satisfaction;
- (iii) receipt of a confirmation from the **Network Operator** in whose **System** the **Plant and Apparatus** is connected that it is acceptable to the **Network Operator** that the **Plant and Apparatus** be connected and **Synchronised**.

(c) LEEMPS/DCCS: No **LEEMPS/DCCS** shall be **Synchronised** to a **User System**, until the later of:

- (i) the date specified by **NGET** (where CC.3.3.2(b) applies in the **Interim Operational Notification** provided to the **Network Operator** with a copy being provided to the **LEEMPS/DCCS** owner;
- (ii) in the case of **Synchronous Generating Unit(s)** only the requirements of CC.4.3.3 has been completed to **Network Operator's** satisfaction;

(iii) receipt of a confirmation from the Network Operator in whose System the Plant and Apparatus is connected that it is acceptable to the Network Operator that the Plant and Apparatus be connected and Synchronised.

CC.4.3.3 In the case of **Synchronous Generating Unit(s)** only, the **Generator** must complete the following tests to **NGET's** satisfaction (or to the Network Operator's satisfaction where CC.3.3.2(a) applies) to demonstrate compliance with the relevant provisions of the **CCs** prior to the Generating Unit being **Synchronised** to the **Total GB Transmission System**:

- (a) tests to establish the open and short circuit saturation characteristics of the **Generator** Generating Unit to allow assessment of the short circuit ratio in accordance with CC.6.3.2. These tests on the **Generating Unit** may be carried out at a location other than the **Power Stations**; and
- (b) open circuit step response tests to demonstrate compliance with CC.A.X.X.

CC.4.3.4 **NGET** shall assess the items submitted by the **Generator** or **DC Converter Station** owner with the **Notification of Users Intention to Synchronise**, and shall determine whether or not such items have been completed to **NGET's** satisfaction so as to enable **NGET** to issue an **Interim Operational Notification**. Where CC3.3.2(a) applies the Network Operator shall determine whether or not the items submitted by the LEEMPS/DCC have been completed to its satisfaction prior to allowing the LEEMPS/DCC to synchronise.

CC.4.3.5 ~~Subject to~~ the requirements of CC.4.3.2 and ~~CC.4.3.4, 4.3.4~~ have been successfully met, **NGET** will notify the **Generator** or **DC Converter Station** owner that the: **Generating Unit(s)**, **CCGT Module(s)**, **Power Park Module(s)** or **DC Converter(s)**, as applicable may (subject to the **Generator** or **DC Converter Station** owner having fulfilled the requirements of CC.4.3.3 where ~~applicable~~ that applies) be **Synchronised** to the **[Total System]** through the issue of an **Interim Operational Notification**.

CC.4.3.6 The **Interim Operational Notification** will be time limited as stated on its face, but may be renewed by **NGET** ~~if appropriate~~. An **Interim Operational Notification** shall not remain in effect, nor be renewed so as to remain in effect, for longer than 24 months from the date of the initial **Interim Operational Notification**, except where:

- (a) the **Generator** or **DC Converter Station** owner and **NGET** have applied for and been granted a **Derogation** in respect of the **Unresolved Compliance Issues**; or
- (b) **NGET** ~~believe~~ believes that a longer period is appropriate.

The **Generator** or **DC Converter Station** owner must operate the **Generating Unit(s)**, **CCGT Module(s)**, **Power Park Module(s)** or **DC Converter(s)** in accordance with the terms of the **Interim Operational Notification**.

~~CC.4.3.6~~ 4.3.7 (a) In the case of a **Power Park Module(s)** the **Interim Operational Notification** will limit the number of **Power Park Unit(s)** which can be **Synchronised** to the **Total System** such that neither of the following figures ~~are~~is exceeded:

(a) (i) 20% of **Registered Capacity** of the **Power Station** (or a single **Power Park Unit** where this exceeds 20% of the **Power Station's Registered Capacity**); nor

(b) (ii) 50MW,

until the **Generator** has completed the [voltage control tests in accordance with Appendix XXX] to **NGET's** satisfaction whereupon the provisions of CC.4.3.7 shall apply.

~~CC.4.3.7~~ (b) In the case of **Power Park Module(s)** where the ~~Power Station~~ **Power Park Module** has a **Registered Capacity** greater than 100 MW, the **Interim Operational Notification** will limit the number of **Power Park Unit(s)** which can be **Synchronised** to the **Total System** to 70% of **Registered Capacity** of the **Power Station** until the **Generator** has completed:

- (a) further [voltage control tests in accordance with Appendix XXX]; and
- (b) the [frequency control tests in accordance with Appendix XXX]

in each case, to **NGET's** satisfaction.

CC.4.3.8 Operation in accordance with the Interim Operational Notification whilst it is in force will meet the requirements for compliance by the User and NGET of all the relevant provisions of the Connection Conditions.

CC.4.3.9 Other than **Unresolved Compliance Issues** that are subject to tests required under CC.5.5 to be witnessed by **NGET**, the **Generator** or **DC Converter Station** owner must resolve any **Unresolved Compliance Issues** prior to the commencement of the tests, unless **NGET** agrees to a later resolution, ~~and shall~~, The Generator or DC Converter Station owner must liaise with **NGET** in respect of such resolution.

~~CC.4.3.9~~ 4.3.10 Not less than 28 days prior to the **Generator** or **DC Converter Station** owner wishing to commence tests required under CC.5.5 to be witnessed by **NGET**, the **Generator** or **DC Converter Station** owner will notify **NGET** that the **Generating Unit(s)**, **CCGT Module(s)**, **Power Park Module(s)** or **DC Converter(s)** as applicable is ready to be tested.

CC.4.3.104.3.11 The items referred to at CC.5.4 shall be submitted by the **Generator** or the **DC Converter Station** owner after successful completion of the tests required under CC.5.5.

Final Operational Notification

CC.4.3.114.4 The following provisions apply in relation to the issue of a Final Operational Notification.

CC.4.4.1 **NGET** shall assess the items submitted by the **Generator** or **DC Converter Station** owner under CC.4.3.104.3.11 to determine whether or not such items have been completed to **NGET's** satisfaction so as to enable **NGET** to issue a **Final Operational Notification**.

CC.4.3.12 ~~Subject to CC.4.3.11,4.4.2~~ If the requirements of CC.4.4.1 have been successfully met, **NGET** will notify the **Generator** or **DC Converter Station** owner that compliance with the relevant Connection Conditions has been demonstrated for the **Generating Unit(s)**, **CCGT Module(s)**, **Power Park Module(s)** or **DC Converter(s)** as applicable through the issue of a **Final Operational Notification**.

Limited Operational Notification

CC.4.4.5 The following provisions of CC.4.4 detail the process to be followed if the **Generator** or **DC Converter Station** owner ~~become aware that it's~~ becomes aware following the issue of a Final Operational Notification that its **Plant** and/or **Apparatus** is unable to comply with any provisions of the **Grid Code**, or where applicable with Appendices F1 to F5 of the **Bilateral Agreement**. If the nature of the non-compliance causes or can reasonably be expected to cause a material adverse effect on the business or condition of **NGET** or other **Users** or the **GB Transmission System** or any **User Systems** then **NGET** may, notwithstanding the provisions of this ~~CC.4.4,4.5,~~ follow the provisions of Paragraph 5.4 of the CUSC. Other than that, operation in accordance with the Limited Operational Notification whilst it is force and compliance with the following provisions of CC.4.5, will meet the requirements for compliance by the User and NGET of all the relevant provisions of the Connection Conditions.

CC.4.4.14.5.1 Immediately upon a **Generator** or **DC Converter Station** owner becoming aware that ~~at its~~ **Generating Unit**, **CCGT Module**, **Power Park Module** or **Power Station** as applicable has become non-compliant with the **Grid Code** or (where applicable) with Appendices F1 to F5 of the **Bilateral Agreement**, the **Generator** or **DC Converter Station** owner shall notify **NGET** in writing including with details of the non-compliance, any operating restrictions arising from the non-compliance and an indication of the date from when compliance will be restored.

CC.4.4.24.5.2 If:

- (i) the non-compliance notified pursuant to [CC.4.4.14.5.1](#) has not been resolved to **NGET's** satisfaction within 28 days of the date of such notification, the **Generator** and **DC Converter Station** owner shall notify **NGET** as to the reasons for the continued non-compliance; ~~or~~ [and](#)
 - (ii) **NGET** and the **Generator** or **DC Converter Station** owner have failed to reach agreement within the timescales specified in OC5.4.2.4 regarding the matters referred to at OC5.4.2.2,
- a joint investigation will be undertaken in accordance with the following provisions of [CC.4.4.4.5](#).

~~CC.4.4.3~~ [4.5.3](#) (a) The **Generator** or **DC Converter Station** owner and **NGET**, [with input from the Network Operator where the Generating Unit, CCGT Module, Power Park Module or Power Station as applicable is Embedded](#) shall undertake an investigation to attempt to determine the causes of and solution to such non-compliance. Such investigation shall continue for no longer than 56 days from, in the case of [CC.4.4.24.5.2\(i\)](#) the date of the **Generator's** or **DC Converter Station** owner's notification pursuant to [CC.4.4.24.5.2\(i\)](#), or in the case of [CC.4.4.24.5.2\(ii\)](#), the end of period referred to in OC5.4.2.4.

[\(b\)](#) During such an investigation **NGET** shall have the right to require the **Generator** or **DC Converter Station** owner to operate at certain output levels to enable the tests which **NGET** requires to be carried out, and **NGET** shall have the right to witness any such tests and facilities shall be made available by the **Generator** or **DC Converter Station** owner to enable **NGET** to witness such tests. **NGET** will notify the **Generator** or **DC Converter Station** owner [\(and the relevant Network Operator in the case of an Embedded plant\)](#) as to the **Export and Import Limits** and **Final Physical Notifications** which it requires the **Generator** or **DC Converter Station** owner to submit and duration for which they should be submitted and the **Generator** or **DC Converter Station** owner will amend its **Export and Import Limits** and **Final Physical Notifications** to reflect **NGET's** requirements.

[\(c\)](#) During such investigation the **Generator** or **DC Converter Station** owner shall provide to **NGET** the relevant compliance information from CC.5.3.1 and CC.5.4.1 notified to the **Generator** or **DC Converter Station** owner by **NGET** and submitted in the **User Data Library** notified to the **Generator** or **DC Converter Station** owner by **NGET** as being required to be provided.

~~CC.4.4.4~~ [4.5.4](#) (a) If, by the end of the 56 day period referred to at [CC.4.4.3,4.5.3](#), the investigation has not resolved the non-compliance to **NGET's** satisfaction then **NGET** will issue to the **Generator** or **DC Converter Station** owner a **Limited Operational Notification**. The **Limited Operational Notification** will be time limited. [as stated on its face](#).

[\(b\)](#) A **Limited Operational Notification** shall be for a period which expires no later than 12 months from the initial notification either by the **Generator** or **DC Converter Station** owner to **NGET** of the non-

compliance pursuant to CC.4.4.1,4.5.1, or by NGET pursuant to OC5.4.2.1.

(c) The **Generator** or **DC Converter Station** owner must operate the **Generating Unit(s)**, **CCGT Module(s)**, **Power Park Module(s)** or **DC Converter(s)** in accordance with the terms of the **Limited Operational Notification**.

(d) The provisions of CC.4.3.8 to CC.4.3.12,4.4.2 and CC.5.5 shall apply and shall be followed where a **Limited Operational Notification** has been issued, such that where compliance is shown, a Final Operational Notification will be issued again to the User.

[NOTE: Further consideration to be given to how LONs will apply to LEEMPS.]

CC.4.4.5,4.5.5 If a **Final Operational Notification** has not been issued by NGET within the 12 month period referred to at CC.4.4.4,4.5.4 then the **Generator** or **DC Converter Station** owner and NGET shall apply to the **Authority** for a **Derogation**. The issue by NGET of anythe subsequent **Limited Operational Notification** will be conditional upon a **Derogation** in respect of such continued non-compliance being granted.

CC.4.4.6,4.5.6 Where a **Limited Operational Notification** is so conditional upon a **Derogation** and such **Derogation** includes any conditions (including any time limit to such **Derogation**) the **Generator** or **DC Converter Station** owner will progress the resolution of any **Unresolved Compliance Issues** and / or any conditions upon such **Derogation** and the provisions of CC.4.3.8 to CC.4.3.12 and CC.5.5 shall apply and shall be followed.

CC.5. CONNECTION

CC.5.1 The provisions relating to connecting to the **GB Transmission System** (or to a **User's System** in the case of a connection of an **Embedded Large Power Station** or ~~**Embedded Medium Power Station**~~ or ~~**Embedded DC Converter Station**~~ LEEMPS/DCCS) are contained in

- (a) the **CUSC** and/or **CUSC Contract** (or in the relevant application form or offer for a **CUSC Contract**);
- (b) or, in the case of an **Embedded Development**, the relevant **Distribution Code** and/or the **Embedded Development Agreement** for the connection (or in the relevant application form or offer for an **Embedded Development Agreement**),

and include provisions relating to both the submission of information and reports relating to compliance with the relevant **Connection Conditions** for that **User**, **Safety Rules**, commissioning programmes, **Operation Diagrams** and approval to connect (and their equivalents in the case of ~~**Embedded Medium Power Stations**~~ not subject to a **Bilateral Agreement** or ~~**Embedded DC Converter Stations**~~ not subject to a **Bilateral**

~~Agreement~~ LEEMPS/DCCS). References in the CC to the "Bilateral Agreement" and/or "Construction Agreement" and/or "Embedded Development Agreement" and/or "CUSC Contract" shall be deemed to include references to the application form or offer ~~thereof~~ therefor.

CC.5.2 Items for submission prior to the issue of an Energisation Operational Notification

CC5.2.1 ~~Prior~~ In the case of a Generator connecting to the GB Transmission System, prior to the **Completion Date** under the **Bilateral Agreement** and/or **Construction Agreement**, and prior to the issue of an Energisation Operational Notification, the following is submitted pursuant to the terms of the **Bilateral Agreement** and/or **Construction Agreement**:

- (a) updated **Planning Code** data (both **Standard Planning Data** and **Detailed Planning Data**), with any estimated values assumed for planning purposes confirmed or, where practical, replaced by validated actual values and by updated estimates for the future and by updated forecasts for **Forecast Data** items such as **Demand**, pursuant to the requirements of the **Planning Code**;
- (b) details of the **Protection** arrangements and settings referred to in CC.6, and/or the **Bilateral Agreement**;
- (c) copies of all **Safety Rules** and **Local Safety Instructions** applicable at **Users' Sites** which will be used at the **NGET/User** interface (which, for the purpose of **OC8**, must be to **NGET's** satisfaction regarding the procedures for **Isolation** and **Earthing**. For **User Sites** in Scotland **NGET** will consult the **Relevant Transmission Licensee** when determining whether the procedures for **Isolation** and **Earthing** are satisfactory);
- (d) information to enable **NGET** to prepare **Site Responsibility Schedules** on the basis of the provisions set out in Appendix 1;
- (e) an **Operation Diagram** for all **HV Apparatus** on the **User** side of the **Connection Point** as described in CC.7;
- (f) the proposed name of the **User Site** (which shall not be the same as, or confusingly similar to, the name of any **Transmission Site** or of any other **User Site**);
- (g) written confirmation that **Safety Coordinators** acting on behalf of the **User** are authorised and competent pursuant to the requirements of **OC8**;
- (h) **RISSP** prefixes pursuant to the requirements of **OC8**. **NGET** is required to circulate prefixes utilising a proforma in accordance with **OC8**;

- (i) a list of the telephone numbers for **Joint System Incidents** at which senior management representatives nominated for the purpose can be contacted and confirmation that they are fully authorised to make binding decisions on behalf of the **User**, pursuant to **OC9**;
- (j) a list of managers who have been duly authorised to sign **Site Responsibility Schedules** on behalf of the **User**;
- (k) information to enable **NGET** to prepare **Site Common Drawings** as described in CC.7;
- (l) a list of the telephone numbers for the **Users** facsimile machines referred to in CC.6.5.9; and
- (m) for **Sites** in Scotland a list of persons appointed by the **User** to undertake operational duties on the **User's System** and to issue and receive operational messages and instructions in relation to the **User's System**; and an appointed person or persons responsible for the maintenance and testing of **User's Plant** and **Apparatus**.

CC.5.2.2 Prior to the **Completion Date** the following must be submitted to **NGET** by the **Network Operator** in respect of an **Embedded Development** (except in the case where CC.3.3.2(b) applies in relation to a **LEEMPS/DCCS**, where **NGET** will obtain the information and will record it):

- (a) updated **Planning Code** data (both **Standard Planning Data** and **Detailed Planning Data**), with any estimated values assumed for planning purposes confirmed or, where practical, replaced by validated actual values and by updated estimates for the future and by updated forecasts for **Forecast Data** items such as **Demand**, pursuant to the requirements of the **Planning Code**;
- (b) details of the **Protection** arrangements and settings referred to in CC.6 and/or the **Bilateral Agreement**;
- ~~(c) the proposed name of~~ information to enable **NGET** to prepare **Site Responsibility Schedules** on the basis of the provisions set out in Appendix 1 (but only where the **Embedded-Medium Power Station** or **the Embedded DC Converter Station** is within a **Connection Site** with another **User**);
- ~~(d) the proposed name of the **LEEMPS/DCCS** Site~~ (which shall be agreed with **NGET** unless it is the same as, or confusingly similar to, the name of other **Transmission Site** or **User Site**);

~~CC.5.2.3 (a) Of the items CC.5.2.1 (c), (e), (g), (h), (k) and (m) need not be supplied in respect of **Embedded Power Stations** or **Embedded DC Converter Stations**,~~

- (b) ~~item CC.5.2.1(i) need not be supplied~~ a list of the telephone numbers for **Joint System Incidents** at which senior management representatives nominated for the purpose can be contacted and confirmation that they are fully authorised to make binding decisions on behalf of the **User**, pursuant to **OC9** (except in respect of **Embedded Small Power Stations** and **Embedded Medium Power Stations** or **Embedded DC Converter Stations** with a **Registered Capacity** of less than 100MW, ~~and~~);
- (c) ~~items CC.5.2.1(d) and (j) are only needed in the case~~ a list of managers who have been duly authorised to sign **Site Responsibility Schedules** on behalf of the **User** (but only where the **Embedded Power Station** or the **Embedded DC Converter Station** is within a **Connection Site** with another **User**);
- (g) [a list of the telephone numbers for the **Users** facsimile machines referred to in CC.6.5.9;] **[INTERNAL NOTE: this was not dealt with in the existing CC.5.2.3 exceptions etc]**

CC.5.2.4 5.2.3 In addition, at the time the information is given under CC.5.2.1(g), **NGET** will provide written confirmation to the **User** that the **Safety Co-ordinators** acting on behalf of **NGET** are authorised and competent pursuant to the requirements of **OC8**.

CC.5.2.5 5.2.4 The items referred to in CC.5.2 must be submitted by the **Generator** or **DC Converter Station** owner or **Network Operator** (or in the case where CC.3.4.4 applies, recorded by **NGET**) using the **User Data Library** structure.

CC.5.3 Items for submission prior to issue of the **Interim Operational Notification**

CC.5.3.1 Prior to the issue of an **Interim Operational Notification** the **Generator** or **DC Converter Station** owner must submit to **NGET**:

- (a) updated **Planning Code** data (both **Standard Planning Data** and **Detailed Planning Data**), with any estimated values assumed for planning purposes confirmed or, where practical, replaced by validated actual values and by updated estimates for the future and by updated forecasts for **Forecast Data** items such as **Demand**;
- (b) Details of any special **Power Station**, **Generating Unit(s)**, **Power Park Module(s)** or **DC Converter Station(s)** protection as applicable. This may include Pole Slipping protection and islanding protection schemes;
- (c) any items required by CC.5.2, updated by the **User** as necessary;
- (d) Simulation study results demonstrating compliance with **Grid Code** requirements of:
PC.A.5.4.2

PC.A.5.4.3.2,
CC.6.3.4,
CC.6.3.7(c)(i),
CC.6.3.15,

as applicable to the **Power Station, Generating Unit(s), Power Park Module(s) or DC Converter(s)**;

- (e) A detailed schedule of the tests and the procedures for the tests required to be carried out by the **Generator or DC Converter Station** owner under CC.5. to demonstrate compliance with relevant **Grid Code** requirements. Such schedule to be consistent with Appendix XXX; and
- (f) An interim **Compliance Statement** completed to **NGET's** satisfaction and a **User Self Certification of Compliance** completed to **NGET's** satisfaction and signed by an authorised signatory of the **User** (including any **Unresolved Compliance Issues**) against the relevant **Grid Code** requirements including details of any requirements that the **Generator or DC Converter Station** owner has identified that will not or may not be met or demonstrated.

CC.5.3.2 The items referred to in CC.5.3.1 must be submitted by the **Generator or DC Converter Station** owner using the **User Data Library** structure.

CC.5.4 Items for submission prior to issue of the **Final Operational Notification**

CC.5.4.1 Prior to the issue of a **Final Operational Notification** the **Generator or DC Converter Station** owner must submit to **NGET**:

- (a) updated **Planning Code** data (both **Standard Planning Data** and **Detailed Planning Data**), with validated actual values and by updated estimates for the future and by updated forecasts for **Forecast Data** items such as **Demand**;
- (b) any items required by CC.5.2 and CC.5.3, updated by the **User** as necessary;
- (c) evidence to **NGET's** satisfaction that demonstrates that the controller models and/or parameters (as required under PC.A.5.3.2(c) option 2, PC.A.5.3.2(d) option 2, PC.A.5.4.2, and/or PC.A.5.4.3.2) supplied to **NGET** replicate the behaviour of the **User's Plant and Apparatus**;
- (d) results from the tests required in accordance with CC.5.5 carried out by the **Generator** to demonstrate compliance with relevant **Grid Code** requirements including the tests witnessed by **NGET**; and
- (e) the final **Compliance Statement** completed to **NGET's** satisfaction and a **User Self Certification of Compliance** completed to **NGET's** satisfaction and signed by an authorised signatory of the **User** and a statement of any requirements that

the **Generator** or **DC Converter Station** owner has identified that have not been met together with a copy of the **Derogation** in respect of the same from the **Authority**.

CC.5.4.2 The items in CC.5.4.1 should be submitted by the **Generator** or **DC Converter Station** owner using the **User Data Library** structure.

CC.5.5 Tests to be carried out prior to issue of the **Final Operational Notification**

CC.5.5.1 Prior to the issue of ~~an~~a **Final Operational Notification** the **Generator** or **DC Converter Station** owner must have completed the tests specified in this C.5.5.1 to demonstrate compliance with the relevant **Grid Code** provisions.

CC.5.5.1.1 In the case of any **Generating Unit, CCGT Module, Power Park Module** and **DC Converter** these tests will include:

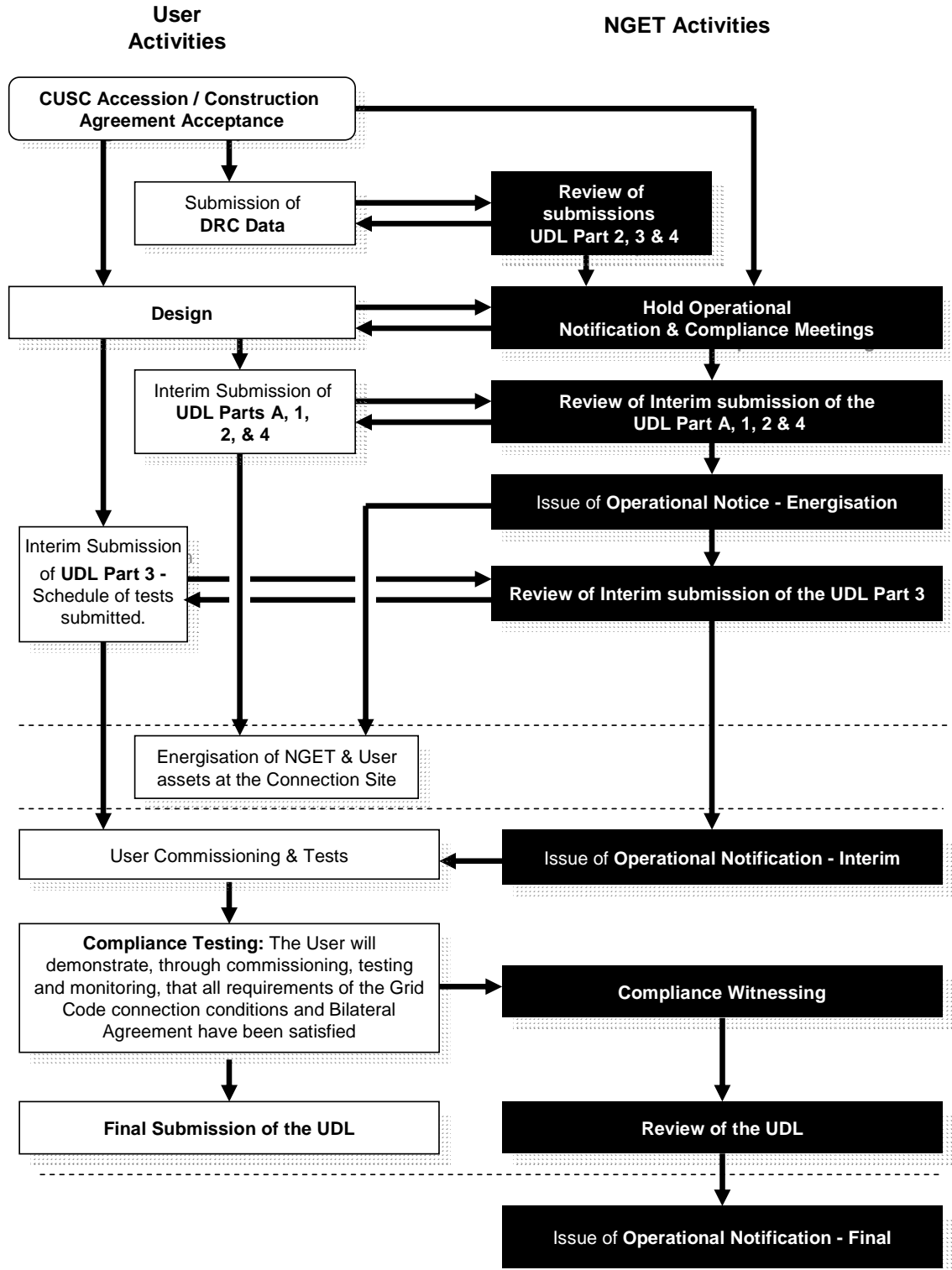
- (a) reactive capability tests to demonstrate that the **Generating Unit, CCGT Module, Power Park Module** and **DC Converter** can meet the requirements of CC.6.3.2. These may be witnessed by **NGET** on site if there is no metering to the **NGET** Control Centre.
- (b) voltage control system tests to demonstrate that the **Generating Unit, CCGT Module, Power Park Module** and **DC Converter** can meet the requirements of CC.6.3.6, CC.6.3.8 and, in the case of **Power Park Module** and **DC Converter**, the requirements of CC.A.6 and, in the case of **Generating Unit** and **CCGT Module**, the requirements of CC.A.7, and any terms specified in the **Bilateral Agreement** as applicable. These tests may also be used to validate the **Excitation System** model or voltage control system model as applicable. These tests may be witnessed by **NGET**.
- (c) Governor or frequency control system tests to demonstrate that the **Generating Unit, CCGT Module** and **Power Park Module** can meet the requirements of CC.6.3.6, CC.6.3.7, CC.A.3 and BC.3.7. The results will also validate the **Mandatory Service Agreement** required by CC.8.1. These tests may also be used to validate the Governor model or frequency control system model as applicable. These tests may be witnessed by **NGET**.
- (d) any further tests reasonably required by **NGET** and agreed with the **User** to demonstrate any aspects of compliance with the **Grid Code** and the **CUSC Contracts**.

CC.5.5.2 Following completion of each of the tests specified in this CC.5.5, **NGET** will notify the **Generator** or **DC Converter Station** owner whether, in the opinion of **NGET**, the results demonstrate compliance with the relevant **Grid Code** conditions.

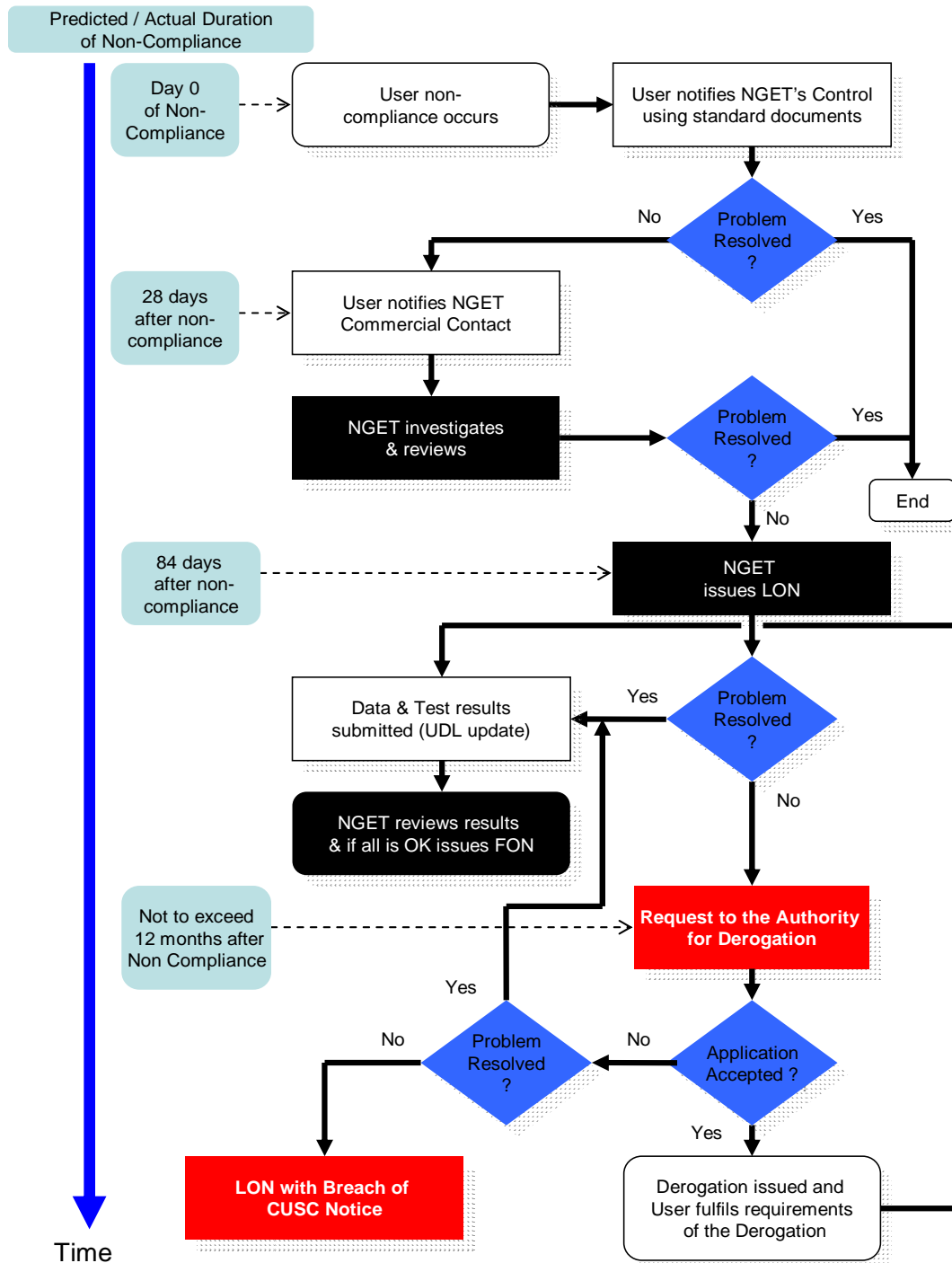
- CC.5.5.3 The **User** is responsible for carrying out the tests and retains the responsibility for safety and personnel during the test.
- CC.5.5.4 **NGET**'s preferred range of tests to demonstrate compliance with the **CCs** are specified in Appendix XXX and will be carried out by the **User** and the results of such tests will be provided to **NGET**. The **User** may carry out an alternative range of tests if this is agreed with **NGET**.

APPENDIX CC.A.XX

Process for demonstrating compliance with the Grid Code for New Power Stations/DC Converter Stations



APPENDIX CC.A.YY
Compliance Process for Lifetime Compliance



CC.A.XX

USER SELF CERTIFICATION OF COMPLIANCE (Interim/Final)

Power Station/ DC Converter Station	[Name of Connection Site/site of connection]	User:	[Full User name]	Registered Capacity (MW) of Plant:	
--	--	--------------	------------------	---	--

This **User Self Certification of Compliance** records the compliance by the **User** in respect of [NAME] **Power Station/DC Converter Station** with the **Grid Code** and the requirements of the **Bilateral Agreement** and **Construction Agreement** dated [] with reference number []. It is completed by the Power Station/DC Converter Station owner in the case of Plant connected to the GB Transmission System and for Embedded Plant. For LEEMPS/DCCS a User Self Certification of Compliance shall also be completed by the Network Operator where CC.3.3.2(a) applies.

We have recorded our compliance against each requirement of the **Grid Code** which applies to the **{Power Station/DC Converter Station}**, together with references to supporting evidence and a commentary where this is appropriate, and have provided this to **NGET**. A copy of the **Compliance Statement** is attached.

Supporting evidence, in the form of simulation results, test results, manufacturer's data and other documentation, is attached in the **User Data Library**.

~~The User~~We hereby ~~certifies~~certify that the Power Station is compliant with the **Grid Code** and the **Bilateral Agreement** in all aspects [with the following **Unresolved Compliance Issues***] [with the following Derogation(s)**]:

Connection Condition	Requirement	Ref:	Issue

Compliance certified by:	Name:		Title:
		[PERSON]	[PERSON DESIGNATION]
	Signature:		Of
		[PERSON]	[User details]
	Date:		

* Include for Interim User Self Certification of Compliance ahead of Interim Operational Notification.

** Include for final User Self Certification of Compliance ahead of Final Operational Notification where Derogation(s) have been granted. If no Derogation(s) required delete wording and Table.

DATA REGISTRATION CODE

-DRC.5 **PROCEDURES AND RESPONSIBILITIES**
- DRC.5.1 Responsibility for Submission and Updating of Data
- In accordance with the provisions of the various sections of the **Grid Code**, each **User** must submit data as summarised in DRC.6 and listed and collated in the attached schedules.
- DRC.5.2 Methods of Submitting Data
- DRC.5.2.1 Wherever possible the data schedules to the **DRC** are structured to serve as standard formats for data submission and such format must be used for the written submission of data to **NGET**.
- DRC.5.2.2 Data must be submitted to the **Transmission Control Centre** notified by **NGET** or to such other department or address as **NGET** may from time to time advise. The name of the person at the **User** who is submitting each schedule of data must be included.
- DRC.5.2.3 Where a computer data link exists between a **User** and **NGET**, data may be submitted via this link. **NGET** will, in this situation, provide computer files for completion by the **User** containing all the data in the corresponding **DRC** schedule.
- Data submitted under Schedule 5, with the exception of the single line diagram, shall be submitted electronically using a proforma to be supplied by **NGET**, or by any other means or format as may be agreed between the **User** and **NGET**. This proforma is to be supplied by **NGET** no later than calendar week 19 in each year.
- DRC.5.2.4 Other modes of data transfer may be utilised if **NGET** gives its prior written consent.
- DRC.5.2.5 Notwithstanding DRC.5.2.3 and 5.2.4 unless otherwise agreed with **NGET**, **Generators** and **DC Converter Station** owners submitting data for a **Generating Unit**, **DC Converter**, **Power Park Module** or **CCGT Module** before the issue of an **Operational Notification – Final** should submit the **DRC** data schedules and compliance information required under CC.5 electronically using the **User Data Library** structure.

.....

The specimen structure of the **User Data Library** is given below.

User Data Library = Specimen Structure	
Part A: Commercial & Legal	
A.1	Signed Legal Agreements
A.2	Commissioning & Test Programmes
	Connection Site Commissioning & Test Programme
	Generating Unit Commissioning Program
	Generator Control Test Procedures and Programme
A.3	Statements of Readiness
A.4	TOGA Registration Details
A.5	Mandatory Services Agreement
A.6	Codes for Balancing Market Units
A.7	BMU Registration
A.8	Balancing Mechanism Process
A.9	Ancillary Services Monitoring
A.10	User Self Certification of Compliance
A.11	Compliance Statement
Part 1: Safety & System Operation	
1.1	Interface Agreements
1.2	Safety Rules
1.3	Local Switching Procedures
1.4	Earthing
1.5	Site Responsibility Schedules
1.6	Operational and Gas Zone Diagrams
1.7	Site Common Drawings
1.8	Control Telephony
1.9	Local Safety Procedures
1.10	Safety Co-ordinators
1.11	RISSP
1.12	Telephone Numbers for Joint System Incidents
1.13	Contact Details (fax, tel, email)
1.14	Local Joint Restoration Plan (incl. black start if applicable)
1.15	Maintenance Standards
Part 2: Connection Technical Data	
2.1	DRC Schedule 5 = Users System Data
2.1.1	<i>System Configuration Data</i>
	Users System Layout & Single Line Diagram
	Reactive Compensation
	Substation Infrastructure
	Circuit Parameters
	Transformer Data

User Data Library = Specimen Structure

Switchgear Data
2.1.2 Protection Systems
User System protection and settings
User System Auto Reclose facilities & settings
Circuit Breaker Fail
Generator Transformer protection and settings
System Fault Clearance Times
Generator protection and settings
2.1.3 User System Studies (if required)
2.2 Protection Settings Reports
2.2.1 Protection Discrimination Review
2.2.2 Protection of Interconnecting Connections
2.3 Special Automatic Facilities e.g. intertrip
2.4 Operational Metering
2.5 Tariff Metering
2.6 Operational Communications
2.6.1 EDL & EDT
2.7 Performance Monitoring
2.7.1 Ancillary Services Monitoring
2.7.2 Fault Recorder
2.7.3 Dynamic System Monitor (if required)
2.7.4 Power Quality Monitor (if required)
2.8 Power Quality Test Results (if required)
Part 3: Generator Technical Data
3.1 DRC Schedule 1 - Generating Unit Technical Data
3.1.1 Table of Generator Parameters
3.1.2 Controls System Details
3.1.3 Generator / Station Model
3.1.4 Power Quality - Harmonic Assessment Information
3.2 DRC Schedule 2 - Generation Planning Data
3.3 DRC Schedule 4 – Frequency Droop & Response
3.4 DRC Schedule 14 – Fault Infeed Data – Generators
3.5 Special Generator Protection
Pole Slipping Protection
Islanding Protection Schemes
3.6 Compliance Tests & Evidence
3.6.1 Reactive Capability
3.6.2 Voltage Control (e.g. Excitation, AVR PSS)
3.6.3 Frequency Response (Governor)
3.6.4 Fault Ride Through
3.7 Compliance Simulation Studies
3.7.1 Model Verification
3.7.2 Reactive Capability & Voltage Range
3.7.3 Voltage Control & Stability (e.g. AVR, PSS)
3.7.4 Fault Ride Through
3.8 Site Specific Technical Data & Compliance
3.8.1 Special Automatic Features e.g. intertrip

User Data Library = Specimen Structure

Part 4: General DRC Schedules

- | | |
|-----|---|
| 4.1 | DRC Schedule 3 – Large Power Station Outage Information |
| 4.2 | DRC Schedule 6 – Users Outage Information |
| 4.3 | DRC Schedule 7 – Load Characteristics |
| 4.4 | DRC Schedule 8 – BM Unit Data (if applicable) |
| 4.5 | DRC Schedule 10 – Demand Profiles |

< End of **Data Registration Code (DRC)** >

Document comparison done by Workshare Professional on 21 August 2008
15:27:20

Input:	
Document 1	file://C:/Documents and Settings/laura.m.brock/Desktop/Phase II Changes v11 (comb of LON v9 and update v10).doc
Document 2	file://C:/Documents and Settings/laura.m.brock/Desktop/Phase II Chages v14 (LEEMPS text based on v11).doc
Rendering set	Standard

Legend:	
<u>Insertion</u>	
Deletion	
Moved from	
Moved to	
Style change	
Format change	
Moved-deletion	
Inserted cell	
Deleted cell	
Moved cell	
Split/Merged cell	
Padding cell	

Statistics:	
	Count
Insertions	220
Deletions	136
Moved from	1
Moved to	1
Style change	0
Format changed	0
Total changes	358