

Introduction to the Operational Notification Process



Compliance & Notification Team

Contents

- Purpose
- Overview of process for new connections
- How do I comply?
 - Compliance Toolkit
- Who can I contact I have a problem?
- Issues that have caused delays

Contractual Framework: CUSC

- Approval to Connect/Energise
- Construction Agreement Clause 5:
- “..... the statement submitted by the **User** shall in addition contain relevant **Connected Planning Data** and a report certifying to **The Company** that, to the best of the information, knowledge and belief of the **User**, all relevant **Connection Conditions** applicable to the **User** have been considered and complied with.

Contractual Framework: CUSC

- Becoming Operational
- Construction Agreement Clause 7:
- “**The Company** shall connect and **Energise** the **User’s Equipment** at the **Connection Site**and thereafter upon compliance by the **User** with the provisions of Clause 5.....**The Company** shall forthwith notify the **User** in writing that the **Connection Site** shall become **Operational** at a **Transmission Entry Capacity** of ??MW.
- The **Operational Notification** is a formal letter to the **User’s** representative/Co Secretary confirming the **User’s** right to use the **National Electricity Transmission System**.

Grid Code

- Industry Code governing technical framework
 - Generic Technical Requirements
 - Compliance Processes
 - Connection Conditions
 - Site Specific Requirements
 - Technical Appendices (F1 to F5) in Bilateral Agreement

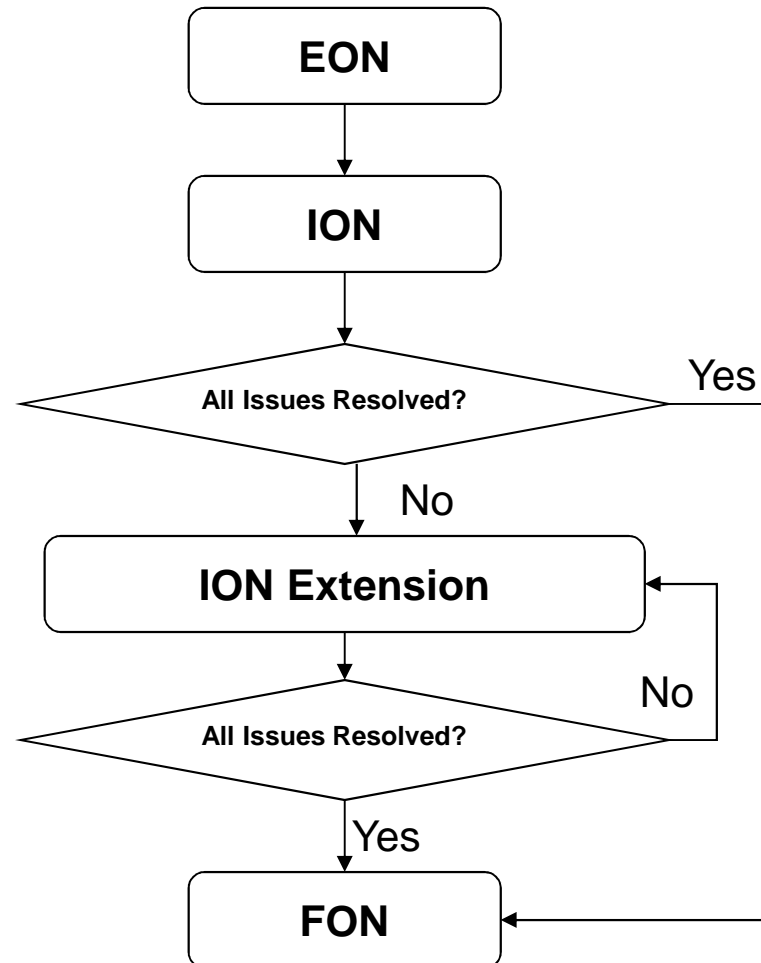
Process for New Connections

Types of Operational Notifications:

- Energisation Operational Notification (EON)
- Interim Operational Notification (ION)
- Final Operational Notification (FON)

Operational Notifications - New

Operational Notification Process for New Connections



Operational Notification Process

- Timescales
- Your nominated lead contacts
 - Compliance & Notifications team
 - Generator Compliance Engineer
- Compliance Toolkit

Compliance Toolkit

- Compliance Statement
- User Data File Structure (UDFS)
- Operational Notification Compliance checklist (ONCC)

Toolkit - Compliance Statement

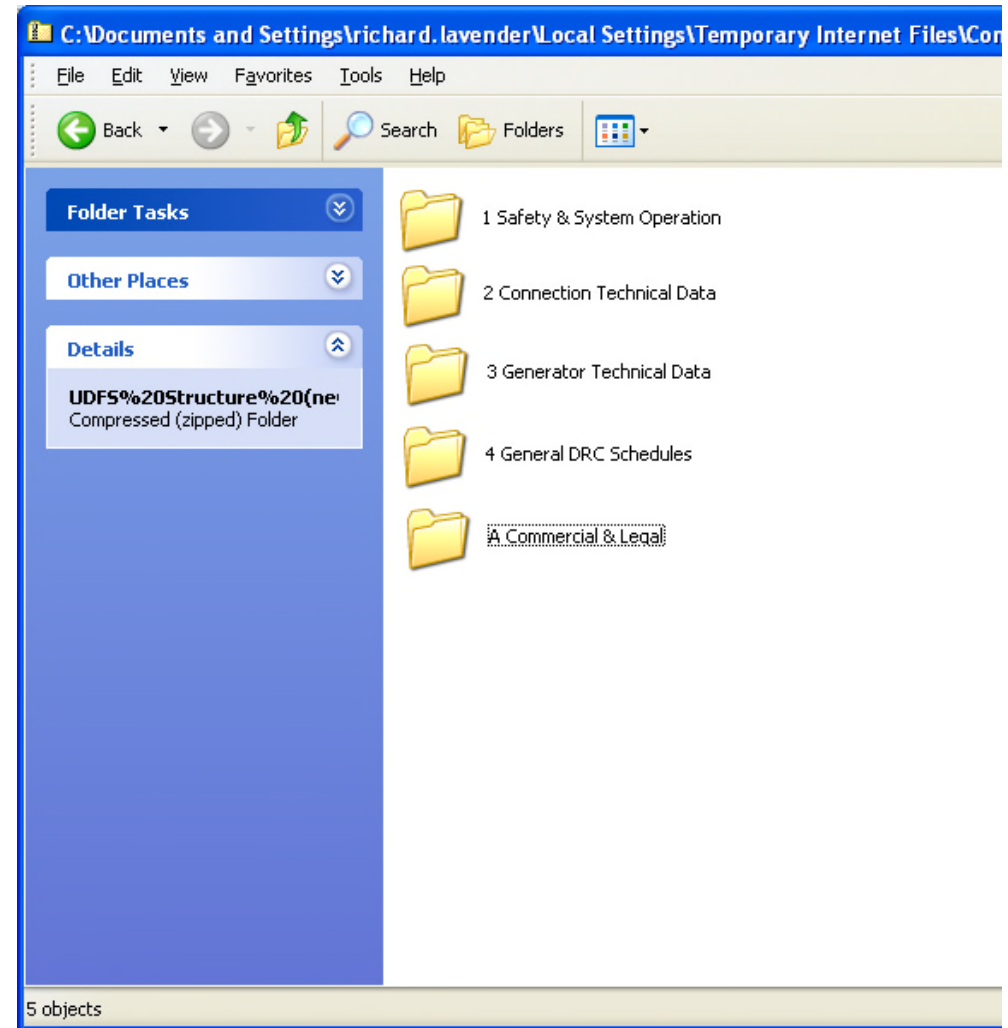
| | | | | | |
|----------------------------------|---|--|--|--|--|
| Compliance Statement | | Test Generator transmission connected in NGET transmission area | | | |
| | | Completion Date on 31/10/2008 | | Connection Voltage = 400kV, Registered Capacity = 1000MW, Options: N3 | |
| Key to Evidence Requested | | Generation Type : Synchronous Plant | | | |
| ‘DS’ | Indicates that NGET would expect to see the results of a Dynamic Simulation study. | | | ‘S’ | Indicates that NGET would expect to see the results of a Simulation study (not necessarily, but not excluding, dynamic simulation). |
| ‘G’ | Manufacturer’s generic data or test results, as appropriate. | | | ‘P’ | Generating Unit design data. |
| ‘D’ | Copies of correspondence or other documents confirming that a requirement has been met (e.g. copy of letter from NGET confirming receipt of Safety Rules) | | | ‘T’ | Indicates that NGET would expect to see results of, and/or witness, tests or monitoring which demonstrates compliance. Where possible, the test is referenced to the relevant section of this guidance document. |
| ‘O’ | Indicates that NGET would expect to be provided with the currently applied operating settings. | | | ‘TV’ | Indicates type validation test (if Generator pursues this compliance option) |

Key to Compliance: Y = Yes (Compliant), N = No (Non Compliant) or Q = Query

| REQUIREMENT | | RESPONSE | | | | |
|-----------------------------|---|--|---|--|-----------------------------|-------------------------|
| Connection Condition | Compliance Requirement of User | Evidence Requested | Lead Role | UDI Ref | Compliance Y, N or Q | User's Statement |
| CC.5.2 | Please confirm that the following information has been submitted to NGC: (a) Updated Planning Code Data, with any estimated values replaced by validated plant data; (b) Details of Protection arrangements and settings (see CC.6.2); (c) Copies of Safety Rules and Local Safety Instructions (see CC.7.2.6) applicable at the User Site; (d) Information to enable NGET to prepare Site Responsibility Schedules (e) An Operation Diagram (see CC.7); (f) The proposed Name of the User Site; (g) written confirmation that Safety Coordinators are authorised and competent pursuant to CC8; (h) RISSP prefixes, pursuant to requirements of CC8; (i) A list of telephone numbers for Joint System Incidents; (j) List of managers authorised to sign Site Responsibility Schedules; (k) Information to enable NGET to prepare Site Common Drawings (see CC.7); (l) A list of telephone numbers of Fax machines (see CC.6.5.9); | P, G, D P D D D D D D D D D D | SO TO TO TO SO/TO TO TO SO TO TO SO | 2.1 3.1-3.4 2.1.2 1.2, 1.10 1.5 1.6 1.13 1.10 1.11 1.12 1.5 1.7 1.13 | | |

Toolkit - User Data File Structure

- Electronic implementation of the Compliance Statement structure.
- UDFS structure populated by the User during the Compliance Process
- Statements, supporting info., reports DRC data, modelling
- Version control important.



Toolkit - Compliance Checklist

NATIONAL GRID ELECTRICITY TRANSMISSION PLC

GB Reference : GBEXXXX

Operational Notification Compliance Checklist

| | | | |
|------------------------------|-----------------------|--|------------|
| Customer: | Test Limited | Energisation Date: | 31/05/2010 |
| Connection Site: | Test 400kV Substation | Synchronisation Date: | 31/10/2010 |
| Date of Bilateral Agreement: | 08/02/2006 | Transmission Company Commissioning Date & Effective From Date: | 31/05/2010 |
| Comm.Prog.Commencement Date: | 31/05/2010 | Completion Date: | 31/10/2010 |

| | | | | | |
|---------------------|---------------|--------------|------|---------------------|--------|
| Connection Type: | GEP | DNO: | n/a | Capacity: | 1000MW |
| Direct or Embedded? | Direct | Affected TO: | None | Connection Voltage: | 400kV |
| TO/ Host TO: | National Grid | BM Unit: | Yes | | |

| Item No. | Information/Data and Activity Requirements | Code or Agreement Ref. | User Data File Structure Ref. | Initiator | National Grid Responsible Management Unit (RMU) | Required Lead Time | Source of Required Lead Time | Normal Lead Time (default) | Calculated Date | Adopted Date | Guidance Notes and Links to Information |
|----------|--|--|-------------------------------|---------------|---|--------------------------|------------------------------|--|-----------------|--------------|--|
| | Before Start of Commissioning: | | | | | | | | | | |
| 1 | Arrange first Operational Notification Panel meeting | | | National Grid | Commercial - Electricity Customer Team | BCA Immediate | Internal | BCA Immediate | 08/02/2006 | | ONP to be set up unless all parties (User, National Grid, TO, DNO as applicable) agree otherwise. Responsibility can be transferred to Commissioning Panel |
| 2 | Circulate contact details | | | National Grid | Commercial - Electricity Customer Team | After first ONP | Internal | After first ONP | 01/12/2008 | | Contact details of all parties to be circulated promptly following ONP meeting. |
| 3 | Produce Compliance Statement Pro-forma and issue to User | | | National Grid | Commercial - Electricity Customer Team | After first ONP | Internal | After first ONP | 01/12/2008 | | |
| 4 | Confirm User Site Name | CC5.2.1(f) | | User | Commercial - Electricity Customer Team | Prior to Completion Date | CC.5.2.1 | At first ONP | 01/12/2008 | | |
| 5 | Genset Unit Outages/Output & Other User Equipment/Apparatus Outages: TOGA Registration and User's familiarity with process | A.4 | | User | NO - Energy Requirements | BCA Immediate | Internal | BCA Immediate | 08/02/2006 | | A Guide to BMU Registration provides information of TOGA registration. TOGA allows on-line submission of availability forecasts. |
| 6 | Detailed Planning Data (Committed Project Planning Data): Generating Unit Technical Data (DRC Schedule 1) Frequency Droop & Response (DRC Schedule 4) Mothballed Unit Data & Alternative Fuel Info (DRC Schedule 15) | PC.5.4 / PC.4.4.2/ PC.A.5/ CC.5.2.1(a) | 3.1, 3.3, 4.8 | User | Generator Dynamic Performance | BCA Immediate | PC.4.4.2 | BCA + 28days (for DPD I) Completion Date - 2Y (for DPD II) | 08/03/2006 | | Network Modelling also closely involved in DRC Sch 1 - see guidance notes on submitting GC data. This is an ongoing process throughout the life of the agreement, and relates to the current planning of the system. Updates are required annually at "Week 24" - see PC.4.3.1 |

Issues that may cause Pre-connection delays

- Metering
 - Settlement (Elexon), Operational (SCADA)
- Telephony
 - Accessibility 24hrs a day
- Controllability
 - Control Point to be able to act on instructions
- Other Agreements
 - Interface / Commercial / Mandatory Agreements

Common Customer Queries – Post Connection

- ION - fully commercially available for MWs on issue
 - not commercially available for MVars until tested
 - must maintain reactive requirements
- Requirements of Integral Equipment Test (IET) process
- Guidance Notes available for Compliance Testing & IET process

Contacts

- Operational Notification Queries:
 - Richard Lavender – Manager
 - Steve Hoar
 - John Towie
 - Chloe Harradine
 - Ben Green

- Web Page Guidance:

<http://www2.nationalgrid.com/UK/Services/Electricity-connections/Compliance/>

Questions?



Process for Existing Connections

Fourth category of Operational Notification issued in relation to existing connections:

- Limited Operational Notification (LON)

Operational Notifications - Existing

Operational Notification Process for Existing Connections

