# nationalgrid

# A Guide to BMU Registration with National Grid

Issue 8.8, March 2017



#### Contents

	Page
Introduction	1
Overview	1
BMU Registration Process	2
Associated Requirements	2
Communications	2
The Registration Process	4
Change of BMU Ownership (CoBLP)	5
Change of Trading Agent (CoTA)	5
BM Active	6

#### References

7

Disclaimer: This document has been prepared for guidance only and does not contain all the information needed to complete BMU registration with ELEXON or National Grid. Please note that while this Guide has been prepared with due care, National Grid does not make any representation, warranty or undertaking, express or implied, in or in relation to the information contained in this guide, and accordingly the contents should not be relied on a such. © The National Grid Company 2002



#### Introduction

1. This document is a guide to the process of registering Balancing Mechanism Units (BMUs) with National Grid. It is intended both for parties who are entering the market for the first time and for those who already have BMUs registered with ELEXON but now wish to, or are required to, register such BMUs with National Grid.

#### Overview

- 2. Each Party that has responsibility for Exports and/or Imports on to the Transmission System must ensure that the Plant and/or Apparatus which gives rise to those Exports and/or Imports are comprised in registered BM Units. The Central Registration Agent (CRA) administers this registration process for ELEXON. Section K of the Balancing and Settlement Code (BSC)<sup>1</sup> defines this obligation, and the BMU registration process is detailed in the Balancing and Settlement Code Procedure (BSCP) 15, "BM Unit Registration". The BSC and the associated BSCPs can be found on the ELEXON website www.elexon.co.uk, under BSC and Related Documents.
- 3. In addition to the requirement to register with ELEXON, there is an obligation in some instances for parties to register their BMUs with National Grid, in its role as Transmission Company (TC). The Grid Code<sup>2</sup> obliges parties to register depending on type and size criteria with National Grid. Parties may also choose to register smaller BMUs in order to participate actively in the Balancing Mechanism. Interconnector Users are required to register BMUs, regardless of capacity, in pairs (Import & Export expressed as Demand & Generation BMUs).
- 4. Once a BMU is registered with National Grid, the Lead Party must submit Physical Notifications (PNs) for that BMU. The PNs for a BMU are the expected levels of Export or Import, as at the Transmission System Boundary, for that BMU. This is done using a communications system known as EDT (Electronic Data Transfer)<sup>3</sup> Participants may also wish to be active in the Balancing Mechanism, for which a separate system known as EDL (Electronic Dispatch Logging)<sup>3</sup> will be required. These two systems are distinct and separate from any links between the party's system and those of ELEXON or its Agents. Interested parties should bear in mind that the time required to install and test the necessary communication system(s), up to three months or more, may determine the minimum time in which BMU registration can be completed.
- 5. Although this document deals specifically with BMU registration, references are given where possible to enable further information to be obtained on related areas. Please see pages 6 & 7 for references relating to postscripts.
- 6. ELEXON and National Grid may be contacted via their respective helpdesks:

ELEXON: <u>bscservicedesk@cgi.com</u> - telephone 0870 010 6950

National Grid: <u>BMU.Registration@nationalgrid.com</u> - telephone 0800-085-4806

#### **BMU Registration Process**

7. The detailed process of BMU registration is given in BSCP15, "BM Unit Registration", a subsidiary document to the BSC. This guide does not aim to summarise BSCP15, but to indicate the steps that parties will need to take to complete the registration process with National Grid. Any interested party is advised to contact National Grid and ELEXON on their respective helpdesks; those whose BMUs are already registered with ELEXON should be aware that they will still have to contact ELEXON in order to register the change in FPN status of their BMUs from No to Yes.

#### Associated Requirements

- 8. New entrants to the market will have to accede to the BSC Framework Agreement before BMU registration can be completed. This is done through ELEXON, who will advise on the process.
- 9. All users of the National Grid transmission system must accede to the Connection and Use of System Code (CUSC)<sup>4</sup>. Further information about CUSC may be found on the National Grid website at <u>www.nationalgrid.com/uk/Electricity/Codes</u>. The Connections Team within National Grid offers information and assistance to new customers and may be contacted directly on 01926 654634.
- 10. Companies wishing to trade across the England-France Interconnector, Moyle, BritNed or EWIC Interconnectors must be registered with ELEXON as an Interconnector User. Each Interconnector User will register two BMUs, one for demand and one for generation (being respectively export from and import to the GB Transmission System).
- 11. Users of the England-France Interconnector in particular must fulfil a number of other criteria with National Grid Interconnectors Ltd and/or Reseau de Transport d'Electricitie (RTE), the French transmission system operator, including the signing of a User Agreement to comply with the IFA<sup>5</sup> (Interconnexion France Angleterre) Access Rules. These Access arrangements are outside the scope of this document, but interested parties are advised to look at the Interconnectors area of the National Grid website at www.nationalgrid.com/uk activities, interconnectors, or contact Interconnectors Business on ifa.customerenquiries@nationalgrid.com tel 01926 655478.
- 12. When BMUs are being registered, there is an associated registration process, detailed in BSCP20<sup>1</sup>, for registering metering systems for generation and demand BMUs (those not registered with the Supplier Meter Registration Service), demand BMUs directly connected to the NGC transmission system, and metering systems directly associated with system connection points. Although this registration process is a BSC obligation, National Grid is heavily reliant on the use of such metering information. Metering data for any metering systems that are registered through BSCP20 are forwarded to National Grid through the Central Data Collection Agent 1012 daily report. This data helps populate Network Demand data in order that cost effective planning of the transmission system is facilitated.

13. Other associated registration processes concerns TOGA and MPSI. TOGA (Transmission Outage and Generator Availability) is National Grid's system for receiving submissions of generator availability and outage dates. MPSI (MW Profile Submission Interface). This is a web based system which is required to enable BM Units to be registered if they do not have EDT (Electronic Data Transfer) for submitting PNs and MELs. See Appendix A for the TOGA and MPSI Registration Guide.

#### **Communications**

14. As indicated in the Overview, past experience has shown that participants can take up to six months or more to install and test the required communication links with National Grid. This is likely to increase the lead time for BMU registration beyond the minimum thirty working days laid down in BSCP15, a factor that interested parties should keep in mind.

#### EDT (Electronic Data Transfer)

- 15. It is a requirement of the Grid Code that any BMU registered with National Grid must submit an accurate indication of its intended MW position, in the form of a Physical Notification (PN). This is achieved by means of an EDT link, (an ISDN or leased line with associated hardware and software). The link is paid for, and is the responsibility of, the Lead Party, and is also used for the submission of MEL/MIL (Maximum Export Limit / Maximum Import Limit) data and, as required, day-ahead dynamic data and BOD (Bid Offer Data).
- 16. A list of EDT suppliers with software type tested can be provided by National Grid on request.
- 17. Participants make EDT submissions onto the National Grid systems using an account and password provided by National Grid. Each user (called a Trading Agent) is identified by a unique nine-letter code. It is possible for a participant to operate more than one Trading Agent; conversely, a participant may choose to have a third party act as their Trading Agent and submit data on their behalf, thus avoiding the need for EDT installation. Each Trading Agent must have identified contact personnel for the receipt of passwords and to agree any password changes. The physical location from which EDT files are submitted is called a Trading Point.
- 18. It should be noted that PN submissions may only be made using EDT; other forms of communication, including facsimile, email and telephone submissions, are not permitted.

#### EDL (Electronic Dispatch Logging)

19. Any BMU, with the exception of the Interconnector BMUs, may be designated to be Active in the Balancing Mechanism. This means that Bid and Offer volumes and prices may be offered to National Grid, as System Operator, to be used in balancing generation and demand on the Transmission System. The Bid Offer Data is submitted via EDT, but a separate communications system, EDL, is used by National Grid to relay Bid Offer Acceptances to the Control Points of such BMUs, over a permanent link. EDL systems are paid for by National Grid.

20. National Grid also allows the EDL link to be used by participants to submit shortterm changes to MEL/MIL data and for real-time dynamic parameter submissions.

#### Qualification

- 21. New EDT and EDL systems must undergo Network Access Tests (NATs) and Business Process Interface Tests (BPITs) before they may be used for data submission. National Grid is only responsible for carrying out the tests at the National Grid end and the generator and their suppliers conduct the tests from their locations and are responsible for any costs incurred there. Upon completion of the National Grid testing a Qualification certificate is issued to the participant. It is a requirement of BSCP15 that this Qualification must be completed at least five working days before BMU registration with National Grid becomes effective.
- 22. Further information<sup>5</sup> may be found on the National Grid website (<u>www.nationalgrid.com</u>), and any queries may be directed through the helpdesk tel 0800 085 4806 / +44 8705 216121.

#### The Registration Process

- 23. The first step for any party interested in registering BMUs with National Grid is to contact the National Grid helpdesk. National Grid and ELEXON work closely together to effect the registration as smoothly as possible, and new entrants to the market usually find it useful to have a meeting with both companies to discuss their registration.
- 24. Having made the decision to proceed, the party may then pursue the installation of communications systems at the same time as completing the necessary paperwork. As mentioned above, if new EDT or EDL systems are required to be installed, this is likely to increase the lead time for BMU registration beyond the minimum thirty working days laid down in BSCP15, a factor that interested parties should keep in mind.
- 25. As well as meeting the other criteria indicated above, a party wishing to register BMUs must submit the correct forms as stipulated in BSCP15. When BMUs are being registered with National Grid, National Grid also requires that its own registration forms be completed (contact <u>BMU.registration@nationalgrid.com</u>). These forms are not contained within BSCP15 but supplied by National Grid on request. The forms should be returned to National Grid at least twenty working days prior to the commissioning date. The NG registration form will contain the BMU id(s) These NG BMU id(s) are used by Elexon, and the Settlement id(s) are normally based on these. ELEXON appoints a Central Registration Agent (CRA) to administer the registration process, and it is to the CRA that the relevant BSCP15 forms are submitted. CRA will then pass the information to National Grid. Following receipt of the BSCP15 form by National Grid an acceptance or an objection statement must be then issued by National Grid to ELEXON within 5 working days.

- 26. BSCP15 refers to the TCCD (Transmission Company Commissioning Date). This is the date from which the BMU is first traded through National Grid systems. In the case of a BMU that is also being registered with ELEXON for the first time, it should correspond to the Effective From Date of the BMU. If Qualification tests are not completed within the required time-scales, however, the TCCD may be delayed. As mentioned in the above point, the NG registration forms should be returned to National Grid at least twenty working days prior to the commissioning date.
- 27. Once the necessary changes have been made to the National Grid systems to incorporate the newly-registered BMU, data submissions relating to periods from the TCCD onwards may be made, in line with the Data Validation, Consistency & Defaulting Rules<sup>6</sup>.

#### Change of BMU Lead Party (CoBLP)

- 28. If a BMU is transferred from one Lead Party to another, the process is known as a Change of BMU Lead Party, or CoBLP. This is covered under BSCP15/4.11 (Change of CVA BM Unit Ownership), it is subject to thirty working days' notice. However, the time for National Grid to effect the change will depend upon the Trading Agent requirements. It may be possible for a CoBLP to be implemented by National Grid in five working days, particularly if there is no Change of Trading Agent (see below re CoTA).
- 29. If the CoBLP also involves a change of Control Point, depending if the nominated Control Point already has EDL or not, can impact timescales. New EDL can take around 6 months to install.
- 30. If the CoBLP also involves a change of Trading Agent, depending if the nominated Trading Agent has EDT or not, can impact timescales. New EDT can take 3-6 months to install.
- 31. The CoBLP process needs to be undertaken with Elexon, but National Grid will also require an updated copy of the NG registration form to be completed for the BMUs in question, to ascertain the changes required.

#### Change of Trading Agent (CoTA)

- 32. At any point in time, each BMU within the National Grid systems is assigned to a particular Trading Agent. A Change of Trading Agent (CoTA), often associated with a CoBLP, changes the BMU assignment in relation to data, at an agreed date and time. A CoTA is agreed between the party and National Grid and does not involve ELEXON or the CRA. It is normally subject to ten working days' notice, though this may be reduced, particularly if the "new" Trading Agent already exists.
- 33. However, since all Trading Agents must have completed Qualification, if the CoTA is to a new Trading Agent requiring new EDT, the lead time in that case will be dependent upon the time taken for the new Trading Agent to complete qualification.

34. Again an updated copy of the NG registration form is required for National Grid to ascertain and effect the changes required.

#### **BM Active**

- 35. In some cases a party may not have registered with Elexon under BSCP15, but with National Grid only, depending on the connection agreement, eg. BELLA agreements. If later the party wishes to participate in the balancing mechanism and undertake the BSCP15 process with Elexon, the Elexon timescales will still apply. An updated NG registration form is required to be sent to the NG BMU Registration team (contact <u>BMU.registration@nationalgrid.com</u>) indicating that the BMU now requires to become BM Active. A Control Point with EDL is a requirement for this (whereas was previously optional). Depending on whether new EDL is also required to be installed, this may impact lead times for the changes to be updated and NG's consideration towards the Elexon suggested commissioning date. If EDL is already in place, NG will still require at least 2 months notice for changes of this nature.
- 36. In any event, if the original registration with National Grid was for the units to not be BM Active, but now wishes to be BM Active, an updated NG registration form is required and the 2 month notice period with NG will apply.

#### References

- 1. The Balancing and Settlement Code (BSC) contains the rules and governance for trading in the Balancing Mechanism and Imbalance Settlement process. All licensed electricity companies are obliged to be a party to the BSC; other parties may choose to do so. ELEXON is the Balancing and Settlement Code Company (BSCCo) defined in and created by the BSC. The BSC and the associated Balancing and Settlement Code Procedures (BSCPs) be found the ELEXON website can on www.elexon.co.uk, under BSC and Related Documents.
- 2. National Grid and users of its Transmission System are required to comply with the **Grid Code**. The Grid Code covers all material technical aspects relating to connections to and the operation and use of the Transmission System or, in as far as relevant to the operation and use of the Transmission System, the operation of the electric lines and electrical plant connected to it or to a distribution system. The Grid Code also specifies data which system users are obliged to provide to National Grid for use in planning and operation of the Transmission System, including demand forecasts, availability of generating sets and intended dates of overhaul of large generating sets. The Grid Code may be found on the National Grid website at www.nationalgrid.com/uk/Electricity/Codes/gridcode
- 3. A number of documents are made available on the National Grid website relating to **EDT and EDL**. The following, all found under <u>www.nationalgrid.com/uk/Electricity/Codes/gridcode/ges/ewelecstandards</u> may be of interest:

Interface Standards – Issue 3

Electronic Data Transfer (EDT) Interface Specification – Issue 4

Electronic Dispatch Logging (EDL) Message Interface Specifications - Issue 4

EDT Interface Specification – Guidance Note – 30 October 2001 (Relating to the establishment of Participants' DR services)

EDT Submitter Guidance Note – 21 December 2001 (Relating to the efficient use of EDT communication channels)

4. The **IFA** (Interconnexion France Angleterre) Access Rules detail rules for gaining access to and use of the England-France Interconnector, including the participation requirements, the tender process and the auction process. The IFA User Agreement is the agreement between users and the joint owners of the England-France Interconnector giving effect to the IFA Access Rules. Further information may be found on the National Grid website at <u>www.nationalgrid.com/uk/Interconnectors/France/Documentation</u>

#### A Guide to BMU Registration with National Grid

5. The Connection and Use of System Code (CUSC) is the legal document which forms the basis of the contractual framework for connection to, and use of, National Grid's high voltage transmission system. Holders of a generation, distribution or supply licence are required to be a party to the CUSC Framework Agreement and comply with the CUSC. Information about the CUSC and the associated charges may be found on the National Grid website under

http://www.nationalgrid.com/uk/Electricity/Codes

6. The Data Validation, Consistency & Defaulting Rules is a Grid Code Associated document, which defines the rules for data validation and consistency checking which will be applied to Balancing Mechanism data received from Trading Agents and Control Points. It also covers defaulting rules to be applied in the absence of expected data. This document may be found on the National Grid website, under

http://www.nationalgrid.com/uk/Electricity/Codes/gridcode/associateddocs

Appendix A

# nationalgrid

### **TOGA Registration Guide**

#### Introduction

TOGA (Transmission Outage and Generator Availability) is National Grid's system for receiving submissions of generator availability and outage dates. The system also provides reports of transmission outages. It is a web based system so it is accessible from anywhere. Units need to be registered for TOGA if they are large, or transmission connected (including all off-shore wind farms), or a BEGA.

#### Logging in

TOGA is accessed from web address https://www.toga.ngtuk.co.uk/toga

Note that the site is secure and require 'https:' instead of 'http:' in the URL. Address opens a login window which asks for a username and password. Details of how to obtain usernames and passwords are covered in the following sections. *Usernames and passwords are common to both systems.* 

#### **Registration of Local Security Officer**

One person needs to be registered as 'Local Security Officer' (LSO) to act as a contact for our internet security team. The LSO is responsible for authorising user request/ registration (form B160) for their company. Registration of LSO can be obtained by submitting the attached Form B151. A 'Deputy Local Security Officer' (DLSO) can also be registered if desired using another copy of the form.

#### **Request for TOGA Users**

The other form attached, Form B160, is used for requesting one or more people to be TOGA users and has to be signed by the LSO. The LSO can also be a user if so desired. It is also quite acceptable to have just one generic log-in for multiple users. In this case the name of the power station or company can be filled in for the name of the user. The Company 3 character code should be left blank as this will be filled in by National Grid. If TOGA is to be used at a power station, the role required is 'Power Station' but if it is to be used by a company for more than one power station the role required is 'GCSubmitter'.

#### **Submission of Forms**

The form should be scanned and sent by email to <u>Gen.Info@nationalgrid.com</u>. Once the forms have been processed, the Internet Security Team will issue the required usernames and passwords to the LSO.

#### Contacts

The TOGA and MPSI team can be contacted by email at <u>Gen.Info@nationalgrid.com</u> or by telephone on 0118 936 3476. Details of how to enter availability and outage data into TOGA or notified output into MPSI will be provided.

Rumit Shah Ver2.2

17 April 2015

FORM FOR REGISTERING, AMENDING OR REMOVING DETAILS OF LSOS AND DLSOS



nationalgrid

#### FORM B151

### Registration, Amendment or Removal of Local Security Officers and Deputy Local Security Officers

User organisation name			
Effective date for change			
Type of Request ( Please tick)	Add	Delete	Change

AUTHORISATION FOR CHANGE Existing users only

Full name of *current* LSO/DLSO or registered I.S Contact Signature of *current* LSO/DLSO or registered I.S Contact

I	
1	
ŀ	
ŀ	

Deputy LSO:

Fax

#### Date of Request **REGISTRATION DETAILS**

New users: Please supply all details requested below. Existing user: Please supply only changes to details currently registered with NGT

LSO:

Telephone

Full name of LSO/DLSO to be created/modified

Tick as appropriate

Business address, including post code

Contact Numbers

Office:

Mobile:

Home:

Others:

E-mail address

#### To be completed in private by the future LSO/Deputy LSO

PRINT codeword (min. 8 Characters) Do not reveal this codeword to anyone else

Specimen signature

When you have completed this form, Please scan and Email to <u>Gen.Info@nationalgrid.com</u> Phone number: 0118 936 3476

Form B151 - VER 2.1

17/04/15

nationalgrid

FORM FOR REGISTERING, AMENDING OR REMOVING DETAILS OF TOGA AND MPSI USERS

### FORM B160

## national**grid**

This form is used to add, change or deactivate the login account of a TOGA or MPSI user. If you handle access requests for more than one company, Please submit a separate form for every user in each organisation.

Company name	
Company 3 Character code	
Effective Working Date for request	
(minimum 5 working days notice	
required)	

Full Name of TOGA/MPSI User	Action Enter either: (A) Add (R) Remove (C) Change	Role Required (see list of roles below)	If user is for removal enter existing user id(s) (format Xccccccc)
			,

(Please continue on the back of this sheet if insufficient space.)

Signature of LSO or Deputy LSO	
Please print Name	
Date of Request	

When you have completed this form, Please scan and Email to <u>Gen.Info@nationalgrid.com</u> Phone number: 0118 936 3476

*List of Roles:* GCSubmitter, Power Station, GCView, DNO Viewer, TO Scot Planner & TO Scot Viewer

FormB160 – VER2.1

17/04/15

