

## Information note on TOGA Facilities

Prepared by National Grid (Plc)

**Issue 3**  
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## NOTES

'These notes of guidance have been prepared by National Grid with the aim of assisting Users in completing the relevant Schedules of the Grid Code (GC). The guidance notes do not form part of the GC, and if there is any conflict between the Guidance Notes and the GC, or any other agreement, then that agreement shall take precedence'.

## DOCUMENT CHANGE CONTROL DETAILS

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## Introduction

TOGA (Transmission Outages, Generation Availability) is National Grid's facility to enable it to manage the increased Grid Code OC2 data volumes associated with the introduction of the British Electricity Transmission and Trading Arrangements (BETTA) introduced on 01 September 2004. TOGA is web based and enables users to log on to the TOGA database to enter and retrieve data as required by the Grid Code.

TOGA functions in two separate areas referred to as GOAMP and TOPAM; the former for generator availability and outages, the latter for transmission system outages.

GOAMP, "Generator Outage And Maintenance Planning", enables generators to meet their OC2 requirements to inform National Grid of their generator availabilities and planned outages for all grid code timescales.

TOPAM, "Transmission Outage Planning And Monitoring", enables transmission asset owners such as the National Grid's ETAM, the Scottish TOs and offshore transmission asset owners to send in requests for outages on transmission system assets, to view outages sanctioned and planned and to run reports for both historic and future outages. National Grid uses the data in TOPAM to fulfill its obligations under the Grid Code to inform affected stakeholders of outages on the transmission systems that may impact upon them and also uses the data to populate annual reports for Ofgem.

## Database availability

The database will normally be available daily between 0001 and 1800hrs with planned outages usually scheduled from 1800hrs on working days with a view to returning full availability to users by 0001hrs the following morning. Outside of planned outages and unforeseen shutdowns, TOGA is usually available 24/7.

## Secure log on facilities

Each user requiring access will be allocated an ID and password. For Generators this can be at a Power Station or Company level. There are two levels of access:

- Read only
- Update giving ability to submit data

A named person from each company will be required to manage their own users' requirements and to inform National Grid of the authorized list of users and any changes to these users. This named person is given the designation "Local Security Officer" or "LSO". One deputy LSO or "DLSO" is also permitted to perform the functions of the LSO in their absence. There are manual and automatic facilities to detect attempts at unauthorized access to the database.

## TOPAM

In order for National Grid to meet its Grid Code obligations to inform third parties of transmission system access restrictions due to, for example, planned maintenance or faults, outage reports are generated automatically, daily, and sent to designated email accounts.

The automated reports and report frequencies that National Grid are required to deliver are:

- Mondays:** Daily Report; planned outages from current day to day + 1  
Changes Report; outage changes since day – 1
- Tuesdays:** Daily Report; planned outages from current day to day + 1  
Changes Report; outage changes since day – 1
- Wednesdays:** Daily Report; planned outages from current day to day + 1  
Changes Report; outage changes since day – 1  
1 – 7 week ahead report; planned outages from the next Monday to the Sunday at 7 weeks ahead
- Thursdays:** Daily Report; planned outages from current day to day + 1  
Changes Report; outage changes since day – 1  
8 week ahead and beyond report; planned outages from 8 weeks ahead
- Fridays:** Daily Report; planned outages from current day to day + 1  
Changes Report; outage changes since day – 1  
1 – 7 week ahead report; planned outages from the next Monday to the Sunday at 7 weeks ahead
- In addition to Grid Code requirements: A Day + 3 to Day +11 planned outage report ie all planned outages from the next Monday to the next Sunday is also produced. This report is generated as there are typically high volumes of late notice changes on Fridays; work found on inspection extending outages at short notice for example.

It is National Grid’s experience that some customers and stakeholders prefer not to receive some or all of these reports. The “daily” reports can be selected/deselected individually as can the group of three reports; Changes, 1-7 week ahead and 8 week ahead plus . National Grid also receives requests to send no reports at all.

To request, modify or stop the issuing of outage reports, please email your requirements to [.box.TOGA@NationalGrid.com](mailto:.box.TOGA@NationalGrid.com)

It is also possible for external parties to “self-serve” and log on to TOPAM to run their own outage reports as and when required. To request this facility use the [.box.TOGA@NationalGrid.com](mailto:.box.TOGA@NationalGrid.com) email account. The first stage of the process will be to register an LSO or DLSO account if none exist already. From that point on the LSO and the DLSO can request to add additional user accounts.

## GOAMP

### Entry of Generation Output Useable and Outage (OUO) Data

Data required to meet the requirements of Grid Code OC2 can be supplied in two different ways.

- i) Entry of Output Useable and Outage: Simple interactive screen entry of data, using drop down menus, on a BMU by BMU basis for all Grid Code timescales. When making any entry, except an initial 5 year ahead plan, the system will display the last set of previously entered data and the user can enter/update the appropriate daily or weekly (peak of the day/week) data – the data should be the *minimum* expected in peak windows to allow for the worst case. When entering this data, previously entered generation outages for each unit will be visible and TOGA will do a validation check and flag any discrepancies against entered outages for the same unit. For daily data it is possible to make more than one entry for the day for each BMU. If this is done the system will work out what is the peak of the day.
- ii) Uploading a CSV file in the correct format (see separate interface specification). This will require the file to provide a valid generating unit ID and details of all Output Useable data for the period of the file. Details of these IDs will be provided by National Grid

Entry of generation outage data: A simple interactive screen entry of data on a BMU by BMU basis (if the whole module is on outage) or an individual generator by generator basis (for individual GTs and steam turbines) for all Grid Code time scales. Data entry requirements are a valid BMU ID/generating unit ID, which is chosen from a drop down list, outage dates and the amount of reduction in output of the associated BMU. For the chosen period previous outages will be shown and these can be amended.

The database has some intuitive checking of entered data including comparison of OU data to outage data, which will flag warnings to the user if there appears to be inconsistencies in the data. The system will also check to ensure OU data is a credible value for the selected BMU.

### Other features

A history of entries is maintained in the database and it is possible to retrieve a previously entered submission made up to a year in the past and print these or download in a CSV format.

The database will guide you to the entries that are needed and these should be made within the time scales specified in the Grid Code. It will be possible to enter daily data anytime (subject to TOGA system outages) between midnight and approximately 1100 on a normal working day. Weekly data can be submitted any time from Monday to Wednesday. (There is no Grid Code requirement to enter data on weekends or bank holidays)

### Viewing of aggregated margin reports

After National Grid has completed its processes it will make available on the web site the national and zonal margins for the day or week as is appropriate. If required the system will also e-mail a copy of the reports to designated persons within your company. It will be possible to view historical reports. There may be some format differences to current reports.

**GOAMP support**

For support accessing or using GOAMP functionality, please email your queries to the [gen.info@nationalgrid.com](mailto:gen.info@nationalgrid.com) account.

## **Viewing of National Grid Transmission outages**

The system will also provide access to National Grid's transmission outages so you can view or print outages that may affect your Network or Power Station. It is possible to carry out live searches to find these outages and also to find outages that have changed since you last looked at the system. If required the system will also be able to e-mail out relevant reports.

## **Technical**

The system requires Internet Explorer 5.5 or greater and an Internet Connection with a recommended bandwidth of 512K. Any reasonable PC capable of running IE 5.5 will be suitable. When using the system it will not download any data on to your PC unless you specifically request a download of data for further analysis. The displays are designed around a resolution of 1024x768 pixels best displayed on a 17" screen or equivalent LCD screen.

Generating unit ID's. If a file upload of outages is provided then the system will need to recognize the generator ID. For BMU's where there is only one generating unit the ID will be the same as the BMU name. If more than one generating unit is associated with a BMU then the ID will be in the format of BMU name followed by a unique suffix.

## **Training**

Training requirements are still being assessed but the system will be easy to use and it is anticipated that the user guide should provide sufficient information to enable users to quickly understand the system.

## **Current Progress**

The System is being acceptance tested but the ability to enable wider Internet access is taking longer than expected. We are targeting early November for this, so Users should be able to log on to TOGA and try the application in a test environment. Mid December is currently targeted for the introduction of the new service