

Electricity Market Information

Andrew Ryan

Network Operations

nationalgrid

Items to cover

1. Progress since last DSWG 11 June
2. Explanation of initial summary page
3. Further options for summary page
 - ◆ Updated strawman
 - ◆ Cost / option tables
4. Consultation progress
5. Triad Information
6. DNO obligations

Progress

- ◆ Delivered a quick win summary page on BMRS with Elexon (<http://www.bmreports.com/dsr.htm>)
- ◆ Produced a Market information area on our National Grid Website (<http://www.nationalgrid.com/uk/Electricity/Data/electricitymarketinfo/>)
- ◆ Several meetings with Elexon/Logica to develop potential options in tandem with National Grid options
- ◆ Continued our informal consultation on transparency with the industry
 - ◆ Started drafting the consultation summary document - currently on target for publication in early August

Initial “Quick Win” BMRS Summary Page

- ◆ There are a number of different options for the implementation of an electricity summary page;
- ◆ These range from a quick win solution using existing information through intermediate hybrid options up to a more complex and detailed page which includes new data feeds and new graphs (something more like the gas daily summary page);
 - ◆ High resilience and support through BMRS as standard, but both a normal and high resilience option considered by National Grid
- ◆ A summary page has already been implemented by Elexon since last DSWG containing links and some of the key information in one place;
- ◆ This is a joint innovation between National Grid and Elexon including BMRS and framed National Grid content;
- ◆ The implementation of this page is essentially a no-cost solution for the industry, contrasting with more complex options outlined in the next slides

► **Related Sites**

- OFGEM
- Elexon
- National Grid

BM Reporting

Contact Us

Electricity Data Summary

Electricity Data Summary

Welcome to the Electricity Data Summary Page

This summary page has been produced to provide centralised access to key electricity data. ELEXON welcomes any suggestions on other data items that users would find it useful to be able to access from this page – please contact the [ELEXON help desk](#).

System Information

The [systems warning page](#) gives details of any system warnings issued by National Grid e.g. Notice of Insufficient Margin (NISM), High Risk of Demand Reduction (HRDR) or Demand Control Imminent (DCI).

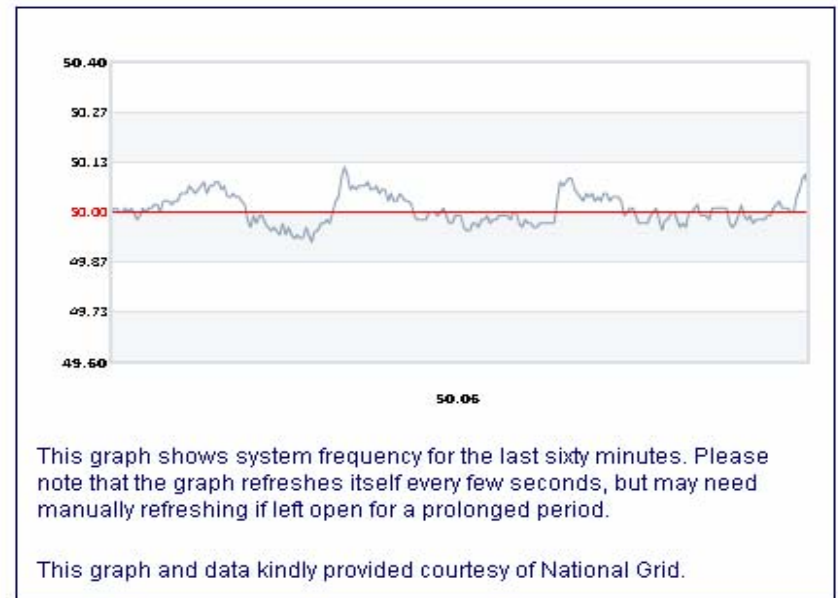
[Real Time Frequency Data](#) is available for the last sixty minutes.

Weather and temperature data are not currently published on the BMRS or National Grid website, but are available from the [Met Office](#).

Market Information

Select IMBALNGC from the [Day and Day Ahead](#) Margin page to display the forecast imbalance position.

The [system prices](#) page displays indicative System Buy Price (SBP) and System Sell Price (SSP) values for today and yesterday.



System Demands

System demand outturn data is available for the [previous and current day](#), the last [sixty minutes](#) (see chart to left), the last [twenty-four hours](#) or the last [eight days](#). Historical data is also available for [download](#).

For the day and day ahead, forecast [demand](#) and [margin](#) data is available.



[About Us](#)

[Energy & Services](#)

[Media](#)

[Community](#)

[Careers](#)

[Gas](#) | [Electricity](#) | [Metering](#) | [Property](#) | [Interconnectors](#) | [Land and Development](#) | [Grain LNG](#)

[About the Electricity Industry](#)

[Electricity Alliances](#)

[Balancing Services](#)

[Charging](#)

[Codes](#)

[GB Agreements](#)

[Getting Connected](#)

[Operational Data](#)

[Demand Data](#)

[Real time](#)

[Reserve Information](#)

[Electricity Market Information](#)

[Operational Info](#)

[Compliance Statement](#)

[Safety](#)

[Seven Year Statement](#)

[Suppliers](#)

Electricity Market Information

Information on the Electricity industry is held across 4 industry websites, provided by National Grid and Elexon. Industry parties have indicated that this can make it difficult to find the required information quickly and that a central location for key data would be beneficial.

In response National Grid has worked with Elexon to develop an [Electricity Data Summary webpage](#), which provides key information from these websites.

Industry Engagement

National Grid has engaged with the industry through the Electricity Operational Forum, the Demand Side Working Group (DSWG) and an Electricity Demand Forecasting Workshop to solicit feedback on information transparency issues. The deadline for feedback as part of this process was 13 July 2007. National Grid will publish a report on this website in early August 2007. This report will also be presented at the Electricity Operational Forum and DSWG.

Whilst the deadline for feedback was the 13 July 2007, National Grid continually welcomes ideas and feedback on improving Information Transparency. For such feedback, please contact richard.j.price@uk.ngrid.com (tel: 0118 936 3391).

Where can I find out more?

Further information can be found, by using the links below to key operational industry websites

[BMRS website \(Elexon\)](#) – Balancing Mechanism half hourly data close to real-time

 [Print This Page](#)

 [Email This Page](#)

Development of a summary page

- ◆ At June's DSWG meeting, members indicated they thought the content of the strawman was broadly right
- ◆ The first draft strawman summary page has been developed further in response to feedback from the meeting:
- ◆ This new draft version is more similar in look to the current gas daily summary report. Changes include:
 - ◆ All the info is on a single vertically scrollable page
 - ◆ Tables are at the top, followed by graphs as per the gas summary page
 - ◆ There are links to definitions of each data category and the data history
 - ◆ New items have been added, e.g. triad demand information
 - ◆ The graphs are new, not links or copies of existing BMRS ones

System Warnings

Today		Tomorrow	
Wednesday 27 June 2007	None	Thursday 28 June 2007	None

Definitions

Click [here](#) for system warning history

Peak Demands Yesterday / Today Tomorrow

Date	Forecast Demand Peak	Actual Demand Peak
Tue 26 June 2007		42960 MW
Wed 27 June 2007	43550 MW	
Thu 28 June 2007	43300 MW	
Fri 29 June 2007	42800 MW	

Definitions

Click [here](#) for historic and forecast demand data

Triad Demand Information

Winter Triad Demand Period - 1 November to 28 February	GB Demand MW
3 highest demands so far for this winter triad period	
15-Nov-07	57630
03-Dec-07	58340
04-Jan-08	57420
...	...
3 highest forecast demands for rest of this winter triad period	

Options for a full summary page

- ◆ A full summary page solution similar to the strawman outlined is considerably more complex than the initial BMRS page
- ◆ Either National Grid or BMRS could publish this page, or could publish part each and there are various potential support level options
- ◆ Whichever route is considered, there are a number of new data items that could be presented and some new ways of presenting the data
- ◆ There are advantages and disadvantages of the potential approaches
- ◆ Implementation timescales and costs need to be considered
- ◆ The indicative costs developed in the few weeks since the last meeting vary for all the options considered

Options for summary pages

- ◆ Option 1 – Simple framed content + links page (already delivered on BMRS);
- ◆ Option 2 – Separate summaries of existing NG and BMRS content each on single pages, selective new data items based on availability;
- ◆ Option 3 – Single version of Option 2 on one platform with new data feeds and framed content from the other platform;
- ◆ Option 4 – New full single summary page modelled on gas daily summary page as per strawman including the new data feeds.

General advantages of different platforms

Platform	Pros	Cons
BMRS	<ul style="list-style-type: none"> • High reliability, availability and resilience. • Full 24/7 support and 99.5% availability. • Already established as central site for key operational and commercial information relating to the electricity market close to real-time. 	<ul style="list-style-type: none"> • Has been historically expensive to maintain and change • Historically long timescales to implement. • Managed by BSC governance processes.
National Grid model 1 e.g. SONAR / nationalgrid.com	<ul style="list-style-type: none"> • Not constrained by BSC governance processes. 	<ul style="list-style-type: none"> • Not conceived to deliver high volumes of data • Lower resilience and support (Mon-Fri 8-6).
National Grid model 2 e.g. GMRS gas platform	<ul style="list-style-type: none"> • High reliability, availability and resilience. • Full 24/7 support and 99.5% availability. 	<ul style="list-style-type: none"> • Initially costly to develop and maintain. • Would be a lengthy delivery cycle

Cost / Option table for National Grid options

	Option	National Grid Current support 8-6 Mon-Fri	National Grid 24/7 support 99.5% availability
1	Simple links page	n/a	n/a
2	Separate summaries of existing content tidied up in one place on each platform	£10-150k depending on extent of new data	£150-250k depending on extent of new data 24/7 solution on SONAR
3	Option 2 plus new data feeds and framed content from the other platform	£750k for SONAR solution with new interfaces for framed content	Not a practical option – costs would exceed full option 4 solution
4	Full summary page on one single platform including new data feeds	As per option 3 but full data feeds instead of framed content	£1.4m for full solution with high support and resilience

Cost / Option table for BMRS options

Option	Pros	Cons
<p>“The 10% Solution” i.e. a simple page of links and National Grid graphs</p>	<p>Already delivered at minimal cost and timescales.</p>	<p>Only provides a small fraction (10% ?) of the straw man requirement.</p>
<p>“The 60% Solution” i.e. an actual summary page (with graphs and summarised data), but only where the data is already available on BMRS</p>	<p>Relatively inexpensive to deliver – few tens of thousands</p> <p>Doesn't require Modification Proposal, which could mean quicker delivery (but leaves it slightly unclear who should agree the expenditure)</p>	<p>Can only meet a fraction (60% ?) of the requirement – not generation fuel mix, or temperature data, or interconnector flows</p>
<p>“The 100% Solution” i.e. a full solution, with National Grid sending BMRS additional data files where required (e.g. temperature, generation fuel mix)</p>	<p>Solution can meet 100% of the straw man requirements</p> <p>More expensive to deliver. ELEXON and BMRS costs in £100k to £250k range depending on details of solution; plus National Grid costs to provide data.</p>	<p>Requires a Modification Proposal which could mean added delay (but does provide some certainty on the process for agreeing requirement).</p>

Full summary page – next steps

- ◆ How to take this forward will be one of the outputs of the consultation process
- ◆ We would welcome feedback on:
 - ◆ the content of this strawman
 - ◆ the different potential implementation options
- ◆ We continue to work with Elexon to investigate ways to take this forward

Consultation Process

- ◆ Comments from the mini consultation with the industry on market information up to 13th July will be included
- ◆ We still welcome your input and will incorporate any further ideas into the document where we can
- ◆ We will publish a consultation document in early August 2007
- ◆ We will report back to the next Electricity Operational Forum on 1 August 2007 and the next DSWG
- ◆ We will suggest initial ways forward for individual developments where appropriate following feedback from our initial report back to the industry in August

Issues raised so far

How can I obtain Generation by fuel type?

Is GSP demand Data available?

Can new information types be published more quickly?

Can SONAR be more reliable?

Can all the data be in one place?

Can forecast / outturn Demand be Consistent?

Can National Grid publish its Wind Generation Forecasts?

Is an Electricity daily summary page possible (like Gas)?

What is National Grid definition of demand

Can Historical BMRS Data be made available?

Where do I find Generator / Supplier Imbalance?

Can the roles of the different info provision platforms be clarified?

nationalgrid

Triad Information

- ◆ At the June DSWG, members asked for further thoughts on Triad information that National Grid could make available
- ◆ The 3 highest daily winter demands so far, and the 3 forecasted highest for the remaining winter period.
 - ◆ The forecasted highest would be based on normal Winter Demands

Winter Triad Demand Period - 1 November to 28 February	GB Demand MW
3 highest demands so far for this winter triad period	
15-Nov-07	57630
03-Dec-07	58340
04-Jan-08	57420
...	...
3 highest forecast demands for rest of this winter triad period	
...	...
18-Jan-08	59490
03-Feb-08	58330
25-Feb-08	58660

DNO obligations

- ◆ The obligations on DNOs are currently to provide:
 - ◆ Number of **Small Power Stations, Medium Power Stations or Customer Power Stations**
 - ◆ Number of **Generating Units** within these stations
 - ◆ Summated Capacity of all these **Generating Units**
 - ◆ The demand data provided by DNOs is net of the expected generation provided by embedded generation. The DNO is then obliged to provide the deduction made at a **Connection Point for Small Power Stations, Medium Power Stations or Customer Power Stations.**
 - ◆ Short circuit level data from the embedded generators is combined with the demand short circuit data to give one inclusive figure.
 - ◆ DRC schedule 1 type generation data is required for Licence Exempt Medium Power Station (i.e. between 50 to 100MW in capacity).
- ◆ We are currently considering within National Grid if any changes are needed.