#### **Electricity Market Information**

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#### 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 (<u>http://www.bmreports.com/dsr.htm</u>)
- Produced a Market information area on our National Grid Website (<u>http://www.nationalgrid.com/uk/Electricity/Data/electricitymarketinfo/</u>)
- 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



	Electricit	ty Data Summary
<ul> <li>Related Sites</li> <li>OFGEM</li> <li>Elexon</li> <li>National Grid</li> </ul>	This summary page has been produced to provide centralised	ectricity Data Summary Page d access to key electricity data. ELEXON welcomes any suggestions on access from this page – please contact the <u>ELEXON help desk.</u>
3M Reporting		access from this page – please contact the <u>ELENON help desk.</u>
Contact Us	System Information	
Electricity Data Summary	The <u>systems warning page</u> 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). <u>Real Time Frequency Data</u> is available for the last sixty minutes.	50.40 50.27 50.13 50.00 50
	Weather and temperature data are not currently published on the BMRS or National Grid website, but are available from the <u>Met Office</u> .	49.50 50.05
	Market Information Select IMBALNGC from the <u>Day and Day Ahead</u> Margin page to display the forecast imbalance position. The <u>system prices</u> page displays indicative System Buy Price (SBP) and System Sell Price (SSP) values for today ar	This graph shows system frequency for the last sixty minutes. Please note that the graph refreshes itself every few seconds, but may need manually refreshing if left open for a prolonged period. This graph and data kindly provided courtesy of National Grid. nd yesterday.
		System Demands
	50,000 47,374 45,347	System demand outturn data is available for the <u>previous</u> and current day, the last <u>sixty minutes</u> (see chart to left), the last <u>twenty-four hours</u> or the last <u>eight days</u> . Historica

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About Us	Energy & Services	Media	Com	munity	Careers
Gas   > Electricity   > Metering	► Property   ► Interconnectors   ► Land an	d Development   > Grain	LNG		
About the Electricity Industry	Electricity Market Information	h			Print This Page
<ul> <li>Electricity Alliances</li> </ul>					_
· Balancing Services	Information on the Electricity industry is	held across 4 industry w	ebsites, provided by Natio		
· Charging	Elexon. Industry parties have indicated that this can make it difficult to find the required information quickly				
· Codes	and that a central location for key data v	would be beneficial.			
· GB Agreements	In response National Grid has worked with Elexon to develop an Electricity Data Summary webpage,				
· Getting Connected	which provides key information from these websites.				
Operational Data	Industry Engagement				
Demand Data	industry Engagement				
Real time	National Grid has engaged with the industry through the Electricity Operational Forum, the Demand Side				
Reserve Information	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.				
Electricity Market Information	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.				
· Operational Info	Whilst the deadline for feedback was the 13 July 2007, National Grid continually welcomes ideas and				
Compliance Statement	feedback on improving Information Transparency. For such feedback, please contact				
Safety	richard.j.price@uk.ngrid.com (tel: 0118 936 3391).				
<ul> <li>Seven Year Statement</li> </ul>					
<ul> <li>Suppliers</li> </ul>	Where can I find out more?				
	Further information can be found, by us	ing the links below to key	operational industry web	sites	
	» BMRS website (Elexon) – Balancing	g Mechanism half hourly c	ata close to real-time		
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## **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



#### **Electricity Daily Summary Page**

Wednesday 27<sup>th</sup> June 2007 10:04

**System Warnings** 

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

Definitions

Click here for system warning history

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

Definitions

Click here for historic and forecast demand data

Triad Demand	Winter Triad Demand Period - 1 November to 28 February	GB Demand MW
Information	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> <li>High reliability, availability and resilience.</li> <li>Full 24/7 support and 99.5% availability.</li> <li>Already established as central site for key operational and commercial information relating to the electricity market close to real-time.</li> </ul>	<ul> <li>Has been historically expensive to maintain and change</li> <li>Historically long timescales to implement.</li> <li>Managed by BSC governance processes.</li> </ul>
National Grid model 1 e.g. SONAR / nationalgrid.com	<ul> <li>Not constrained by BSC governance processes.</li> </ul>	<ul> <li>Not conceived to deliver high volumes of data</li> <li>Lower resilience and support (Mon-Fri 8-6).</li> </ul>
National Grid model 2 e.g. GMRS gas platform	<ul> <li>High reliability, availability and resilience.</li> <li>Full 24/7 support and 99.5% availability.</li> </ul>	<ul> <li>Initially costly to develop and maintain.</li> <li>Would be a lengthy delivery cycle</li> </ul>



# **Cost / Option table for National Grid options**

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



# **Cost / Option table for BMRS options**

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



#### 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

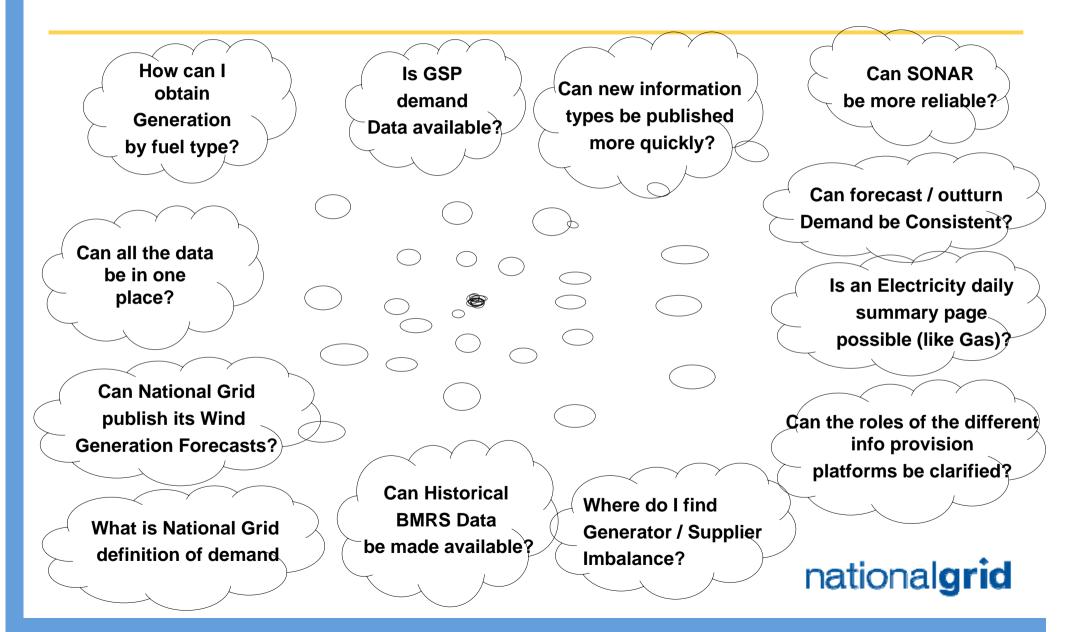


# **Consultation Process**

- Comments from the mini consultation with the industry on market information up to 13<sup>th</sup> 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**



## **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.

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