

GenID	Generator	Type	SettDate	SPd	MW	Bal BO	Total	Meter	Checked	Diff
ANYT-1	Anytown Gen	CCGT	19/7/2010 00:00	7	509.35	9.6	518.95	159.80	F	-359.1
ANYT-1	Anytown Gen	CCGT	19/7/2010 00:00	8	509.35	9.6	518.95	169.40	F	-349.5
ANYT-1	Anytown Gen	CCGT	19/7/2010 00:00	9	509.35	9.6	518.95	169.40	F	-349.5
ANYT-1	Anytown Gen	CCGT	19/7/2010 00:00	10	509.35	9.6	518.95	179.00	F	-339.9

REF

RENEWABLE ENERGY FOUNDATION

DATA TRANSPARENCY IN THE ELECTRICITY INDUSTRY

A Renewable Energy Foundation Initiative 2010–2011

In the next decade the United Kingdom needs to renew, modernize, and redesign its electricity infrastructure, with costs potentially running into hundreds of billions of pounds and met ultimately through increases in consumer bills.

However, the electricity industry, and the market in which it operates, is characterized by obscurity and even secrecy.

This is unsatisfactory since Generation and Supply must be regulated by open competition to ensure efficiency. For such a competitive mechanism to function, all the costs imposed on customers by generators should be transacted through a transparent market.

At present this is not the case, a point that is particularly true of the generation sector, where detailed, metered, data is costly, difficult, or impossible to obtain.

For the following reasons this is not in the national or the public interest:

- New entrants to the electricity market are impeded and competition is inhibited, to the disadvantage of the consumer.
- Technical and financial problems arising from current energy policy and its targets cannot easily be anticipated by the innovators who might solve them.
- Academic and technical research into the electricity system and its costs is rendered all but impossible.
- Analysis of progress towards UK and EU energy and emissions targets is prevented.
- Without full electricity system data disclosure there can be no satisfactory public accountability for Government policy measures.

In view of these concerns REF is building on its track record of publishing empirical data relating to renewables, and is now calling for full data transparency in the overall electricity sector.

Specifically, REF is calling for:

1. **The requirement that embedded generators on the distribution network record sub-hourly metered generation data and make this freely available to the regulator, Ofgem, who should in turn put this into the public domain. *At present this information is not collected.***
2. **Free public release of sub-hourly metered generation output data for each and every individual electricity generator in the United Kingdom, whether subsidized or unsubsidized. *Currently, only part of this information is collected, and what exists is only available on subscription and for restricted and confidential use.***
3. **Full, free, and public disclosure of data relating to the Balancing Mechanism, including all participants in the market, and their utilization by National Grid. *This material is not at present available to the public, and since costs in this area are set to rise significantly, in large part due to the Government's renewables policy, there is a pressing need to improve public scrutiny.***

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ANYT-1	Anytown Gen	CCGT	19/7/2010 00:00	9	509.35	9.6	518.95	169.40	F	-349.5
ANYT-1	Anytown Gen	CCGT	19/7/2010 00:00	10	509.35	9.6	518.95	179.00	F	-339.9

GenID	Generator	Type	SettDate	SPd	MW	Bal BO	Total	Meter	Checked	Diff
ANYT-1	Anytown Gen	CCGT	19/7/2010 00:00	37	508.43	9.6	518.03	151.60	F	-366.4
ANYT-1	Anytown Gen	CCGT	19/7/2010 00:00	38	508.41	9.6	518.01	161.40	F	-356.6
ANYT-1	Anytown Gen	CCGT	19/7/2010 00:00	39	508.41	9.6	518.01	160.40	F	-357.6
ANYT-1	Anytown Gen	CCGT	19/7/2010 00:00	7	509.35	9.6	518.95	159.80	F	-359.1
ANYT-1	Anytown Gen	CCGT	19/7/2010 00:00	8	509.35	9.6	518.95	169.40	F	-349.5
ANYT-1	Anytown Gen	CCGT	19/7/2010 00:00	9	509.35	9.6	518.95	169.40	F	-349.5
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Not only is data of this kind freely available in other countries but the cost of collecting such information telemetrically is low and would be outweighed by the advantages of open access to market information.

For instance, knowledge of the fluctuating hourly variation in the electricity produced by embedded generators, such as some wind farms, would enable the market to plan more accurately to address the problems presented by these generators and so reduce the costs of maintaining reliability of service. Since UK consumers will ultimately bear these costs it is critical that such information should be in the public domain and in an accessible format.

However, REF recognizes that disclosure of *generation data* is only one necessary element in achieving market transparency. Data on overall *operational cost* is also essential for a truly competitive market: for example, data on the operational costs of intermittency, of shadow-plant to maintain security of supply, of ancillary services such as Short Term Operation Reserve (STOR), of extensions and reinforcements to the transmission grid.

Such costs would be difficult for any party other than National Grid to infer from the generation data for which we are calling, though they are related. Consequently, we suggest that:

- 4. Government should consider placing a statutory requirement on National Grid to make detailed, disaggregated, operational cost data freely available to the public.**

* * * * *

The current initiative is an extension of long-standing REF interests. We have pioneered the publication of monthly load factors for all of the over 5,000 renewable generators in receipt of public support via the Renewables Obligation (RO), which has run since 2002. Over the coming year, starting in July 2010, REF will introduce a new online database of renewable generation data to enable members of the public and industry participants alike to obtain information relating to site performance, ownership, and other matters.

REF will also be publishing listings of all conventional generators together with data that is currently in the public domain.

As our project for Data Transparency in the Electricity Sector develops we hope to supplement this data resource with further material.

About the Renewable Energy Foundation

The Renewable Energy Foundation is a registered charity promoting sustainable development for the benefit of the public by means of energy conservation and the use of renewable energy.

REF is supported by private donation and has no political affiliation or corporate membership. In pursuit of its principal goals REF highlights the need for an overall energy policy that is balanced, ecologically sensitive, and effective.

We aim to raise public awareness of the issues and encourage informed debate regarding a structured energy policy that is both ecologically sensitive and practical. The issues of climate change and security of energy supply are complex and closely intertwined. REF contributes to the debate surrounding these issues by commissioning reports to provide an independent and authoritative source of information.

For further information, contact Renewable Energy Foundation, 21 John Adam Street, London WC2N 6JG.

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