

**Initial observations on the IPPR-commissioned Report
'Beyond the Bluster – why wind power is an effective technology'**

31st AUGUST 2012



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Introduction

The following email was circulated on 30th August announcing the publication of the report entitled ‘Beyond the Bluster – why wind power is an effective technology’. CATS asked Stuart Young Consulting Ltd to briefly consider the Report and make observation on his initial findings.

From: Reg Platt [R.Platt@ippr.org]
Sent: 30 August 2012 10:48
To: Reg Platt
Cc: Will Straw; Clare McNeil
Subject: New IPPR report tackling myths on wind power published today

Hi all

A new IPPR report, ‘Beyond the Bluster – why wind power is an effective technology’ has been published today.

The report can be accessed [here](#).

There is an exclusive on the report in the Guardian [here](#).

The press release, issued today, is [here](#).

We’ve written this report with the technical details provided by GL Garrad Hassan, a leading renewable energy consultancy.

The report examines claims that are often made criticising wind power technology. We show that these claims, which have been made by a group of over 100 backbench MPs who are campaigning against wind power, are not based on the facts.

The report shows unequivocally that wind power can significantly reduce carbon emissions, is reliable, poses no threat to energy security up to 2020 and is technically capable of providing a significant proportion of the UK’s electricity with minimal impact on the existing operation of the grid.

We want to rid the debate of bogus claims that criticise wind technology and focus squarely on issues around costs and local community concerns – both of which should be thoroughly scrutinised. It’s worrying that these bogus claims are having an impact on government policy and creating uncertainty across the renewables sectors. This is not in the best interest of UK consumers or the UK economy.

As ever, interested by any comments you have.

All best

The IPPR climate and energy team

Reg Platt

Institute for Public Policy Research (IPPR)
Research Fellow, Climate Change and Energy

Observations

The Publications page on the IPPR website from where the report can be downloaded has an introduction which has two particular bullet points as follows:

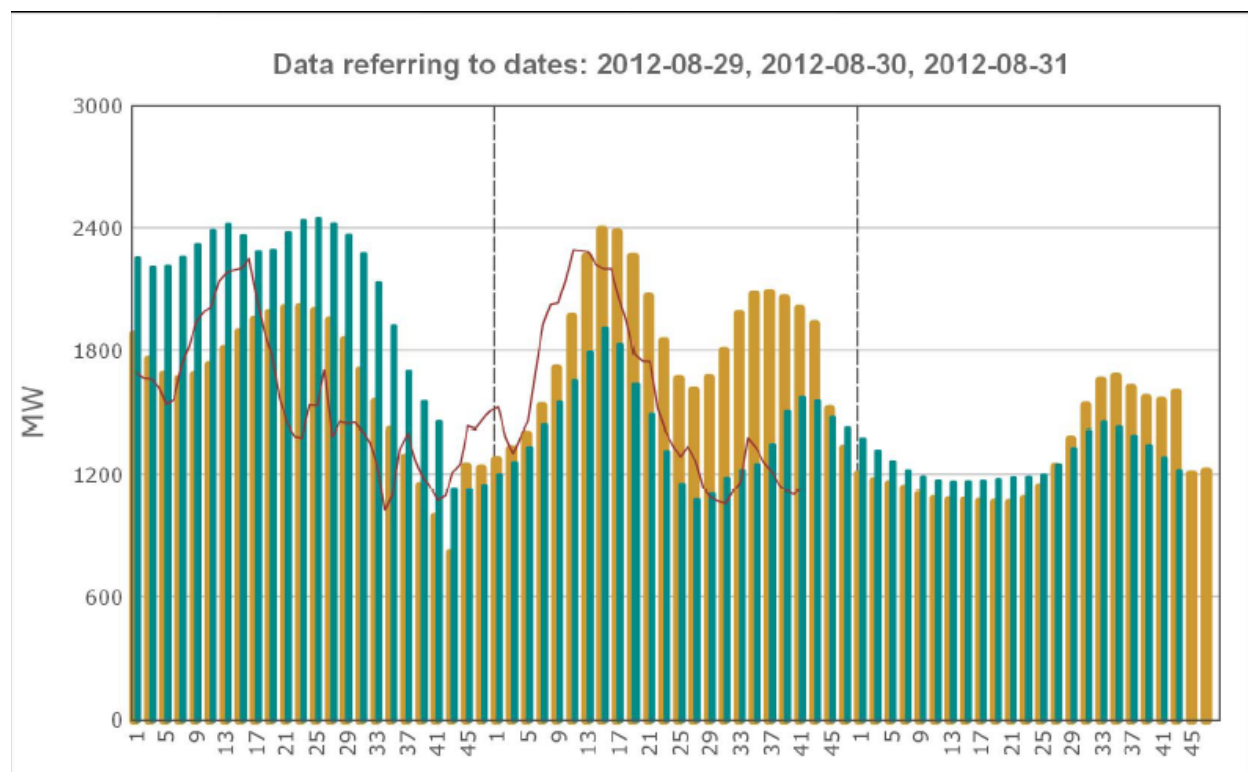
“Beyond the bluster: Why wind power is an effective technology

The conclusions of the report note that:

- It is inaccurate to describe the output from wind power as ‘unpredictable’.
- In the short term, wind power output is remarkably stable and increases and decreases only very slowly.”

National Grid records generation by technology every five minutes and that is to be found on the NETA website at www.bmreports.com. National Grid also forecasts wind output for two days ahead and refines that forecast daily. This is recorded on the “Wind Forecast Out-turn” page on the NETA website.

This is a snapshot taken around 8pm on 30th August 2012.

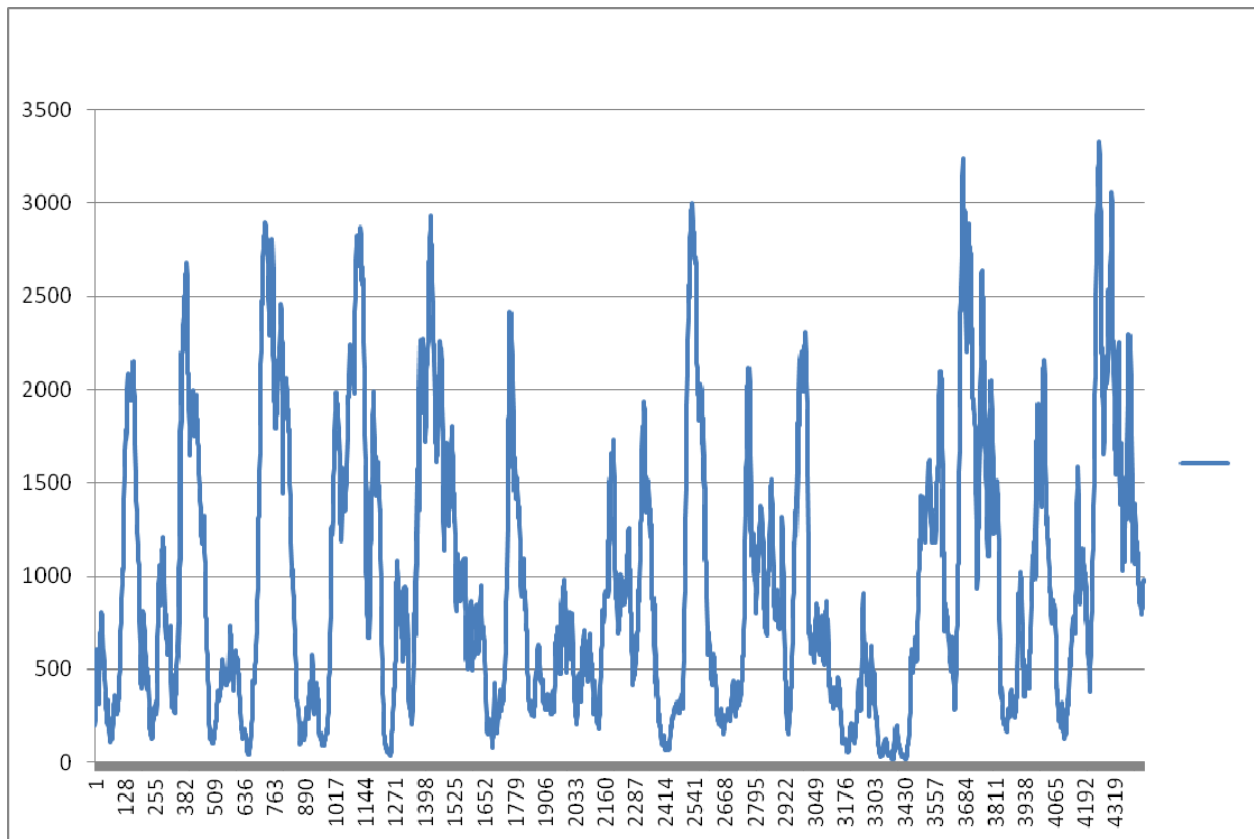


The numbers are the 48 half-hour periods of the day, the yellow bars are the initial half-hour forecasts, the green bars are the refined forecasts and the red data line was the actual wind output recorded.

This clearly shows the difference between the refined output and the recorded output to be as high as 1250MW, and the difference between the initial and refined forecasts to be almost 800MW over a 24 hour period. This is not a reflection on National Grid’s forecasting ability, it is an illustration of the impossibility of accurately and reliably forecasting the availability of electricity generated by wind.

Demonstrably, the output from wind power is “unpredictable”.

National Grid also publish a spreadsheet of “Generation by Fuel Type” in five-minute periods. The 24 hour rolling data ending at 8.30pm on 30th August 2012 includes two five-minute periods with variations in excess of 100MW. The graph of the last three months’ wind generation in half-hour periods is also published on the NETA website. The following graph shows the amount of electricity generated by wind against time (for three months) up to the period ending 12 noon on 31st August 2012:



Note the number of occasions that generation approaches zero from a metered 4686MW of wind capacity.¹

Hence, it is not at all demonstrable that “In the short term, wind power output is remarkably stable and increases and decreases only very slowly.”

Examination of the actual Report content confirms that the two bullet point claims made in the introduction do indeed appear within the body of the Report namely at para 2.4, first and second bullet points.

Having confirmed that the Report actually includes these claims and that they have not been quoted out of context, I see little point in a detailed examination of a document which makes two so readily dismissible assertions.

Stuart Young
31st August 2012

¹ This explanation is found at the information button on the wind forecast out-turn page:

Based on historical outturn data and detailed local wind forecasts, National Grid forecasts likely levels of wind generation for windfarms visible to National Grid, i.e. those that have operational metering and that are included in the latest forecast process. The forecasts are produced for the period from 21:00 on the current day (D) to 21:00 D+2. Wind Generation forecasts are produced by National Grid's own second generation windpower forecasting tool. The predictability of the wind varies with atmospheric conditions and so there may be periods where National Grid's forecast and outturn values differ significantly. Please note that the downloadable data will contain gaps for Original and Updated Forecast values in Settlement Periods that National Grid do not provide forecast values for.