

System Flexibility

Transmission Workstream 4th June 2009

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System Flexibility

Changes in supply and offtake behaviours driven by developments to the regime and types of connectees may potentially impact the way that the transmission system is operated and managed:

- ◆ Increased wind powered generation to support renewable targets
- ◆ Flexible offtake profiles
- ◆ Increased LNG importation
- ◆ Evolving interconnector, storage and supply behaviour

The materiality of these developments is unknown, however as a prudent operator National Grid is looking investigate the potential impact of these changes before they occur

System Flexibility

In order to understand the potential impact of these developments we need to consider:

- ◆ What data / information can be used to understand the size of the issue
- ◆ What timescales should be monitored for trends
- ◆ What trends would cause concern
- ◆ How these trends relate to industry costs
- ◆ How we can work together with industry to develop a joint way forward

System Flexibility

National Grid has a strong preference for industry engagement to better understand the changing behaviours and how we can best meet our customers needs

Feedback from the last meeting:

- ◆ Hourly linepack data may be a useful source of information (see slides 6 & 7), however
- ◆ Scepticism about forecast growth in wind generation
- ◆ More wind will not necessarily mean more within-day volatility
- ◆ Case not yet clear for flexibility products and services

National Grid would still like industry engagement, however as a prudent operator we will continue to progress work in this area despite the uncertainty

System Information Provision

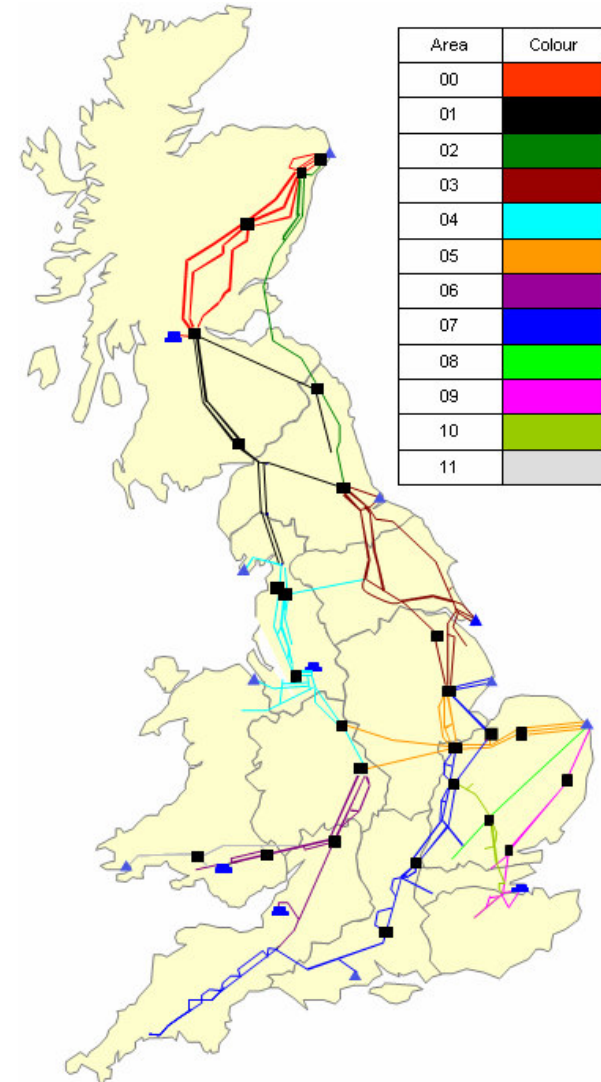
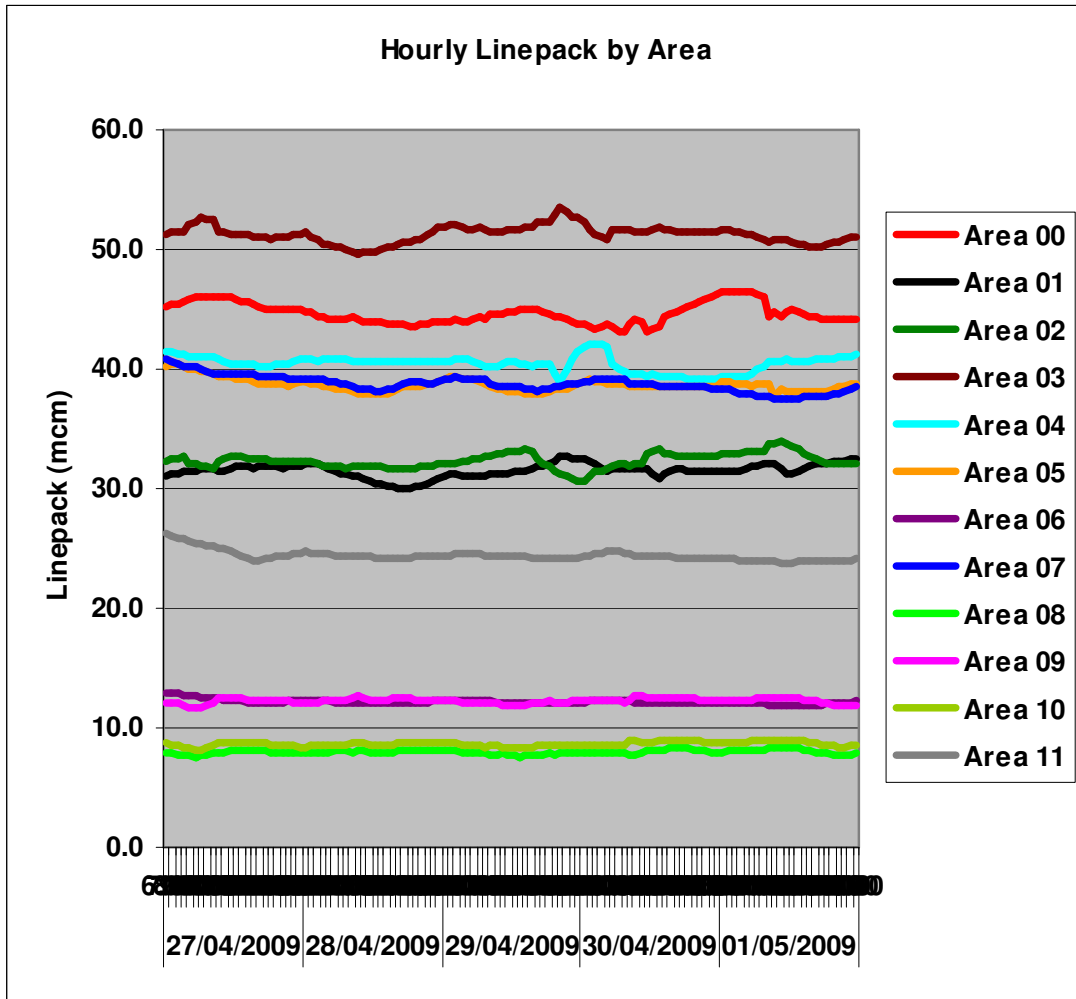
We propose holding a workshop in June, focussing on what information should be analysed and potentially whether there is an industry requirement for such information to be published

- ◆ However this is only the start of a much more substantial piece of work looking at future network requirements

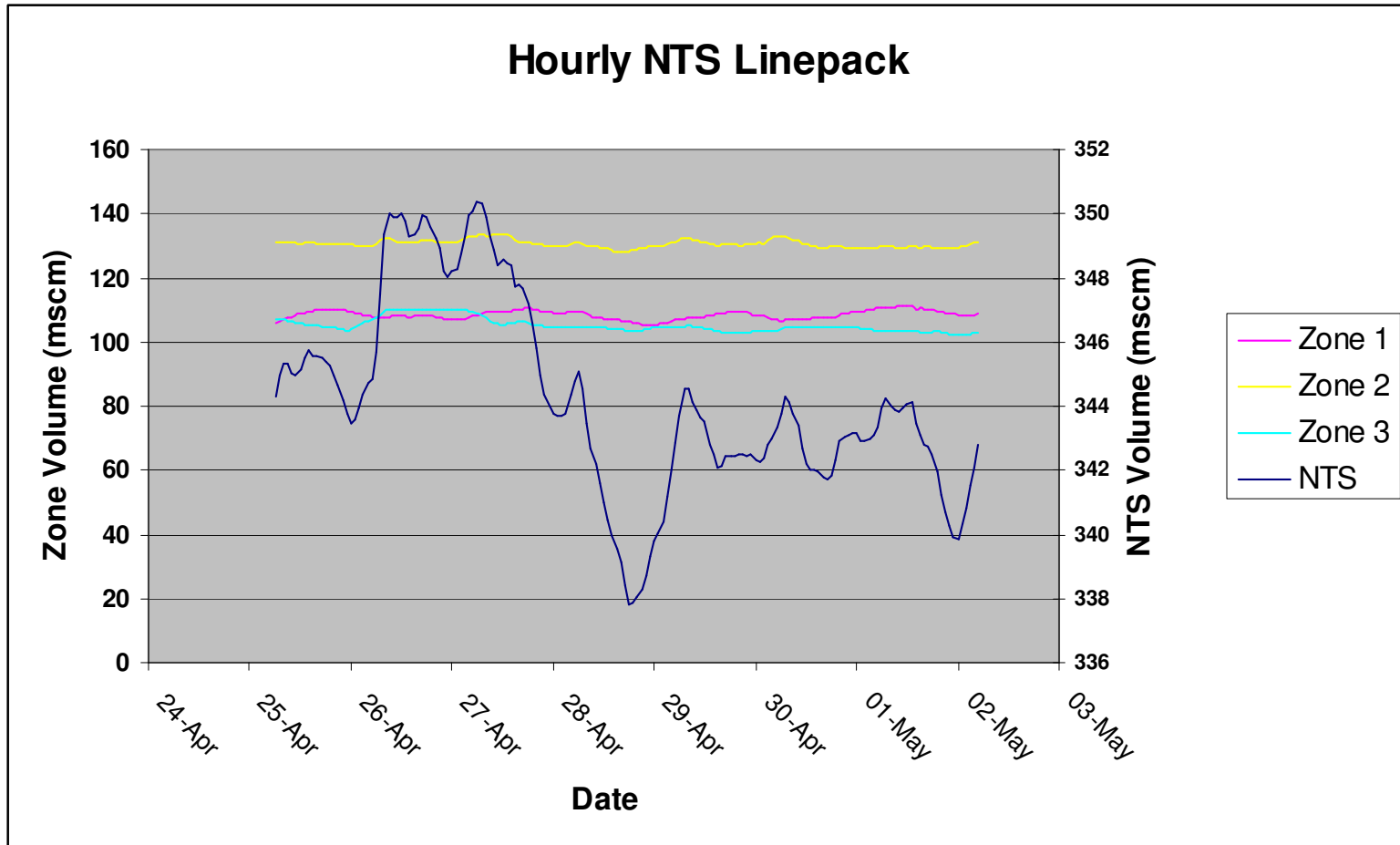
Industry participation in these discussions would be beneficial to incorporate different perspectives

These discussions may feed into any future Ofgem consultation

Hourly Data by NTS Linepack Area



Hourly Data by Geographical Linepack Zone



Zone 1 – North; Zone 2 – Midlands; Zone 3 – South