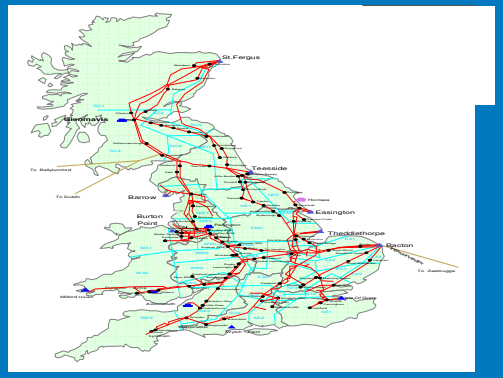
nationalgrid
THE POWER OF ACTION

Entry Capacity
Reserve prices for 2014 QSEC



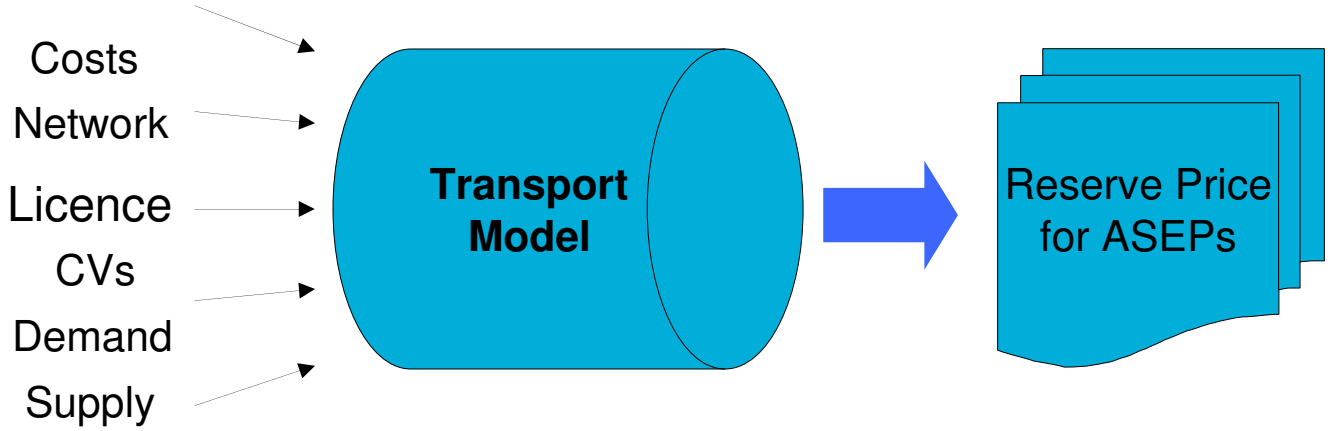
Explanation of the changes to reserve prices

Introduction

- **QSEC 2014 reserve prices have been revised**
- **Results have been compared to QSEC 2013**

- *movement, due to changes in average exit costs as a result of changes in supplies*

Methodology: check inputs, understand outputs

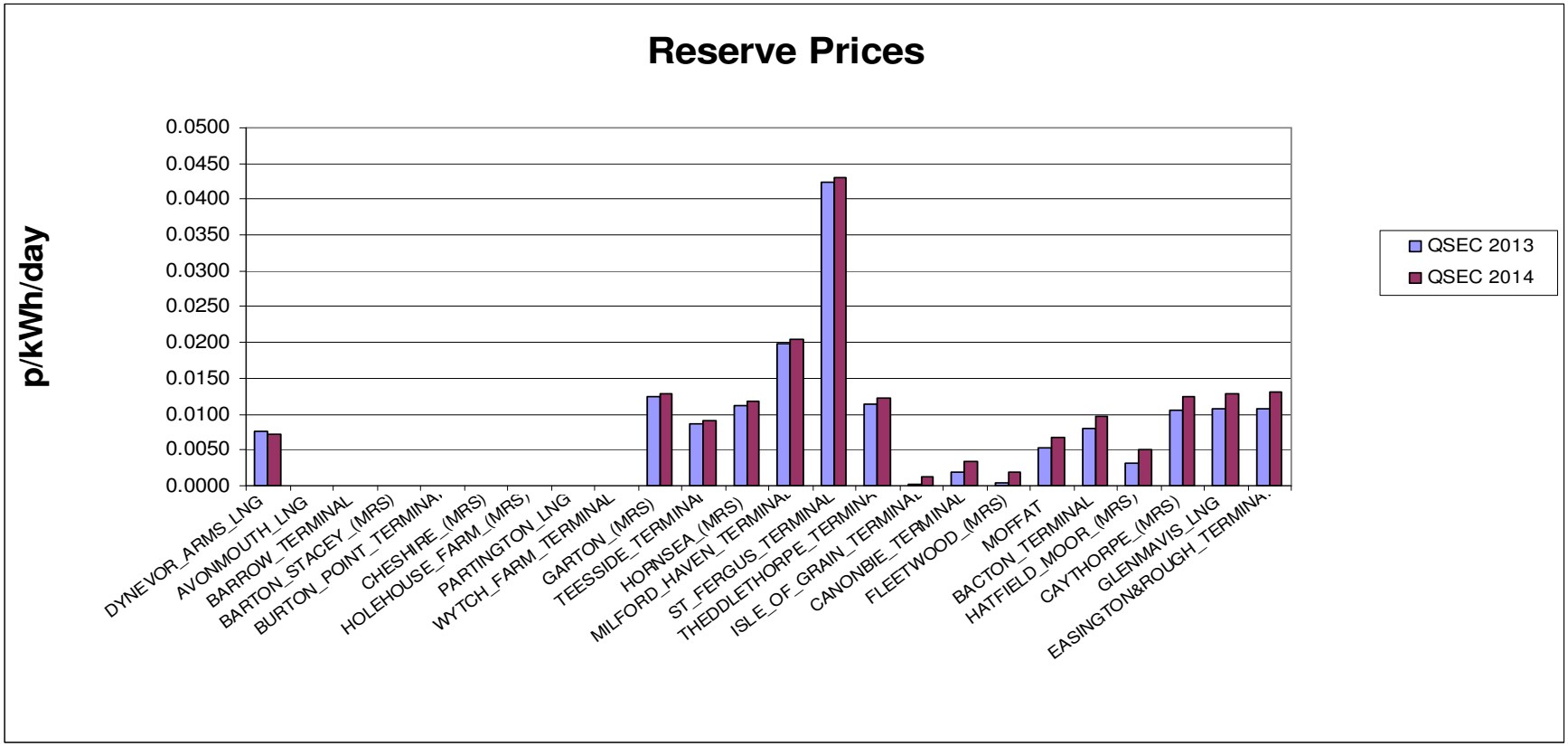


Inputs to the model follow our latest 'Statement of the Gas Transmission Transportation Charging Methodology' which is now in the UNC

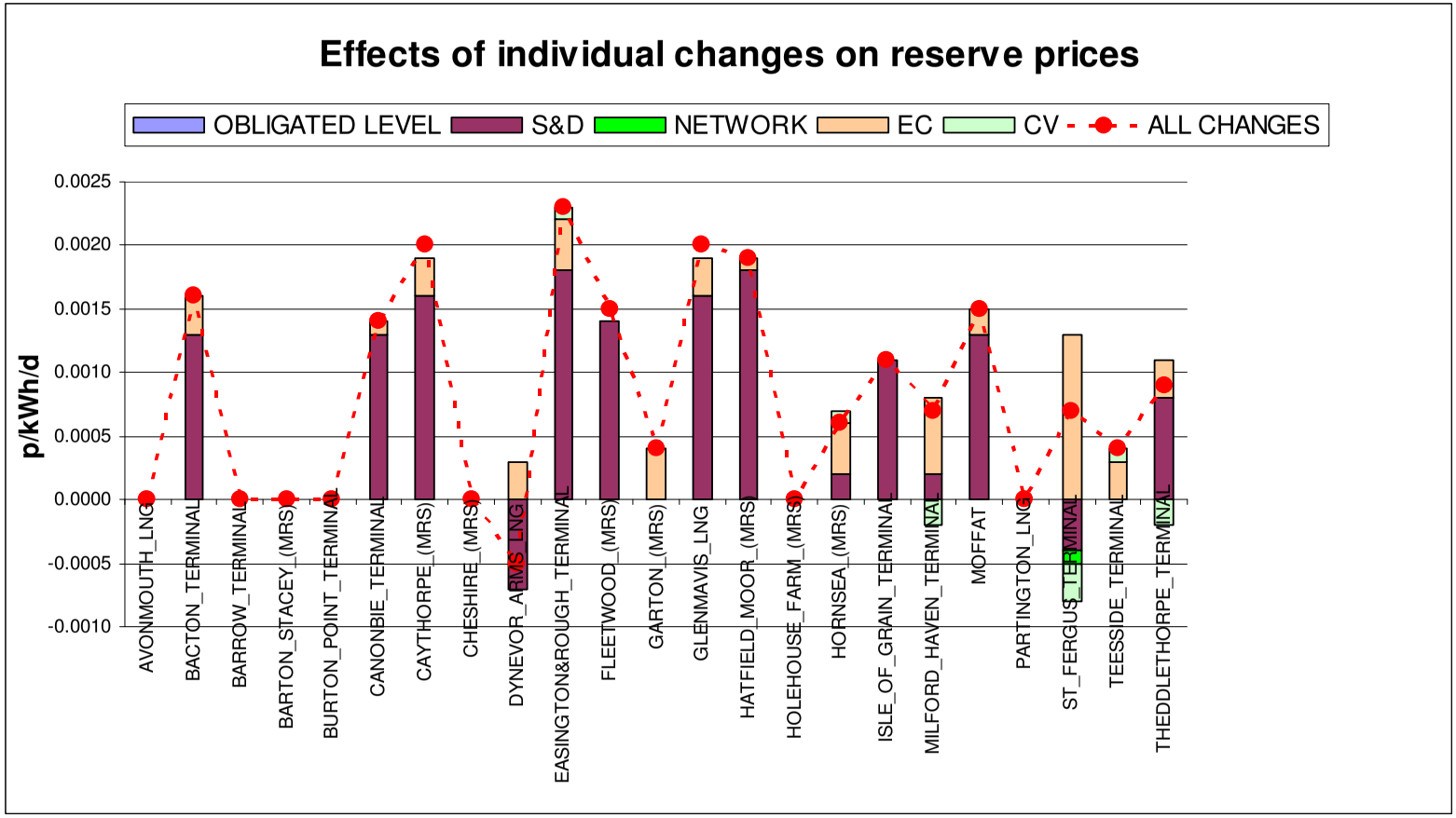
Reserve prices for QSEC capacity (2013 → 2014)

nationalgrid
THE POWER OF ACTION

Decreases Increases



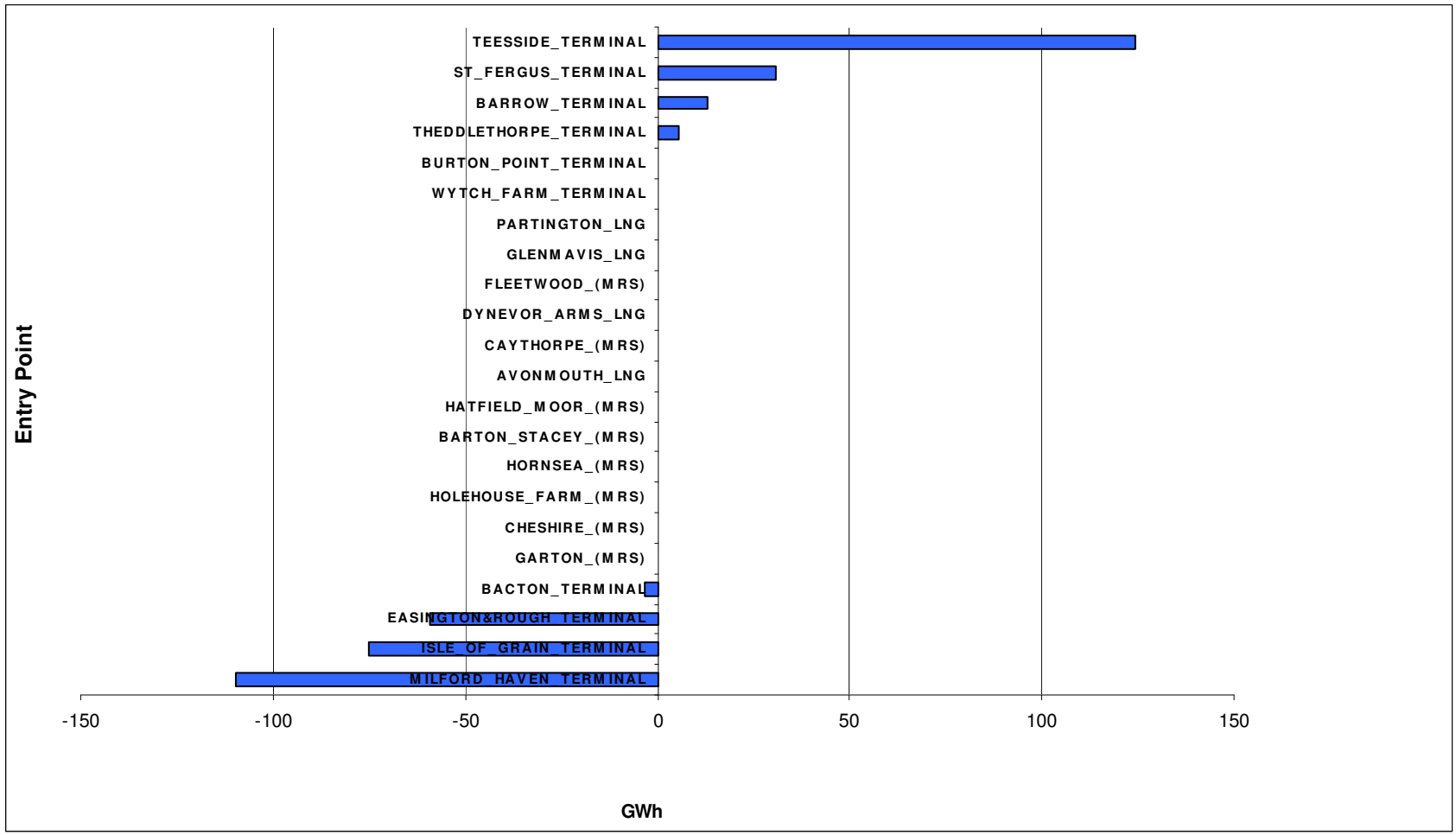
Changes from current prices (2013 → 2014)



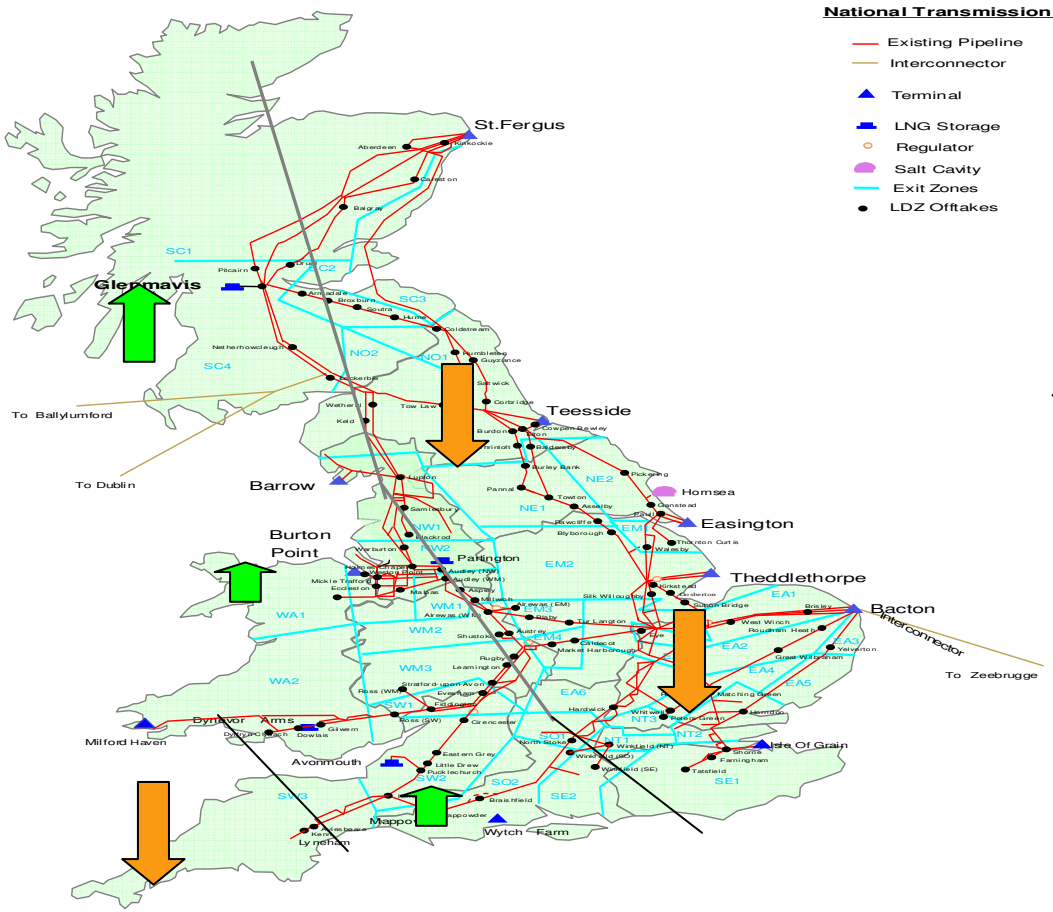
Focus on Supply & Demand

- Change in supply and demand normally has the greatest influence on prices
- Forecast peak day demand has decreased by 1.2% in 2016/17 from 6,209 to 6,135 GWh
- -0.6% LDZs and -2.5% direct connects (mainly power stations)
  - Mostly in the east and London & SE, cut at c. dozen power stations by an average 12 GWh. Moffat increased by 82GWh
- Consequently supply has decreased to match demand
  - beach terminals as in the TYS Teesside up by 120 GWh
  - storage is used to balance supply and demand
  - MH down by 110 GWh and IOG down by 75 GWh

Focus on Supply & Demand



Changes in demand



Focus on Supply & Demand cont.

- Most reserve prices have increased (average 0.0011 p/Kwh/d) due to the revised forecast of supply and demand
- Supplies down in the south (MH & IOG) and up in the north. This has the effect of increasing exit costs in the south (which are already high) as supplies need to come in from other areas (ie the north) to meet demand.
- The increase in balance of costs to exit means the adjustment factor to meet the 50:50 exit :entry requirement has gone up on the entry side compared to last year. Hence the entry reserve prices have increased.

Focus on Expansion Constant

- The Expansion Constant represents the capital cost for an additional km of pipe
- Updated annually
- Updated according to RPI using the new RIIO methodology 0.75*Forecast RPI growth for 2013+0.25*Forecast RPI growth for 2014
- Taken from the HM Treasury report November 2013, “Forecasts for the UK Economy” so can be reconciled externally
- Revised from 2830 to 2918 GWhkm, a 3.1% increase

Focus on Expansion Constant (cont)

nationalgrid
THE POWER OF ACTION

- Entry points that are furthest from the centres of demand are most affected
  - An incremental GWh of supply will require a greater length of pipe to be installed to transport the gas to the demand centres. Therefore these entry prices are more sensitive to changes in the expansion constant
    - St. Fergus +0.0013 p/kWh/d
    - Milford Haven +0.0006 p/kWh/d
  - Changes of this nature should be expected and predictable by shippers

Focus on Network Changes

- Network changes have had a limited effect ..
  - no new projects added to the network this year
  - other changes are updated measurements and minor corrections
  - effect on prices is negligible

CVs

- To recognise different CVs at each entry point, the capital costs are adjusted for CVs
- An increase in CV will reduce reserve price
- Small changes with largest effect on price -0.0003 p/kWh/d at St. Fergus (moved from 39.4 to 39.6)

Next Steps

- Prices published on 16 January 14 (2 months notice)
- Invitation letter to be published with one months notice
- Auction to start 17 March