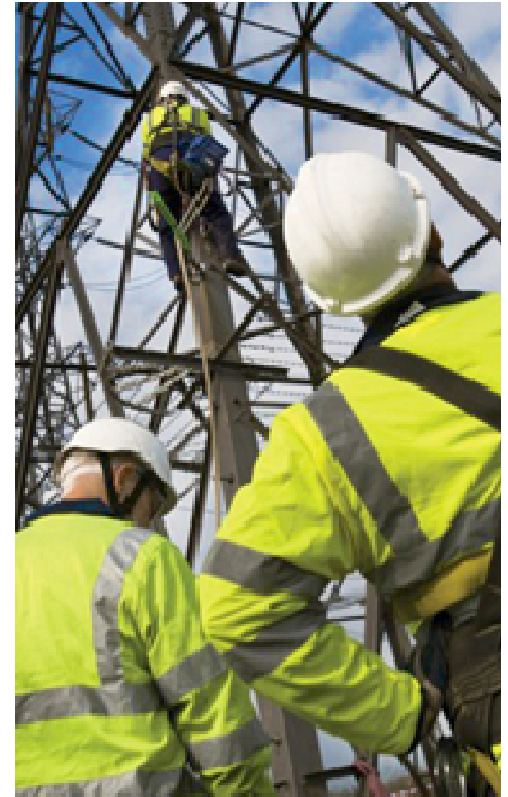


# Explanation of 2009 QSEC Reserve Prices

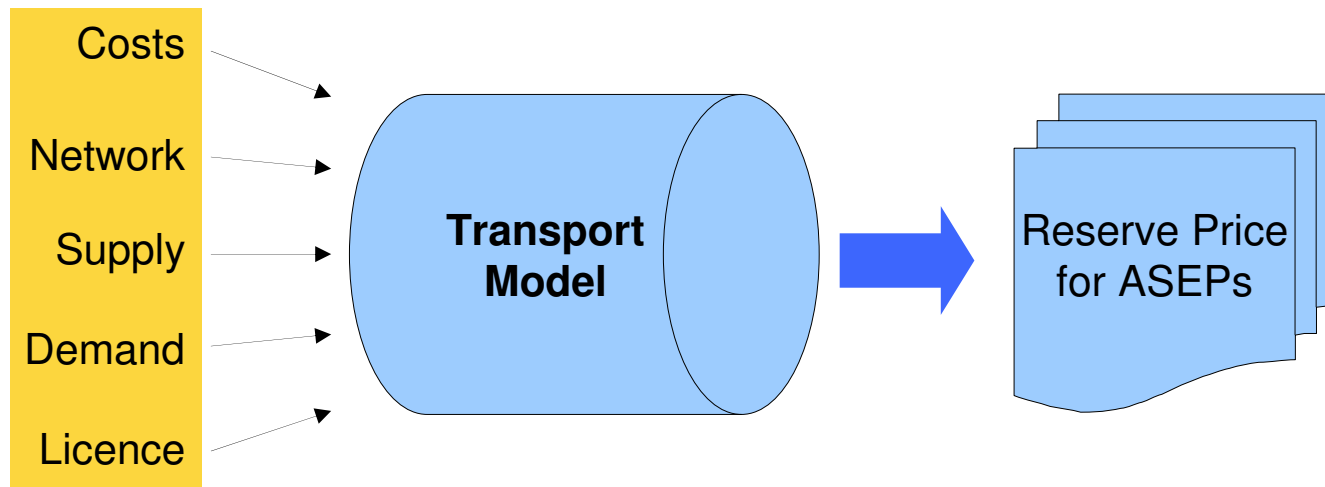
Gas TCMF 3<sup>rd</sup> September 2009



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# Entry Pricing Methodology

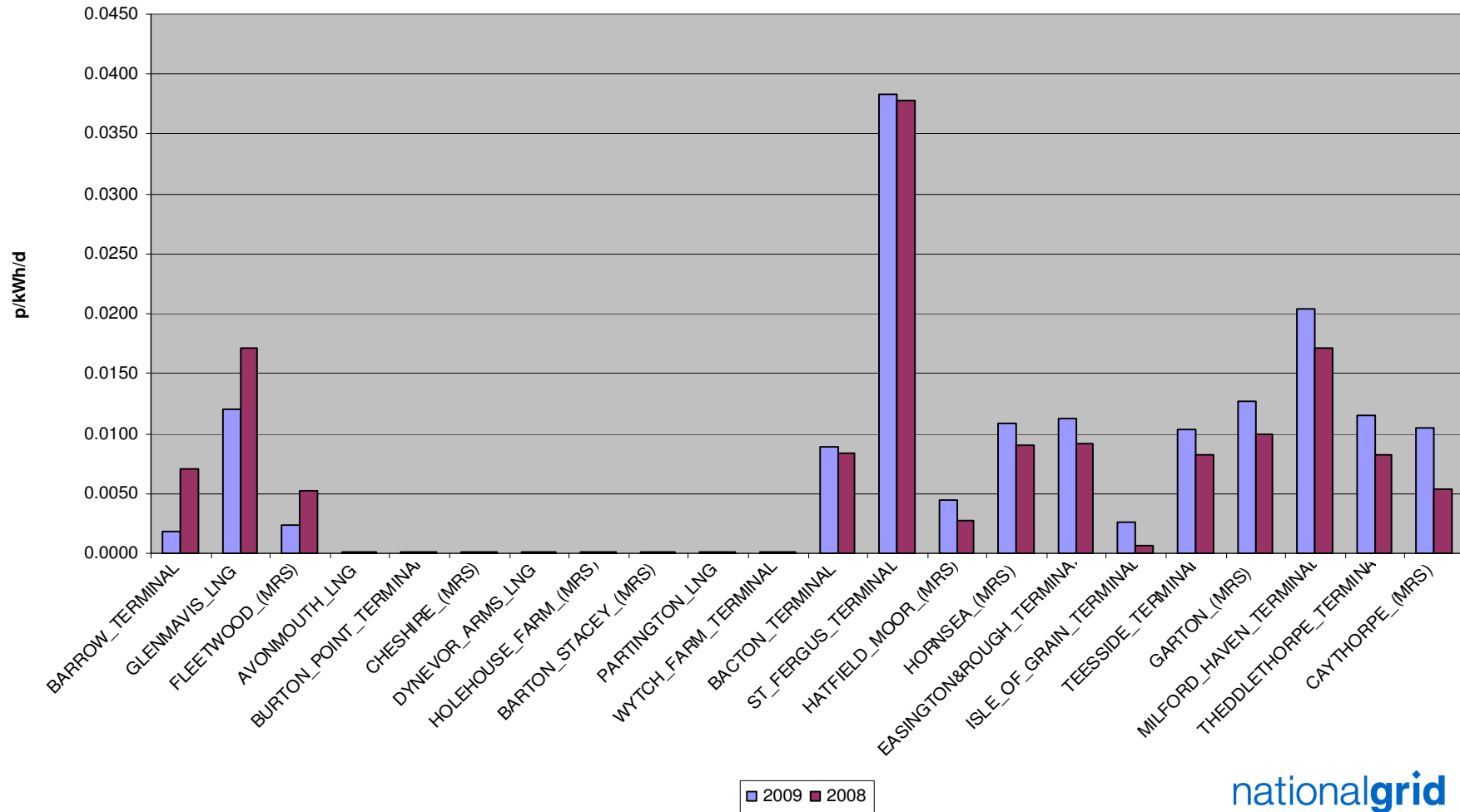


- ◆ Changes to inputs drive changes in prices
  - ◆ Costs ~ Expansion Constant
  - ◆ Network ~ Additional Pipes
  - ◆ S&D ~ Supply & Demand levels, CV and balancing rules
  - ◆ Licence ~ Obligated Capacity Level

# Reserve prices for QSEC capacity (2008 → 2009)



2008 and Revised 2009 Reserve Prices



# Focus on Expansion Constant

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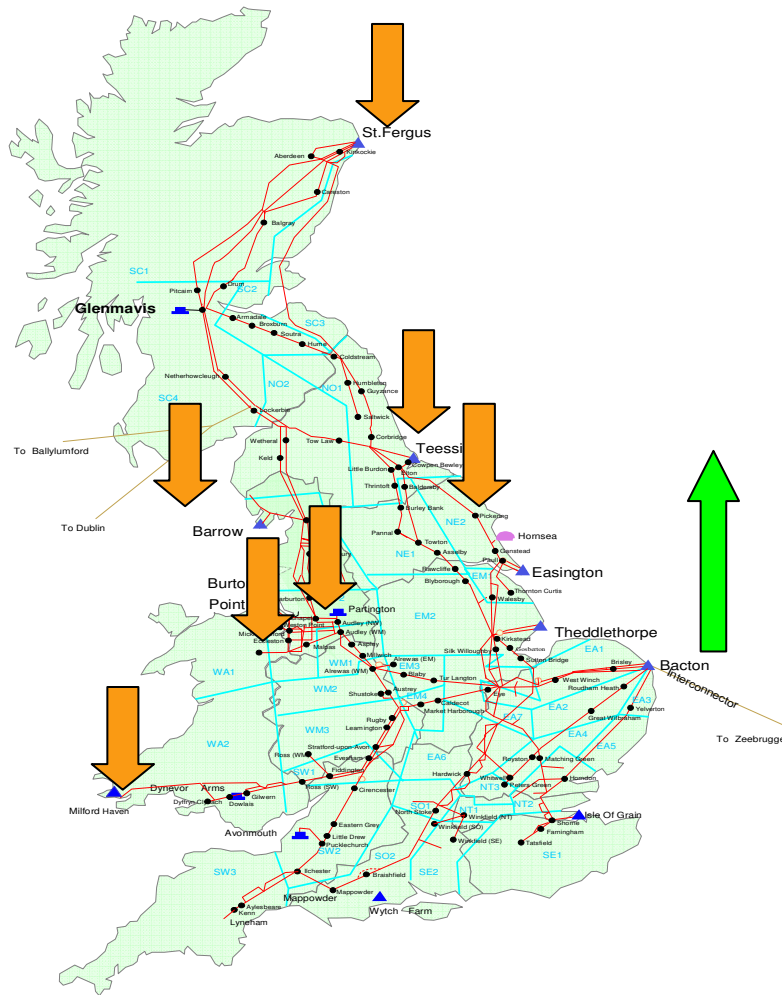
- ◆ Entry points that are furthest from the centres of demand most affected
  - ◆ The Expansion Constant represents the capital cost for an additional km of pipe
  - ◆ Updated annually according to change in Steel Price Indices (materials & labour)
  - ◆ Those Entry Points where there is the greatest impact are (largest first):
    - ◆ St. Fergus
    - ◆ Glenmavis
    - ◆ Milford Haven
  - ◆ 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

# Focus on Supply & Demand

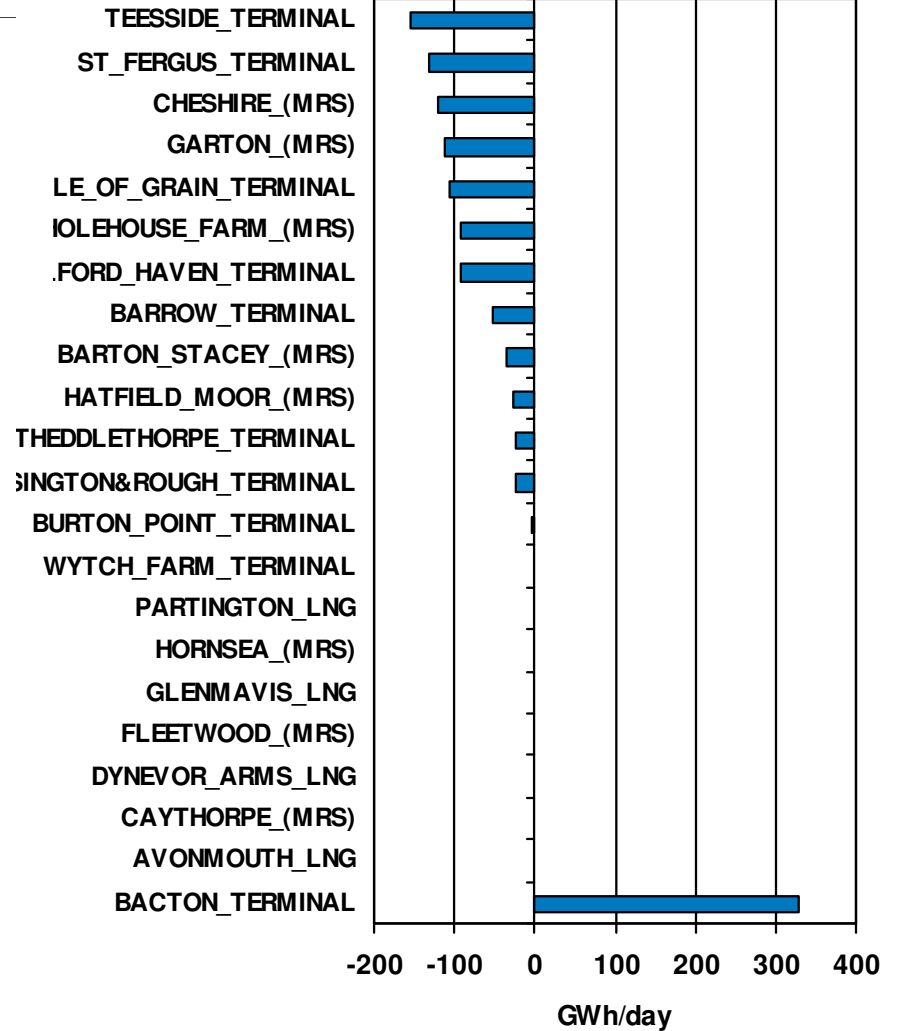
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- ◆ The change in supply and demand is the largest factor that influences prices
  - ◆ Forecast Demand has reduced significantly in 2011/12 due to the recession (about 6%)
  - ◆ Consequently supply has fallen **but not** uniformly
  - ◆ Supply balancing rules have changed following non-veto of GCM 16
    - ◆ supply altered in defined order based on entry type groups
    - ◆ all sites within a group are increased or decreased by the same amount
    - ◆ seeks to promote price stability and 'black-box' merit orders
  - ◆ Supply changes tends to be factor that influences charges the greatest

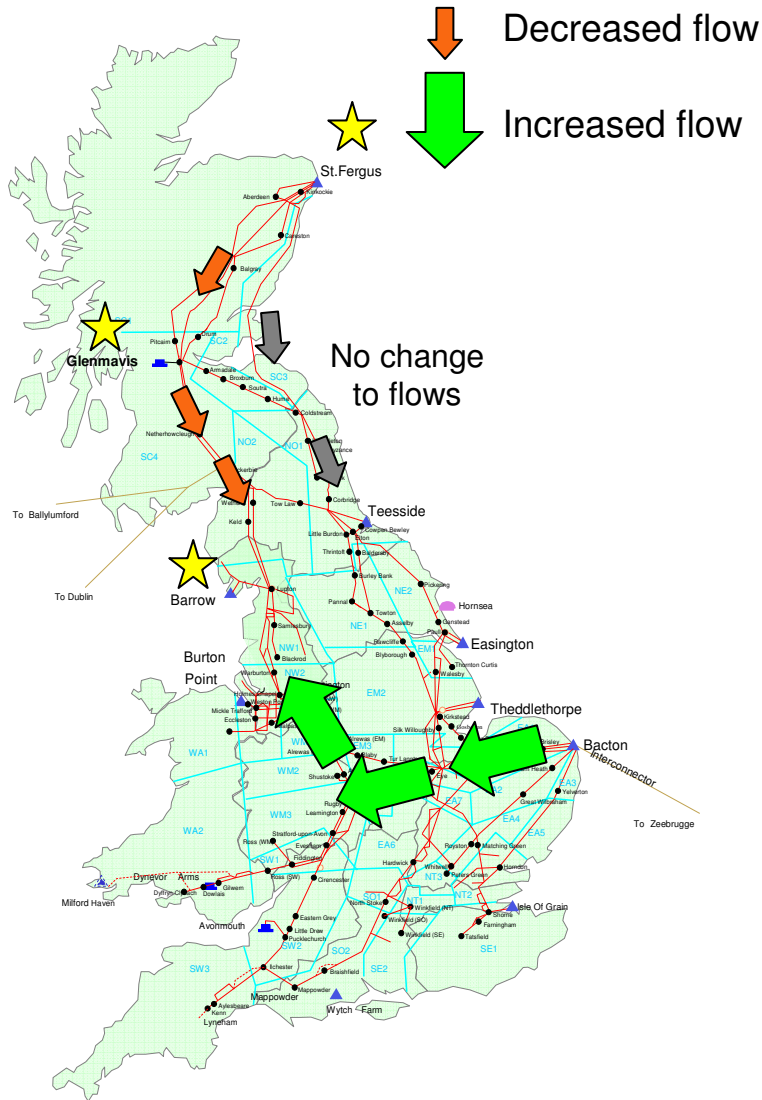
# Supply changes in 2011/12 (c.f. 2010/11) (GWh)



Implementation of GCM16.



# ASEPs impacted by West Coast flows



- ◆ West Coast flows reduced by
  - ◆ decreased supply in the North and West
  - ◆ increased supply in South-East
- ◆ As a consequence, the west coast marginal costs reduce and
- ◆ therefore, the prices decrease at these locations

# Focus on Obligated Capacity

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- ◆ Caythorpe price has increased due to Obligated level increasing
  - ◆ The higher the Obligated level the more capacity is offered, which subsequently creates increased supply at the Entry point when calculating the obligated price
    - ◆ 2008: 0 GWh
    - ◆ 2009: 90 GWh
    - ◆ No other changes
  - ◆ Caythorpe was the only ASEP where incremental was purchased in the 2008 QSEC auction



# Changes from current prices (2008 → 2009)

