

Gas Quality Scenario Development

Straw Man

Agreed parameters to be included:

- Continental imports (high Wobbe range)
- Norwegian imports (high Wobbe range)
- New UKCS developments (low Wobbe only)
- Initially just capture Wobbe, ICF can be captured through high Wobbe assessment as this is expected to entail additional ballasting / blending. Other gas quality parameters can be identified later.
- Timing 2009/10, 2013/14

Agreed parameters to be excluded:

- LNG imports
- Existing UKCS supplies

Supply Scenarios

To manage the considerable supply and gas quality scenarios it is proposed to generate four scenarios that are common to the evaluation of all supply sources under review.

Two of the four scenarios (Transit UK & Global LNG) are broadly but not completely analogous with National Grid's 2005 supply scenarios as detailed in the 2005 10 Year Statement, while the other two scenarios (Equilibrium & Design Limits) are new. These are all detailed below:

Transit UK: This scenario assumes a phased build-up of imports to the UK from Norway and LNG. It assumes that international LNG players, and to a lesser extent Norwegian parties, decide to use the UK as a 'gateway to Europe' with appreciable exports to the Continent primarily during the summer and shoulder months. Whilst the Interconnectors are assumed to export for much of the year, their operation is occasionally seasonal with relatively low winter imports when the UK experiences high demand or high prices. With high volumes of LNG shipped to the UK the development of the proposed Continental LNG terminals is assumed to slip. Similarly, with relatively high Norwegian imports to the UK and additional Troll gas sent to the UK in preference to Continental landing options there is lower Norwegian supplies for the Continent. Consequently, the availability of Continental supplies is reduced and the gas quality of Continental supplies for UK imports is less influenced by Continental LNG and Norwegian supplies.

As Transit UK is based around relatively high exports to the continent, it is reasonable to assume that UK gas prices are depressed, hence development of additional UKCS supplies are marginal.

Equilibrium: This scenario assumes that Continental Interconnectors continue to operate seasonally and there is an increased need for Continental imports to the UK brought about by lower levels of LNG imports and Norwegian imports. As the UK is assumed to receive modest levels of LNG imports there is some development of the proposed Continental LNG terminals. Similarly, with lower Norwegian imports to the UK there are increased Norwegian supplies for the Continent. Consequently, the availability of Continental supplies is increased and the gas quality of Continental supplies for UK imports is more influenced by Continental LNG and Norwegian supplies.

As Equilibrium is based around modest exports and imports to the Continent, it is reasonable to assume that UK gas prices are higher than in Transit UK, hence development of additional UKCS supplies are also higher.

Global LNG (amended): This scenario assumes a situation where the majority of the LNG potentially destined for the UK is shipped to alternative markets as a result of stronger gas prices outside of the UK, or possibly through a sustained loss to one of Europe's main sources of supply due to unforeseen circumstances. Despite LNG being shipped to alternative markets, imports of Norwegian gas to the UK are also lower [in National Grid's 2005 Global LNG, Norwegian imports to the UK were high] due to contractual commitments or Continent needs arising from the loss of a supply source. To meet the supply shortfall the UK receives relatively high volumes from the Continent for much of the year. In this scenario we assume the development of all of the proposed Continental LNG terminals, and that additional Troll gas is delivered to the Continent. Consequently, the availability of Continental supplies is relatively high and the gas quality of Continental supplies for UK imports is significantly influenced by both Continental LNG and Norwegian supplies.

As Global LNG is based around relatively high imports from the Continent, it is reasonable to assume that UK gas prices are much higher, thus promoting the development of additional UKCS supplies.

Design Limits: This scenario assumes that there may be economic circumstances that arise for all Continental and Norwegian imports to flow at full capacity type conditions. It also assumes that there are very high levels of additional UK supplies.

Working Group members to:

- Review "straw man" scenarios for both 2009/10 and 2013/14
- Assess the Gas Quality form under each scenario
- Provide views and estimates of gas flows under each scenario to Ofgem before the next Working Group meeting
- Identify those cases within the scenarios that need to be developed or assessed further