



# The Gas Forum

## “The voice of the gas industry”

GTCPR Technical Working Group  
Conclusions Report  
Ofgem workshop 14 Oct 2014

# Introduction

- Gas Forum welcomed the industry-wide invitation by Ofgem to contribute to the modelling exercise
- It is important that industry is given the opportunity to attempt to quantify the impacts of any policy change.....however, critical assessment of outputs is essential as is an appreciation of the wider context and more qualitative aspects
- It follows that Gas Forum volunteered to prepare a “Conclusions Report”.
  - Assessment of model design and core assumptions
  - Identification of broader issues which should be considered in Ofgem’s IA
  - Assessment of development process
- Will focus on the first two elements of the assessment

# Views on model design & assumptions

<b>Design Feature/Assumption</b>	<b>Group's views</b>	<b>Possible variant</b>
Modelling out to 2030	Supply/demand input assumptions are less robust further out	Reduce period to 2025
Static network assuming no new supplies/incremental capacity	Unrealistic assumption given the period under review, however, it is understood that forecasts of future supplies is fairly subjective.	Reduce period to 2025
Adopts the Transportation Model merit order for the purposes of deriving charges	Given this is the supply stack adopted in the transportation model, this is a sensible approach	Modify the stack to promote storage above LNG (or a proportion thereof).
Annual gas supply uses NG Ten Year Statement	Sensible approach	Model allows for Gone Green or Slow Progression, or we assume any alternative demand scenario
Peak gas supply and demand uses NG Ten Year Statement	Sensible approach	As above
Norwegian gas flows assumed to be split 90% contracted vs 10% arbitrage with the margin to exclude sunk pipeline costs	Seems reasonable, although perhaps overly simplistic due to interplays between GB and continental markets.	Use of historical flow patterns to generate a future supply forecast
UKCS supplies mix of supplies	The split of 20% associated, 20% condensate and 60% dry is used which seems reasonable	
Storage supplies using historical flow patterns (compared to demand)	We believe this is the case, but cannot confirm from the information provided. The use of historical flow patterns seems a reasonable proxy for future flows.	
Interconnector flows based on arbitrage position of spot prices	Wholesale prices are derived from historical data and are not price forecasts. This may skew the results if a) price arbitrage is not the primary driver of flow or b) future price trends (linkages) change significantly. However, given that these outcomes are unlikely and the fact that it is the price differentials (rather than absolute values) which determine flows, the assumption seems reasonable	Could use alternative wholesale price forecast, although not critical. Wholesale prices should be inflation indexed.

# (cont)

Design Feature/Assumption	Group's views	Possible variant
Transaction prices at connected continental interconnections based on current charges	An assumption that the basis upon which the charges at interconnected networks and interconnectors themselves will be fixed at the current rate. A reasonable assumption based on best available information.	Indexation of these charges
Probability of constraint at an ASEP based on net flow to net capacity ratio	A generic approach attempting to replicate shipper views on potential for a constraint. Also applies "standard rule of thumb" for shipper response to constraint risk in terms of booking behaviour. This is a very simplistic approach, however, it is recognized that it is impossible to model each individual shipper's risk assessment (and appetite for risk) and resulting booking strategy. It is accepted that the use of net flow compared to net capacity is appropriate.	Apply a less generic approach to risk assessment and subsequent booking patterns and/or, vary the probability curve to investigate impacts on outputs.
GTCR model includes a supply dispatch model which assumes LNG to be the "balancing" supply source	Not unreasonable given recent LNG flow patterns, although of course the future structure of the global gas market is highly uncertain. Projected increases in global liquefaction capacity may, for example, shift the position of LNG within the GB supply stack.	Promote a volume of LNG up the merit order to reflect expected growth in global liquefaction capability.
Booking strategy assumptions – application of profit margins, gas production ratios and gas price constraint indexes	The model permits the User to determine values for each of these variables.	n.a
Use of floating adjustments – the model contains a menu of various options for structuring the adjustment	Clearly, there a number of alternative methods which could be applied, although these might be restricted by the final version of the EU Tariff Code. It would be helpful if the Group was able to examine these alternatives and assess their impacts on the model outputs	n.a
Application of multipliers - the model permits the User to set the multiplier and the year of application	As above it would be helpful if the Group was able to assess the impacts of varying the values on the model outputs.	n.a
Application of inflation to capacity charges – the model permits the User to set the level and the contracts it is applied to	As above it would be helpful if the Group was able to assess the impacts of varying the values on the model outputs	n.a

## Issues for further consideration

- Potential new and additional sources of gas supply and their respective impacts on the system capacity (noting that additional supplies will include embedded supplies which may be delivered into the distribution networks).
- The potential for actual physical constraints within the network (at entry and exit)
- Contractual hurdles which will need to be overcome, in particular the possibility for contractual resetting.
- Impacts on new entrants, and those requiring access to short-term capacity or during off-peak periods
- Cost reflectivity of any new charging arrangements, recognizing that the short run marginal costs of providing capacity will tend towards zero
- Efficiency of capacity use, through the potential creation of capacity scarcity attached to a market characterized by long term bookings
- Price stability of charges.
- Equitability in charges, noting that commodity charges are paid at the same rate by all users delivering gas into and taking gas out of the transmission network, with some permitted exceptions.

## (cont)

- Reasonableness of guaranteed allowed revenues attached to a system where CAPEX has been recovered, or recovered against “stranded assets”. Investigation of risk-sharing by the regulated monopoly provider of the network and the capacity Users.
- Impacts on traded markets (liquidity and wholesale gas prices) and ultimately consumers of “rebalancing tariffs” which may result in allocative inefficiencies.
- Possible impacts on future investment in “marginal projects” and the knock on effects for overall security of supply. For example, would a new charging structure be overly detrimental to storage developers?
- Over-investment or gold-plating of the network. Would a change in charging structure lead to an over-booking of longer term capacity products, falsely signaling a demand for additional capacity?
- Overall impacts on system utilization. Could a charging structure deter low value users from utilizing the network, thereby exacerbating revenue under-recoveries?