Gas Entry Baselines for TPCR

Nienke Hendriks

20 October 2005

Outline

- Background
- Should baselines be revised as part of next TPCR?
- Some issues which have arisen
- Objectives going forward
- Three generic options for this workshop

Background

Last Transco price control:

- Introduction of TO and SO baselines
- TO baselines based on theoretical max phys approach
- SO baseline = 90% TO baseline
- High baseline for system as a whole: 20% rising to 25% margin (plus effect of any new entry points) over forecast 1-in-20 demand
- Entry point specific baselines for each of five years of price control
- Range of licence obligations (offer for sale all baseline capacity, clearing auction, buy-back mechanism, investment incentive)

⇒ Baselines fulfil a dual role: they form an integral part of the (i) revenue restriction and (ii) auction arrangements

Should baselines be reviewed?

- As part of last price control 18 entry point specific baselines were set for 2002/03 – 2006/07
- Of the 18 entry point specific baselines, 11 are flat and 7 change over time.
- The Bacton and St Fergus baselines increase over the five years
- The Barrow baseline sees a marginal decrease
- The Easington and Teesside baselines first decrease and then increase
- The Cheshire baseline is flat during the first two years and then increases
- TPCR TO allowance was linked to these baselines

Objectives going forward

- Incentivise National Grid Gas to provide capacity in response to price signals;
- Avoid artificial constraints and significant amounts of sterilised capacity;
- Baseline and incremental incentives to form a coordinated and complementary set of incentives;
- Arrangements should be simple and transparent to minimise uncertainty and disputes.

Issues

- Capacity expansion has been at new rather than existing entry points
- No signals for new investment at existing entry points
  - Valuable information given expectations of expansion at St Fergus at time of last Transco price control
  - But also surprising given current expectations of a number of stakeholders at Easington
- Revenue under-recovery through entry auctions (last year's TO commodity charge of £40 million)
- Baselines are non-transferable – hence sterilising capacity which could potentially be used elsewhere, e.g. new entry points
- SO baseline capacity >>> forecast 1 in 20, i.e. disjoint between baselines and physical capability of existing network
- If baselines are too high then limited incentives on shippers to bid in LR auctions

Capacity margin

	2002/3	2003/4	2004/5	2005/6	2006/7
Total SO baseline capacity (GWh/d)	7166	6979	7715	7982	8064
Maximum flow rate (GWh/d)	4533 (8 Jan) (37%)	4349 (29 Jan) (38%)	4357 (26 Jan) (44%)		
1 in 20 forecast (10 year statements)	5737 (20%)	5784 (20%)	5905 (23%)	6021 (25%)	6107 (25%)

Generic options

- Option A: status quo (entry point specific)
- Option B: System wide/zonal baseline
- Option C: No baseline

Criteria used to select these options:

- Scope for all issues to be raised – stimulate debate
- Consider scope for greater consistency with approach adopted in electricity transmission
- Address some of the issues which have arisen

Option A(1): Status Quo

Method: Roll forward existing baselines

Advantages

- Gives shippers at existing entry points certainty with respect to auctions under current regime

Disadvantages

- large capacity margin
- sterilised capacity
- high TO allowance
- no credible proxy for actual (physical) capacity/demand
- unlikely that auction bids will provide investment signals

Key challenge: how to reallocate capacity between entry points

Option A(2): Refinement of status quo

Method: Determine baseline for year 1 of TPCR2007 on entry point specific basis by using all available auction signals and augment this to meet forecast 1:20 gas demand for yr 1.Baselines for yrs 2-5 are set equal to baseline in yr 1.

Advantages

- uses all available information for year 1(incl. forecast 1 in 20 for year 1)
- No reliance on forecast data for years 2-5
- Reasonable proxy for existing capacity
- Reduces buy-back risk on National Grid Gas

Disadvantages

- Issues at declining terminals (e.g. sterilised capacity)
- insufficient to meet 1 in 20
- high level of Ofgem involvement
- Some residual reliance on forecast information

Key challenge: how to reallocate capacity between entry points

Option B(1): System wide baseline

Method: Aggregate all entry point specific baselines. National Grid Gas would have discretion to determine entry point specific baselines and would have licence obligation to ensure maximum use of existing capacity and provide incremental capacity in a timely and efficient manner. National Grid Gas would have to develop objective and transparent method to re-allocate capacity between entry points.

Advantages

- Optimise use of existing capacity
- Reduces risk of sterilised capacity
- More similar to electricity transmission
- Less Ofgem involvement ex ante
- National Grid Gas more accountable
- Stronger incentives for shippers to bid in LR auctions

Disadvantages

- National Grid Gas has more discretion
- potentially more disputes
- issue in respect to 1 in 20 obligation
- Information needed to allow effective self-policing

Option B(2): Zonal baselines

Method: Determine zonal baselines and possibly include a mechanism to re-allocate capacity between zones.

Advantages

- Optimise use of existing capacity
- Reduces risk of sterilised capacity

Disadvantages

- potentially more disputes
- issue in respect to 1 in 20 obligation

Key challenges: how to define zones and how to reallocate capacity between zones

Option C: No explicit baselines

Method: Breaks link between National Grid Gas revenue allowance and specific output measures

Advantages

- Reduces risk of sterilised capacity
- Similar to electricity approach
- Less Ofgem involvement ex ante
- National Grid Gas more accountable
- Stronger incentives on shippers to bid in long-run auctions

Disadvantages

- greater discretion for National Grid Gas
- credibility issue enforcement
- more scope for disputes, greater Ofgem involvement
- how to determine what is incremental capacity

ofgem

Promoting choice and value for all gas and electricity customers