Optional ('Short-haul') Commodity Tariff - Charging Methodology Review

Gas TCMF – 7th May 2009

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Background

This presentation covers issues associated with the existing NTS Optional ('Short-haul') Commodity Charge & the NTS Charging Methodology rate calculation process.

- 'Short-haul' was introduced in 1998 to reflect more accurately the costs of gas transportation from a terminal to a nearby large supply point to avoid inefficient by-pass.
  - Shippers can elect to pay the optional tariff as an alternative to both the entry and exit NTS commodity charges.
  - The tariff is derived from the estimated cost of laying and operating a dedicated pipeline of NTS specification (i.e. the cost of by-passing the NTS).
  - A charging function has been calculated based on flow rate and pipeline distance.
  - Available to all daily-metered supply points, although in practice it is only attractive for large supply points situated close to terminals

Question

Q: If this was low on the list of priorities from the TCMF survey, why are we looking at it now?

A: We get more questions relating to 'short-haul' and the charging arrangements compared to any other area of the methodology.

We want a clear and up to date charging methodology that continues to be appropriate considering changes since its introduction.

The ‘Short-haul’ Tariff

This is available as an alternative to the standard SO commodity tariff (both entry and exit) and the TO commodity tariff (at entry).

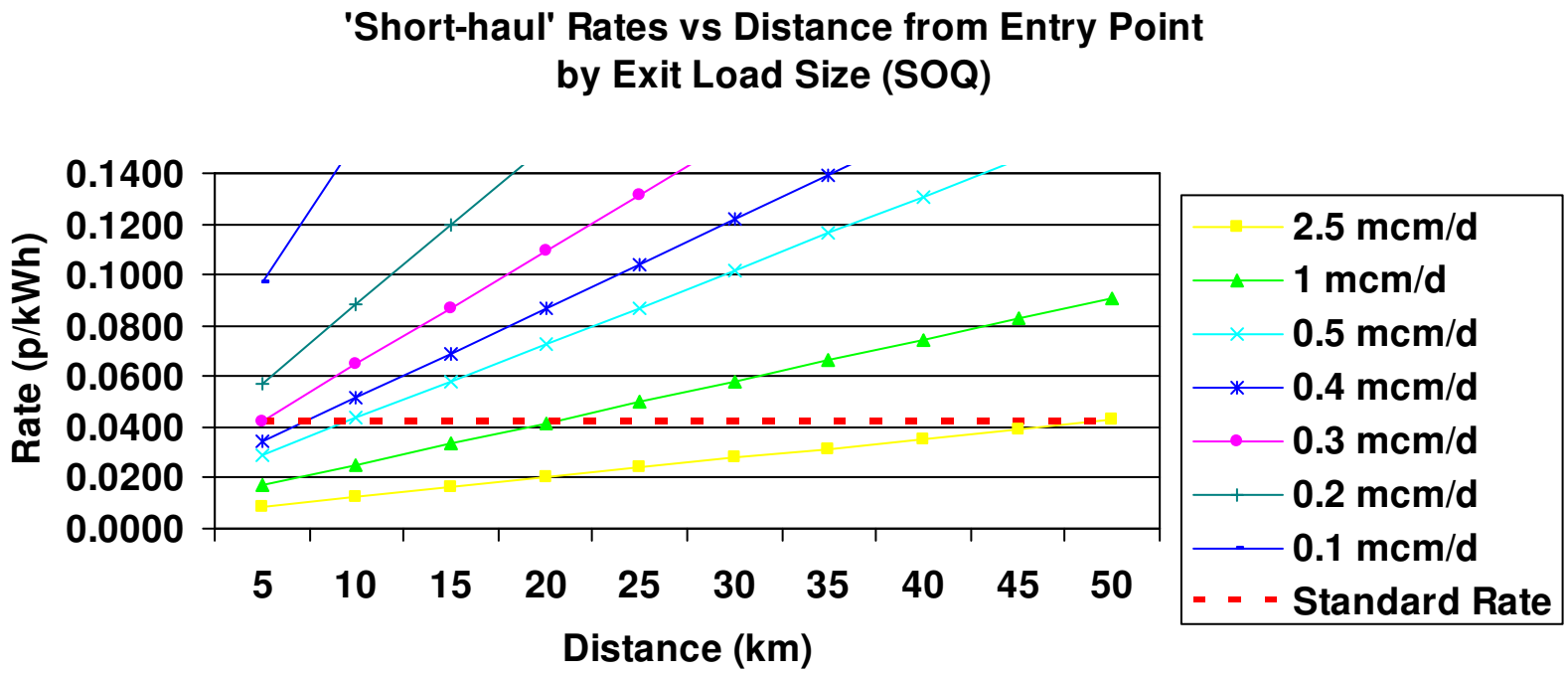
Charge rate is related to the

- distance (D) of the exit point from the elected aggregate system entry point
- peak daily offtake rate (SOQ)

Rate(p/kWh) = 1230 x $[(SOQ)^{-0.834}]$ x D + 363 x $(SOQ)^{-0.654}$

The charge currently recovers around £6m of the target £305m commodity revenue per annum

‘Short-haul’ & Standard Commodity Rates



Standard Rate of 0.0424 p/kWh (as at 1/04/09) calculated as follows:	
TO Entry Commodity Charge	0.0114 p/kWh
SO Entry Commodity Charge	0.0155 p/kWh
SO Exit Commodity Charge	0.0155 p/kWh
Total Charge	**0.0424 p/kWh**

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Is the charge cost reflective?

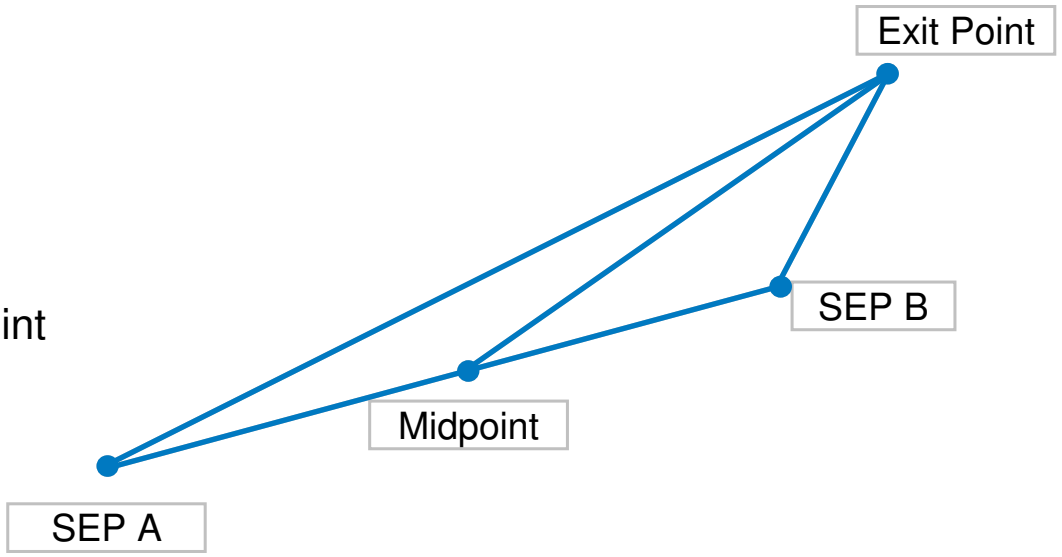
The charge was introduced in 1998 using estimated costs at the time.

- There have been no updates to the formula.
- Construction costs have risen by up to 300% over that time and therefore the charging function should be updated to reflect this.
- The tariff calculation assumptions included a load factor of 75% and full depreciation over 10 years.

Consideration of Existing Parameters 1

Distance from ASEP to exit point

- This is currently the straight line distance (km) from the ASEP to the boundary of the exit point.
- No problem where an ASEP has all SEPs at same location, but
- Where there is more than one SEP what is the appropriate location from which to measure?
  - *A pipeline to each SEP*
  - *1 pipe via all SEPs*
  - *Closest SEP*
  - *Furthest SEP*
  - *Mid point*
  - Other?
- Currently use the mid point



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Consideration of Existing Parameters 2

Load Factor

The current load factor is assumed to be 75% in the tariff calculations.

- This therefore assumes high utilisation.

But

- Actual data suggests that in some instances the load factor is significantly lower.
- The current average load factor is around 50%.
- Using this figure in the derivation of the tariff would imply a 50% increase in the tariff.
- Would it be appropriate to have
  - *A single load factor for every site (status quo)*
  - *A site-specific load factor*

  in the tariff calculation?

Consideration of Existing Parameters 3

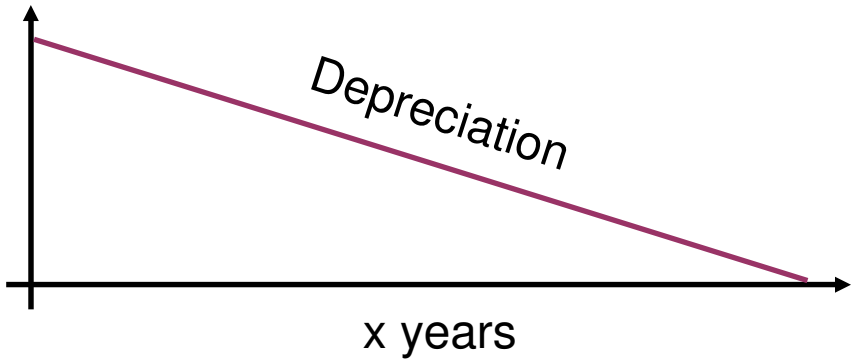
Depreciation time for pipeline.

Costs have been assumed to be fully depreciated over 10 years. This is because project approvals have typically used this assumption.

- Is this assumption still valid?

Or

- Is there a more appropriate time to consider?
  - *45 years (asset life)*
  - *20 years*
  - *Other?*
  - *Increasing the asset life would reduce the tariff.*



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Consideration of Existing Parameters 4

Minimum Charge

There is currently a charge to reflect the costs of connecting a pipe from the specified entry terminal to an exit point within the terminal (i.e. when the assumed distance is zero).

- Charge is related to the SOQ at the exit point.
- This charge is applicable when the distance is deemed to be zero.
- This should reflect the costs of the alternative connection.

BUT

- Are there any other costs or benefits to consider?

Consideration of Existing Parameters 5

Annual updating of charge.

There have been no updates since the charge was introduced.

- Would it be appropriate to update charges going forward in line with changes to other tariffs?
  - *RPI*
  - *Steel price index (consistent with expansion factor in the transportation model)*
  - *Other?*

Is the application of the charge appropriate?

There have been an increasing number of queries from shippers regarding the application of the charge.

1. Application to multiple exit points from a single entry point.

- This is allowed under the UNC but the default allocation, where there is insufficient entry flow to meet the required exit flow, is to pro rate.
  - Alternative allocations can be requested but only where we agree
  - This has recently been queried by a shipper who wishes to define an 'allocation order'. This is being investigated as there are systems implications.
- This situation is more likely to be an issue where the actual load factors are lower than the 75% assumed in the methodology.
- Since the tariff is meant to be an alternative to shippers building a dedicated pipeline, the load factor assumption could be revisited.

Is the application of the charge appropriate?

2. Application at storage exit points.

- Storage points are not eligible entry points for ‘short-haul’ however, storage points are eligible exit points.
  - This may have been an oversight given that ‘short-haul’ was introduced when commodity only applied to exit.
- Storage points currently avoid NTS commodity charges since storage is deemed to be part of the wider system
  - to charge commodity for storage gas might be double counting as the charges are paid for a unit of gas at entry to the system (beach) and on final exit (customer) from the system
- By allowing the short haul rate for storage exit, a unit of gas flowing via a storage site can avoid paying entry commodity (beach) which might be significantly higher than the short haul rate.
  - Question: Does this undermine the logic of storage sites avoiding NTS commodity charges?

Impact on SO and TO Commodity Charges

NTS Charges (Prices in p/kWh)	Actual rates from 01 April 2009	Rates that would apply if there was no 'short-haul' charge	Rates that would apply if 'short-haul' Users built their own pipe
SO Commodity **(Applied to Entry and Exit Flows)**	0.0155	0.0141	0.0158
TO Commodity **(Applied to Entry Flows)**	0.0114	0.0102	0.0114
Optional 'Short-haul' Commodity **(Weighted Average *)**	0.0052	N/A	N/A

* Note: Charges calculated based on current 'Short-haul' tariffs

Summary of Issues

1	**Distance from ASEP to exit point**
2	**Load Factor**
3	**Depreciation time for alternate pipeline.**
4	**Minimum Charge**
5	**Annual updating of charge**
6	**Application to multiple exit points from a single entry point**
7	**Application at storage exit points**
8	**Any other issues?**

Way Forward

June 2009 Gas TCMF: Analysis of options for each issue.

- What analysis will be required?

Summer 2009: Development of Proposals

- Discussion or Consultation Paper?

Implementation date

- April/October 2010?

Appendix A: Impact on SO and TO Commodity Charges (In Detail)

NTS Charge		Actual rates from 01 April 2009	Rates that would apply if there was no 'short-haul' charge	Rates that would apply if 'short-haul' Users built their own pipe
SO Commodity	Relevant Annual Flow (GWh)	1,934,686	2,169,382	1,934,686
	Annual Revenue (£m)	298.92	305.03	305.03
	SO Commodity Rate (p/kWh)	**0.0155**	**0.0141**	**0.0158**
TO Commodity	Relevant Annual Flow (GWh)	971,947	1,089,294	971,947
	Annual Revenue (£m)	110.80	110.80	110.80
	TO Commodity Rate (p/kWh)	**0.0114**	**0.0102**	**0.0114**
Current Optional 'Short-haul ' Commodity	Relevant Annual Flow (GWh)	117,348	N/A	
	Annual Revenue (£m)	6.11		
	SO Commodity Rate (p/kWh) (Weighted Average)	**0.0052**		