Price Multipliers

Entry Charging Review Group, 16th December 2009



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Introduction

- An action from the third Entry Charging Review Group meeting was "Produce draft options for 'phase two' for further discussion."
- Phase 1
 - If phase 1 includes removal of discounts and revisions to the release of interruptible quantities then this would address the quantity of zero reserve price made available identified as one of the key contributors to the high TO Entry Commodity charge
- Phase 2+
 - Assuming there are no changes to the entry capacity products made available, later phases seeking to address the capacity profiling issue could involve the introduction of price multipliers



Price Multipliers

- Currently all entry capacity prices are expressed as a daily rate equal to 1/365th of the annuitised long run marginal cost (LRMC), generated from the transportation Model, with the exception of the daily capacity prices where discounts apply.
- Price Multipliers could apply such that each product was priced based on a multiple of the prevailing calculation
 - This is equivalent to dividing the annuitised LRMC by a duration of less than 365.
- Price Multipliers are not new within the NTS Charging Methodology and daily capacity was initially priced at 4 times the annual daily rate.



Phased Introduction of Price Multipliers

- The cost of making capacity available annually is the same irrespective of whether the capacity is sold on a daily, monthly or quarterly basis.
- Daily prices could be set as a multiple of monthly prices and monthly prices could be set as a multiple of quarterly prices.



Ideas for Setting Multipliers

- The following table shows the maximum and average capacity procured in each auction type over the 2008/9 formula year
- If the maximum capacity bought drives the cost incurred then the ratio of the maximum to the average would create a multiplier that would collect the level of revenue implied by the maximum.
 - E.g. if the maximum quantity bought is 10 units but only five units are bought on average over the year then a price multiplier of 2 (=10/5) would result in the revenue recovered from the units bought matching the cost of the maximum.

Capacity Procurement (2008/9 Formula Year)	Average (GWh/day)	Maximum (GWh/day)	Ratio (Max/ Average)
QSEC	4,358	5,710	1.31
MSEC	1,223	1,751	1.43
RMSEC	170	516	3.03
DADSEC	79	217	2.76

Ratio of Maximum to Average Capacity Procured by Auction Type



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Price Multipliers: European Comparison

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Price Multipliers compared with Annual Rate (p/kWh/day)





Price Multipliers compared with Annual Rate (p/kWh/day)



annual charge divided by 365).

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Price Multipliers: History

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Key charging changes in relation to NTS entry capacity (1)

No	Date	Key Changes
PC36	Nov 1998	Introduction of daily entry capacity priced at 4 times the administered charge rate for firm and zero for interruptible
PC48	July 1999	Introduction of monthly capacity auctions. MSEC Floor prices determined by the established LRMC methodology with a common 25% discount.
PC49	Aug 1999	DSEC \sim 1.5 x daily rate of cleared price obtained in the relevant monthly auction. (average of the top 50% by volume of accepted bids) or 1.0 x published charges.
		DISEC ~ 0.1 x daily rate of cleared price obtained in the relevant monthly auction. (average of the top 50% by volume of accepted bids) or published charge.
PC51	Jan 2000	Introduction of within day auctions (WDDSEC) with a floor price multiple of 1.0 times the average of the top 50% by volume of accepted bids in the relevant auction of MSEC.
PC61	May 2000	MSEC floor price calculations take into account the quantities that have been identified for sale in the Network Code and
		The adjustment for an assumption of equal revenue recovery from NTS entry and exit capacity should be discontinued.



Key charging changes in relation to NTS entry capacity (2)

No	Date	Key Changes
PC62	May 2000	DSEC Floor Prices should follow the same methodology as that applied for MSEC and that a 50% discount should be applied to the adjusted administered charge rate. Daily interruptible (DISEC) reserve price of zero.
PC72	Feb 2002	In light of the issues raised and the detailed Licence drafting published at the time, it was decided not to propose the methodology change introducing WDDSEC zero prices, as outlined in PC72.
PC76	Nov 2002	Reserve prices for NTS TO entry capacity should be based on the UCAs specified in the GT Licence. Prices no longer adjusted for allowed revenue.
		The relationship between MSEC and DADSEC reserve prices remain as at present, with DSEC reserve price at each entry point equal to two thirds MSEC reserve price
		WDDSEC reserve prices should be zero
GCM01	Nov 2006	Introduction of the Transportation Model



NTS Daily Entry Capacity Price History



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