

MOD0517 - Changes to the Merit Order within the Transportation Model



MOD0517 Workgroup (as part of NTSCMF)
31 October 2014

Agenda

- Background
- MRS compared to LNG
- Options Considered
- Interaction with other developments
- MOD Proposed Solution
- Summary

Background

- Current merit order was established as part of GCM16 and implemented in 2009 and is now in the UNC
 - Transportation Model calculates Entry reserve prices and Exit capacity charges
- It was reflective of the supply utilisation at the time and established through industry consultation
- Merit order has not been reviewed in recent years

Proposal

- Change the Merit Order to be more reflective of the current gas supply patterns on the NTS
 - Analysis looked at the LNG and MRS sources of supply

Current Merit Order

- Beach Terminals
- Pipeline Interconnectors
- Long Range Storage Facilities
- LNG (Liquefied Natural Gas) Importation Facilities
- Mid Range Storage (MRS) Facilities
- Short Range Storage Facilities

LNG compared to MRS

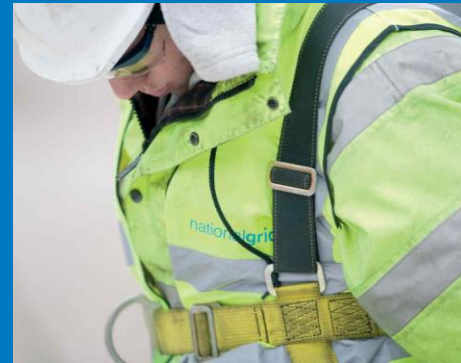


Highest Demand Day Analysis

- Analysis of the previous years highest demand day data based on percentage of supplies used on the particular highest demand day in each year:

Year	LNG	MRS
2010/2011	17.36%	3.77%
2011/2012	18.70%	12.12%
2012/2013	7.70%	16.79%
2013/2014	2.47%	13.24%

Options Considered



Options for amendment to Merit Order

1. To leave merit order as is, with LNG utilised ahead of MRS in supply matching
2. To amend merit order to promote MRS ahead of LNG
3. LNG and MRS grouped together in merit order
4. Use the amount specified against LNG within Winter Outlook Report first, then utilise MRS and then remaining amount to LNG

NTSCMF and Transmission Workgroup

- NTSCMF have discussed Merit Order over summer and on 15th September presented on Option 2 and Option 4 compared to Option 1 to NTSCMF
 - Requested analysis on Option 3 and to show comparison between Option 3 and Option 4
- On 2nd October presented Option 3 and Option 4 analysis and a comparison between the 2 options to Transmission Workgroup
- MOD was raised at October Panel (MOD0517)

National Grid Analysis to date

- National Grid have worked through Option 2, Option 3 and Option 4 compared to Option 1 (original Transportation Model) based on:
 - QSEC 2014 Transportation Model
 - Winter Outlook Report 2013/14
 - Minimum price still applicable
- And:
 - QSEC 2013 Transportation Model
 - Winter Outlook Report 2012/13
 - Minimum price still applicable

Percentage Change

- Some of the charges have larger percentage change than others
 - Small changes to the supply data within the Transportation Model have the potential to change the direction of the flow of gas and this is likely to noticeably impact prices
 - When price starts at minimum price, the p/kWh value change can be small but the percentage change can look large

2014 – Comparison of Option 3 and nationalgrid Option 4 – Transmission Workgroup

■ Option 3

- Values within merit order under Scenario 3:

- LNG and MRS – 3149.49

■ Option 4

- Original value against LNG was 1334.68GWh

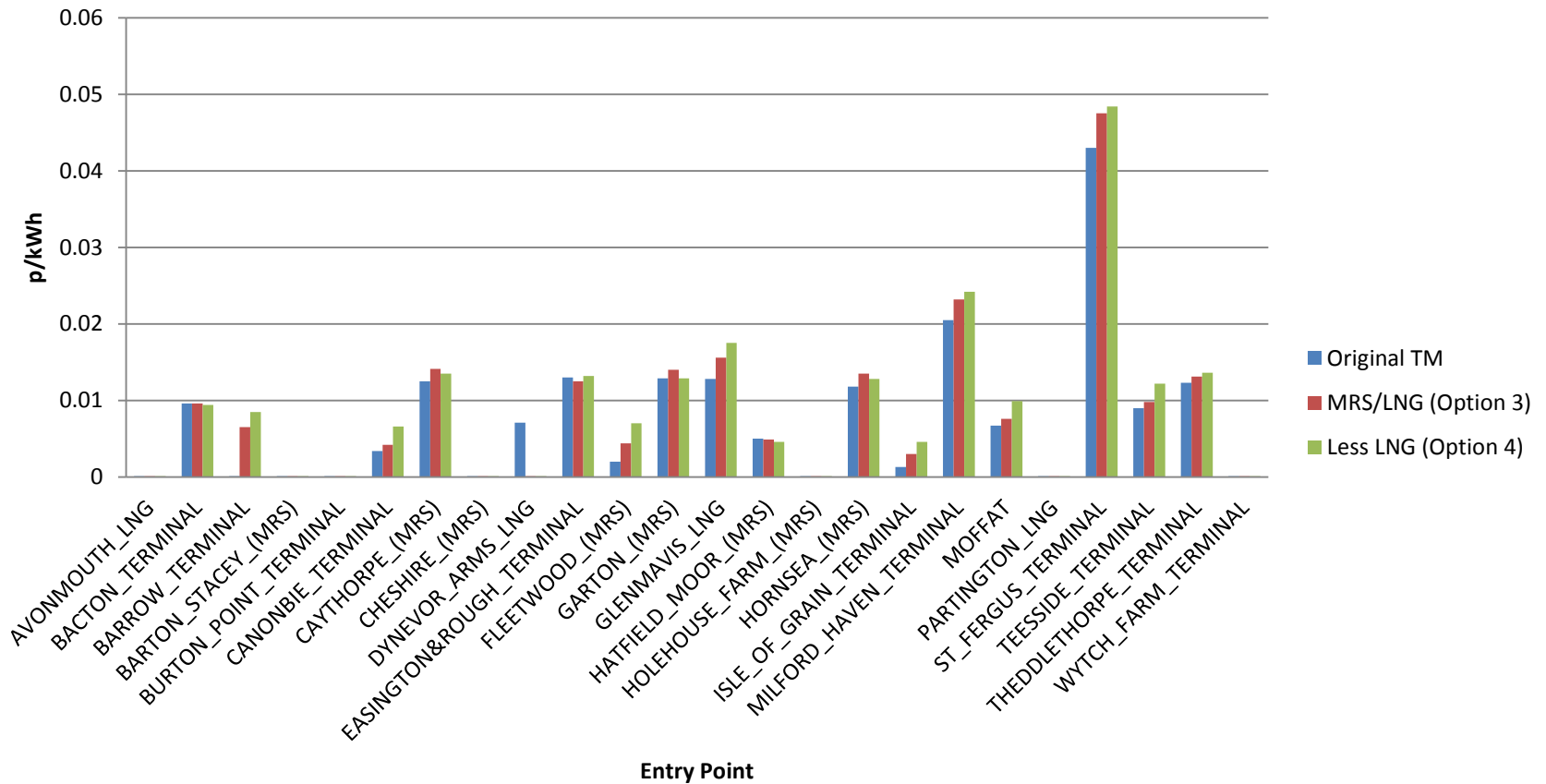
- Values within the merit order under Scenario 4 set at:

- LNG – 551.5GWh

- MRS – 783.2GWh

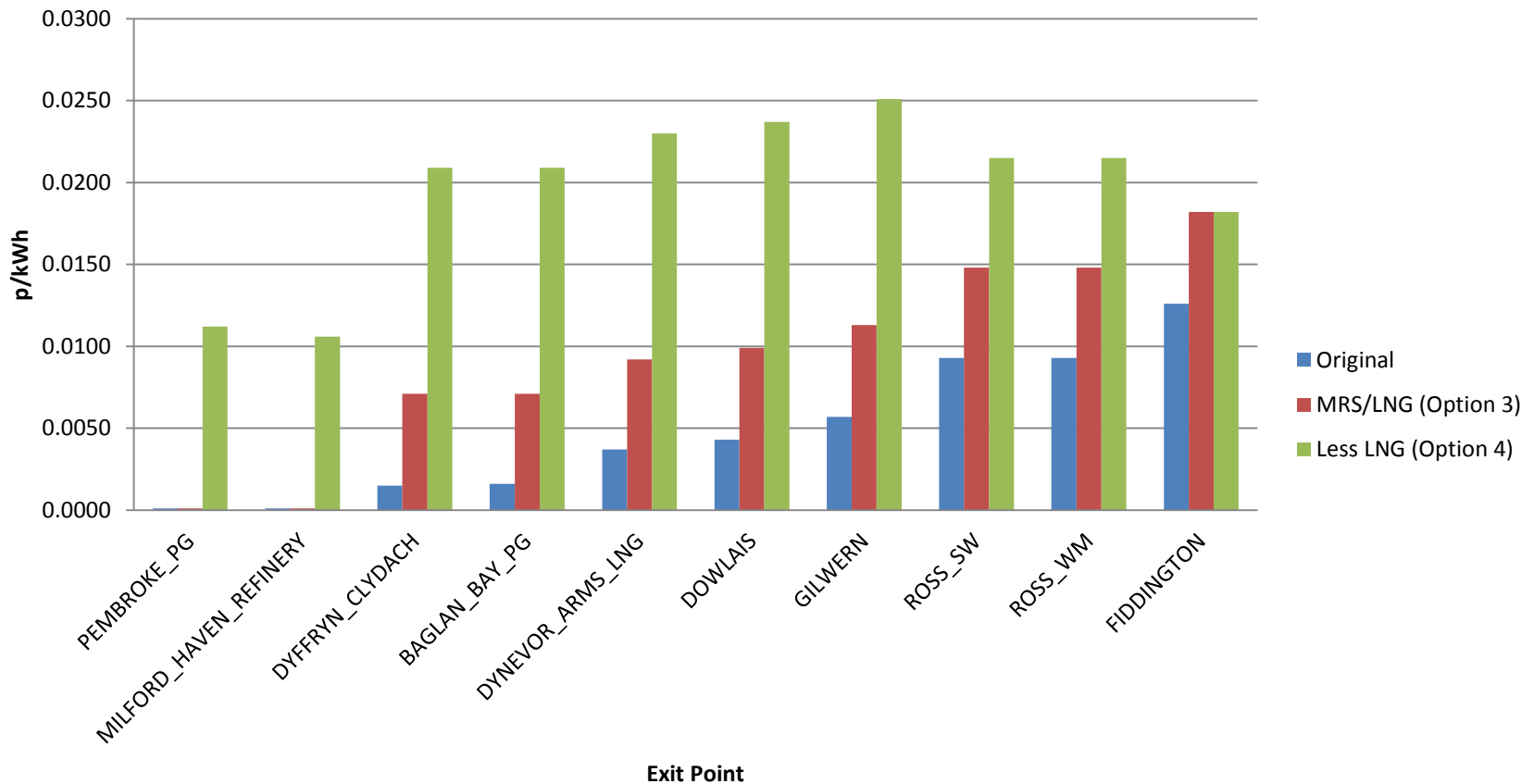
2014 (QSEC) – Entry Results

2014 Comparison of Original, Option 3 and Option 4 reserve prices



2014 (QSEC) – Exit Results (Top 10 increases)

2014 Comparison of Original, Option 3 and Option 4 reserve prices



2013 – Comparison of Option 3 and nationalgrid Option 4 – Transmission Workgroup

■ Option 3

- Values within merit order under Scenario 3:

- LNG and MRS – 3008.10

■ Option 4

- Original value against LNG was 1519.70GWh

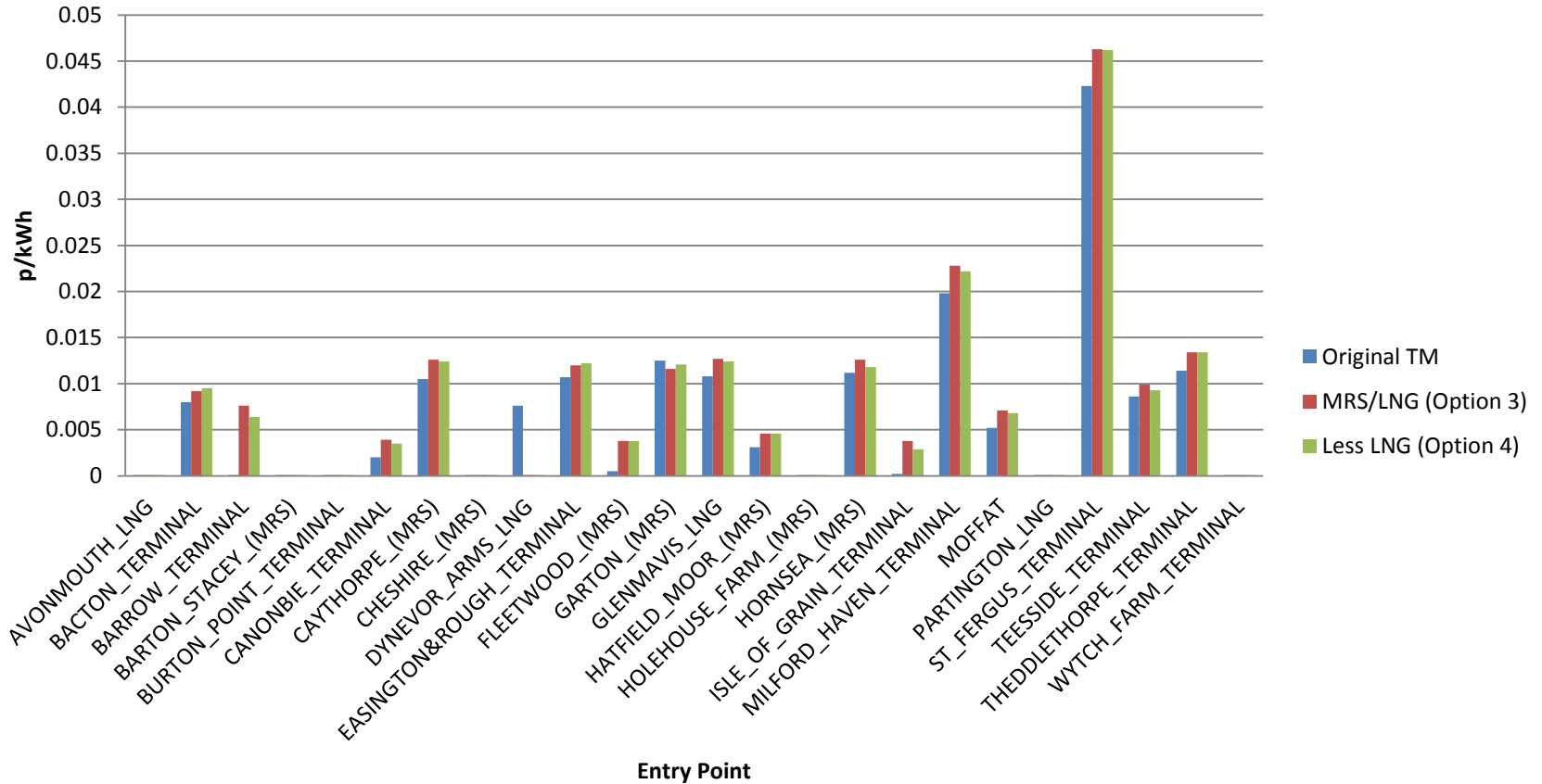
- Values within the merit order under Scenario 4 set at:

- LNG – 881.6GWh

- MRS – 638.1GWh

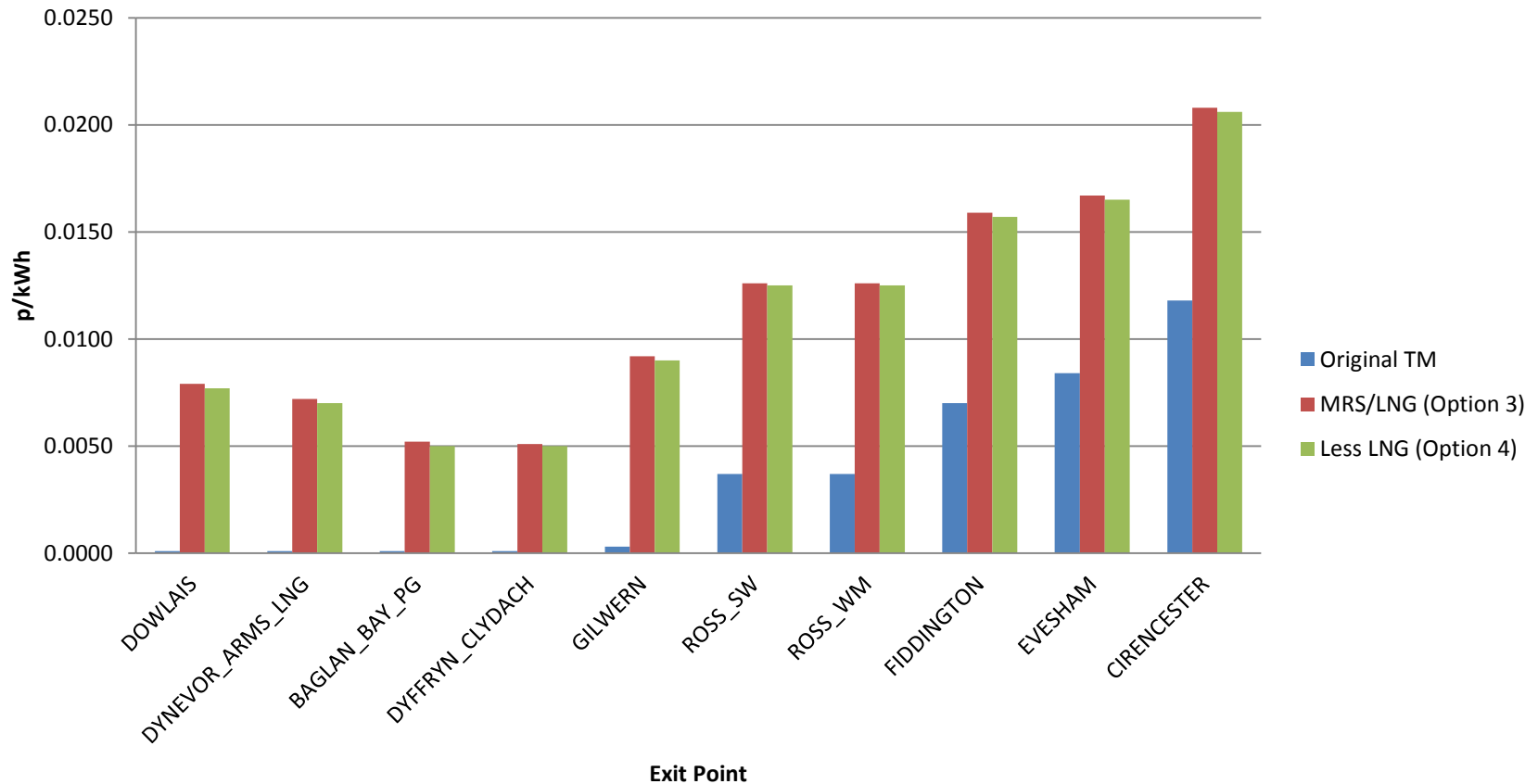
2013 (QSEC) – Entry Results

2013 Comparison of Original, Option 3 and Option 4 reserve prices



2013 (QSEC) – Exit Results (Top 10 increases)

2013 Comparison of Original, Option 3 and Option 4 reserve prices

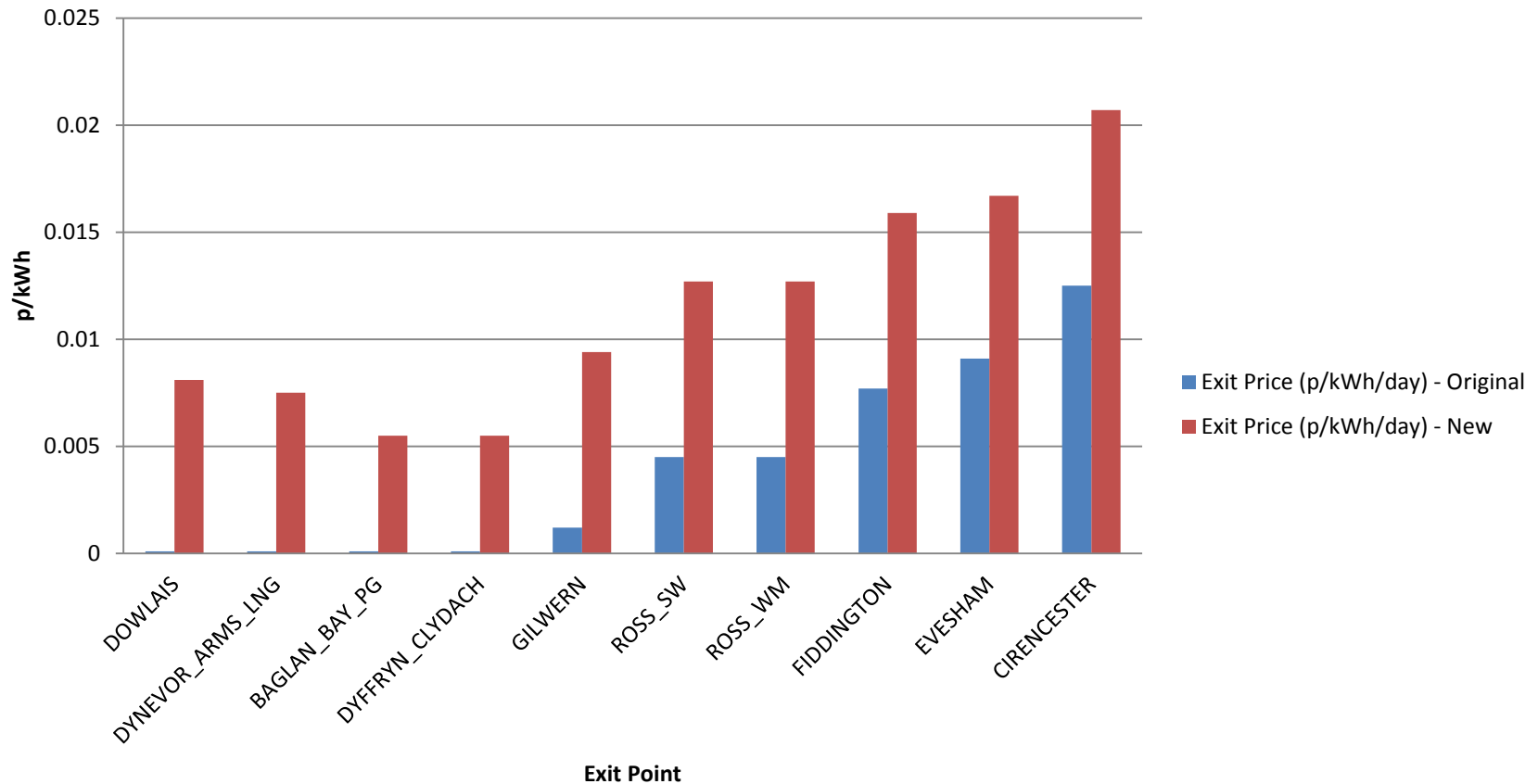


Indicative Exit Prices based on Exit Model for 2015/16 published in May 2014

- Using Option 3 we have produced the impact the change would have on Indicative Exit Prices using the Exit Model for 2015/16, which was published in May 2014
 - Values within merit order for LNG and MRS combined - 3126.40

Top 10 Increases in Indicative Exit Prices based on Exit Model for 2015/16 published in May 2014

Indicative Exit Prices for 2015/16 produced in May 2014



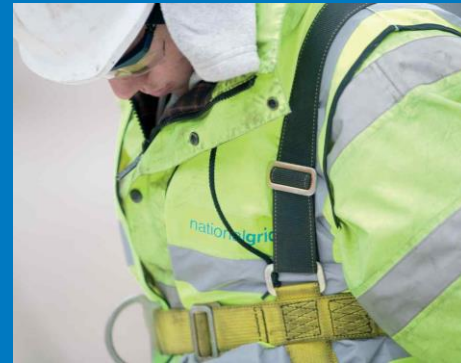
Interaction with other developments



Interaction with other developments

- This Modification can be done separate to the GTCR and Tariff Code as the underlying model and principles of LRMC remain the same

MOD Proposed Solution



Proposed Solution

- Proposed Solution within MOD0517 is Option 3
 - LNG and MRS grouped together in merit order

Proposed Amendments

- It is proposed to amend UNC TPD Section Y – Section 2.5.1 (c) to ensure that the Merit Order specified in the UNC is more reflective of current utilisation of supplies.
- This proposal seeks to amend the Merit Order to combine MRS and LNG into one group within the Merit Order and prorate the supplies (i.e. use an equal percentage of each group to achieve the supply and demand match required) when matching demand in accordance with the process specified in the Methodology.

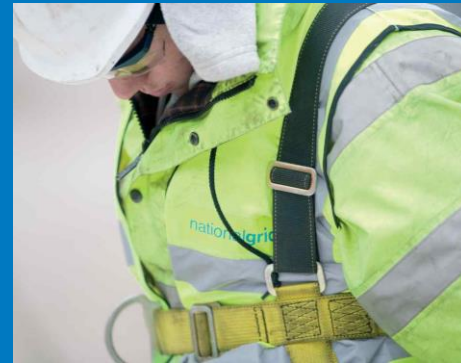
Proposed Timeline (TBC)

- If this MOD is to be implemented for the setting of Exit Capacity Prices which are due to be published in May 2015. The following timeline would need to be used:
- Workgroups
 - 31 October 2014
 - 25 November 2014
- Panel – December 2014/January 2015
- Consultation – January 2015/February 2015
- Panel – January 2015/February 2015
- Ofgem Decision – 31 March 2015

First Auctions prices would be applicable

- If timetable in previous slide is achieved then the following will be the first auctions the new prices would be applicable:
 - Exit
 - 2015
 - Prices applicable from October 2015
 - Entry
 - QSEC 2016
 - Auction March 2016

Summary



Summary

- Option 3 proposed in the Modification raised
 - Amend the Merit Order to combine MRS and LNG into one group within the Merit Order and prorate the supplies
- It is proposed to amend UNC TPD Section Y – Section 2.5.1 (c) to ensure that the Merit Order specified in the UNC is more reflective of current supplies utilised.