

NTS Exit (Flat) Capacity Charging Methodology

UNC Workgroup 0356 - 11th March 2011
Indicatives Analysis

Introduction

- At the 8th February 2011 UNC Modification 0356 Workgroup it was agreed that National Grid would provide further NTS Exit (Flat) Capacity Price analysis based on the following modelled supply and demand flows:
 - Highest daily offtake at each exit point on any day in December 2010.
 - The six highest demand days in December individually.
 - Assess the actual supply position and compare this to model assumptions.
 - All Direct Connects “2-shifting” at 55% & Power Generation only “2-shifting” at 55% of obligation (baseline + incremental).
 - Moffat @ TYS forecast demand and as “system balancer” with all other demand flows @ baseline + incremental.
 - Baseline + incremental demand scaled to 2012/13 available supplies and 2012/13 peak forecast demand respectively.
- Post meeting, National Grid was also asked to provide indicative prices with the modelled demand flow based on the higher of either booked capacity or flows in the previous 12 months (to cover those offtakes relying on off-peak capacity).
- Indicative prices by offtake for 2012/13 for all of these options have been published on the Joint Office website.

Assumptions & Approach

Analysis 1 <i>December 2010</i>	DC power generation	DC industrial	DN	Bi-Directional sites with no physical entry (Moffat)	Bi-Directional sites with physical entry (storage, IUK, BBL)	Supply
Sets 1-6	Top-6 Aggregate Demand Days					Actual Supply position on each day
Set 7	Highest individual offtake demand of Top-6 Days					Highest actual Supply from Top- 6 Days
Set 8	Highest individual offtake demand of any December day					2012/13 Forecast Supplies & Supply / Demand balancing rules
Set 9	Highest of either Set 7 or Booked Capacity level				Zero	

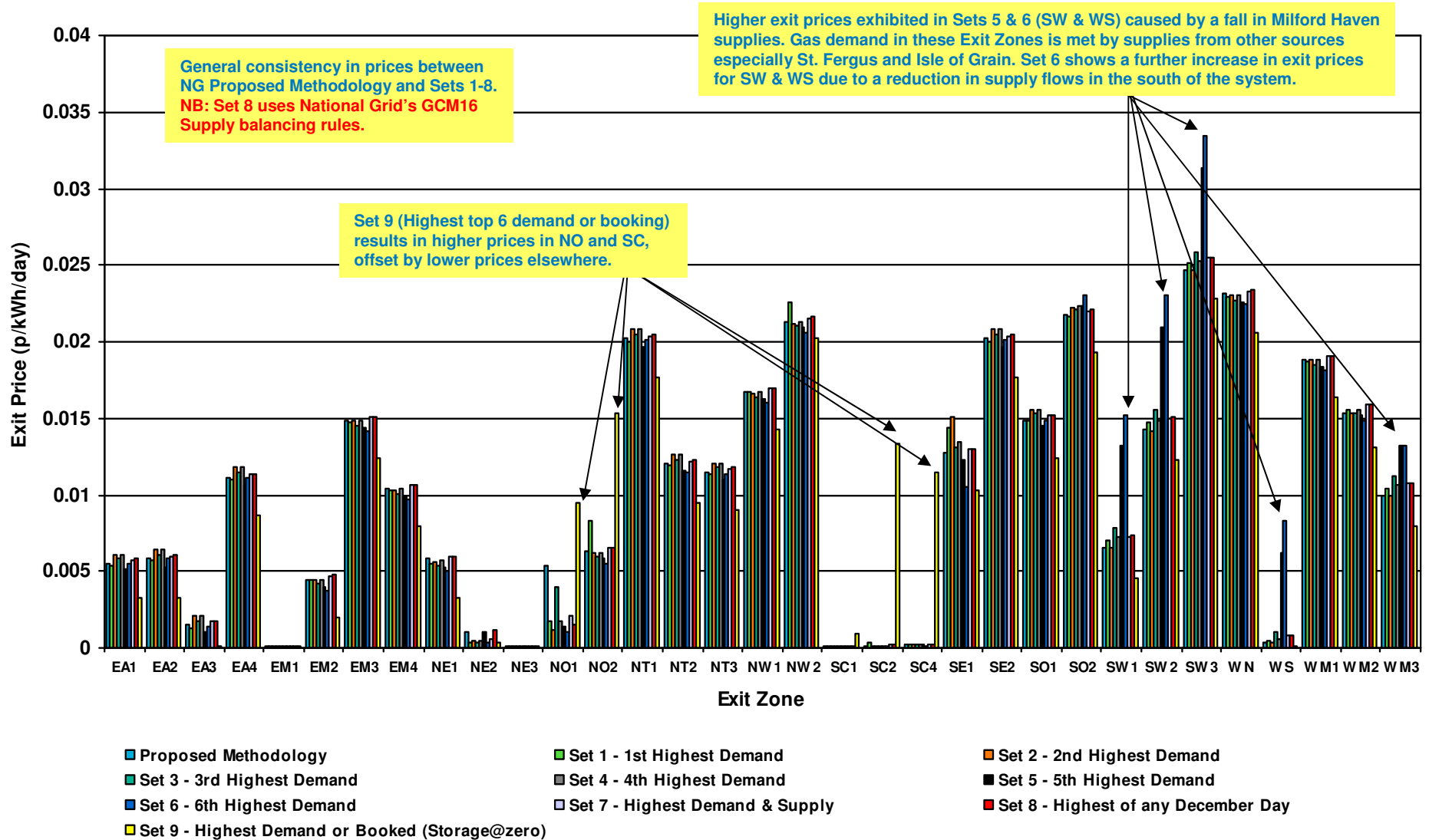
Assumptions & Approach

Analysis 2 Methodology Variations	DC power generation	DC industrial	DN	Bi-Directional sites with no physical entry (Moffat)	Bi-Directional sites with physical entry (storage, IUK, BBL)	Supply
Set 1 - Mod0356 Variant "All DC 2-shifting"	55% of Obligation (Baseline + Incremental)		Forecast	Forecast	Zero	2012/13 Forecast Supplies & Supply / Demand balancing rules
Set 2 - Mod0356 Variant "Only PG 2-shifting"	55% of Obligation (Baseline + Incremental)	Obligated Level				
Set 3 - As-Is Variant Moffat @ Forecast Demand	Obligated Level					
Set 4 - As-Is Variant Moffat as "system balancer"	Obligated Level		Obligated level reduced to achieve system balance (326 Gwh/d)			
Set 5 - As-Is Variant Obligation scaled to 2012/13 forecast supply	Obligated Level "scaled to supply" (97.41% scaling factor)					
Set 6 - As-Is Variant Obligation scaled to 2012/13 Forecast Peak	Obligated Level "scaled to peak" (80.78% scaling factor)					

Analysis 1 - Exit Capacity Prices

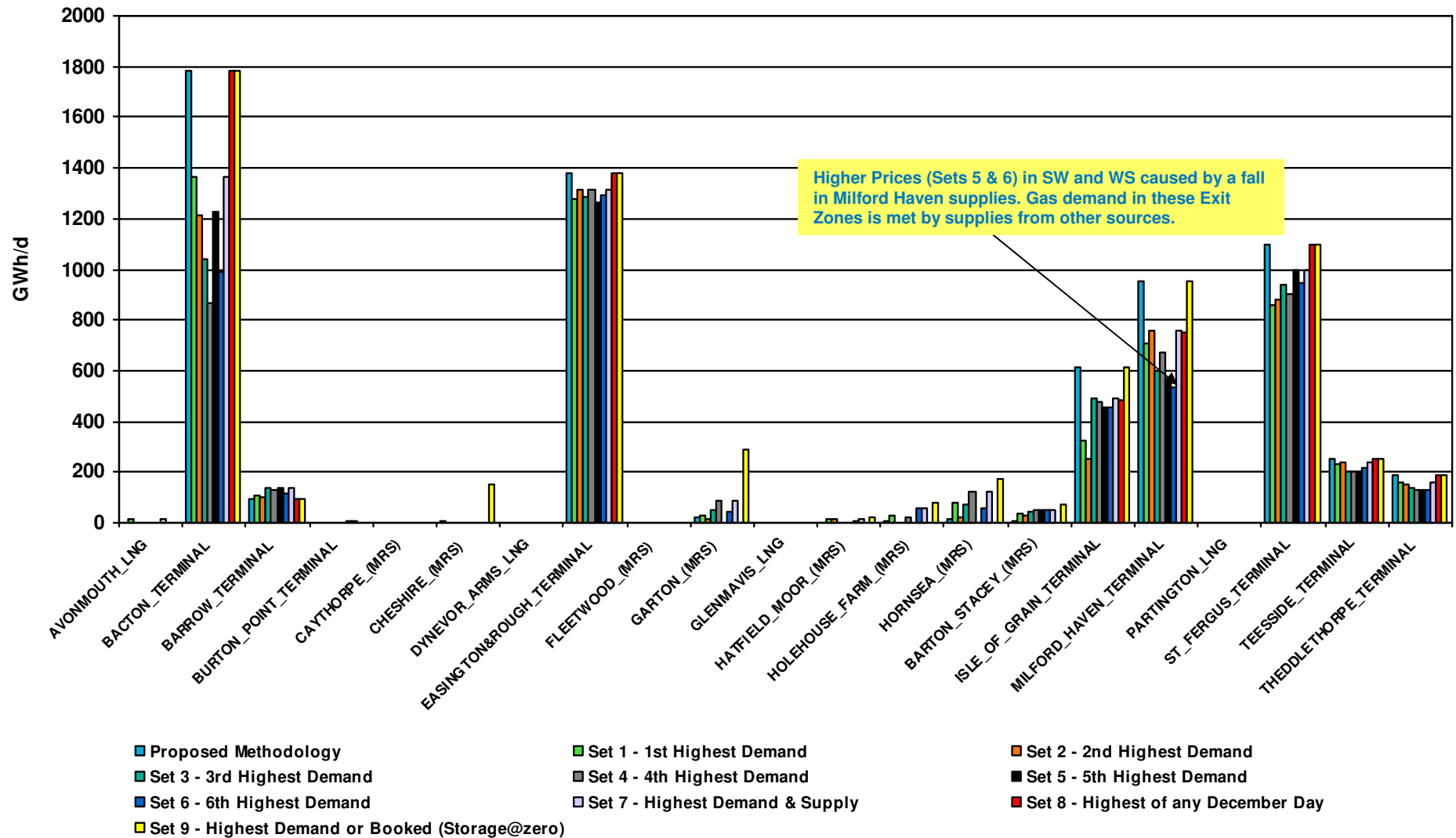
Based on the 6 highest demand flows in December 2010 and derivatives

(Exit zone prices are only produced for presentation purposes to give an indication of the geographic impact)



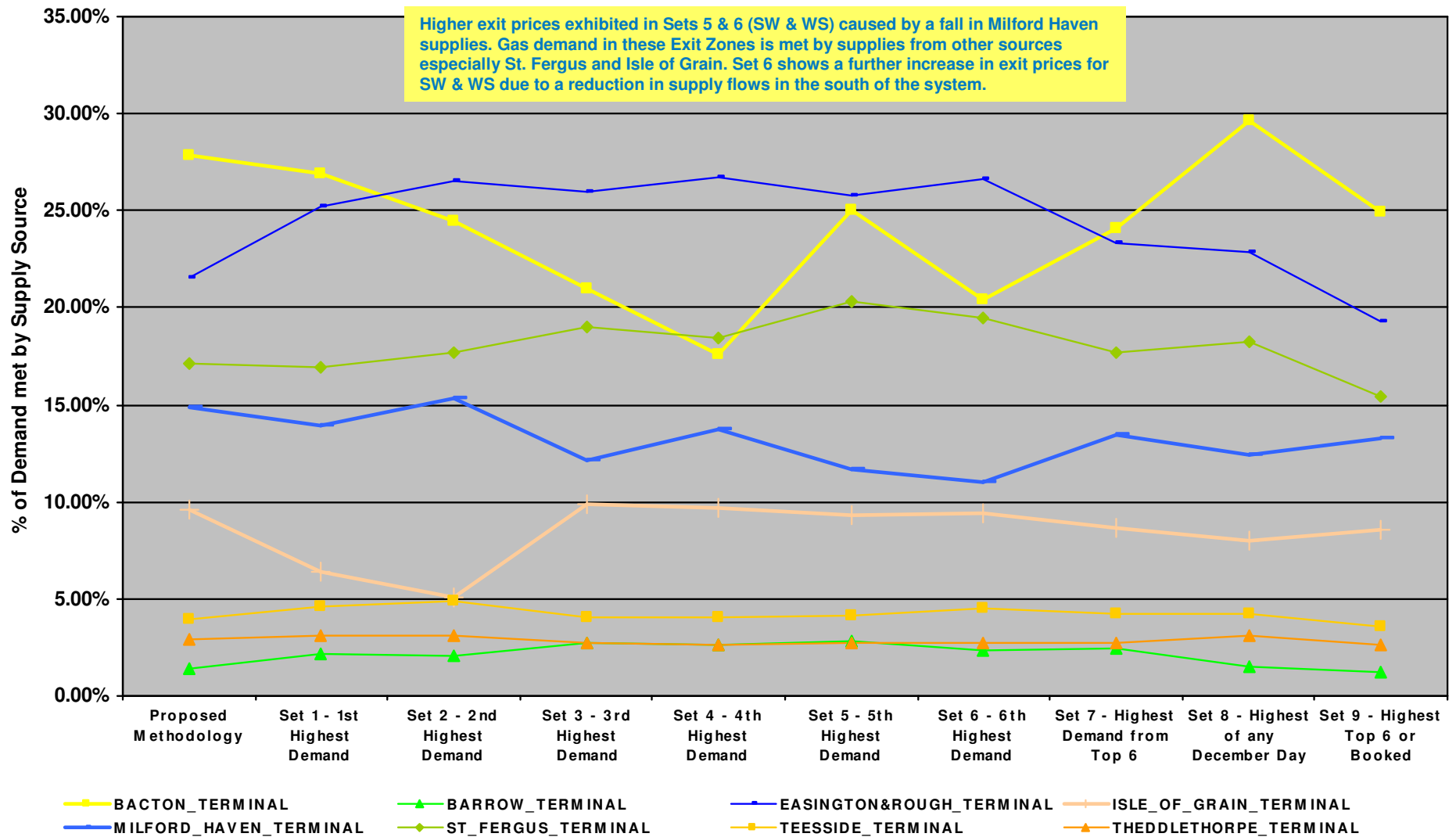
Analysis 1 - Supply Situation

Based on the 6 highest demand flows in December 2010 and derivatives



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Based on the 6 highest demand flows in December 2010 and derivatives



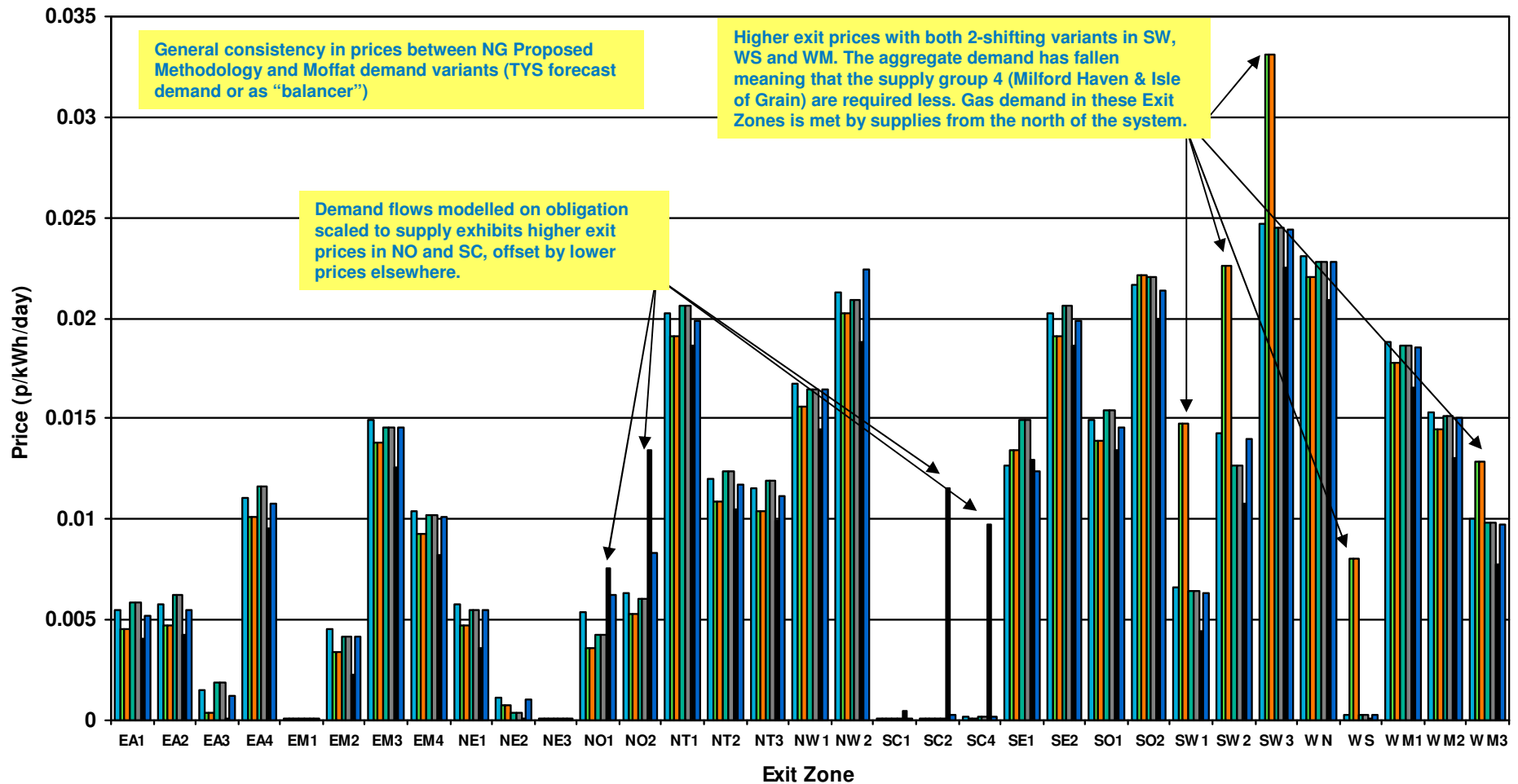
Analysis 2 - Exit Capacity Prices 2012/13



THE POWER OF ACTION

Based on DC & PG 2-shifting, Moffat @ TYS & as Balancer, Scaled Obligations

(Exit zone prices are only produced for presentation purposes to give an indication of the geographic impact)



- Proposed Methodology
- All DC's "2-shifting" @ 55%
- Only PG "2-shifting" @ 55%
- Moffat @ TYS Forecast
- Moffat @ Balancer
- Obligation scaled to Supply
- Obligation scaled to Peak

Analysis 2 - Supply Situation 2012/13



THE POWER OF ACTION

Based on DC & PG 2-shifting, Moffat @ TYS & as Balancer, Scaled Obligations

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