Enduring NTS Exit (Flat) Capacity Price Setting

Gas TCMF 1st July 2010

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Introduction

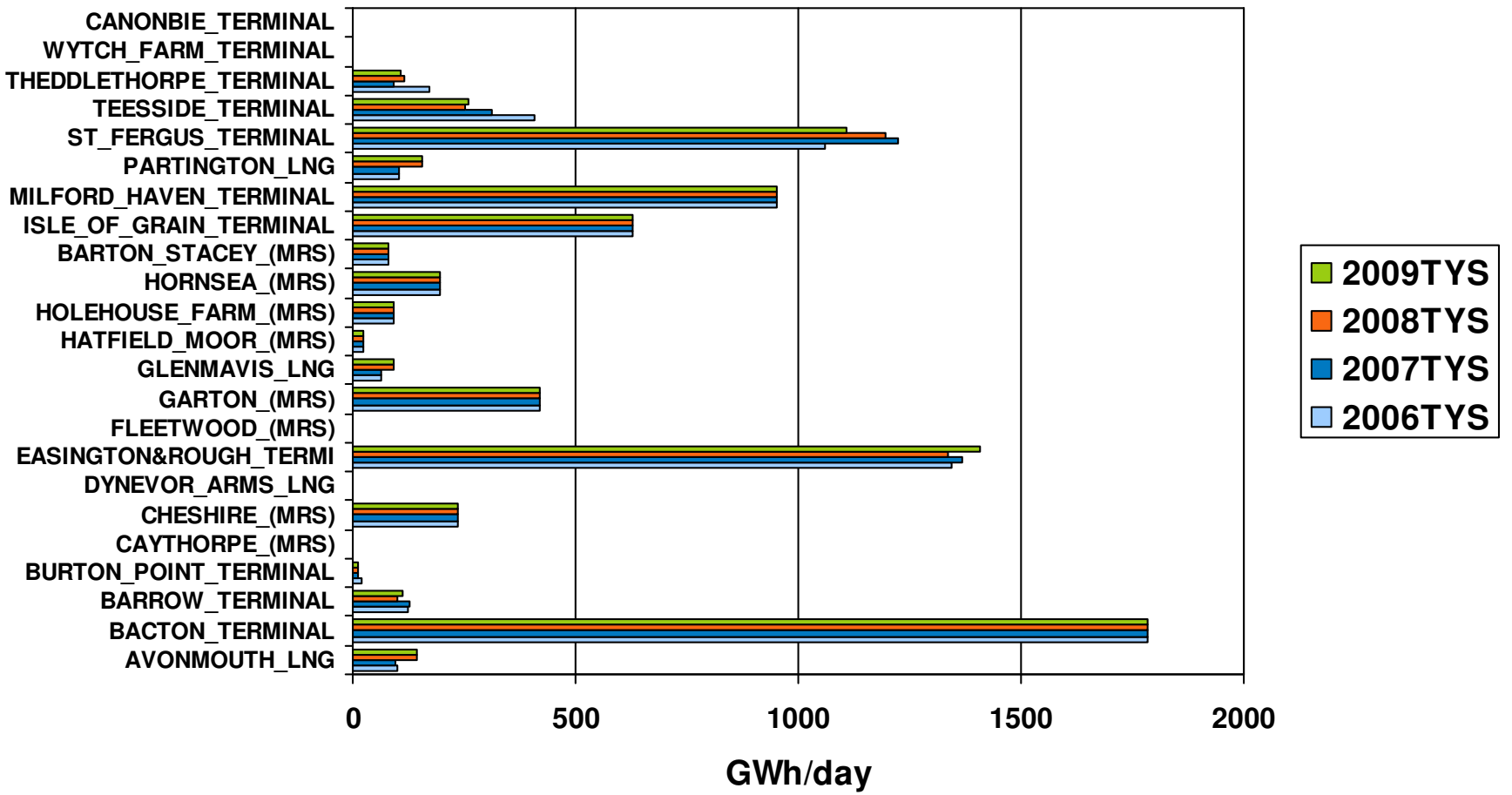
- A presentation at the May 2010 Gas TCMF covered an initial Investigation into how the predicted charges for 2012, based on current (2009) TYS data, compared with the charges forecast from the earlier TYS data.
  - Analysis carried out for 2012/13 exit prices with supply data from the 2006, 2007 and 2008 Ten Year Statements
    - 2012/13 Prices from the 2009 TYS data are the indicative prices published ahead of the application window
  - Results shown for the DN Exit Zones to indicate the geographic price distribution. There will be a similar impact on directly connected loads within each geographic area.

S&D Balancing Rules

- Available supplies need to be adjusted such that a supply and demand balance is achieved within the Transportation Model.
- For charge setting purposes, supplies are split into six groups as follows:
  - 1. Beach supplies (UKCS & Norway)
  - 2. Interconnectors
  - 3. Long-range storage
  - 4. LNG Importation
  - 5. Mid-range storage
  - 6. Short-range storage
- Each group is fully utilized if required with each entry point component in the last group required scaled to achieve a supply and demand match.

2012/13 Charge Setting Supply Data

Prevailing Charging Methodology



Analysis updated from that presented at the 25th May 2010 Gas TCMF meeting to ensure consistent use of 2012/13 gas year UKCS data from the relevant Ten Year Statements (TYS) while maintaining the 2009 TYS view of connected maximum supplies from LNG Importation, Storage and Interconnectors.

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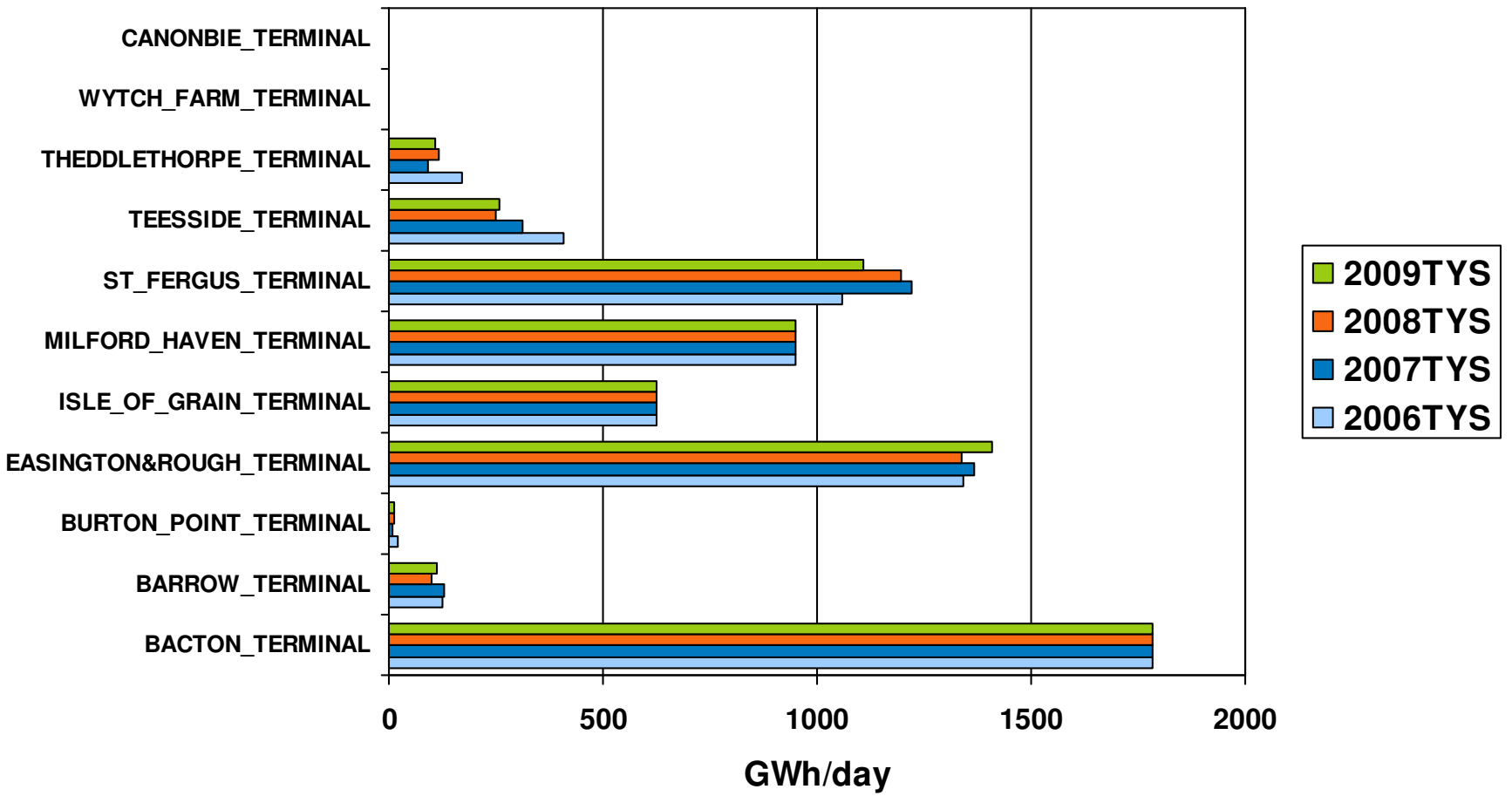
2012/13 Charge Setting Non-Storage Supply Data

Prevailing Charging Methodology



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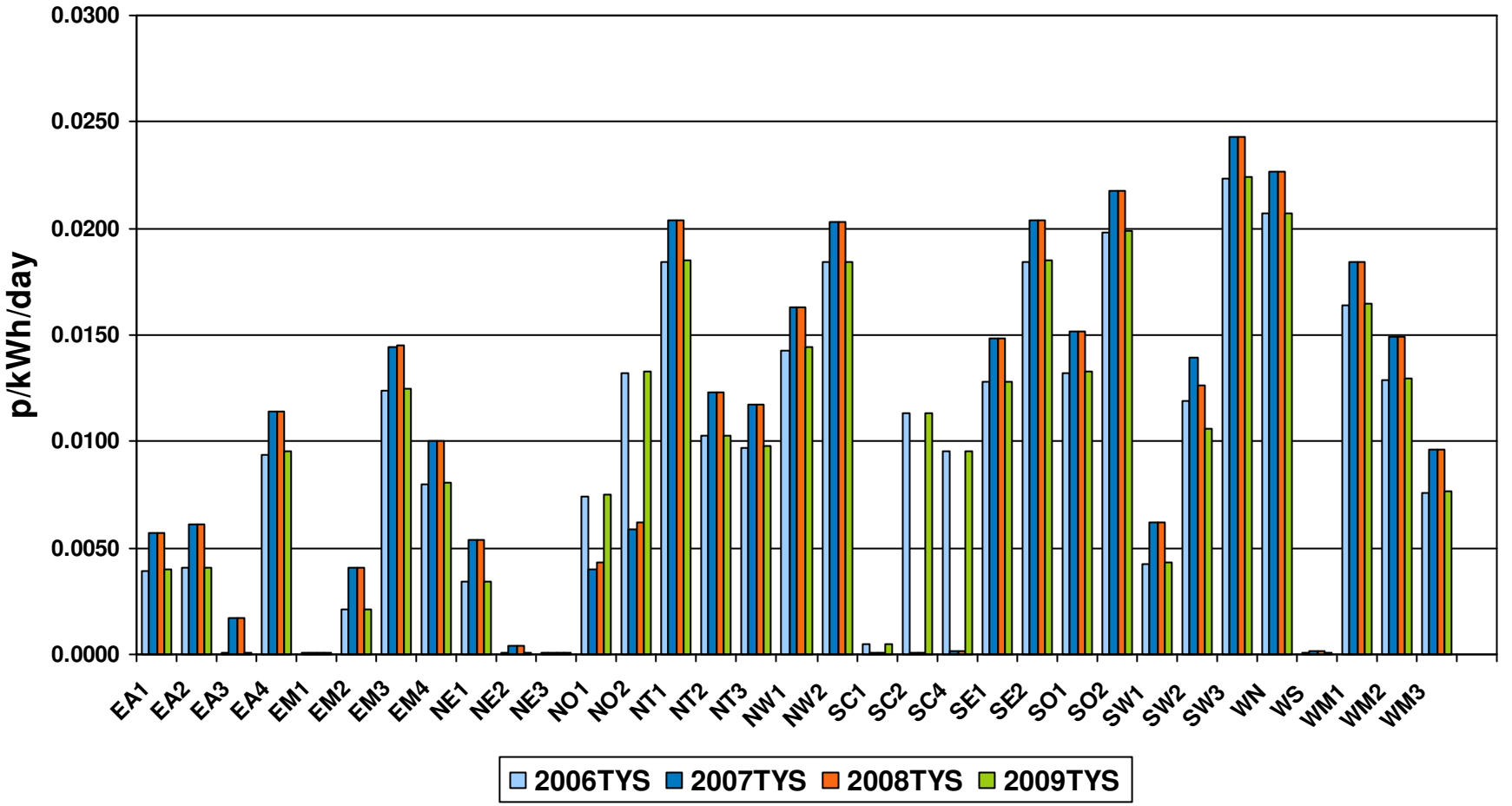
2012/13 Indicative NTS Exit Capacity Prices

Prevailing Charging Methodology



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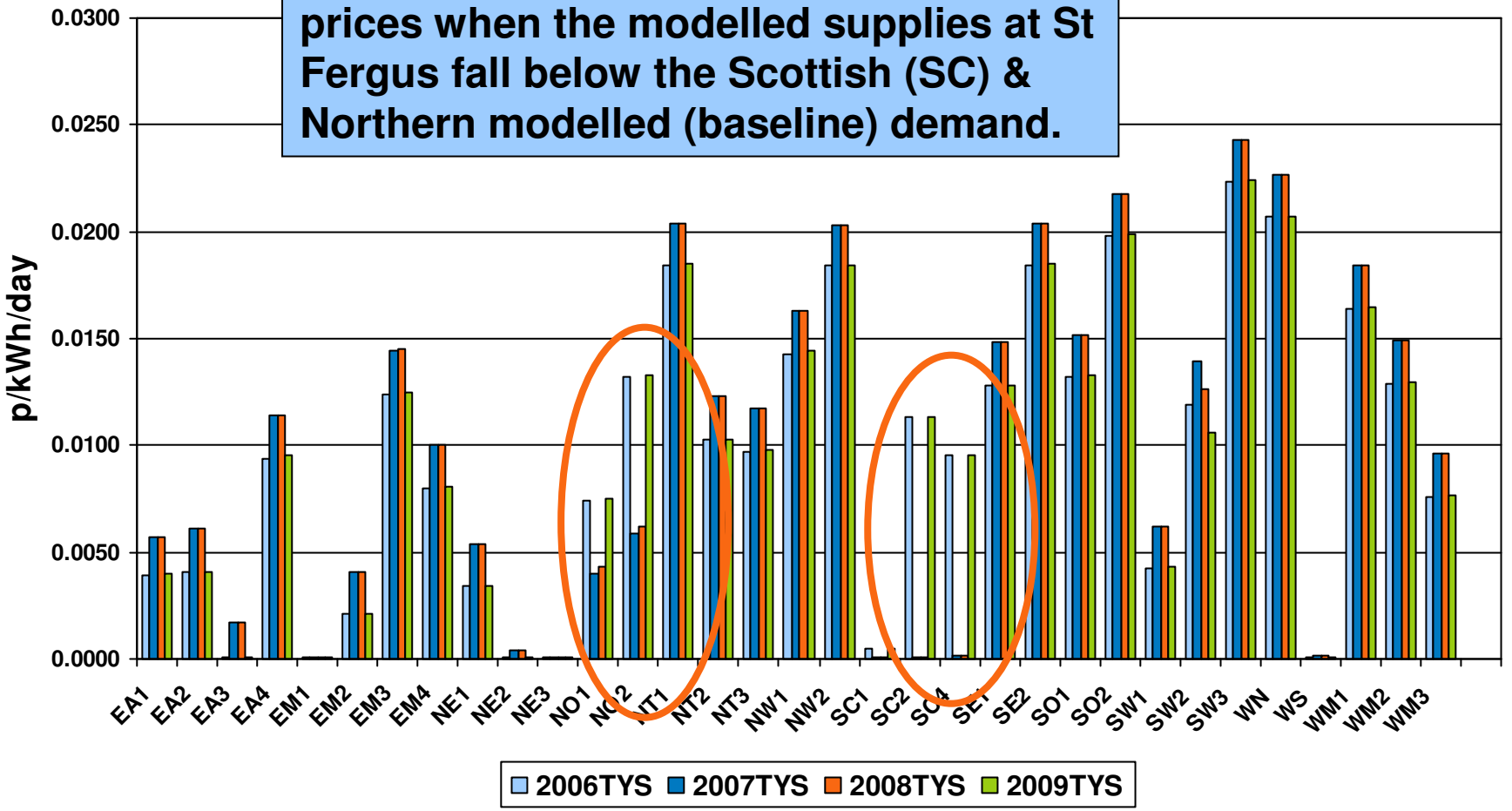
2012/13 Indicative NTS Exit Capacity Prices

Prevailing Charging Methodology

The analysis indicates a change in prices when the modelled supplies at St Fergus fall below the Scottish (SC) & Northern modelled (baseline) demand.



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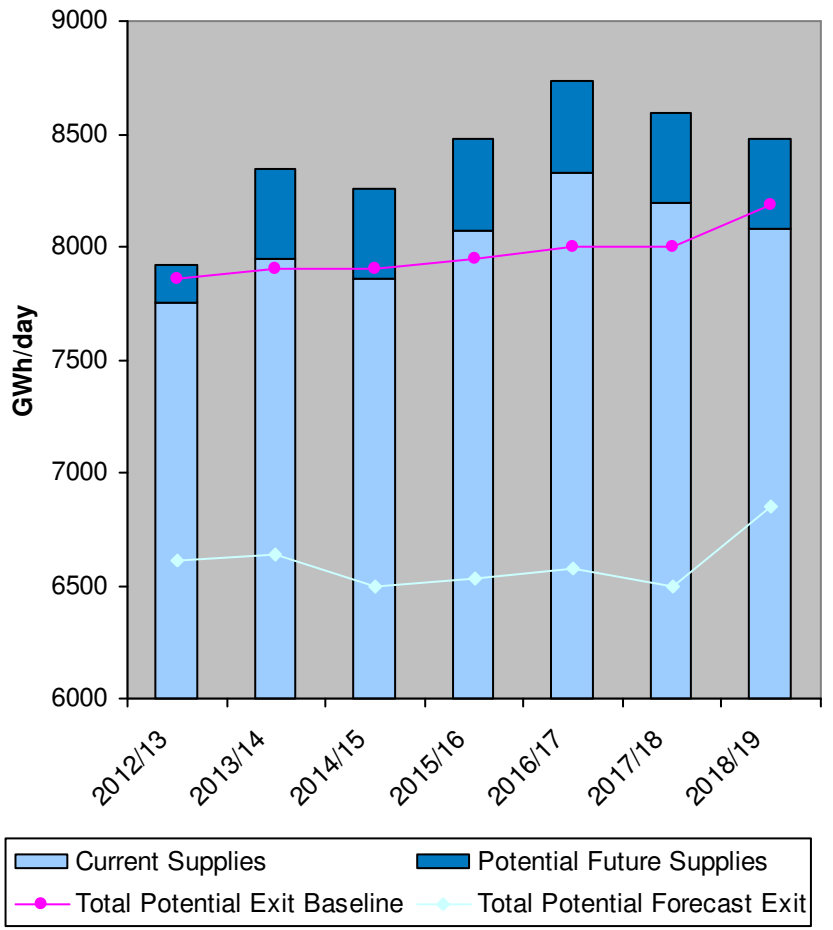
Enduring Exit Capacity Price Methodology

Prevailing Charging Methodology

- The data used within the Transportation Model for setting NTS Exit Capacity prices from 1st October 2012 is;
  - Flow/Demand data:
    - maximum of baseline or allocated exit capacity at each non-bi-directional exit point.
      - Sale of baseline is treated as TO revenue whereas sale above baseline is SO revenue
    - Bi-directional exit points are treated as supplies and hence are modelled as entry flows with zero exit flow
  - Capacity Data:
    - Baseline (TO) exit capacity at all exit points
      - The capacity data is used to ensure that prices are adjusted so that implied revenue (price multiplied by Capacity quantity) equals the target revenue

Issue

- Baseline data was used for flows/demands to reflect connected load.
  - Reflects the potential use of daily firm and off-peak capacity products
- There is a risk that this approach will create a flow/demand level that is so high that
  - there will be insufficient supplies
    - Indicative prices have been based on the assumption that storage projects with planning permission and under construction will be completed by the applicable gas year
  - Prices may not appropriately reflect costs



NB 'Current Supplies' includes UKCS plus connected operational facilities

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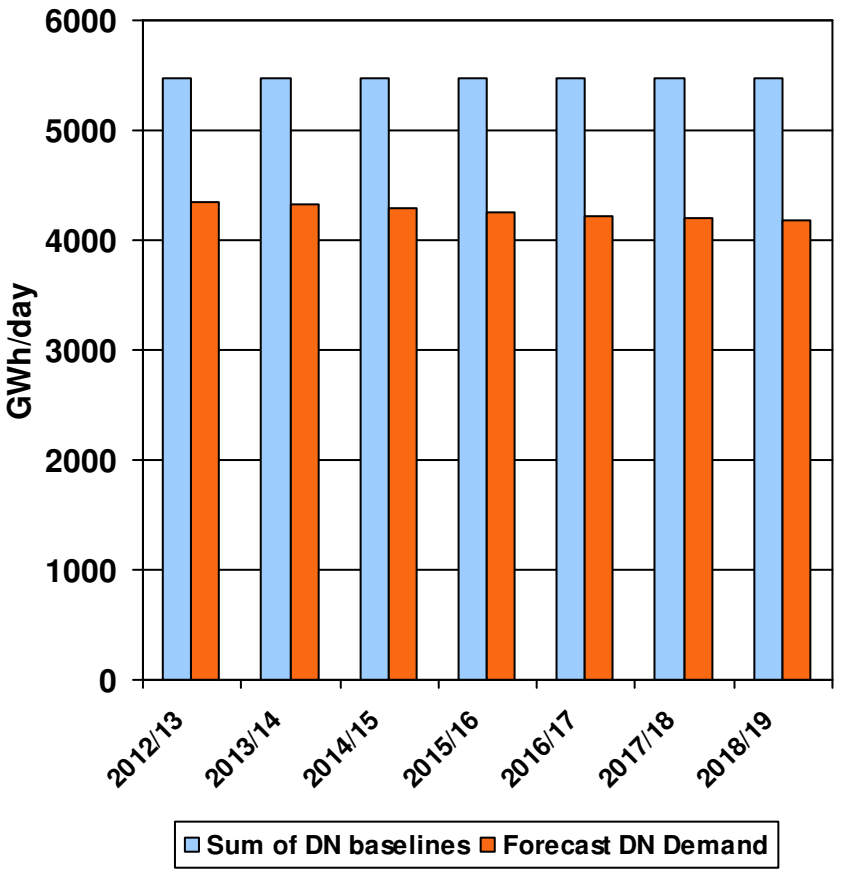
Potential Solution

- While baseline might be a good proxy for connected load at directly connected (DC) NTS offtakes, is it appropriate for DN connected load?
- Forecast LDZ peak demand should be a better estimate of the load connected within the DN so this could be used for the DN connected load
  - i.e. forecast demand prorated to each offtake using the allocated exit capacity



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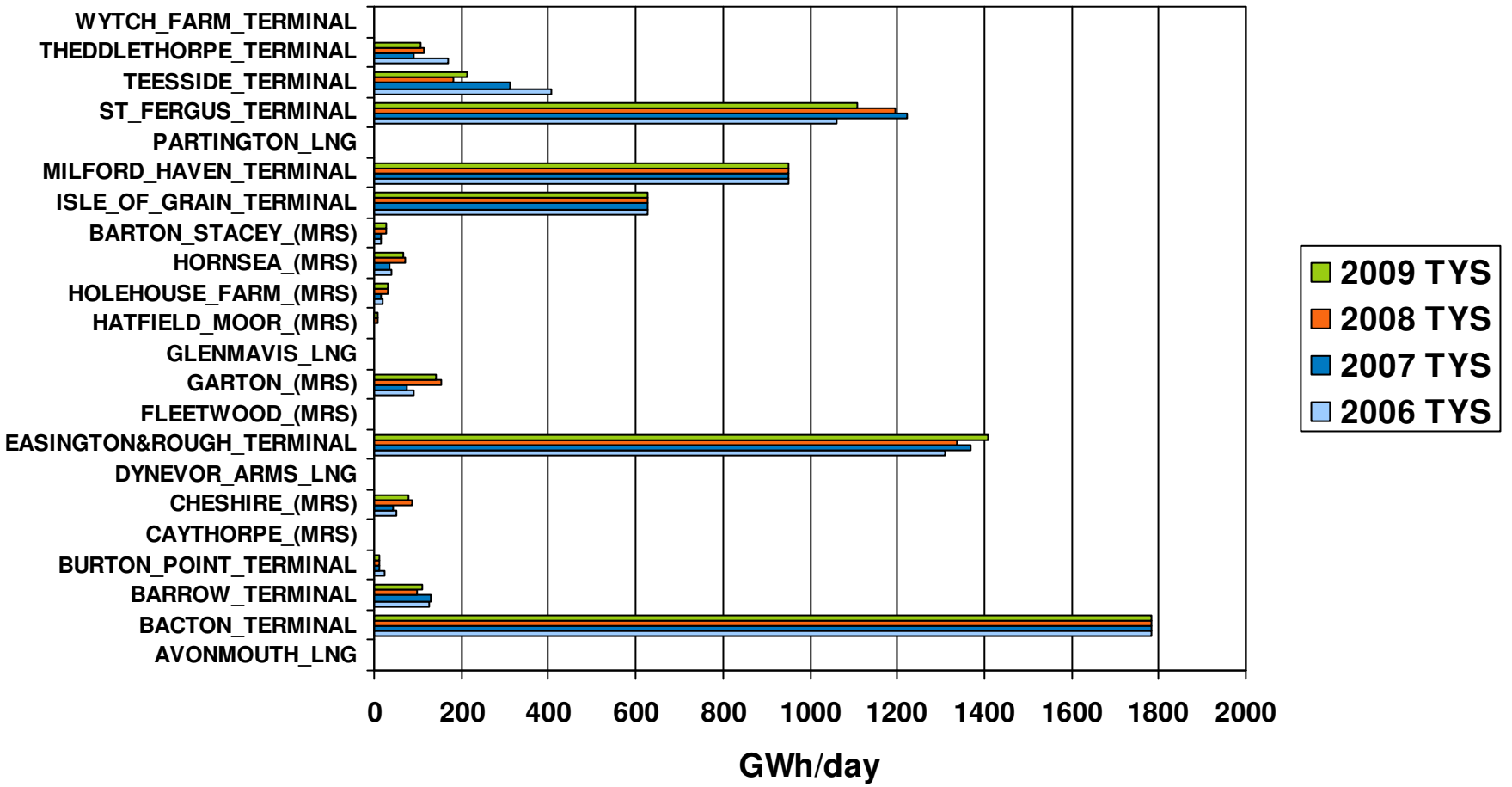
2012/13 Supplies to meet DC baseline plus DN forecast demand (2006 to 2009 TYS)

Proposed Charging Methodology



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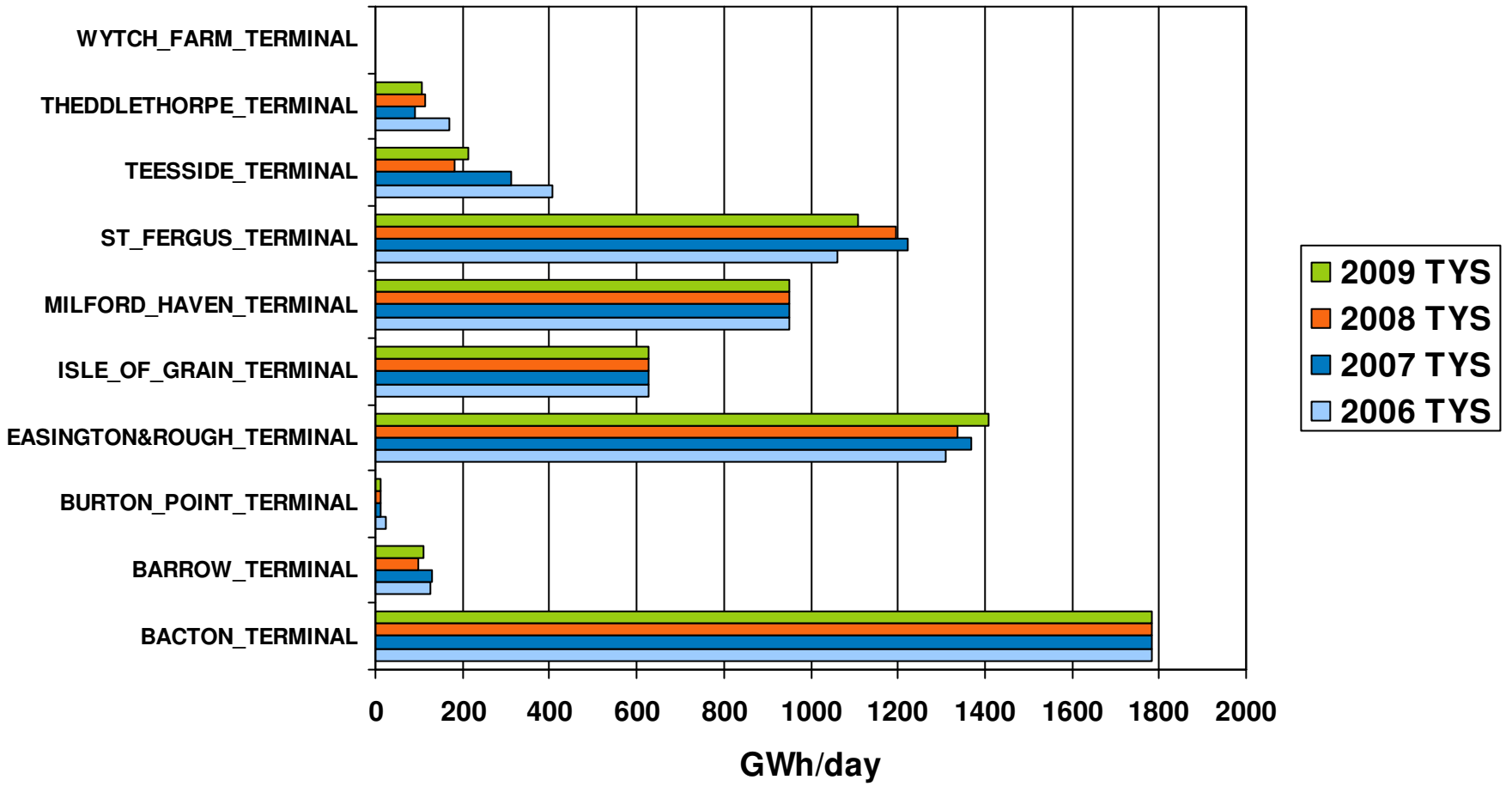
2012/13 Non-Storage Supplies to meet DC baseline plus DN forecast demand (2006 to 2009 TYS)

Proposed Charging Methodology



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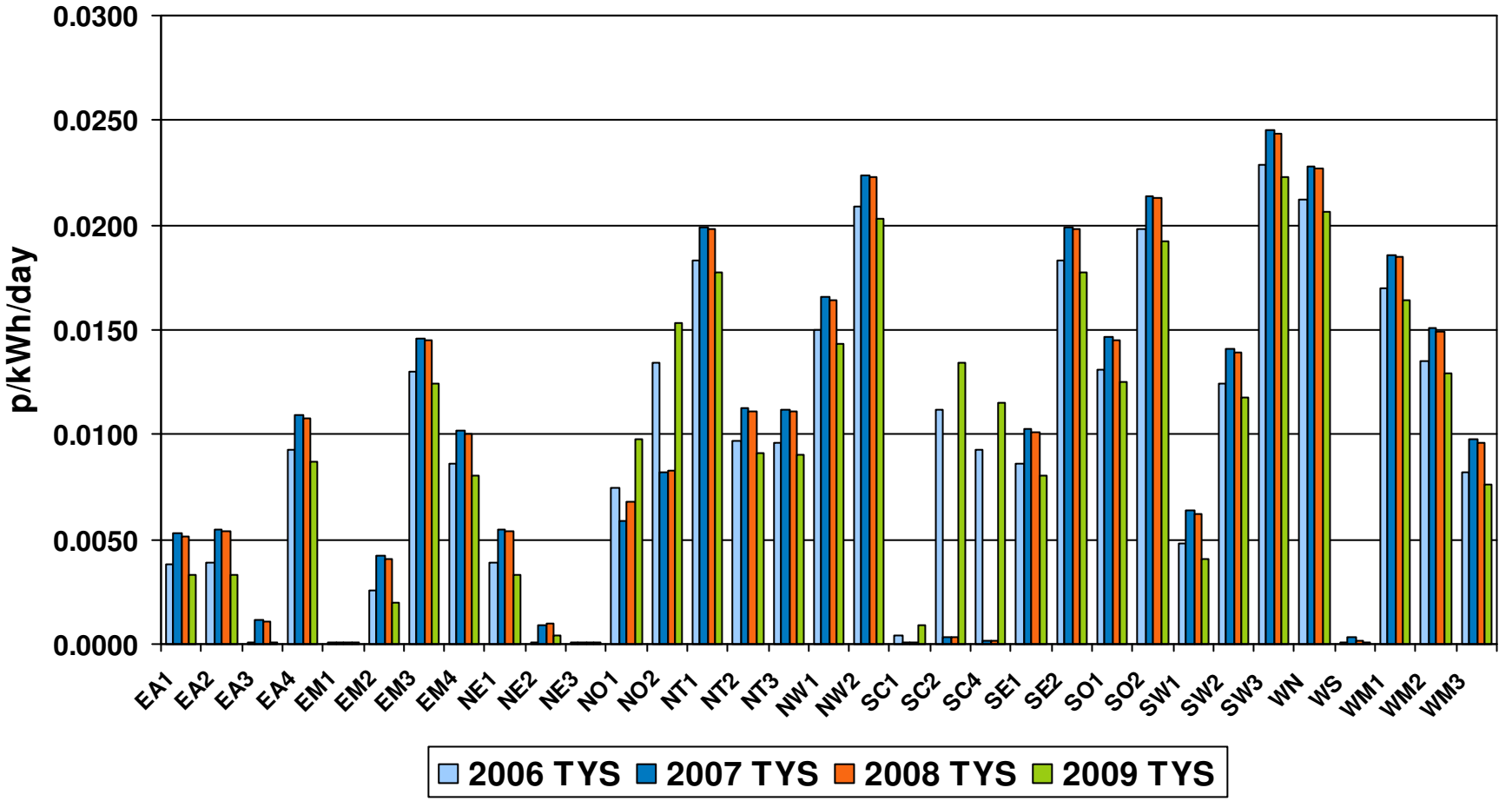
2012/13 Prices based on DC baseline plus DN forecast demand (2006 to 2009 TYS)

Proposed Charging Methodology



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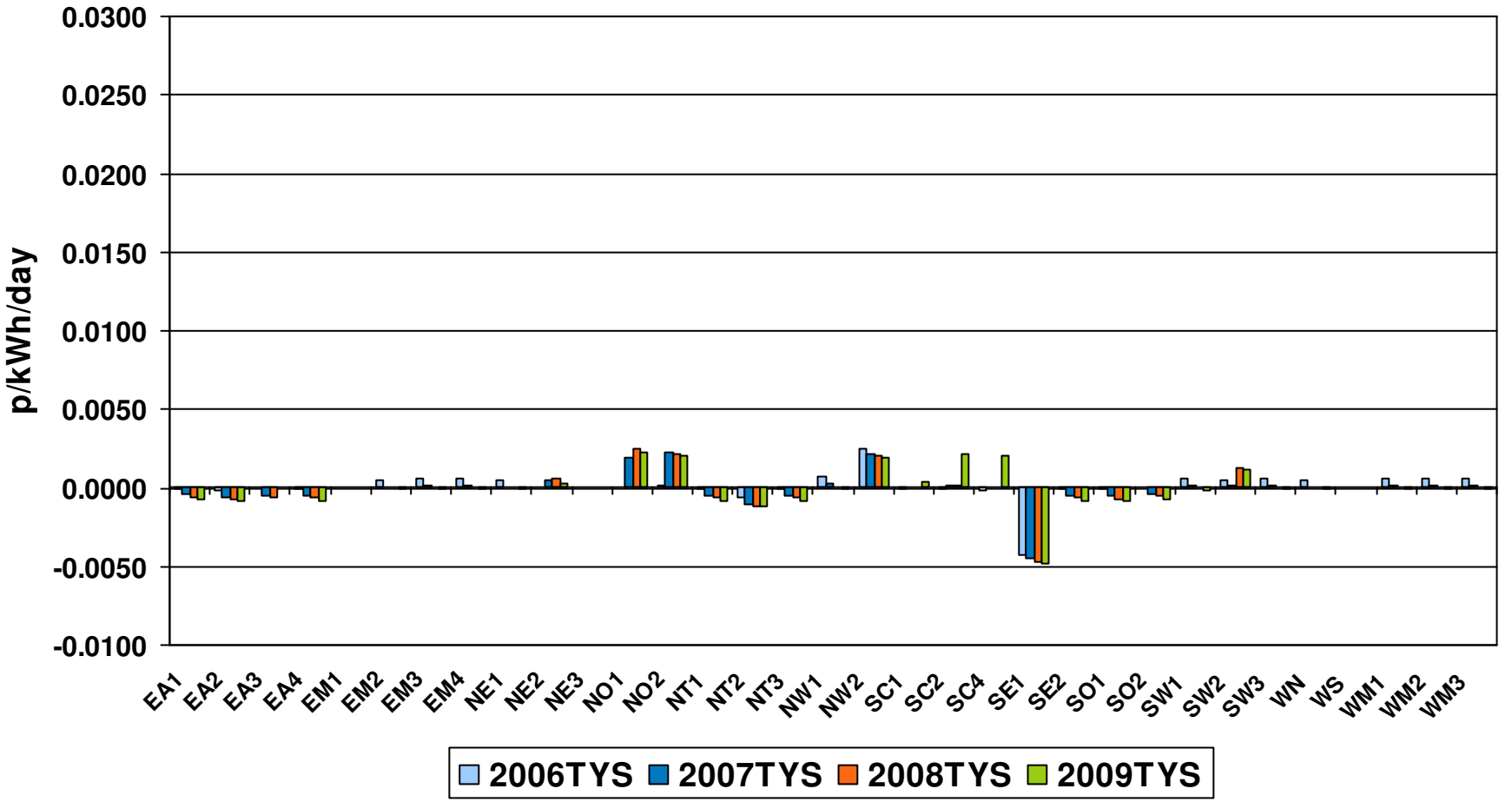
2012/13 Price differences: Baseline c.f. DC baseline plus DN forecast demand (2006 to 2009 TYS)



Prevailing Charging Methodology → Proposed Charging Methodology

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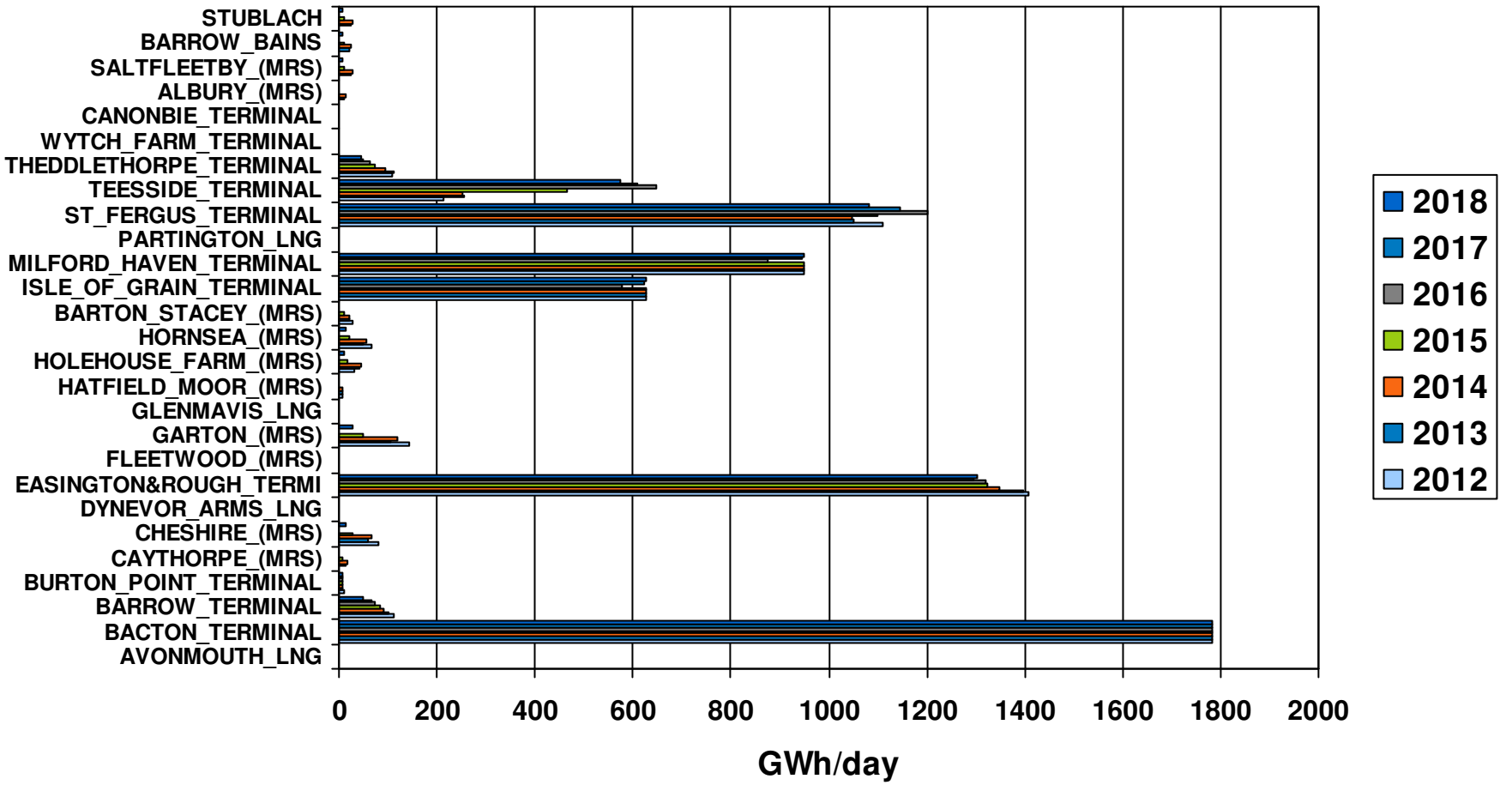
Supplies to meet DC baseline plus DN forecast demand (2012/13 to 2018/19)

Proposed Charging Methodology



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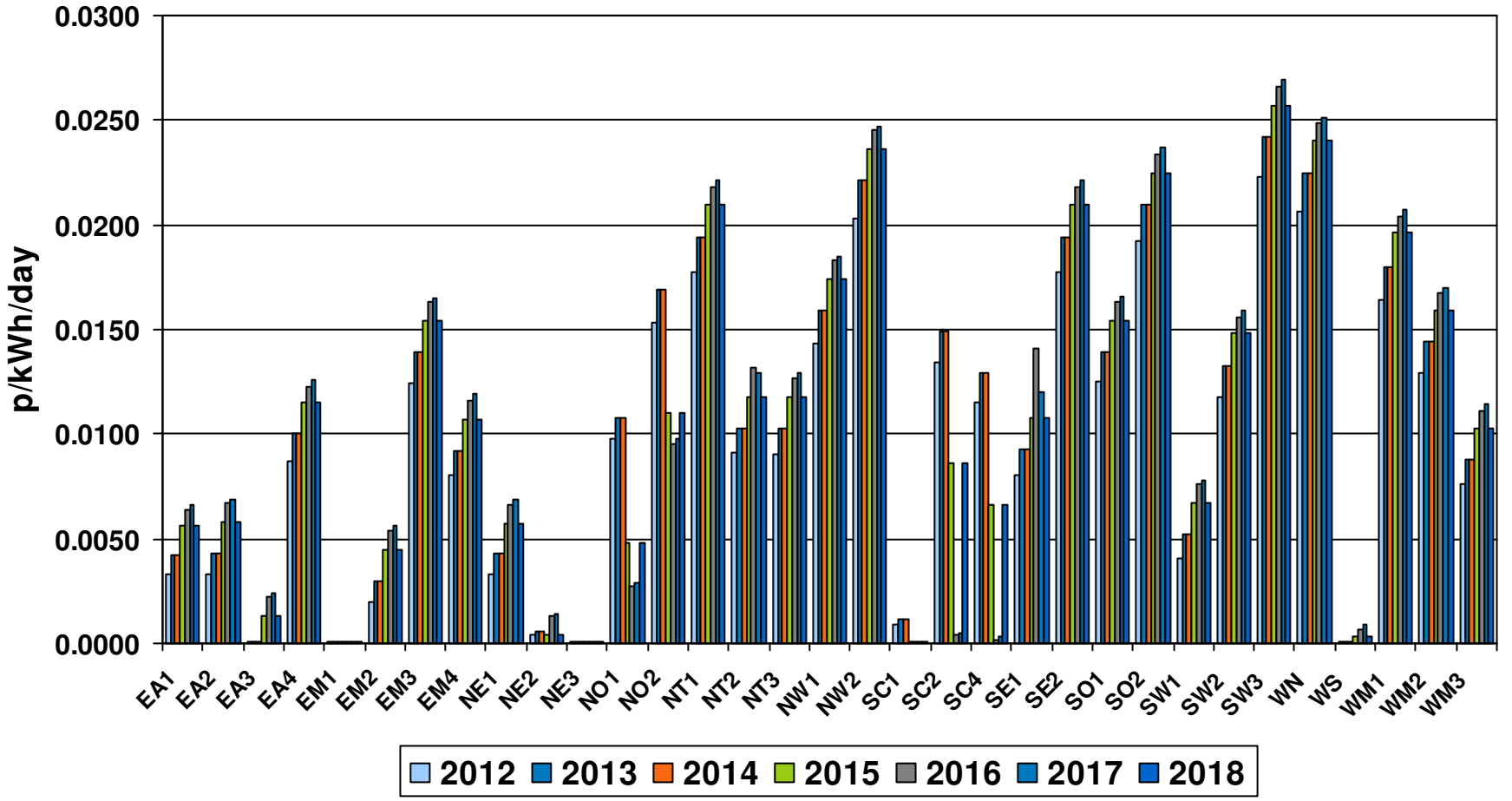
Prices based on DC baseline plus DN forecast demand (2012/13 to 2018/19)

Proposed Charging Methodology



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Summary

- Is this an issue that we need to address before the 2011 application window or before 1st October 2012?
- What alternative demand/flow data could we consider within the charging methodology?
  - DN?
  - DC?
    - Power Generation & Industrial
    - Storage & bi-directional Interconnectors modelled as zero exit flow
- What further analysis should we carry out?