Exit Charge Rebalancing

Application of a Revised LRMC Model to Determine Transitional Exit Capacity Prices

Gas TCMF

25th May 2006

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LRMC / Exit Price Divergence

- PC76 (December 2002) noted significant variation between prices and LRMCs but concluded that prices should not be re-balanced prior to exit reform
- No re-balancing of exit prices with LRMCs since 2002, and this was constrained to +/- 30% (PC71)
- Price capping has always been part of the approved methodology since inception in 1994.
- LRMCs have changed as the network and the supply/demand balance evolves, however capping has allowed significant divergence from latest LRMCs to develop over a number of years

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Proposal

- **Application of LRMC model to determine transitional exit capacity charges**
  - Update when Entry reserve prices are updated
  - Calculation of exit charges from 1 Apr 07 (to 30 Sept 10)
  - Need to consider
    - Inputs - Base model, S/D forecasts
    - Tariff model application

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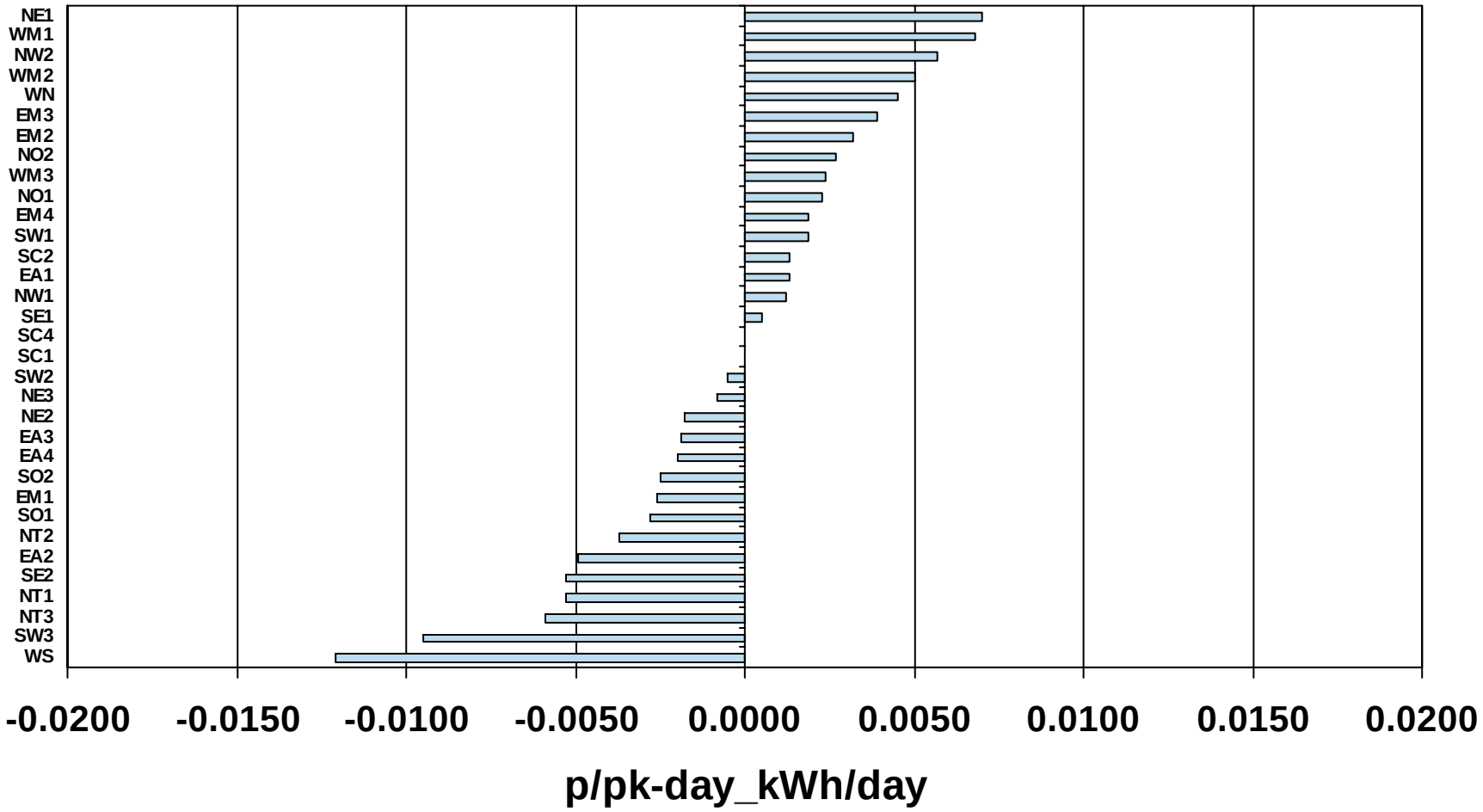
Model F1 (10 Year Average) – DN Impact



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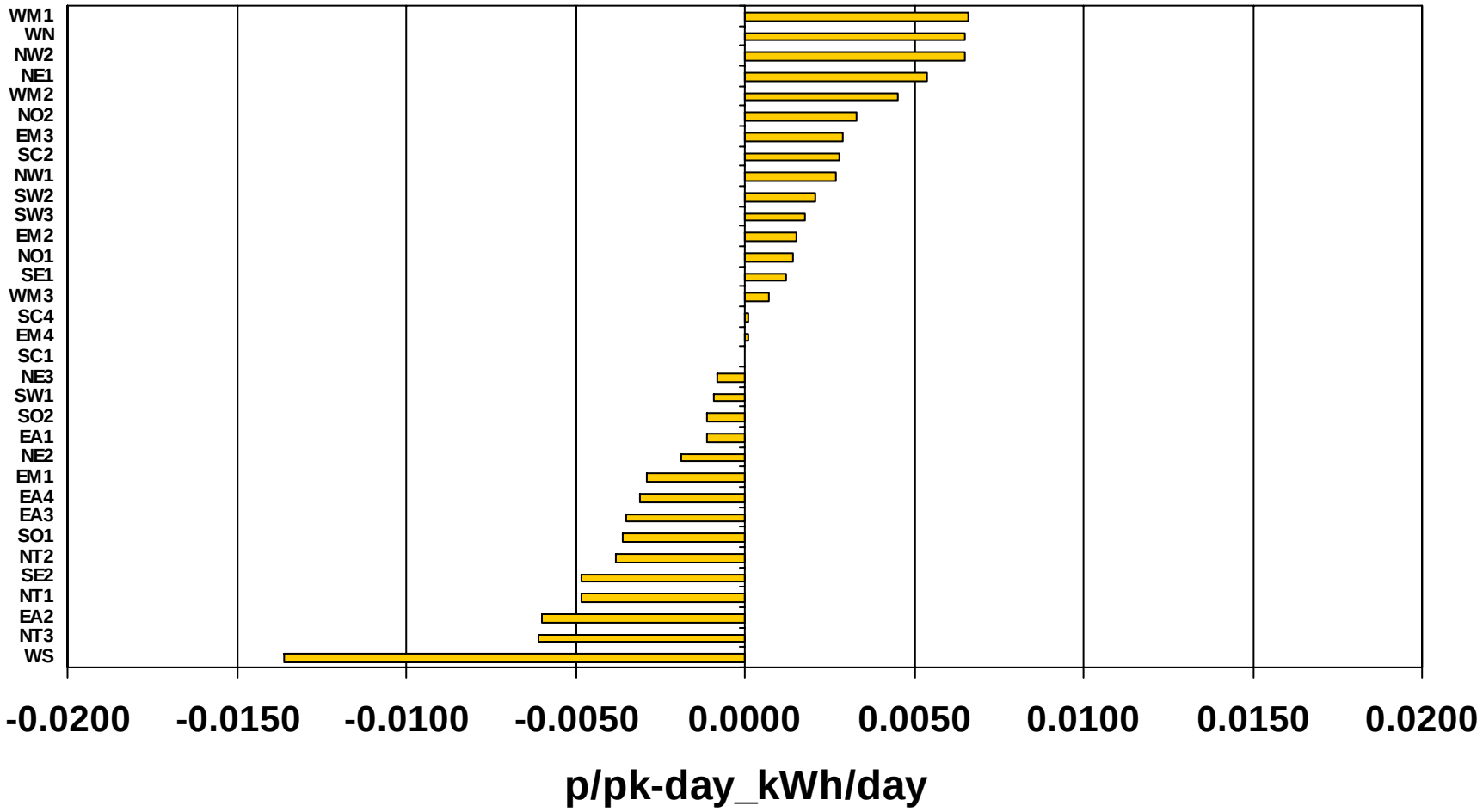
Model F2 (10 Year Average) – DN Impact



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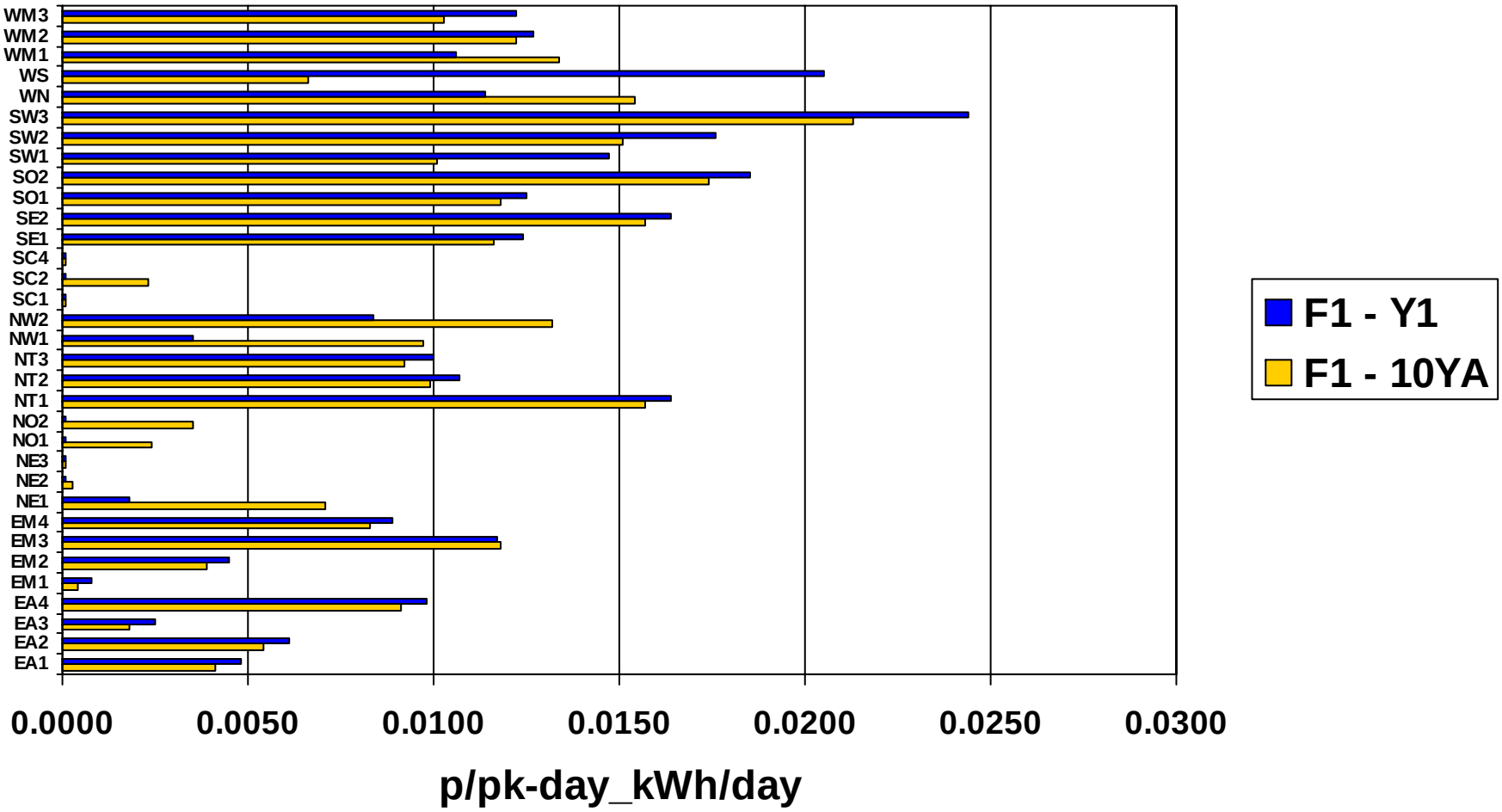
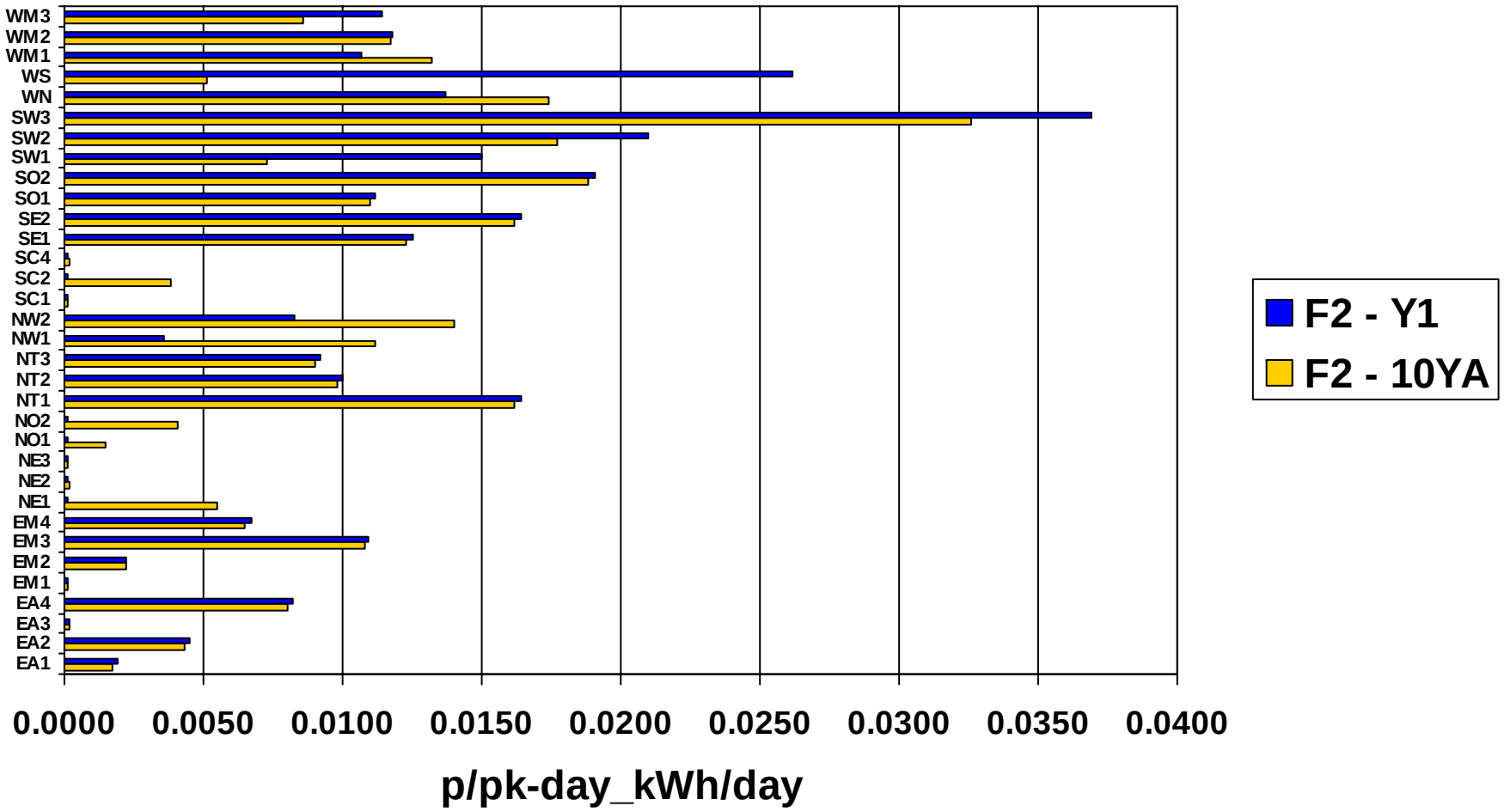
Model F1 – 10 Year Average v Year 1



Model F2 – 10 Year Average v Year 1



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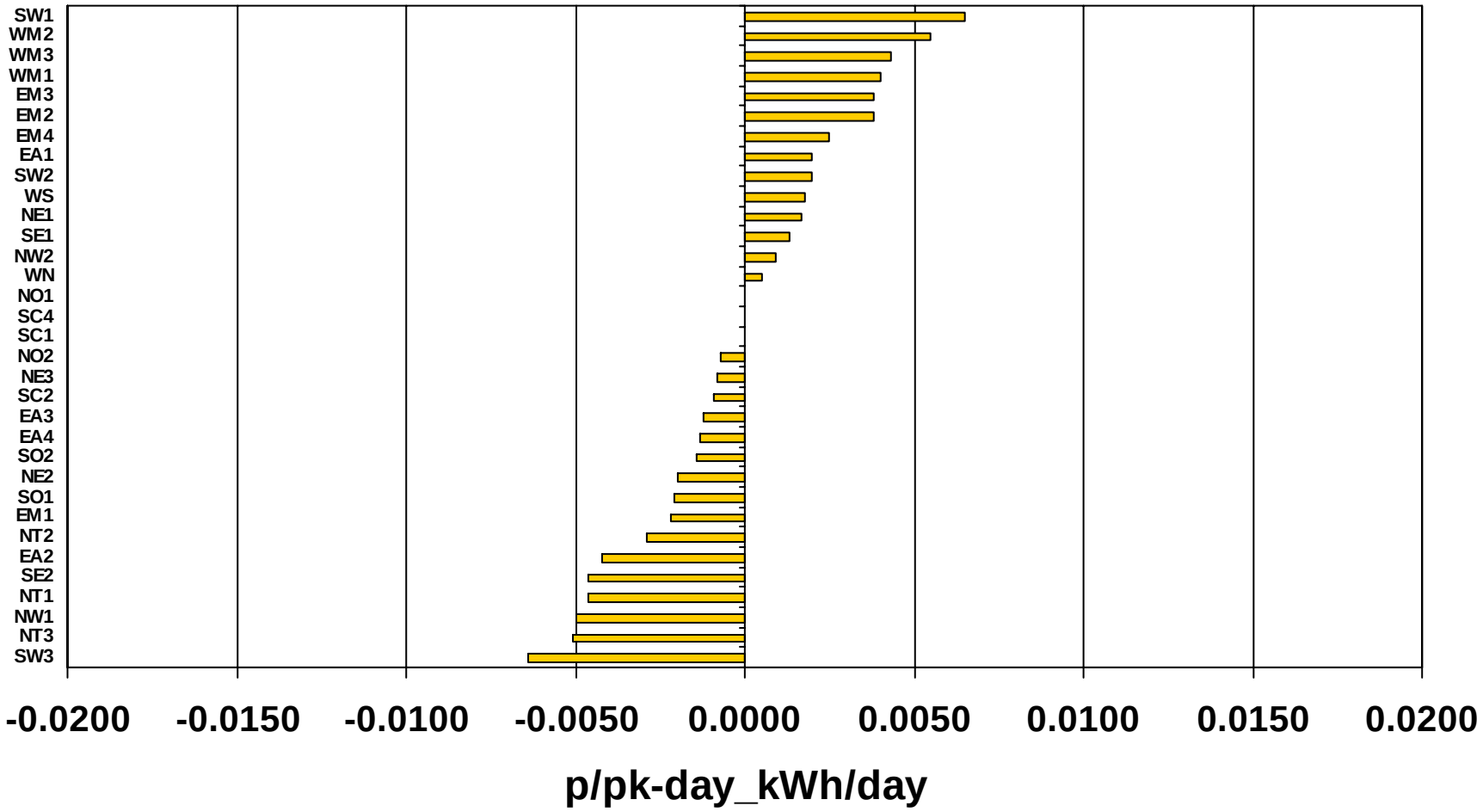
Model F1 Year 1– DN Impact



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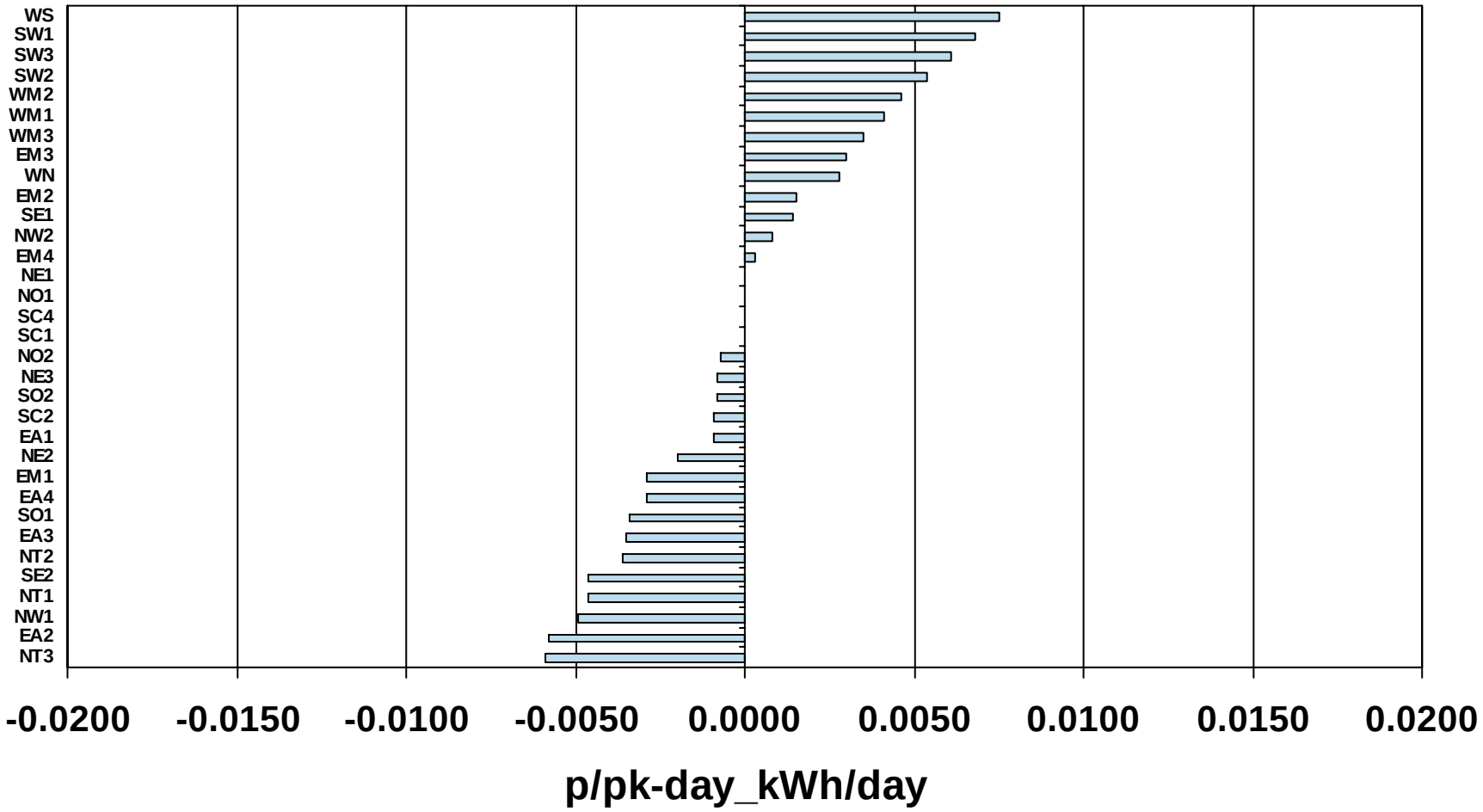
Model F2 Year 1– DN Impact



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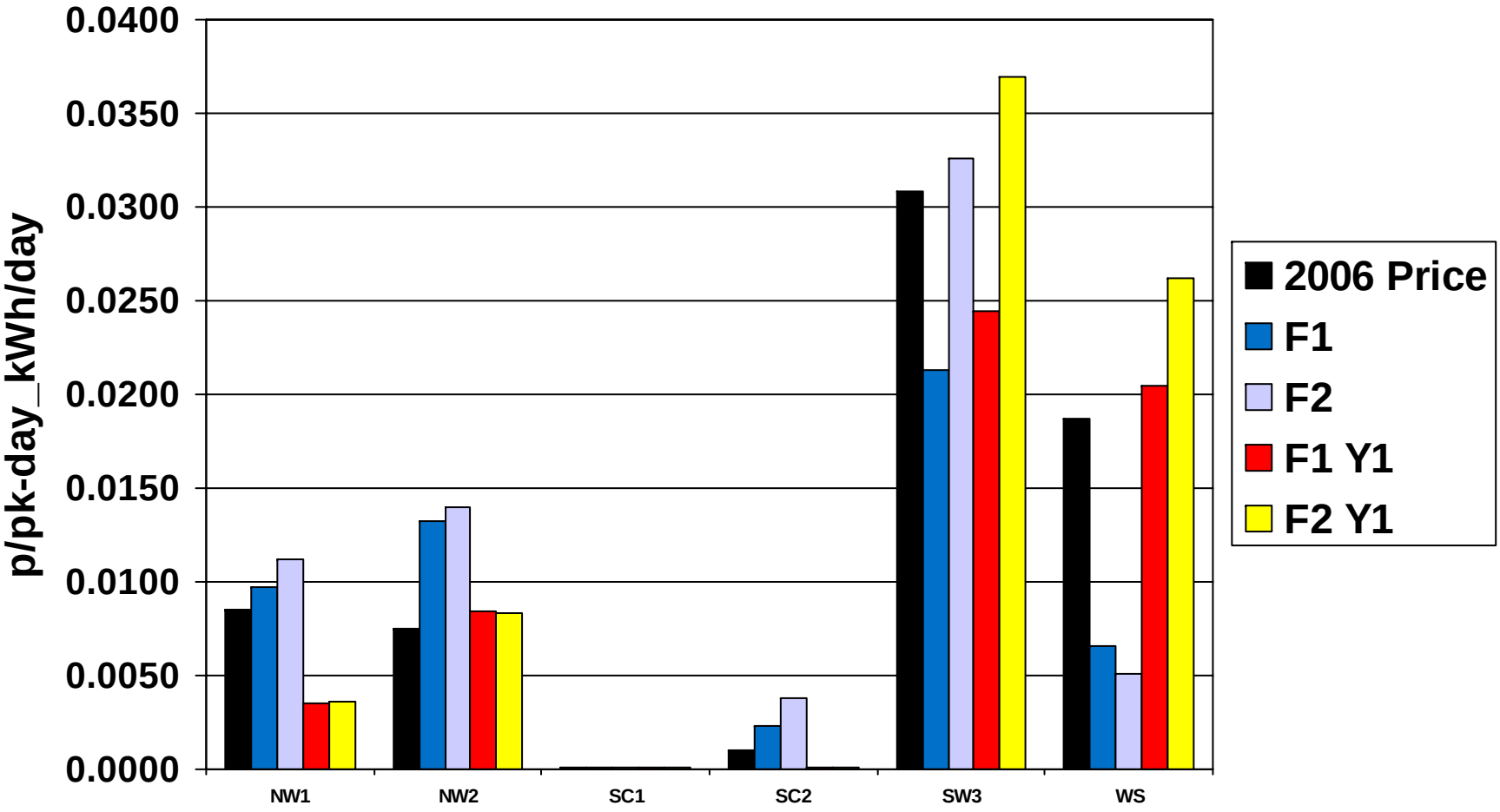
Key Offtake Zones



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Transitional Exit Prices – Key Charging Principle Questions (Transport Model)

Issue	Gas TCMF WG Consensus	Proposal for Exit Prices
1. S&D Scenarios: 1 Year or multiple Year?	Less than ten years to remove forecasting uncertainty & increase simplicity	Single Year
2. How should incremental costs be modelled?	No opinion, although inclusion of spare capacity would indicate Transcost	Transportation Model. Publicly available model will allow user to make own forecasts of LRMCs Minimal price of 0.0001p/kWh/day
3. How would spare capacity be treated?	Include "genuine spare capacity" within the Model	Do not include spare capacity due to stability requirement
4. How would decrement (back flow) costs be treated?	Include within Model	Include backhaul

Transitional Exit Prices – Key Charging Principle Questions (Tariff Model)

Issue	Gas TCMF WG Consensus	Proposal for Transitional Exit Prices
5. How should entry and exit costs be disaggregated?	Solver with 50: 50 constraint	Marginal Costs will be generated through Transportation Model (does not require Solver)
6. How should negative costs be treated?	Removed as final step (Consider commoditisation of negative prices)	Remove at same stage as 50:50 price and revenue adjustment. Non-negative prices.
7. Should capacity charges be adjusted to 50:50 entry:exit and if so how?	Solver constraint	Adjustment by adding/subtracting fixed number to each entry/exit charge, using Solver
8. Are zones required?	Only if capacity is a zone based product	DN Exit Zones with prices flow weighted by forecast demand
9. Are capacity charges adjusted to recover allowed revenue and if so how?	Where possible by adjustment, otherwise cost recovery via commodity based charges	Yes, by adjustment.
10. Should year on year price changes be capped?	Retain: Potential to remove year-on-year capping but have capping based on forecast prices	No

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Assessment Criteria

Licence Objectives	Methodology Objectives. Capacity prices should…	
GL1: **"Reflect Costs"**	GM1 reflect the costs associated with providing that capacity	✓
GL2: **"Facilitate Competition"** GL3: **"Business Development"**	GM3: be easy to understand and implement.	✓
	GM2: generate stable charges;	✓

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