0291 – NTS Licence SC27 – Balancing Arrangements
Default cashout

Review Group 291 - May 2010

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Current regime

- In the event a shipper has a Daily (energy) Imbalance, then it will incur a System Clearing Charge
- The System Clearing Charge is calculated by multiplying the energy imbalance quantity by relevant System Marginal Price (SMP)
- SMP Buy relates to;
  - the higher of the highest price traded per kWh by National Grid NTS for gas for the purposes of balancing the system, or
  - **SAP plus 0.0287 pence per kWh**.
- SMP Sell relates to;
  - the lesser of the lowest price traded per kWh by National Grid NTS for gas for the purposes of balancing the system, or
  - **SAP less 0.0324 pence per kWh.**

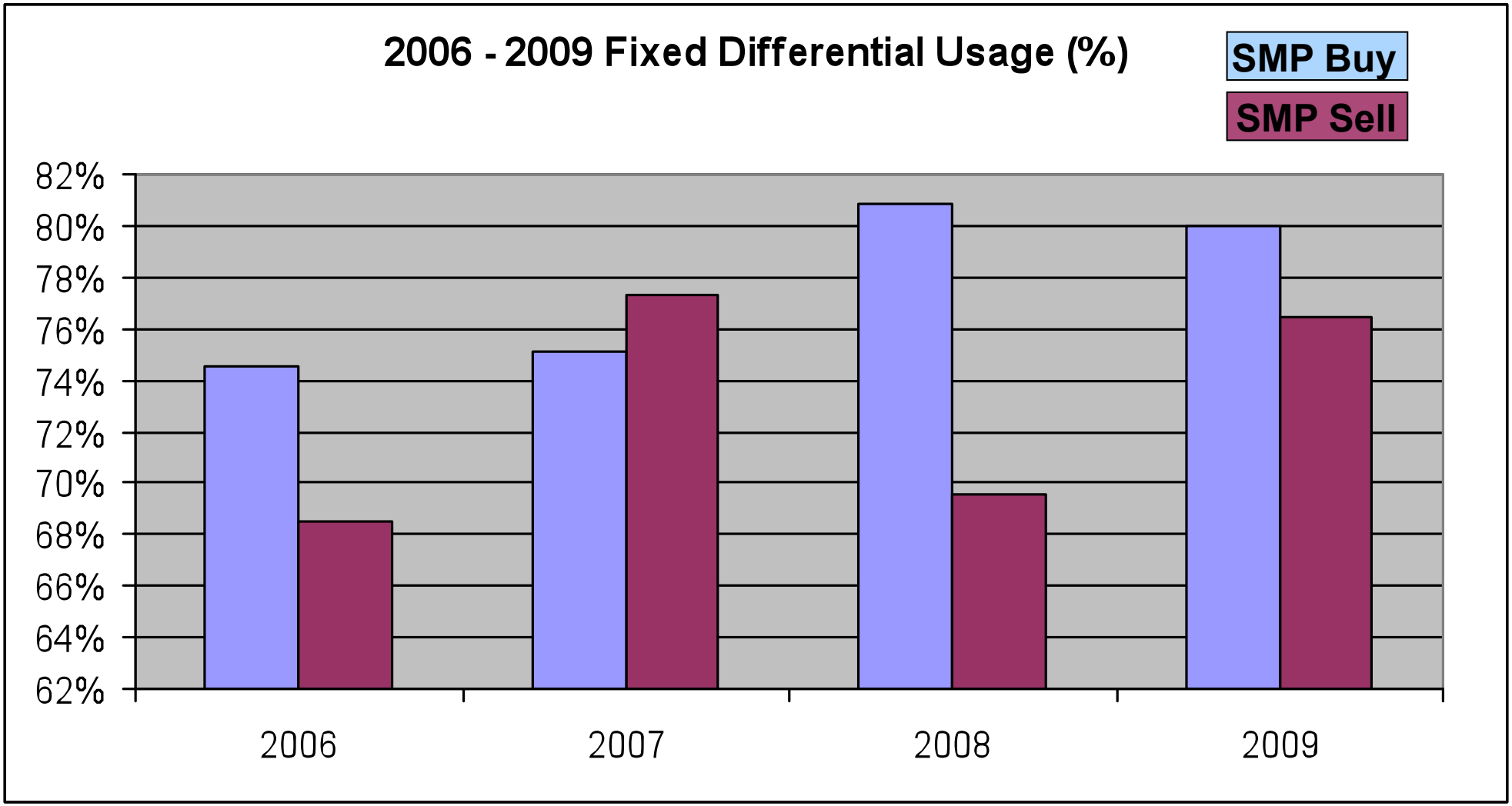
Derivation of current SMP Buy & SMP Sell

- Why differentials of SAP + 0.0287 or – 0.0324?
- Introduced as part of Mod 433 based on Ofgem analysis to calculate the cost of delivering or injecting a kWh of gas to / from the NBP
- In 2000, weighted average price of Hornsea Standard Bundled Unit (SBU) was 5.86p/kWh
  - Calculation divided above cost by % SBU components of Injectability (15.3%), Space (39.9%), Deliverability (44.8%)
  - Assumption then made that Space required 366 days a year but Injectability & Deliverability required 183 days
  - Storage Commodity Charges also applied to Injection (0.024p/kWh) and Deliverability (0.008p/kWh)
- Injection (SMP Sell) = (0.0049+0.0240+ 0.0064) = 0.0353 p/kWh*
- Deliverability (SMP Buy) = (0.0144+0.0080+0.0064) = 0.288 p/kWh
  - **Potential typo*

Analysis Headlines;

- SMP's applied to 2-4% of system throughput
  - 27 TWh of 1,085 TWh (Jan – Dec 2009)
  - 78GWh / ~7mcm per day
- Default SMPs applied consistently around 70% of days
  - 2001 SMP Buy = 82%, SMP Sell = 78%
  - 2009 SMP Buy = 80%, SMP Sell = 76%
- Relative value of default SMPs has fallen against SAP
  - 2001 SMPs = 5% SAP, 2009 = 3-4%
- SMPs are not historically linked to NTS linepack changes

Default Cashout Usage



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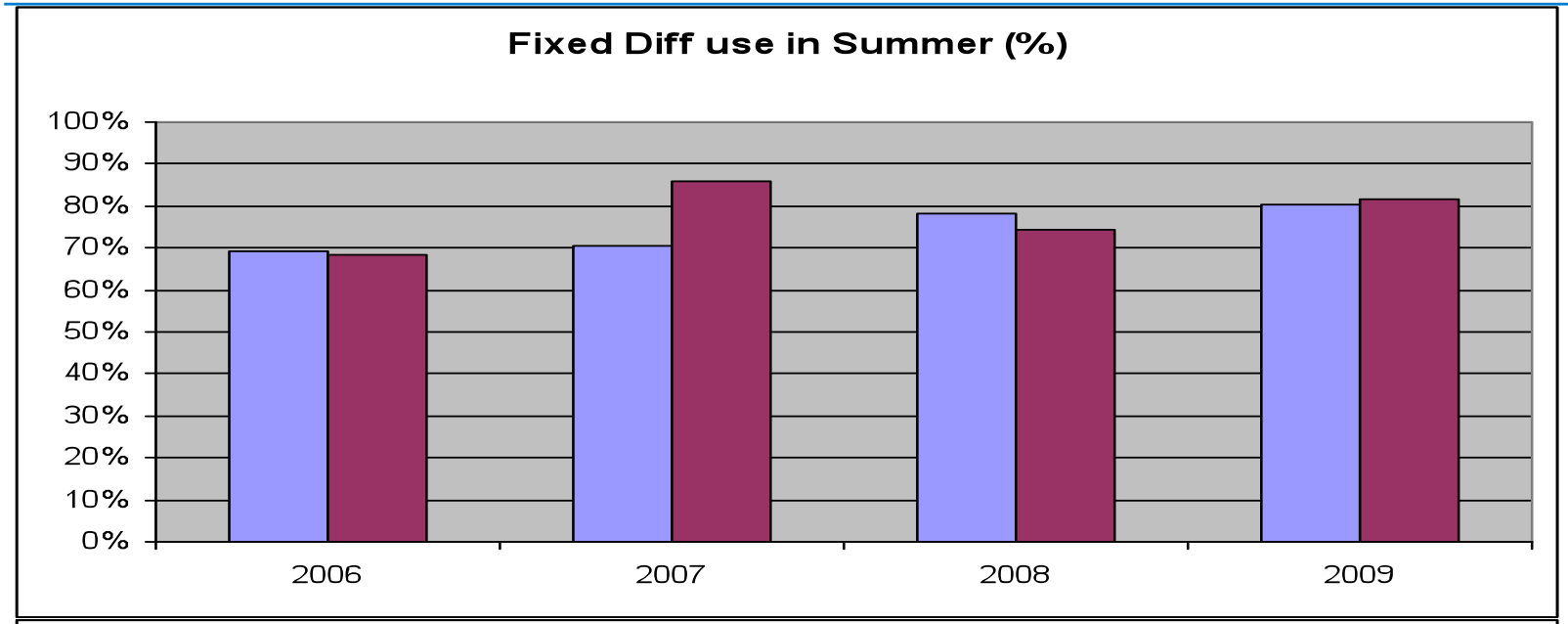
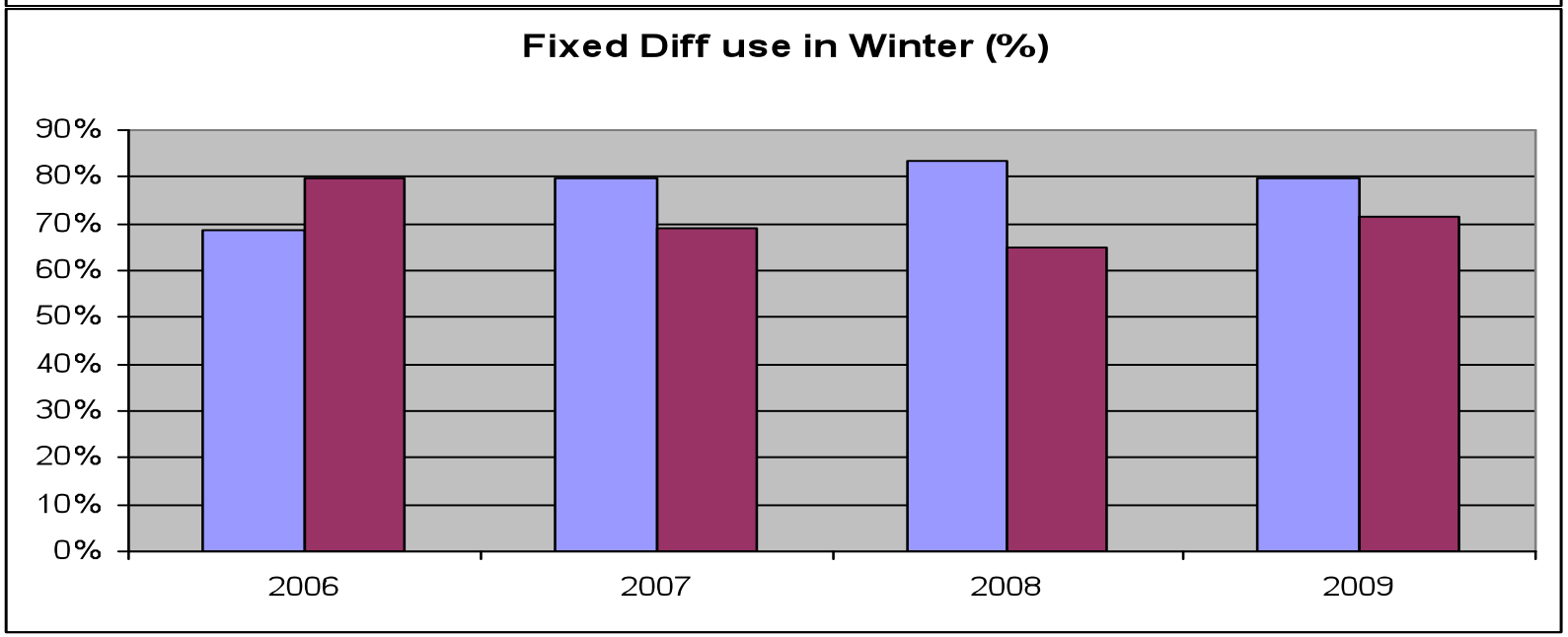
Seasonal Use of Fixed Cashout





SMP Buy

SMP Sell

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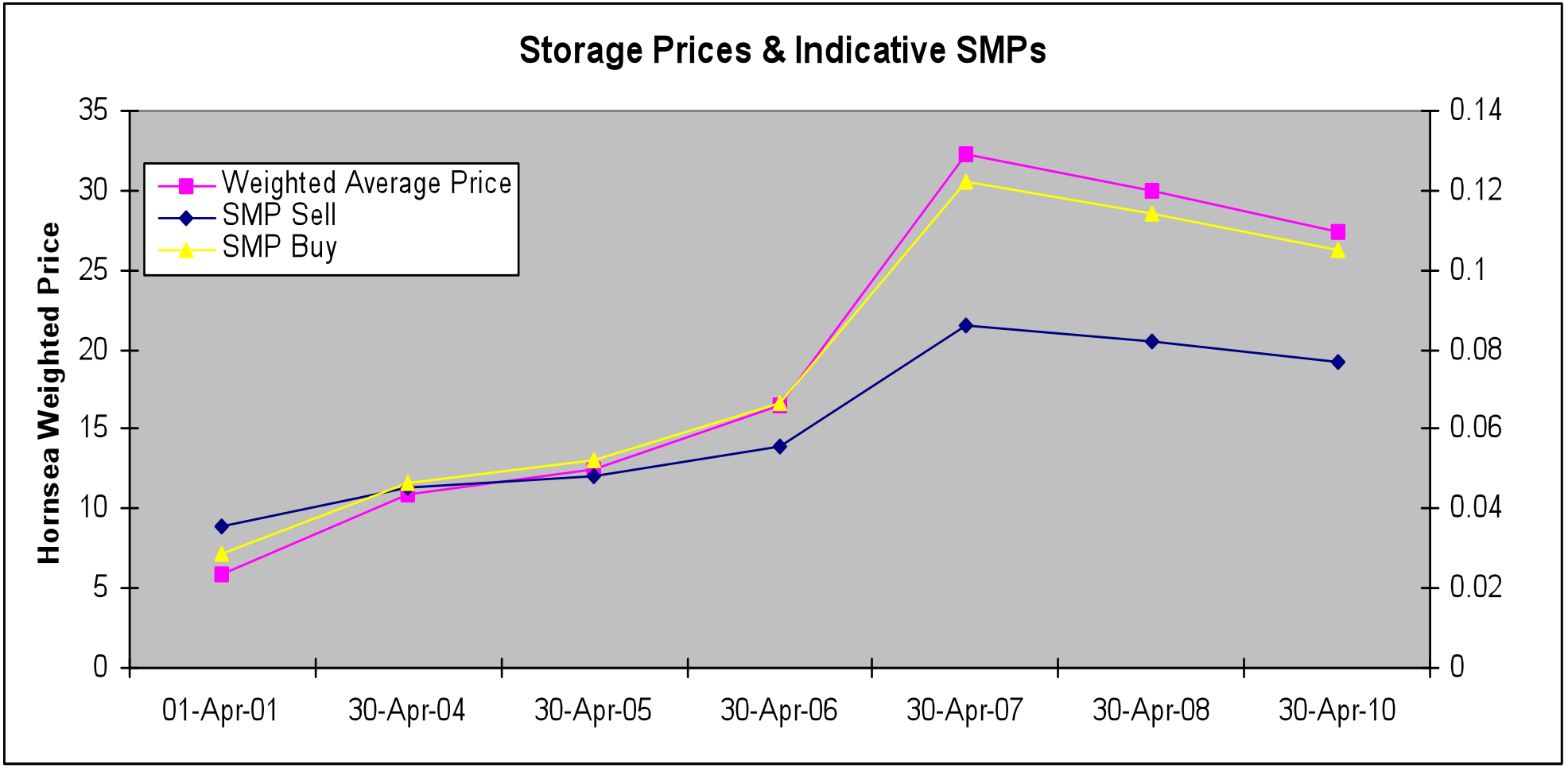
Storage Prices



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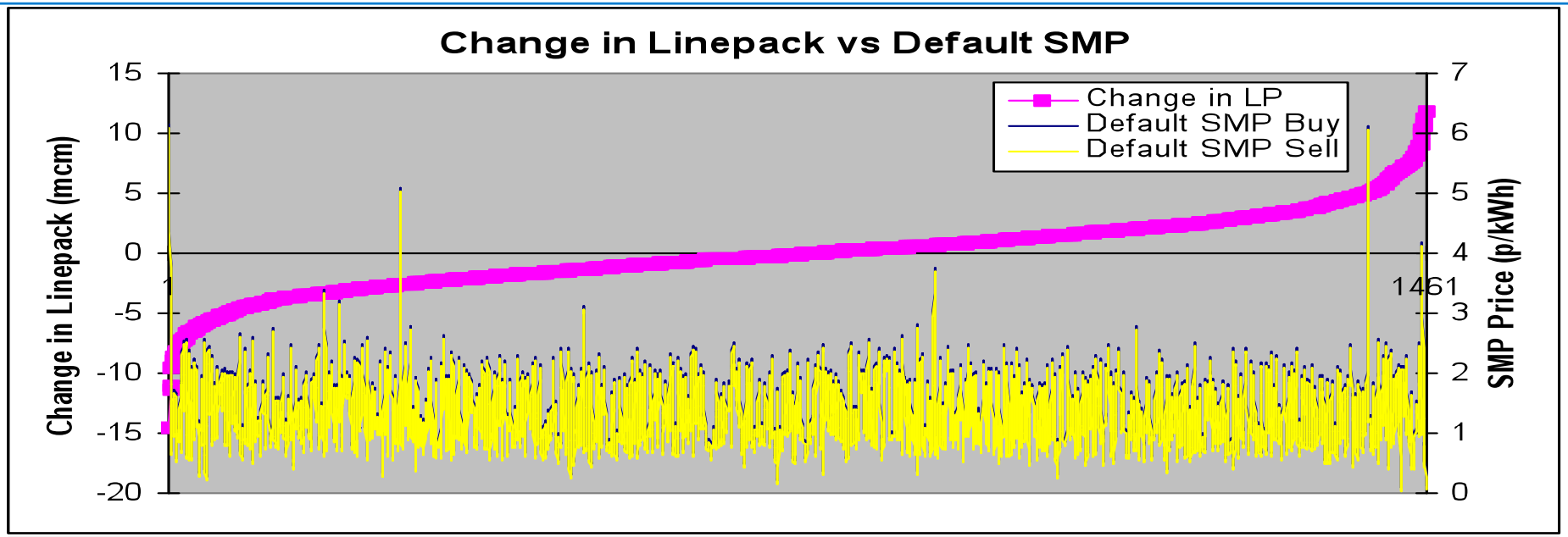
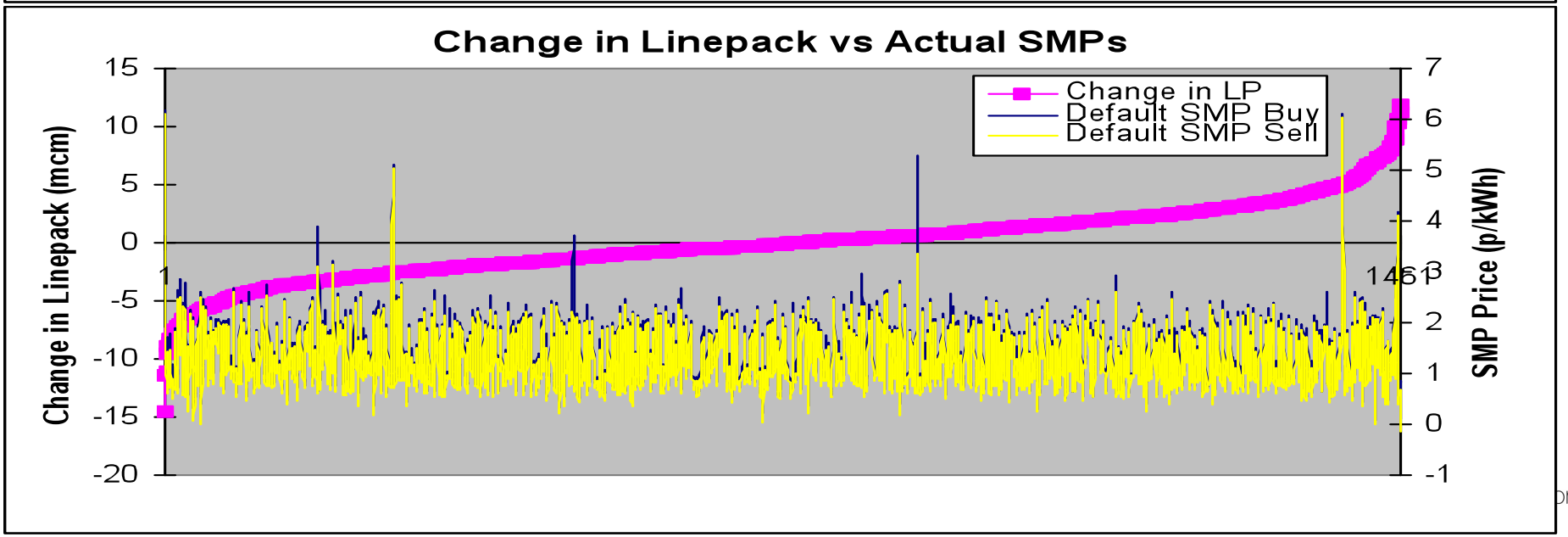
Change in Linepack vs SMPs (1/1/06 – 31/12/09)





Other possible inputs / considerations

- Project Discovery
  - Encourage Seasonal Storage?
  - Short term price signals in *'periods of market tightness'*
- European Regulation
  - Should this Review Group consider wider EU balancing work being undertaken by ERGEG/ENTSOG?
- SO Incentives
  - Residual Balancing
  - Price Performance Measure

Possible criteria for update?

Must Haves	Ideals	Nice to Haves
◆Transparent ◆Objective Based ◆Provide incentive for shippers to balance ◆Does not cross subsidise ◆Does not hamper new entrants	◆Cost-Reflective ◆Market Based ◆Does not hamper market liquidity	◆Encourage cross border trade? ◆Dynamic?

Possible Ideas

- Do Nothing isn't really an option
- Remove default cashout? Are fixed defaults still appropriate?
- Update using current methodology?
  - Use updated Hornsea prices?
  - Incorporate alternative gas sources (LNG / EU Hubs)?
- Apply a % of SAP?
- Pro-rate current values against gas prices (2000-2010)
- Use tolerances? Consider linkage to Linepack product
- NBP price differentials e.g. WD – DA etc
- Linkage to system length
- Any others – views greatly appreciated??

Next Steps

- Which options should we focus on for next session?