

# Update on Trading Activities

February 2005

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Operations and Trading

# Presentation Overview

- Trading Principles
- Trading Considerations & Procured Volumes
- Impact of our Trading
- Trading Performance
- Information Sources on Traded Activity
- Looking Forward
- Summary

# Trading Principles

# Trading Principles

- Trade on expectation of delivering economic benefit
  - Licence obligation to procure economically (Condition C16)
  - subject to prohibition on speculation (Condition C2)
- Requirements based on purely 'physical' considerations
  - to economically offset an expected BM action
  - not trading against a reference price e.g. cash-out prices
- Trading satisfies Ofgem's expectations
- Ensure we comply with FSA regulatory requirements

# Trading Principles

- Trading advice prepared by a Middle Office team and all Trading activity undertaken against this pre-agreed advice
- All trades are tagged to specific advice requirements to facilitate post event audit checks
- Energy trading advice utilises information readily available to all participants and taking account of potential BM actions.

# Trading Advice

- Energy Trading advice model incorporates -
  - a central imbalance volume forecast model with half hourly forecasts based predominantly on analysis of historic NIV
  - an allowance for forecast BM actions
  - a view on IPN data
  - price curves based on predicted BM Bid / Offer slopes with allowance for reversal probabilities
  - updates for demand forecast changes
  - price premiums to reflect the risk of impacting on margin
- Advice for BMU Specific trades utilises system information where required e.g. constraint details

# Trading Considerations & Traded Volumes

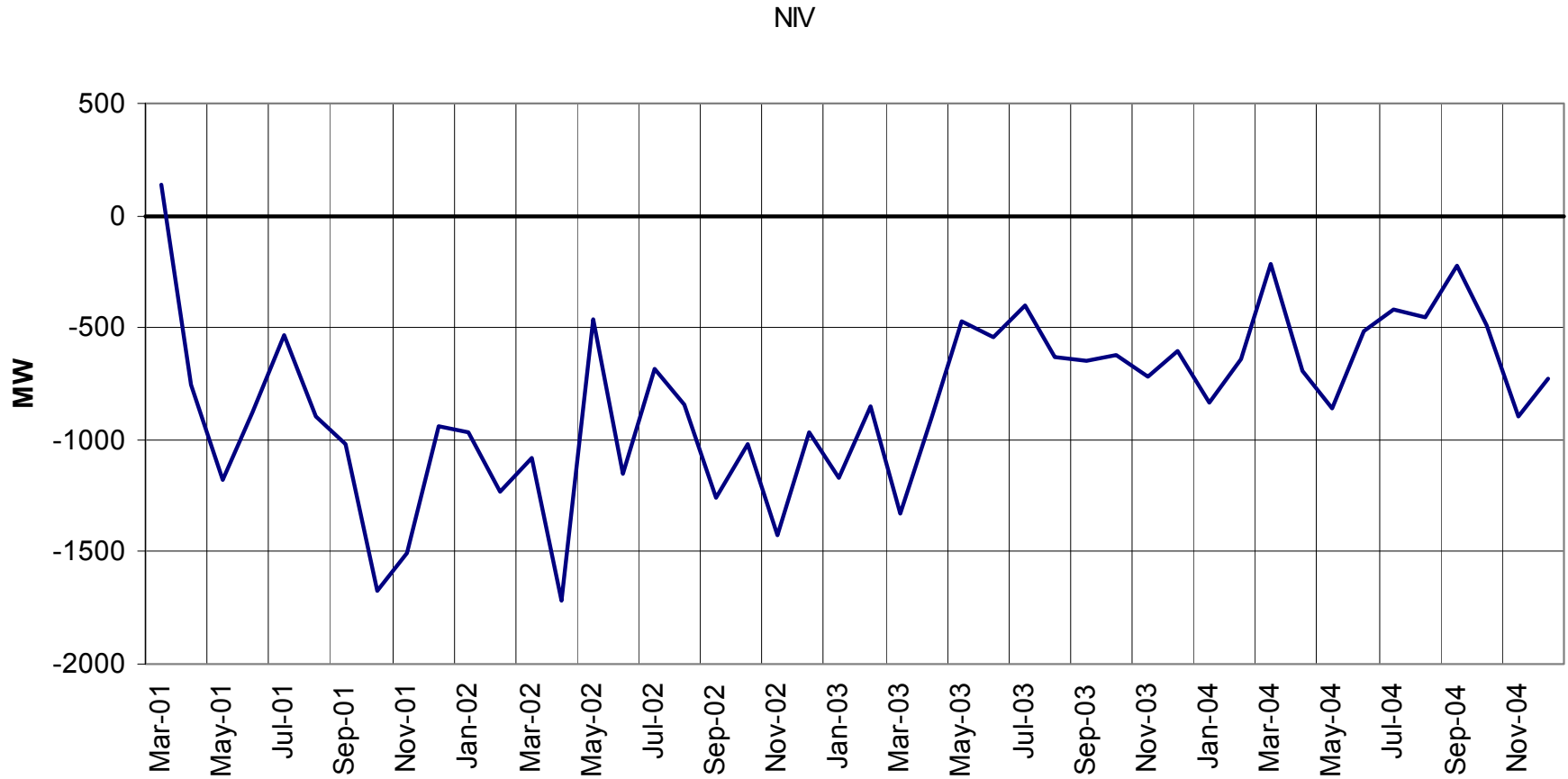
# Trading Considerations / Instruments

<u>REASONS FOR TRADING</u>	<u>INSTRUMENTS</u>
Economic Energy Imbalance (Non-locational)	OTC Forwards; Power Exchange; Bi-lateral; Options; Combination Deals
Margin Support (Non-locational)	OTC Forwards; Power Exchange; Bi-Lateral; Options; Combination Deals
BMU Specific (e.g. margin; constraint) (Locational)	Bi-lateral BMU-specific Forward trades and Options Power Exchange Linked Interconnector (PELI)

# Imbalance Volumes

- Introduction of P78 in Feb 2003 has had a significant impact on imbalance and NGT Traded Volumes.
- Net Imbalance Volume averages -600MW this financial year as compared -1000MW prior to the mod change
- Standard deviation typically 600-700MW so greater risk of forecast position being reversed

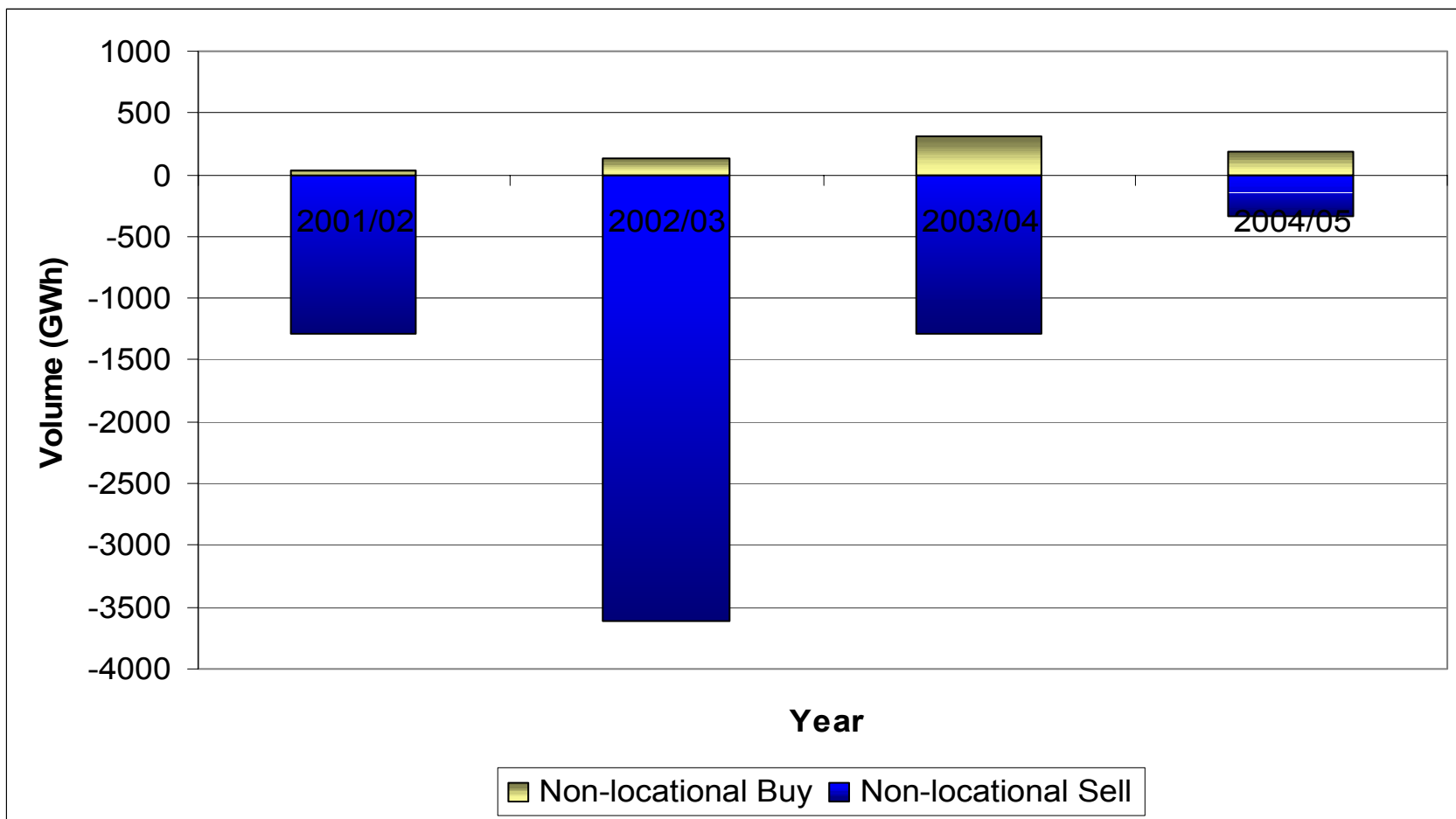
# Monthly Net Imbalance Volumes since Go-Live



# Non-Locational Trades

- NGT Non-locational energy SALES volumes have decreased to 10% of pre-P78 level
- Increase in the volume of non-locational BUYS to -
  - economically manage the risks of imbalance outturning short when forecast long
  - economically support upward margin requirements

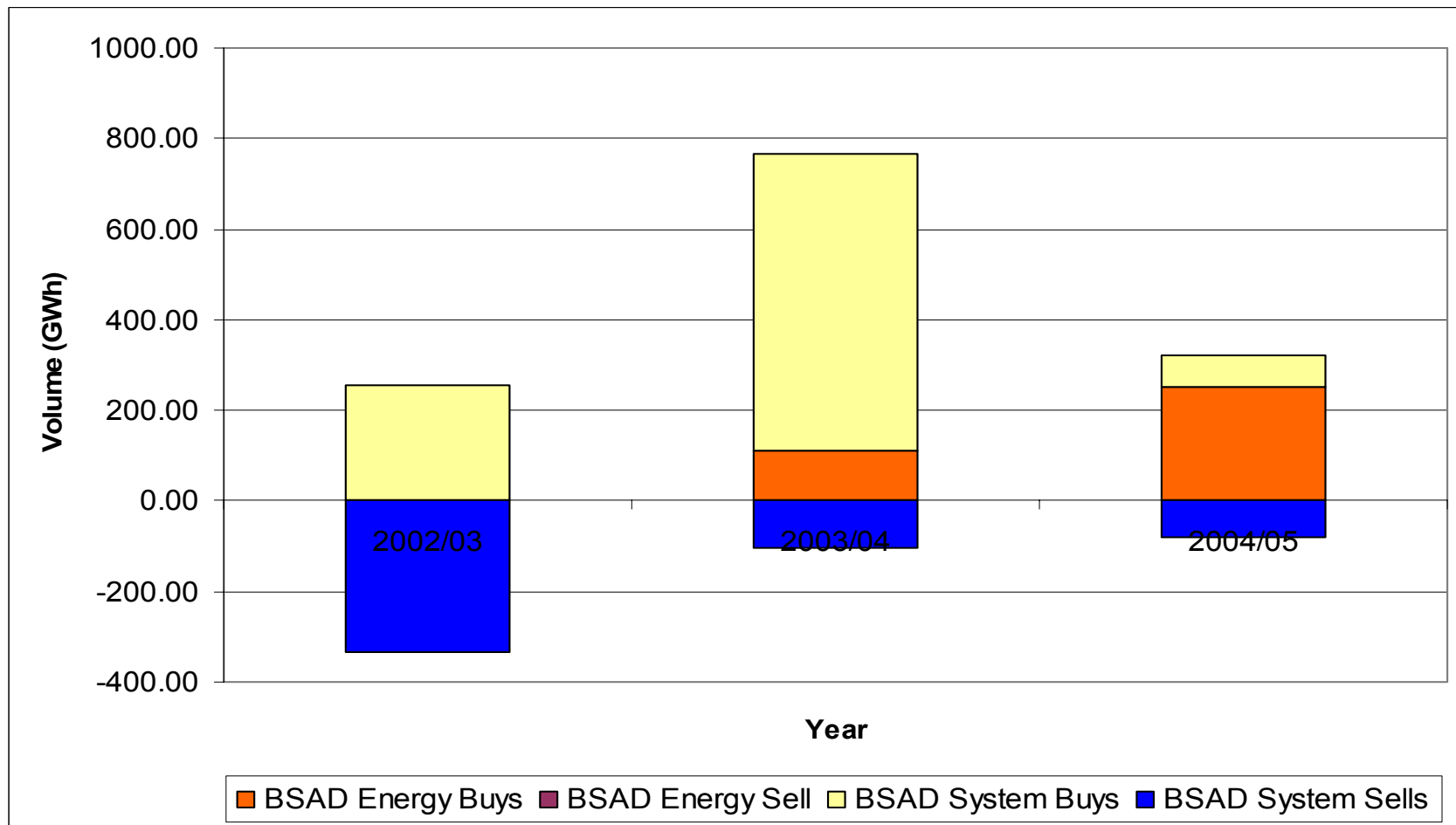
# Non-Locational Volumes 2001 - 2005



# BMU Specific Trades (excludes PGBTs)

- Typical requirements include -
  - upward margin
  - downward regulation
  - constraints
  - Anglo-French Interconnector
- GTMA Schedule 7A developed to provide a contractual framework - initiative to sign up counterparties still on-going
- Upward margin trades included in BSAD energy figures - others in BSAD system

# BMU Specific Trade Volumes (2002 - 2005)

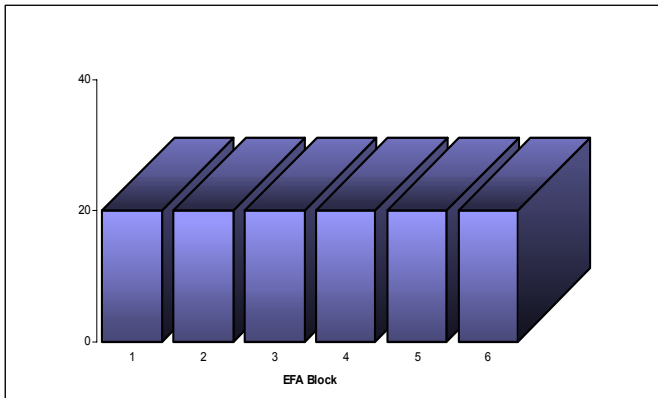


# Combination Trading

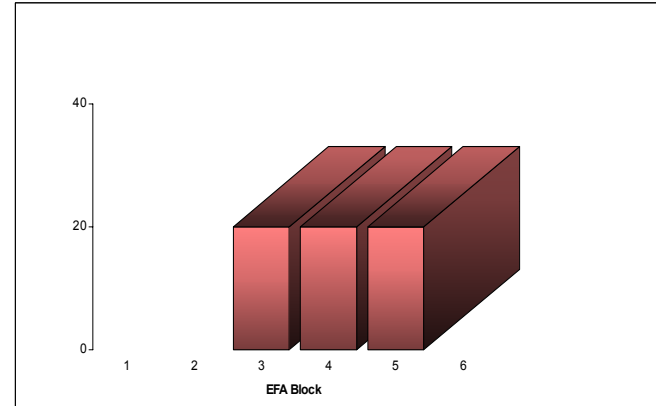
- Set of linked trades undertaken to achieve the physical requirement
- Used as alternative trading strategy where -
  - there is a more economic solution
  - the combination legs are more liquid
  - the requirement is not a standard product
- Approx 30 combination deals undertaken in the last 12 months

# Combination Trade - e.g. Synthetic Off-Peak

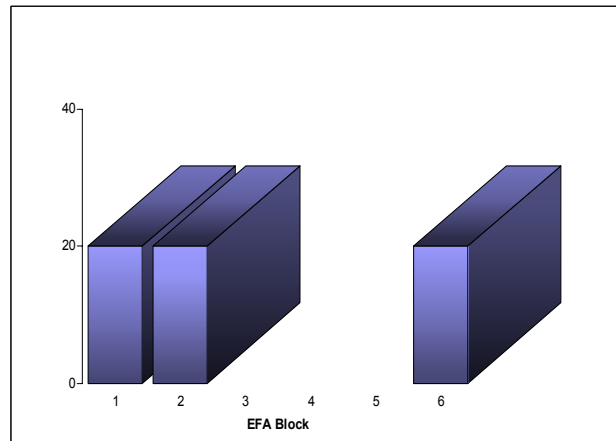
SELL DAY AHEAD BASE LOAD



BUY DAY AHEAD PEAKS



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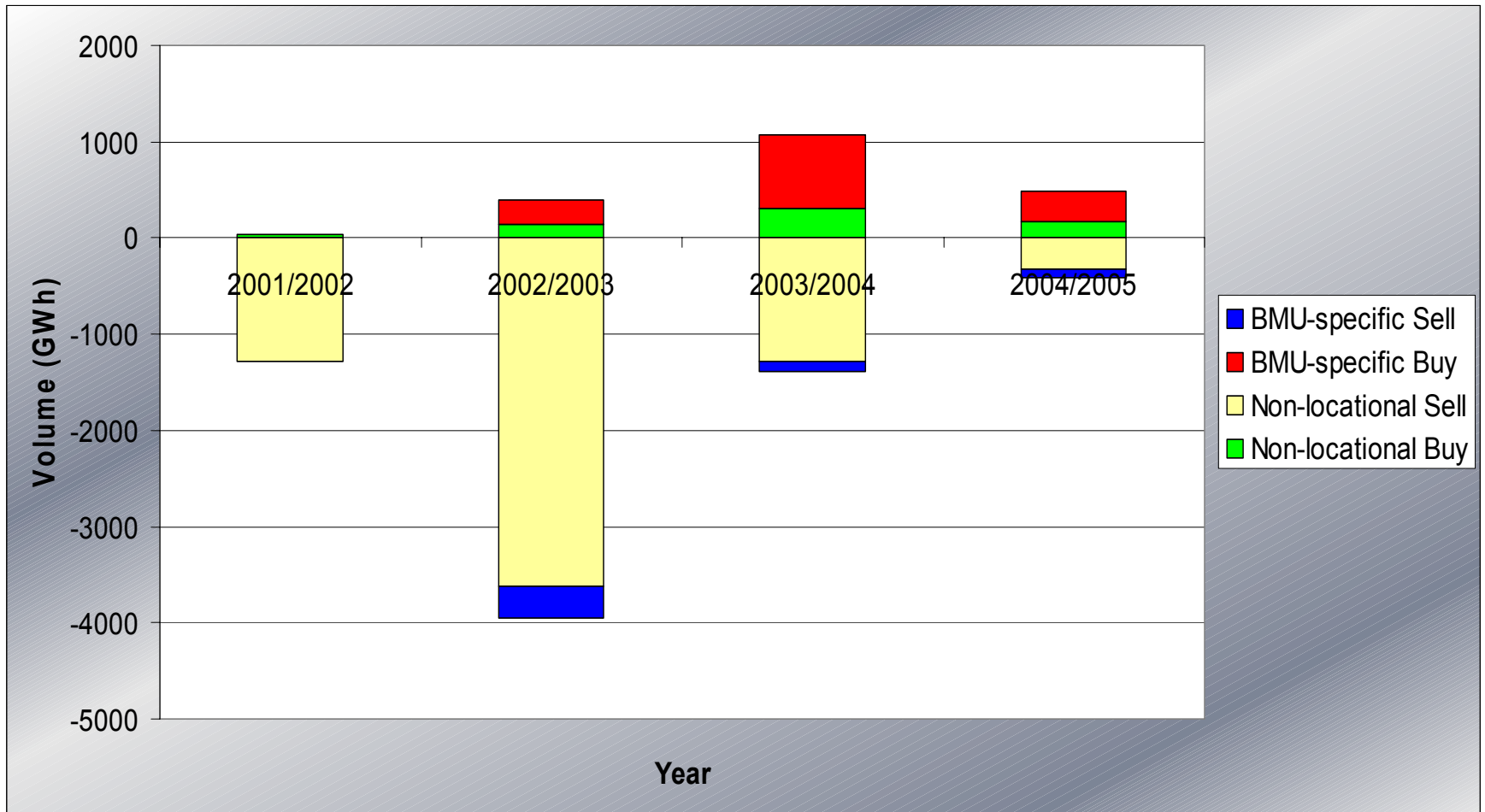


DAY AHEAD  
OFF-PEAKS

# Total Annual Trade Volumes

- Shift away from being a predominant net volume Seller.
- Most significant change has been the reduction in non-locational SALES post P78.

# Total Trade Volumes 2001 - 2005



# Other Transactions

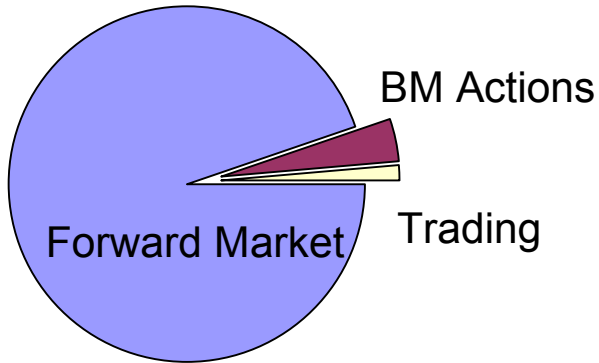
- Options - Since Feb 02
  - Bought 20 CALLS + 1 PUT
    - 19 BMU Specific
    - 2 Non Locational
  - No Options SOLD
- PELIs - Since Nov 03
  - 195 Agreed
  - 158 resulted in BMU Specific Trades

# Impact of Trading

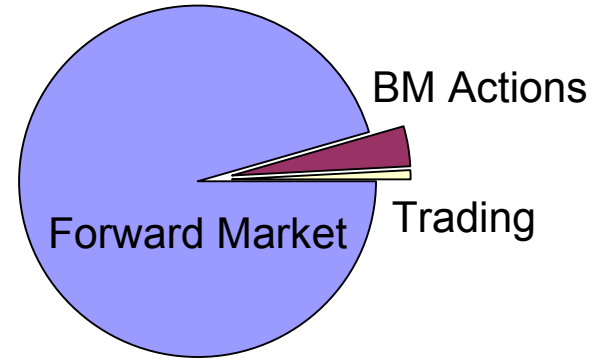
# Impact of Trading

- Principally to reduce overall Balancing Costs
- Consequentially feeds into Cash-out Price
- Impact on Forward Price

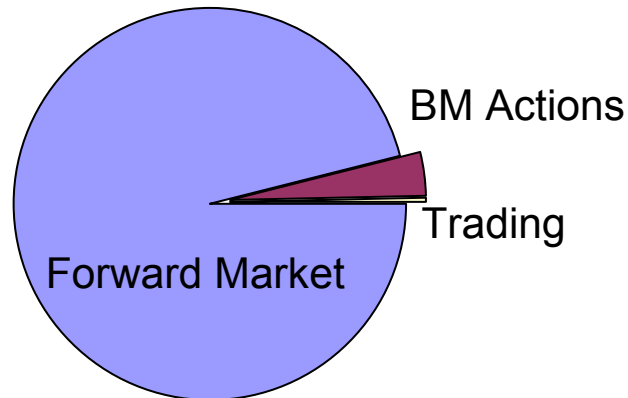
# Energy Supplied 2002 - 2005



2002/3



2003/4

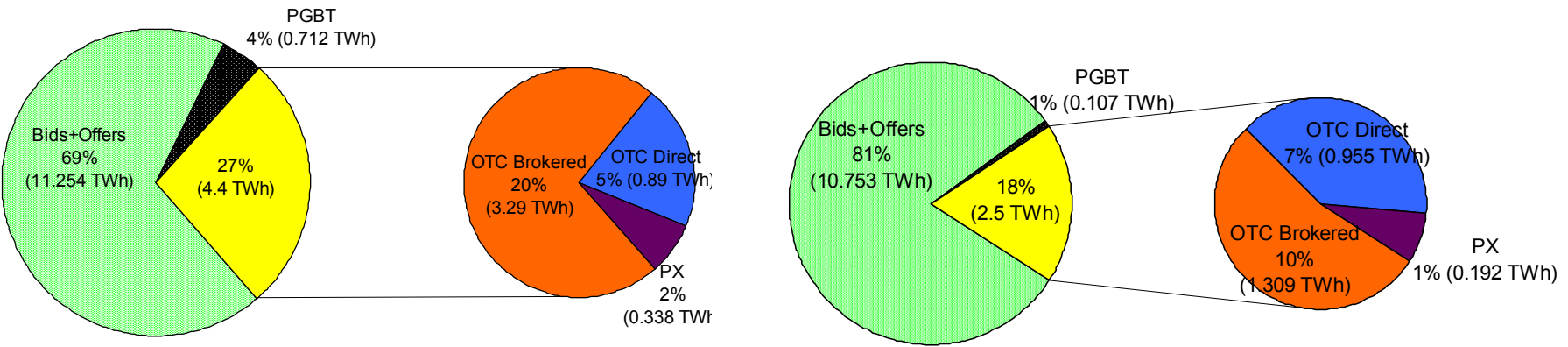


2004/5

# Interaction with BM Activity

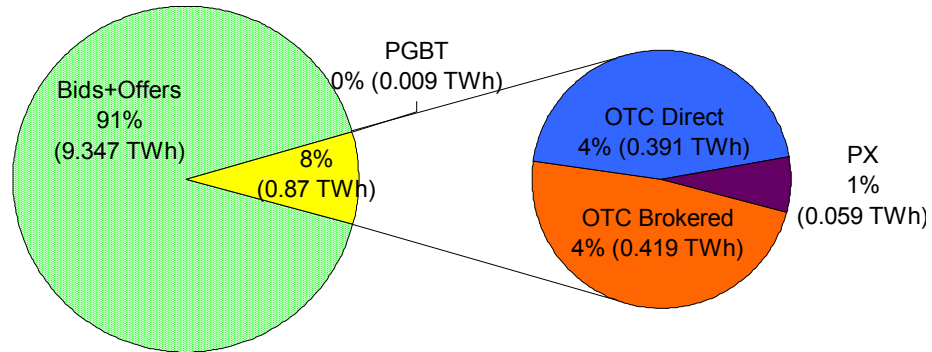
- Vast majority of Balancing Actions are undertaken in the BM
- Trading currently accounts for <10% of Balancing Actions

# Balancing Action Volumes 2002 - 2005



2002/3

2003/4

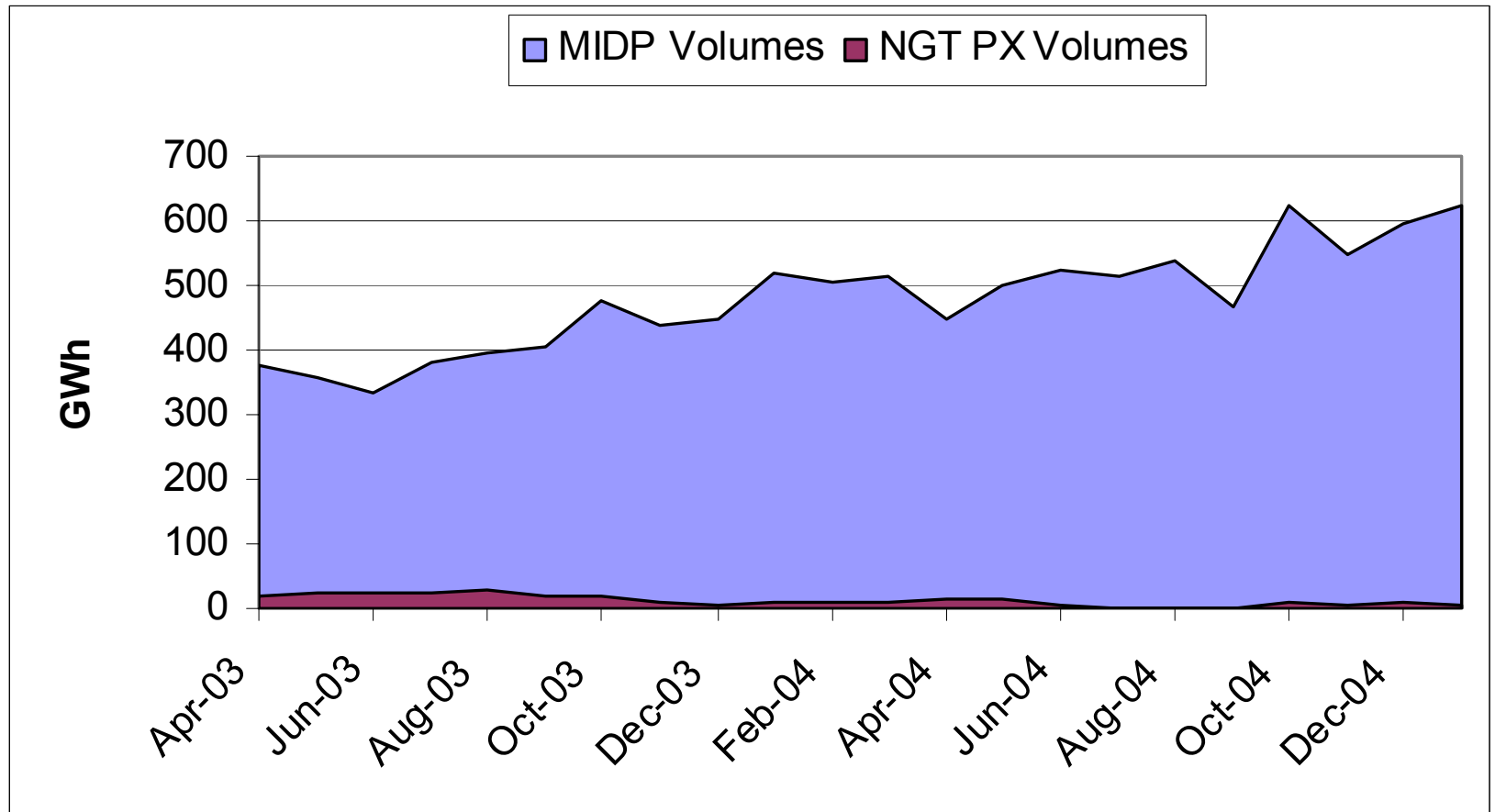


2004/5

# Effect on Cash-Out Prices

- NIV Direction Cash-out (BSAD Methodology)
  - trades used in the calculation of net energy BSAD variables
    - e.g non-locational and BMU specific upward margin trades
  - trades used in the calculation of net system BSAD variables
    - e.g BMU specific trades for constraints or downward regulation
- Reverse Cash-out Price - PX trades included within Market Index Data - typically 1% of trade volume procured via the PX

# MIDP Volumes v NGT PX Trades (2003-2005)



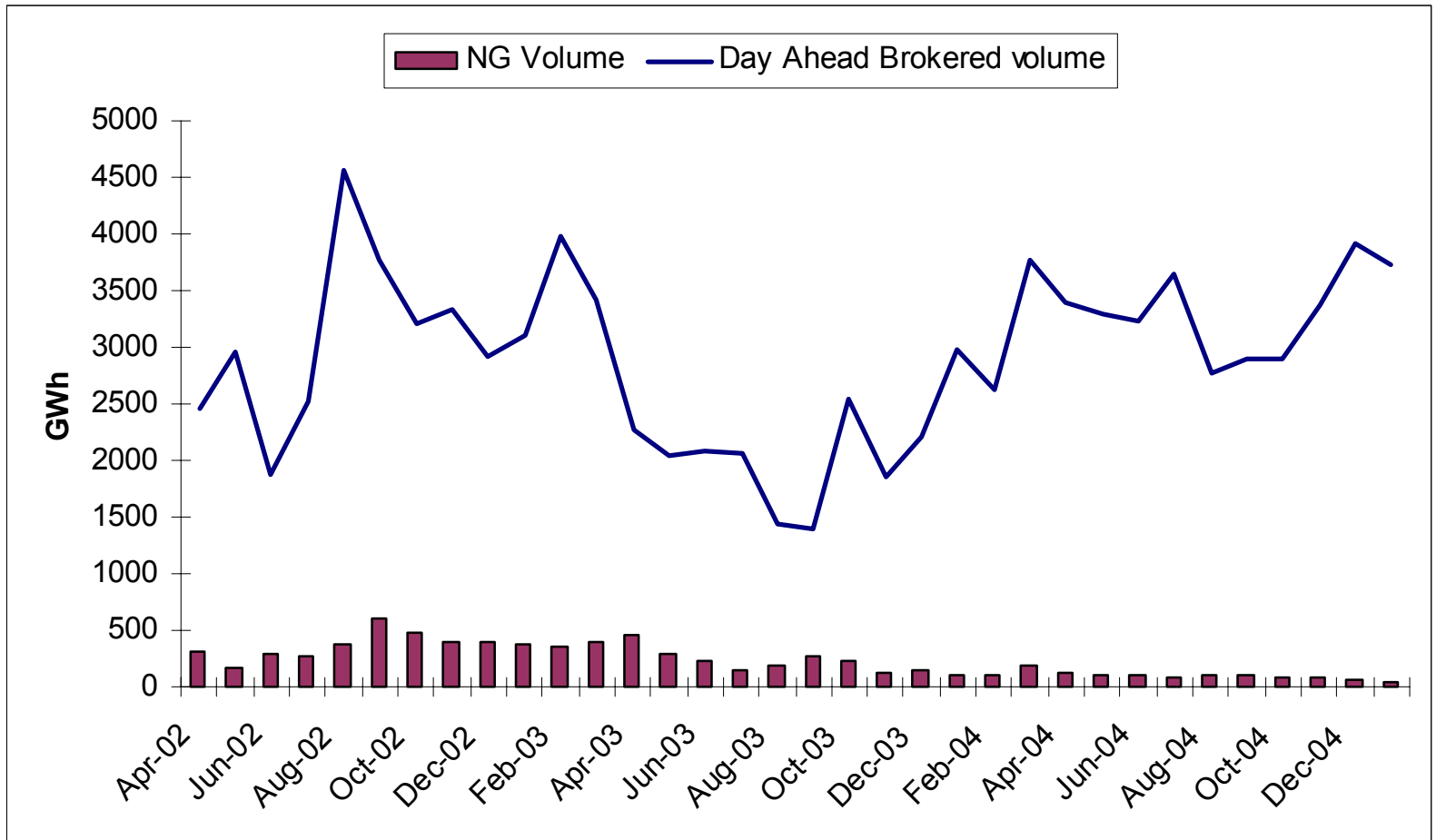
# Consideration of Impact on Main Cash-Out Prices

- Trading accounts for a very low proportion of overall balancing actions
- Some analysis undertaken of 03/04 trading volumes to assess potential impact -
  - On specific days noticeable effects could be identified
  - However when viewed across the year as a whole the current level of NGT trading activity was not considered to have a 'material' impact on long term cash-out signals

# Impact on Forward Curve Prices

- NGT traded volumes account for less than 0.5% of the total annual energy delivered.
- Vast majority of NGT trades are undertaken at day-ahead.
- This Financial Year -
  - 95% of trade volume was for delivery day-ahead.
  - For the other 5% the max time horizon was less than 2 weeks
  - we have traded less than 3% of the brokered dayahead market
- Consequently can conclude that we do not have a material impact

# Impact on the Forward Market



# Trading Performance

# Trading Performance Assessments

- Indicative since impossible to show absolute comparison between the traded and non-traded position
- Daily BM information on energy Imbalance BOAs allows a reasonable assessment of the expected alternative cost if energy imbalance trades not undertaken
- No consistent methodology for determining BMU Specific trading benefit since many trades are undertaken to provide firmness and certainty ahead of gate closure.

# Indicative Trading Performance Results

- Indicative Non Locational Energy trade Benefit data -
  - 2002/3      £8.8m
  - 2003/4      £0.9m
  - 2004/5      £0.4m
- Non-Locational Energy Trade Reversal statistics excluding upward margin & BMU specific trades -

● 2002/3	Traded 3.5TWh	Reversed 0.4TWh
● 2003/4	Traded 1.2TWh	Reversed 0.2TWh
● 2004/5	Traded 0.32TWh	Reversed 0.05TWh

# Information Sources on NGT Trading Activity

# Trading Information Sources

- **BMRS - Balancing Services Adjustment Data**
  - Day-ahead
  - Gate Closure
  - Post Event Day +1 (11:00)
- **NGT Balancing Services Industry Information Website**
  - BSAD Info (net volumes)
  - Forward Contracts Info (Segregated Buys & Sales volumes)
- **Procurement Guidelines**
  - Balancing Services Monthly Report (Breakdown of Costs / Volumes)
  - Annual Procurement Guidelines Report (Pursuant to C16)

# Looking Forward

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- Focus on the periods where high BM costs arise and use appropriate Trading Strategies to mitigate these
- Continue to look for opportunities to hedge risk using Options
- Continue initiative with Market Participants to sign onto Schedule 7A amendments

# Summary

# Summary

- Imbalance Volumes have tended to a more balanced position since P78 which has resulted in -
  - total traded volumes significantly down
  - a greater propensity to BUY volumes for margin support
- Volume of BMU Specific trades has increased due to an increase in Anglo-French Interconnector trading requirements

# Q&A

*Any Questions*