

# Demand Side Participation in Balancing Services

---

Presentation to DSWG – 1<sup>st</sup> September

John Perkins

# Contents

---

- ◆ Presentation to address actions from DSWG on 2<sup>nd</sup> August 2006
- ◆ Demand Side Participation in Balancing Services
- ◆ Comparison with previous years
- ◆ Background Information on the tight day on the 18<sup>th</sup> July
- ◆ Role of Demand Side on 18<sup>th</sup> July
- ◆ Note: Consistent with previous reporting, Demand Side values are for all non-BM providers

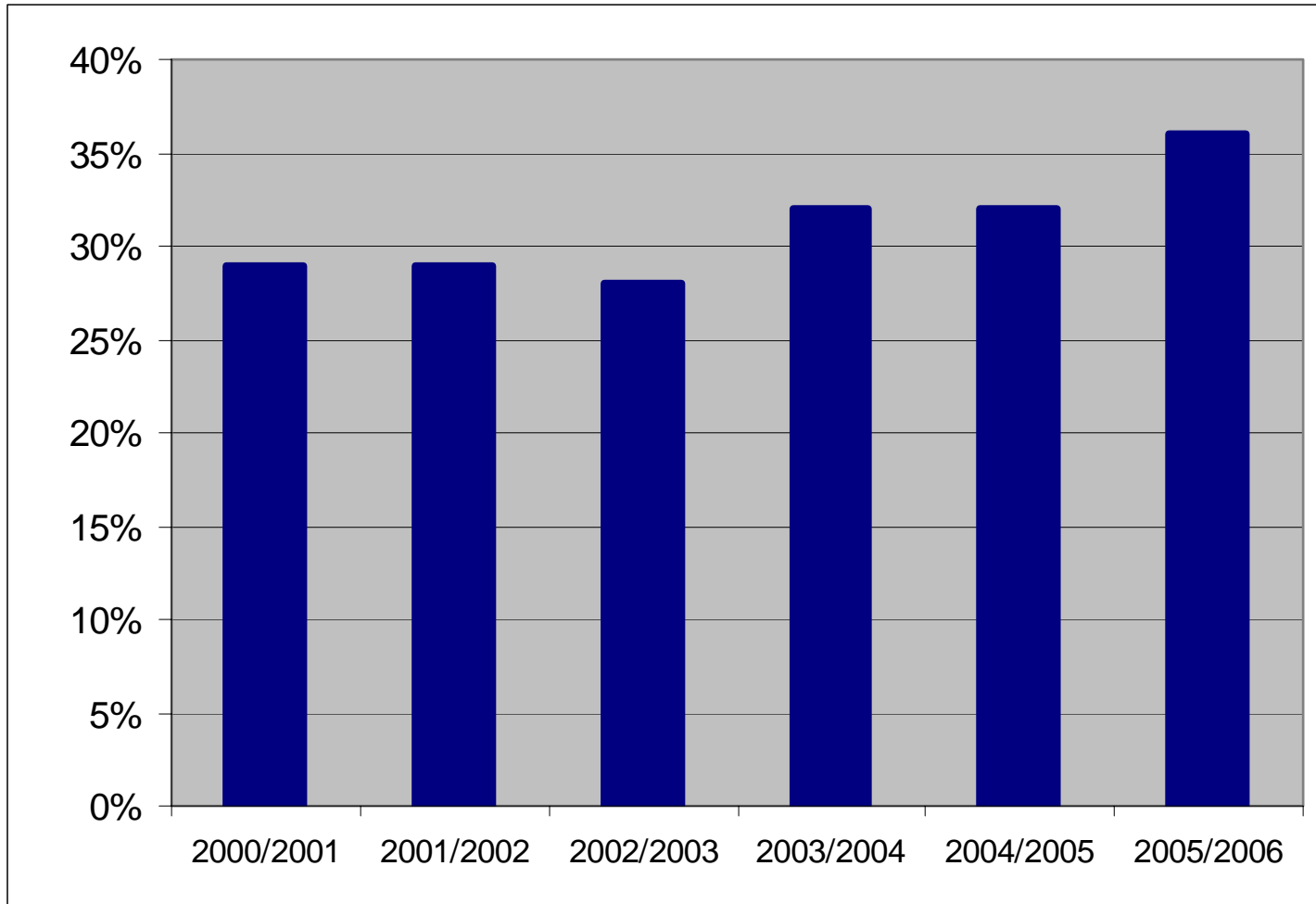
# Demand Side Participation In Balancing Services 2005/6

---

<b>Service</b>	<b>% provided by Demand Side</b>
Frequency Response	36% (based on actual declared availability)
Standing Reserve	32% (annual contracted volume basis)
Fast Reserve	6% (annual contracted volume basis)

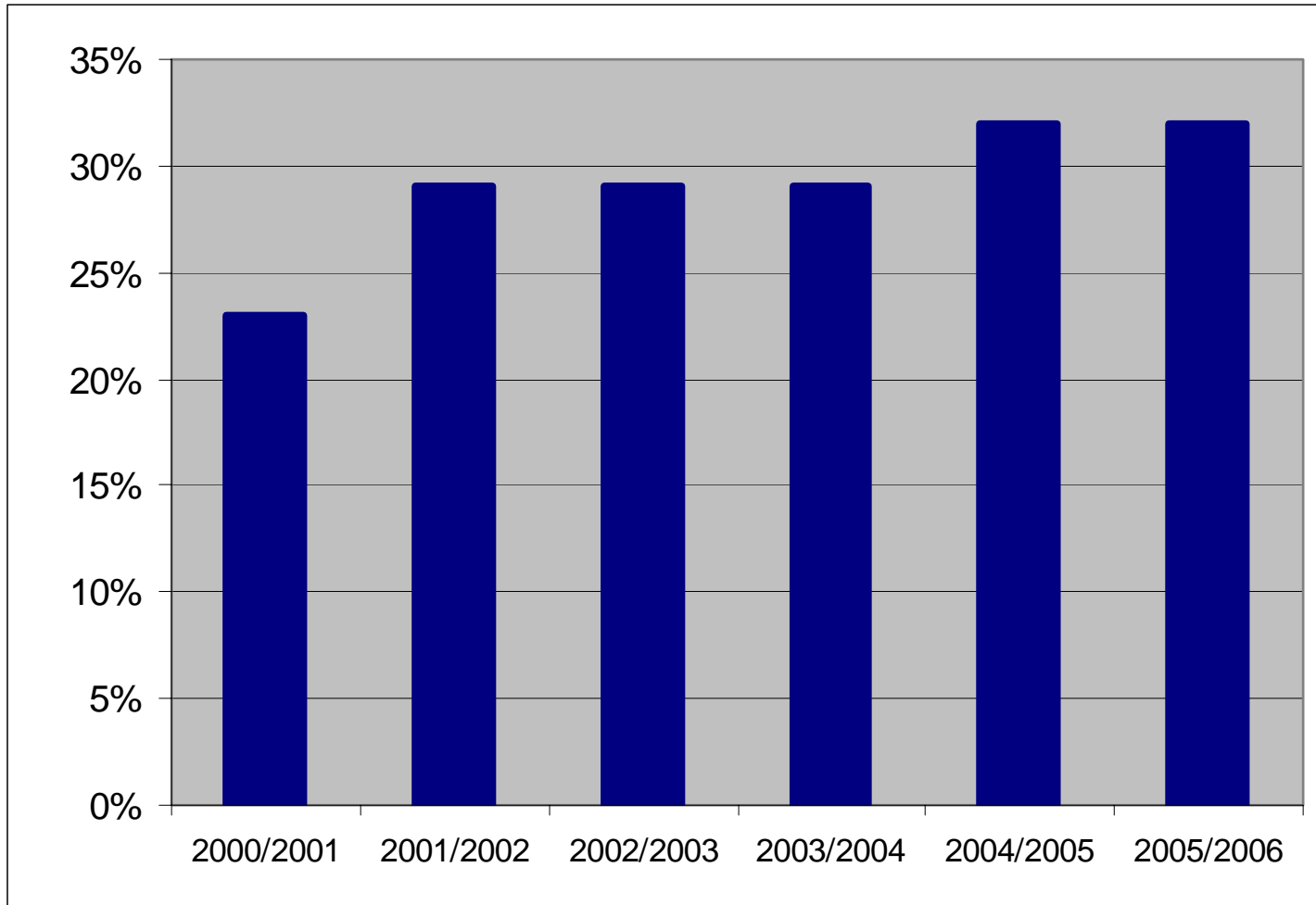
# Frequency Response from Demand Side

---



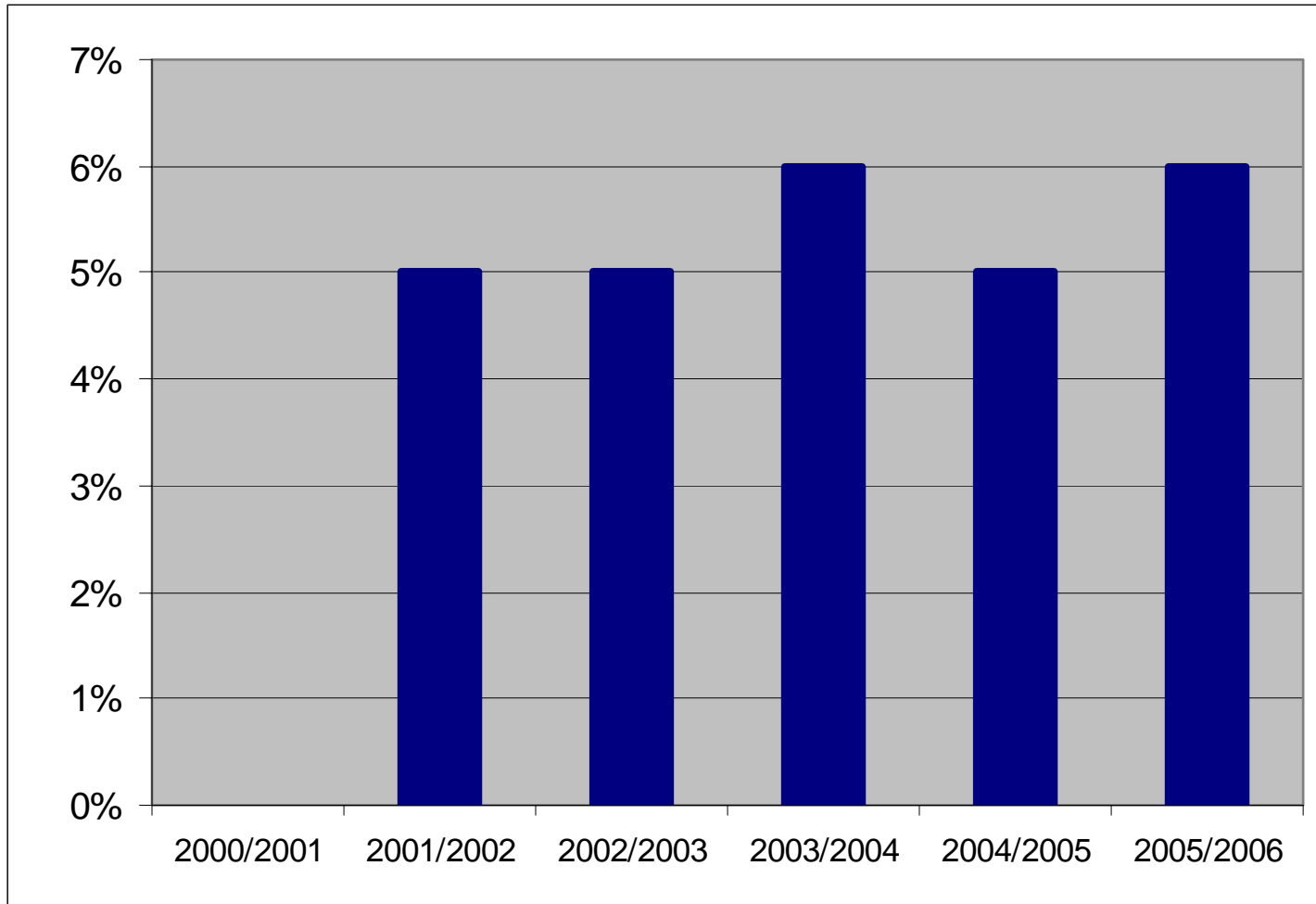
# Standing Reserve from Demand Side

---



# Fast Reserve from Demand Side

---



# System Warnings 18/19 July - background

---

- ◆ High volume of plant unavailable
  - ◆ summer maintenance ~15GW
  - ◆ fault outages (existing breakdowns) ~ 4GW
  - ◆ > 2GW of plant losses from Mon 17<sup>th</sup> to lunchtime peak on Tue 18<sup>th</sup> –
- ◆ High demands forecast in excess of 45GW with record July temperatures
- ◆ Normal demand levels ~43GW, Hot Spell ~44GW
- ◆ National Grid demand forecasts correlated well with outturn levels
- ◆ Net imbalance reached 3.5GW short

# Actions taken on 18<sup>th</sup> July

---

- ◆ NISM issued following losses up to midnight on Mon 17<sup>th</sup> July.
- ◆ Further plant loss of 1200MW lead to issuing of HRDR
- ◆ All standing reserve committed
- ◆ All feasible BM offers accepted
- ◆ DCI issued for lunchtime peak (last ones issued were Dec 2002 and Mar 1998)
- ◆ DCI updated during the afternoon as margin situation remained tight

# Demand Side on the 18<sup>th</sup> July 2006

---

	% delivered by Demand Side	Notes
Frequency Response	42%	Additional benefit of not having to part load some generation to provide response
Standing Reserve	7%	All available Standing Reserve was committed