



Options for Energy Buyers
Ed Blackmore
Sempra Energy

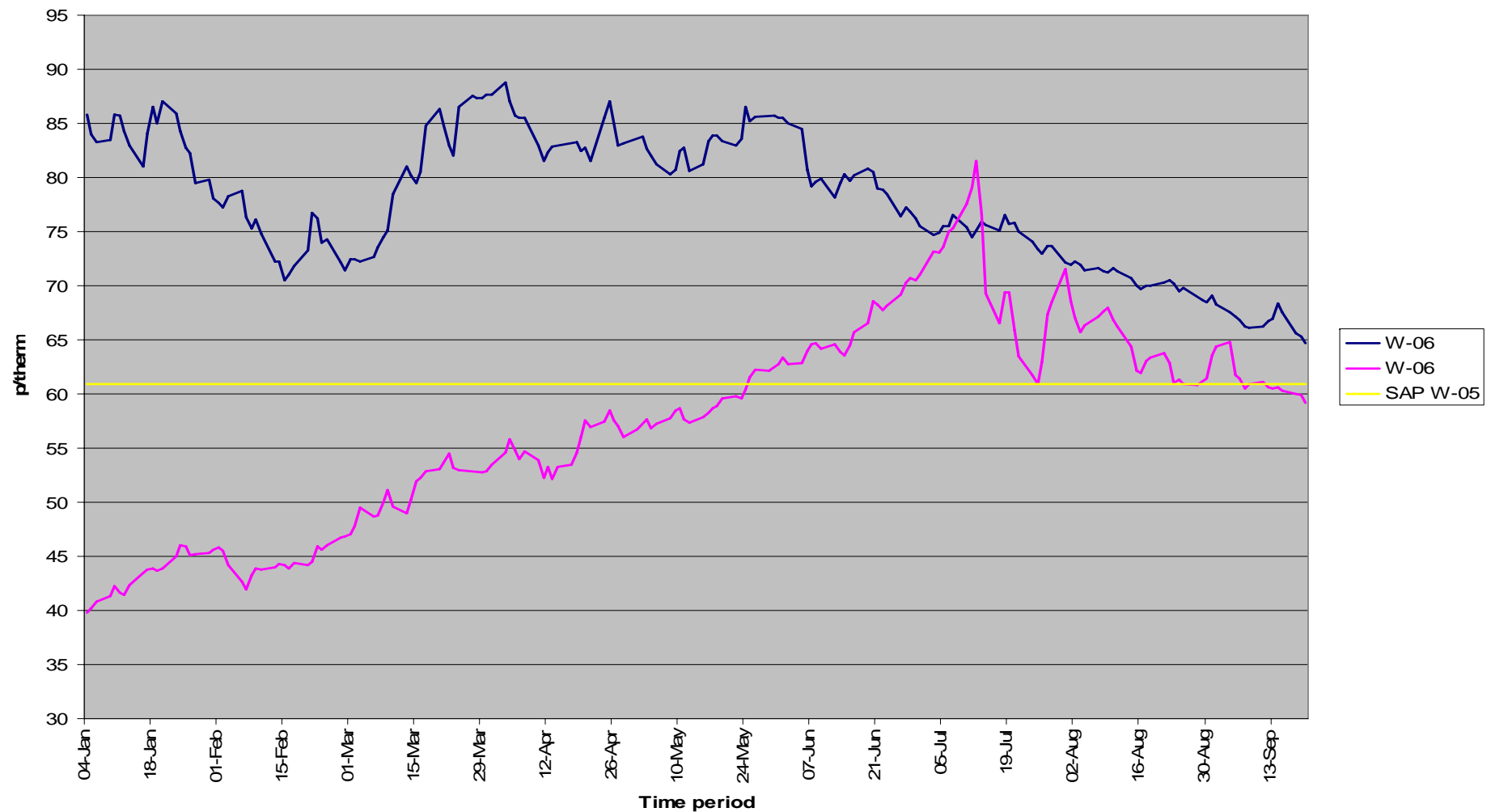
www.sempratrading.com



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Winter-06 price trend

Trend Winter-06 vs Winter-05





Why is Winter6 trading higher than Winter5?

- Market undervalued Winter 5 volatility
- Daily volatility higher than expected
- Risk premium function of volatility
- Average daily volatility Nov/March = 250%!!
- Options market - market pricing 27p movement in January contract

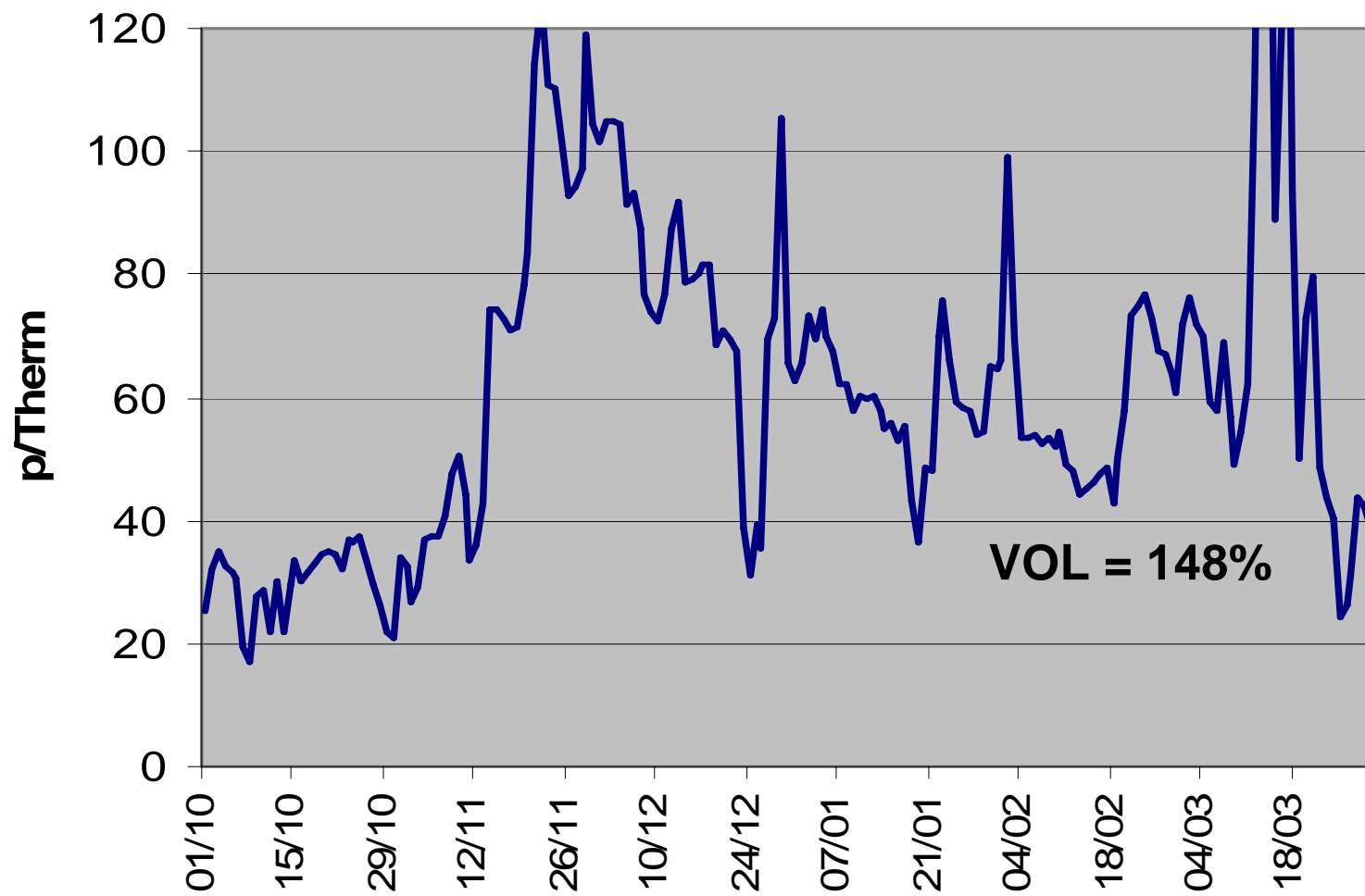


Sempra Energy *Risk Premium*

- Increased Volatility = increased risk premia
- Increased time to expiry - increased risk premia
- New assets e.g. storage, pipelines reduces volatility
- BUT market sceptical of new infrastructure given gas flows in Interconnector last year
- Market starting to believe gas will flow



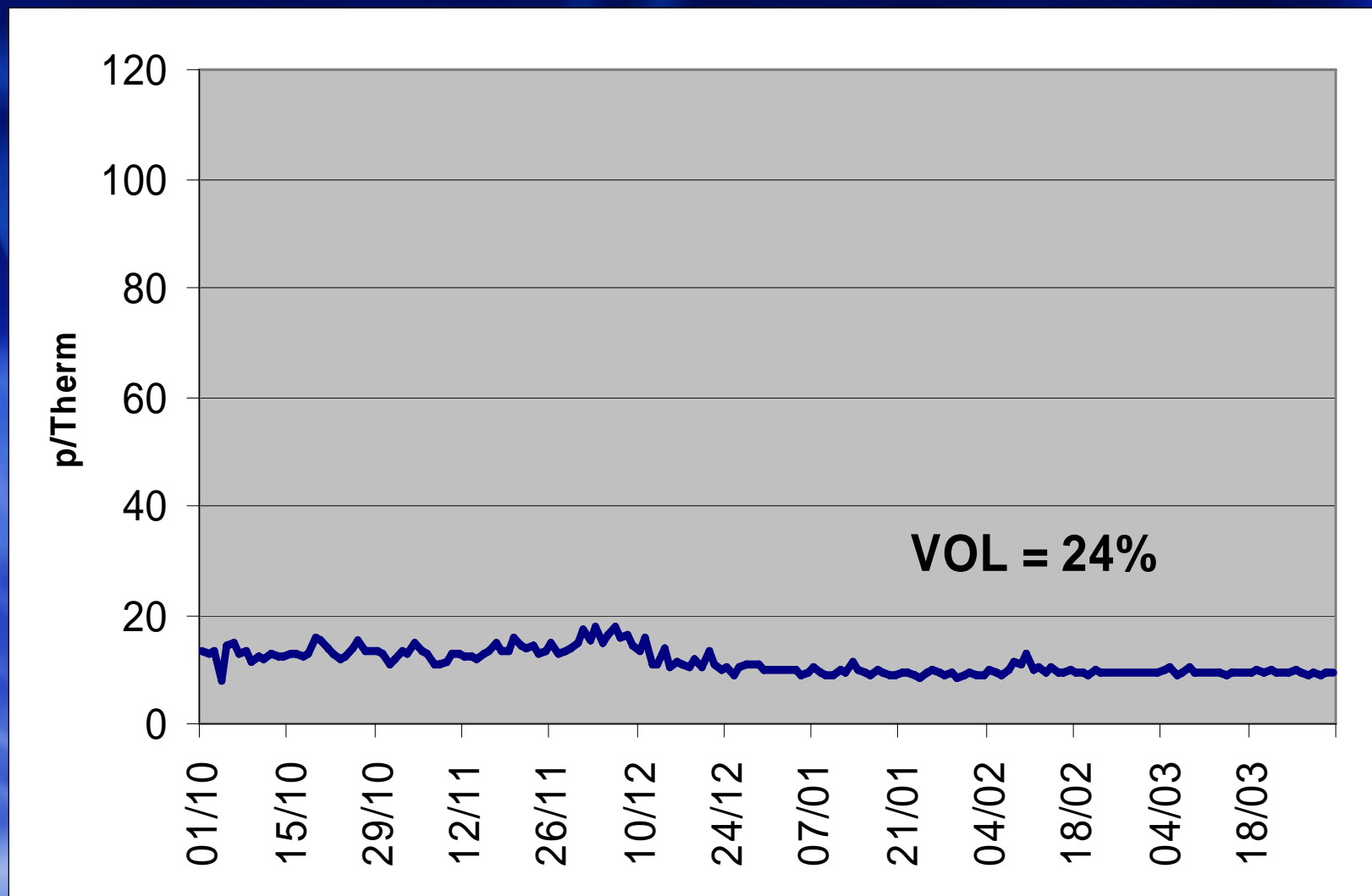
Winter 5 SAP Prices





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Winter 98 SAP Prices





Sempra Energy *Risk Factors:*

- Weather
- Storage reliability
- Gas field decline
- Demand death
- Interconnector gas flows 2005
- Lack of storage/swing UK
- New gas pipelines
- LNG
- Demand side response
- European Storage, and transportation capacity