



18 September 2009

To: Independent Pricing and Regulatory Tribunal

Via email: [ipart@ipart.nsw.gov.au](mailto:ipart@ipart.nsw.gov.au)

Submission with regards to the Review of regulated retail tariffs and charges for electricity 2010 – 2013 draft methodology paper.

Dear Madam / Sir

Thank you for inviting submissions to the above mentioned paper. d-cyphaTrade is the official product sponsor of the d-cypha SFE Electricity Futures and Options Market. Our senior management has over 18 years combined experience in the Australian electricity market and is well qualified to comment on this paper.

1. d-cyphaTrade shares IPART's view<sup>1</sup> that competition and consumer choice provide the best way to protect consumers in the electricity retail markets and hence, d-cyphaTrade opposes regulated electricity retail tariffs, a view which is also supported by recent statements of the Federal Government<sup>2</sup> as well as by recent considerations of the AEMC<sup>3</sup>.
2. As IPART is however obliged to establish a regulated tariff, d-cyphaTrade believes that an approach based on hypothetical cost modelling is seriously flawed. Frontier Economics purports an ability to forecast future pool prices from which Frontier Economics then derives forecasted contract prices<sup>4</sup>. These forecasted contract prices are then used as a basis for efficient hedging strategies in Frontier Economics model Strike<sup>5</sup>. There are two problems with this approach:
  - i. IPART's use of an assumption-dependent "black box" model incorrectly assumes that theoretical pool price modelling provides a more accurate and commercially relevant prediction of future electricity pool prices than the prices of tradable electricity futures contracts. Electricity futures prices are determined by efficient

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<sup>1</sup> Transcript – Review of regulated electricity retail tariffs and charges 2010 to 2013 – Public Forum – Held at IPART offices – Tuesday 1 September 2009, page 4

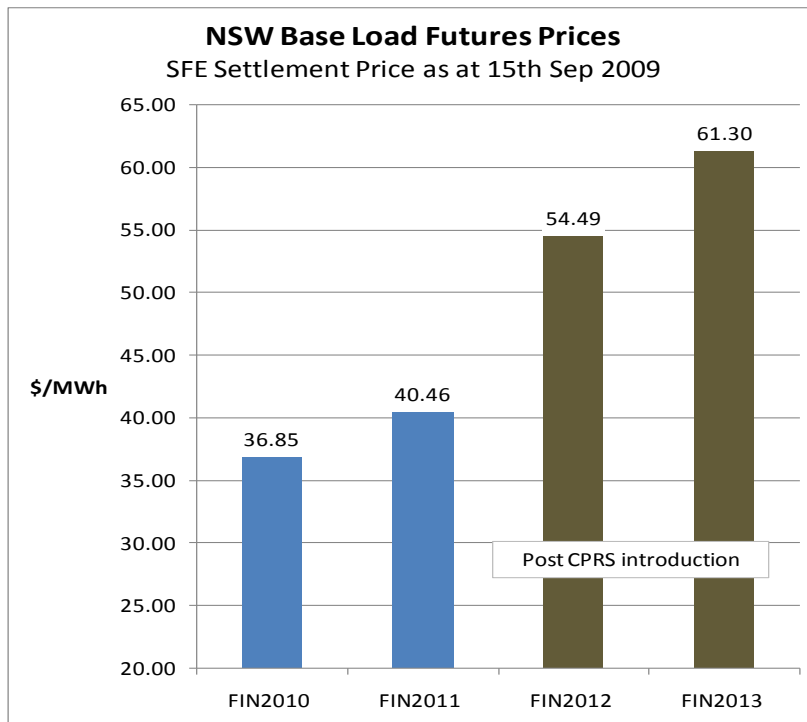
<sup>2</sup> ii Australian Government, Carbon Pollution Reduction Scheme: Australia's Low Pollution Future - White Paper, 15 December 2008 (the White Paper)

<sup>3</sup> Review of Energy Markets Frameworks in light of climate change policies, Australian Energy Market Commission, Discussion Paper, 1 May 2009

<sup>4</sup> Transcript – Review of regulated electricity retail tariffs and charges 2010 to 2013 – Public Forum – Held at IPART offices – Tuesday 1 September 2009, page 61

<sup>5</sup> Transcript – Review of regulated electricity retail tariffs and charges 2010 to 2013 – Public Forum – Held at IPART offices – Tuesday 1 September 2009, page 61

- market forces and represent the *market consensus view* of future electricity pool prices.
- ii. The output from the Strike model is limited to forecast (hypothetical) forward prices. A retailer cannot transact on those prices (unless the forecast price just happens to be identical to the live futures market) hence the model's hypothetical cost is commercially irrelevant to a NSW retailer.
3. The most accurate and transparent price benchmark on which to assess the true hedge price (and cost) for NSW retailers is the d-cypha SFE Electricity Futures Market. The 4 year futures price curve shows the efficient (and achievable) hedge price for a NSW retailer, representing the actual market-based efficient clearing cost of NSW electricity hedges. It is now generally accepted that Australian electricity market participants such as NSW retailers have seamless access to a liquid electricity futures market out to 4 years ahead. During the Financial Year 2008/09 the market traded at an average of 152% of underlying system demand, and in August 2009, the futures market traded at 175% of underlying system demand i.e. the d-cypha SFE market volume was 75% greater than underlying physical electricity demand. The electricity futures and options market trades over \$15 billion in face value annually and includes the world's largest exchange traded electricity options market.
  4. The presence of the publically available futures price curve negates the need for IPART to rely on hypothetical pool price models or to separately value individual factors which are already priced into electricity futures prices such as:
    - a. Generators' CPRS costs or any other Short Run Marginal Cost inputs;
    - b. Generators' Long Run Marginal Costs;
    - c. Predictions of entry time, size or technology type of new generation;
    - d. Any other input commonly used in theoretical pool price modelling.
  5. IPART's methodology should not allow *avoidable* costs incurred by retailers to be passed on to electricity consumers. A NSW retailer's wholesale cost of electricity as it relates to future pool price outcomes (or commercially achievable hedge costs) can be ascertained from transparent and independent electricity futures prices. Futures prices are **INCLUSIVE OF ANY RELEVANT CPRS COSTS**. For example, futures prices across 2011, 2012 and 2013 already reflect the market consensus view of the extent to which generators will be able to pass through any CPRS costs onto retailers via higher spot electricity prices (and hence futures hedge prices). Note the price increase from pre-CPRS futures prices (FY2010 and FY2011) to post-CPRS futures prices (FY2012 and FY2013) in the attached graph. For the purposes of IPART's methodology, the actual CPRS cost incurred by carbon emitting generators is irrelevant other than to the extent that it is already priced into futures prices. Efficiently managed retailers use "carbon-clean" electricity hedge contracts such as futures and/or Over the Counter (OTC) hedge contracts without carbon-pass-through cost escalators. If IPART's tariff methodology allowed NSW retailers to additionally charge NSW consumers for irrelevant CPRS cost assumptions, NSW consumers will be overcharged.



The d-cypha SFE Futures and Options market provides all raw information inputs required by IPART including:

1. 4 years of transparent forward looking futures and options prices available online and in real time;
2. Option implied volatility settlement data showing a market-consensus view of expected annual futures price volatility; and
3. Historical daily futures settlement price and individual trade history dating back to 2002. This data may be utilised to back test futures price volatility and to observe historical price levels.

More refined hedge cost analysis including calculation of a price premium to account for load shaping, demand flex etc can be applied to the relevant base load futures price benchmark.

Please contact myself or another member of the d-cyphaTrade team on 1800 330 101 for further information.

Yours Sincerely,

**Dean Price**

General Manager