



24 March 2003

Mr Sebastian Roberts  
A/g General Manager  
Regulatory Affairs - Electricity  
Australian Competition and Consumer Commission  
PO Box 1199  
DICKSON ACT 2602

### DISCUSSION PAPER – REVIEW OF THE REGULATORY TEST

We refer to the request for comment on the Discussion Paper "*Review of the Regulatory Test*" ('the Discussion Paper') and ask that you accept this as a submission on behalf of Ergon Energy Pty Ltd (Ergon Energy). Ergon Energy actively participates as a Retailer in the National Electricity Market and holds retail licences in Queensland, New South Wales, Victoria and the Australian Capital Territory.

At this stage, Ergon Energy is restricting its comments to section 3.3 of the Discussion Paper and in particular, the input sought by the ACCC on the appropriateness and practicability of implementing a competition measure as part of the revised Regulatory Test.

Ergon Energy does however reserve its right to comment on other aspects of the Discussion Paper at a later point in time.

We appreciate the opportunity to comment. Please feel free to contact me on (07) 3228 8116 should you wish to discuss this submission in any way.

Yours faithfully,

**Darren Barlow**  
**Manager, Regulatory & Community Affairs**

ERGON ENERGY



SUBMISSION TO THE ACCC:  
DISCUSSION PAPER – REVIEW OF  
THE REGULATORY TEST

## 1.0 INTRODUCTION

We refer to the ACCC's request for comments on the *"Review of the Regulatory Test"* (Discussion Paper) and ask that you accept this and the attached letter as Ergon Energy's submission on the issues raised therein.

Ergon Energy is restricting its comments at this point in time to the overview of competition measures contained in section 3.3 of the Discussion Paper. We do however reserve our ability to make additional comment on this or the other issues raised for consideration in the Discussion Paper, at a later point in time.

As a general comment, while in principle Ergon Energy supports the recognition of competition benefits within the context of the Regulatory Test, there is the need to ensure that any measure introduced is objective and robust over a range of market development scenarios.

## 2.0 COMPETITION BENEFITS TESTS

Any mechanism utilised in the National Electricity Market (NEM) to measure competition benefits must be capable of identifying the parties whose behaviour the network investment is capable of modifying as well as quantifying the benefits that are alleged to result.

Ergon Energy acknowledges that this is a sophisticated task, as the measures traditionally applied to assess the state of competition within a market (eg the Herfindahl-Hirschman and Four Firm Concentration Indexes), fail to recognise that in the case of electricity, there need not be a direct correlation between market share and the ability to set or influence price.

The unique characteristics of the electricity market should therefore be recognised in the development of an appropriate competition measure. Characteristics requiring consideration include the following:

### **Repeat Auction**

The main problem with development of a model of supply-side behaviour is the inability to account for the dynamic aspects of the market which result from the repeat auction process.

For example, competition models (eg Cournot) are usually based on the presumption that players act unilaterally (ie that there is no explicit or tacit collusion) and that 'games' are static. In dynamic markets of repeated interaction however, firms develop 'learned' behaviours, leading them to compete less aggressively with one another (ie through price-cutting) and resulting in higher prices.

The dynamic nature of the electricity market and the repeat auction process will therefore need to be captured under any competition model proposed.

### **Inelastic Demand Curve**

The ability to effectively model supply-side behaviour is particularly relevant to the electricity industry where there is a highly inelastic demand curve, making the demand

side of the market at times totally irrelevant in terms of the effect they have on suppliers' actions and strategies.

High inelasticity of demand contributes significantly to a generator's ability to influence prices. That is, the inelasticity of demand ensures that at times the demand-side can withhold capacity or raise prices, without incurring any loss of profits.

### **Access to Data**

Many simulations rely heavily on access to a greater quality of information than that to which electricity market regulators historically have access.

In particular, most simulations are not based on data that allows for an accurate measurement of marginal costs at different levels of production due to information inaccessibility and instead, are based upon average variable costs or the costs of the last generator dispatched to meet demand. The difference between average variable and marginal cost is quite distinct; average variable cost is the average cost of operation to produce a unit of output over a specified level of output, whereas marginal cost is the cost of producing an additional unit of output at a specified level of output.<sup>1</sup>

There is the need to ensure therefore that the competition measure is supported by powers that allow access by the regulator to all data necessary to the development of accurate marginal cost functions.

## **4.0 PREFERRED COMPETITION MEASURE**

It is acknowledged that reliance on assumptions and the veracity of data make all forms of modelling imperfect. Of the options available however, Ergon Energy would support the further investigation of a Price Cost Margin Index (PCMI) measure (more commonly referred to as a Lerner Index), focusing on participant behaviour and measuring the difference between price and marginal cost.

That is, in the form:

$$L = \{p - (mc) * q\} / p = 1/e$$

Where:

p = firm's price;

mc = firm's MC;

q = firm's output; and

e = firm's elasticity of demand.

Provided that:

- marginal cost, rather than average variable cost, functions are applied; and
- a timeframe is applied which allows a realistic determination of the long-run marginal costs of the firms modelled,

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<sup>1</sup> Reference to be inserted (Brennan, 2002: 2). KM to provide.

we believe that the use of a PCMI and its assessment of investment impacts relative to competitive prices will provide a relatively dynamic approximation of electricity market conditions and an appropriate starting point for the assessment of competitive outcomes.

Ergon Energy has previously commissioned UniQuest (in conjunction with the Graduate School of Management and the School of Economics at the University of Queensland) to undertake an independent research project focusing on an investigation of:

- whether market power exists, in any exercisable form, in the Queensland generation sector of the NEM; and
- the extent to which supply-side market power, if it exists, is misused to influence wholesale electricity prices.

In undertaking this analysis, UniQuest utilised a market power measure based on the PCMI referred to above and concluded that there has been a historical divergence between market and competitive prices.

We would welcome the opportunity to discuss this study and the conclusions drawn on the divergence of prices from competitive outcomes with the ACCC in greater detail. In particular, we believe that the above approach would provide a useful indication of circumstances where historically, wholesale prices have been significantly above marginal costs and a starting point for consideration of the means by which a competition index can be practically applied to the NEM.