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SUBMISSION to PRODUCTIVITY COMMISSION

**IMPACT OF COMPETITION POLICY REFORMS
ON RURAL AND REGIONAL AUSTRALIA**

THE IMPACTS OF ELECTRICITY TRANSMISSION PRICING

1 INTRODUCTION

As part of the application of NCP principles to the electricity industry, pricing structures have been established by the Queensland Electricity Reform Unit (QERU) for use of the transmission system in Queensland. The structure of these prices have particular relevance to regional economic development for Central Queensland.

This paper detailing the current position with Transmission Charges clearly indicates that regional development in Central Queensland is not being supported by the existing charge structure and in fact major industrial customers in Central Queensland will be subsidising customers in the South East corner. The table below supports this position by providing the average TUOS charges for selected Corporations in Queensland.

It is the view of CAPELEC that the current TUOS pricing arrangements do not recognise the proximity of generators to load in Central Queensland and this is likely to have a detrimental affect on Regional Development.

To illustrate this point, CAPELEC understands from information provided by the Queensland Electricity Reform Unit (QERU), that the TUOS charges for a selection of Queensland Corporations are of the order of the figures shown below.

Corporation	Total Shared Network Cost (C/kWh)	Amount Postage Stamped	Amount True Locational
NORQEC (North Qld)	0.96	0.42	0.54
CAPELEC (Central Qld)	0.62	0.42	0.20
Energex (South Qld)	0.59	0.42	0.17

These are average figures but clearly indicate that customers in the South East corner are receiving a favourable outcome compared with Central Queensland. This is despite the fact that the majority of the generation plant is in Central Queensland exporting electricity south. The CAPELEC total cost should be significantly less than for Energex.

The continued economic development of Central Queensland depends heavily upon the availability of low cost energy. With the major coal resources and associated generation plant located in Central Queensland, it would seem reasonable that energy transmission costs should reflect this proximity. With the current pricing structure, the embedded strengths of the Central Queensland region cannot be leveraged to enhance economic development opportunities.

Of particular concern is the level of postage stamped TUOS charges. The postage stamping leads to the inadequate recognition of the proximity of major customers to excess generator capacity. Consequently customers will be encouraged to establish elsewhere or if possible, bypass the transmission network altogether. The deficiency with the methodology of charging has become particularly evident in recent months where supply options to the proposed Australian Magnesium Corporation Plant have been considered for a number of locations in Central Queensland. Through bypassing the transmission system altogether (this requires the duplication of some existing transmission assets), significant savings can be achieved. Clearly the current pricing signals can drive inappropriate investment decisions.

This is also particularly relevant to the Gladstone area where the Queensland Government is promoting an Industrial Development Zone. The Gladstone Development Zone provides all of the major utility items required by Mineral and Chemical processes including gas, deepwater harbour facilities, water and electricity. The inequity in the TUOS prices will not encourage customers to establish in this zone.

CAPELEC has made submissions on these issues to the Queensland Government and more recently to the National Electricity Code administrator (NECA) seeking changes to the pricing structures. To address this key issue, CAPELEC has recommended that a multiple transmission zone model be implemented in the Queensland with significant reductions in the postage stamped charges. A summary of the impacting issues that have lead to this inequitable situation is provided as Attachment 1.

CAPELEC has expressed a concern that without due consideration of the nature of the transmission network in Queensland, pricing decisions could be overly influenced by the major market states (ie NSW and Victoria), both of which have compact transmission networks.

The above issue highlights that competition policy reforms have not delivered a favourable outcome in terms of electricity prices for Central Queensland and this will impact on regional development.

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ATTACHMENT 1 - Summary of Impacting Issues

The impacting issues that have lead to the inequitable TUOS pricing regime include:

- * ***Number of Market Zones in Queensland***
- * ***Constraints (Network)***
- * ***Interconnecting Assets***
- * ***Loss Factors***
- * ***Postage Stamping.***

NUMBER OF MARKET ZONES IN QUEENSLAND

QERU has determined that Queensland will have a Single Market Zone to avoid market gaming by the limited number of generators. This approach fails to recognise the three natural zones that exist in Queensland - namely:

- South East Queensland with a large metropolitan customer base with limited generation capacity,
- Central Queensland with major surplus generation capacity and major resource based customer development, and
- North Queensland with its potential for industrial and agricultural development with current minimal generation capacity.

The significant surplus generation capacity of Central Queensland must be sold in the other two zones. This has forced the development of major interconnecting facilities (ie Calvale-Tarong). The establishment of a single market zone does not acknowledge the role of these interconnectors which have been built to overcome capacity constraints. Under a multiple market zone approach, these interconnectors would be constructed to overcome capacity constraints which would otherwise have caused energy price differentials between the zones.

The determination of TUOS changes with a Single Queensland Market Zone results in the costs of these interconnectors being apportioned to all customers rather than to those in the specific zone they service.

The adopted TUOS allocation approach, using the current NEC philosophy results in approximately fifty percent of the interconnector costs being postage stamped across all Queensland customers. It is this postage stamp approach that leads to the inadequate recognition of the proximity of major customers to excess generator capacity in Central Queensland. Failure to recognise this proximity will stifle development in Central Queensland and encourage the shift of major load to southern states. In some limited cases, opportunities may exist for major customer to site their plants adjacent to power stations. However in these cases, the TUOS prices give clear incentives to bypass the transmission system. This leads to inefficient investment decisions as inevitably some existing and adequate assets will be duplicated to avoid TUOS charges.

The continued development of both Central and North Queensland hinges upon the provision of low cost energy and infrastructure services in order to attract foot loose industries (ie Major Reserve and Claimed Reserves).

LOSS FACTORS

Transmission Loss Factors have been introduced to provide some locational signal as to where future generators and customers should locate. Loss factors are applied to the energy price as purchased from the pool and affect the energy purchase price at the Bulk Supply Point. The locational effect provided by the Loss Factor philosophy in no way offsets the real market signals that would be provided by multiple zones.

As an example, to overcome a capacity constraint within South East Queensland, a new transmission line is being constructed between Calvale (Callide) and Tarong. The effect of this line under the current TUOS pricing regime will be to:

1. Increase the level of TUOS allocated to Central Queensland customers,
2. Reduce the price differential between Central Queensland customers and the pool, (as a result of lower losses),
3. Increase the delivered cost of energy in Central Queensland, and
4. Not provide any improvement in service.

The situation worsens as generators continue to locate close to the coal basins in Central and Northern Queensland, forcing the establishment of additional interconnectors. A clear example of this is the development of the Stanwell generator where interconnectors were installed to allow the generation capacity to be used in South East Queensland and North Queensland.

RECOMMENDATIONS

To achieve an equitable allocation of transmission charges, CAPELEC contends that it will be necessary to establish three transmission pricing zones in Queensland. In the absence of inter-regional trading it will be necessary to assign interconnecting transmission assets to the North Queensland and South East Queensland zones. Following this assignment, the Transmission Pricing philosophy outlined in the NEC can be applied.

It is recommended that the multiple transmission zone proposed be implemented within the Queensland Jurisdiction as part of the NECA review. If the current TUOS methodology continues, major Central Queensland customers will be forced to subsidise their southern and northern competitors. The customers will become aware of this subsidisation through the availability of information such as published TUOS charges, Loss Factors and Pool Prices.

CAPELEC is concerned that without due consideration of the nature of the transmission network in Queensland, pricing decisions could be overly influenced by the major market states (ie NSW and Victoria), both of which have compact transmission networks.