Energy Action Group Submission to the Australian Energy Regulator on the PowerLink Revenue Proposal 2006

This unavoidably brief submission has been made to the AER in spite of the NEM Advocacy Panel decision to reject the EAG Application for funding to participate in the PowerLink revenue determination!

Preamble

The Energy action Group is a 29 year old, membership- based, not- for- profit incorporated association attempting to represent the interests of less than 160 MWh consumers across the NEM.

The Energy Action Group recognises that the PowerLink application is the first transmission revenue determination to be made by the Australian Energy Regulator under the National Electricity Act and Rules and as such represents the start of the revised AER regulatory arrangements under the NEL.

Some Brief Comments

The PowerLink application covers a system that has the highest Annual Load Duration Curve running at an average utilisation rate of around 76%, the highest utilisation rate of any transmission company in Australia. This high utilitisation rate creates a group of unique management demands for the effective supply electricity to Queenslanders. The high utilisation rate makes it difficult to take lines out of service to maintain them, and difficult to upgrade their capacity. The problems associated with Powerlink's high utilisation rate are exacerbated as the rate in demand for energy increases across Queensland, which is putting strain on the very long transmission network. The network is further characterised by disparate generating and load centres.

PowerLink's growth rate is derived from a combination of high load growth in South Eastern Queensland due to rapid population growth and a substantial increase in air-conditioning and the number of energy intensive projects proposed for Central and Northern Queensland.

High compound load and energy growth rates have major ramifications in regulatory outcomes for network owners and the AER as there important implications relating to the treatment of Depreciation and Capex.

Under the current Australian regulatory arrangements the majority of transmission assets are usually depreciated over a 50 year period. Sustained high compound growth rates have the potential to rapidly change the depreciation cycle if the assets become obsolete as a higher capacity line or sub station is built to replace the obsolete asset. EAG understands that PowerLink's approach is to duplicate assets, keeping the fully loaded asset in service whilst duplicating the line to accommodate the increased load.

Table 1 illustrates the relationship between compound growth rates and the length of time for consumption to double. It is clear from Table 1 that the NPV savings associated with delaying a project decrease with increasing compound growth rates. The majority of NEM transmission assets owners, excluding PowerLink, have energy (GWh) and peak load growth rates (MW) below 4 %. It should also be clear that if the AER uses a CPI indexation for labour and raw material costs and the actual costs are well above CPI, then the costs of a project will blow out significantly over time.

This difference between 3% to 4% growth is five years in doubling time while the change from 7 % growth and an 8% growth rate is one year in the doubling time derived from Table 1.

Table 1 Relationship between Percentage Compound Growth Rates and the Doubling in Consumption in Years

% Growth	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Doubling Yrs	70	35	23	18	14	12	10	9	8	7	6.3	5.8	5.3	5

PowerLink provides growth forecasts in the Queensland Annual System Planning Review which is used in turn by NEMMCo for the Statement of Opportunities and the Annual National Transmission System Report. The Queensland Annual System Planning Review is bases on an assessment of load growth determined by PowerLink using information provided by Ergon and Energex as a part basis and PowerLinks estimates of inter regional transfers. **EAG believes that a review of the accuracy of Queensland load forecasts would assist the AER in assessing the contribution of load growth in driving Capex and Opex.**

EAG recommends that the AER closely examine the material available in the PowerLink applications to justify and substantiate their load growth projections.

A) Air-conditioning

In the past 4 years all EAG has been able to glean across the NEM (not just Queensland) from the SOO, the various jurisdictional regulatory determinations and the Australian Greenhouse Office on the installation, sales and size of air-conditioners is that there appear to be 1000 different air-conditioner types available to the residential market, between 1 and 12 KW for one phase connected customers, and between 13 and 50 KW, 3 phase connected customers.

EAG is aware from anecdotal evidence that there are residential air-conditioning installations as large as 50 KW and that 30 to 40 KW whole- of - house units are not unusual. If this trend continues then the Queensland network businesses, particularly PowerLink and Energex, will sustain ongoing high levels of network investment to ensure that they are able to meet their Guaranteed Service Levels. There appears to be too little information in the PowerLink application to the AER to justify the level of investment that they claim that they need to meet the South Eastern Queensland load growth.

B) Population Growth

This is an issue not only of concern to PowerLink but the Queensland Government and the local councils who have to supply adequate infrastructure to meet the projected population growth. It would be a pertinent exercise for the AER to try and reconcile the various SE Queensland growth projections. This evaluation should try to evaluate the Queensland Government policies to promote energy efficiency and any other policy that they have developed and implemented to reduce household energy consumption, including developments like a Home Energy Rating Scheme and the promotion of various alternative low electric intensive home heating and hot water systems.

C) Small Business and Commercial Business Growth

Small business and commercial growth is associated with rapid population growth, particularly large shopping complexes and a large number of service businesses that have a high dependence on electric heating and, more importantly, cooling loads.

D) New Industrial Load Growth

EAG believes that this issue needs to be clarified. What free rider provisions have been put in the PowerLink submission to cover transmission augmentation after new industrial or significant existing business augmentation connections costs have been paid for and what costs will be paid for by the existing customer base to augment the existing system.

The AER review of the Powerlink Application needs to closely examine the relationship between the high load factor, growth and the reliability of aging assets, along with the timing of both Powerlink projects and the connection of new large industrial loads. It is clear that this complex relationship can be used to inflate both the capex and opex figures. This issue also raises the question as to how PowerLink are monitoring their system to minimise outages and failures.

EAG agrees that the questions raised in the 13th of June EUAA and the June Major Energy users in Queensland submission. We also believe that if these questions are answered then they will also help clarify a number of the questions that EAG had about the PowerLink Application.

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