

Memorandum

From: Denis Lawrence
To: Alex Sim, Commerce Commission
CC: Paolo Ryan, Calum Gunn
Subject: Transpower Opex Provisions

Date: 17 November 2006

I have been asked to review the opex provisions which form part of Transpower's administrative settlement offer to the Commerce Commission. In its email to the Commerce Commission of 16 October 2006 Transpower argues for its opex provisions to be allowed to increase by the consumer price index (CPI). Transpower argues this outcome is consistent with the decision arrived at by the ACCC in its 2005 review of the NSW transmission business, TransGrid.

Transpower has proposed an opex efficiency target of 2 per cent inclusive of economy-wide productivity gains similar to that used by the ACCC in its TransGrid decision. If used in conjunction with an input price index (such as the labour cost index (LCI)) and ignoring output growth, the cost path would be of the form $LCI-2$ per cent. In its TransGrid decision, the ACCC allowed TransGrid to increase its operating costs using input price indexes that varied between CPI and $CPI+5$ per cent. Labour costs were inflated at 4.5 per cent. Given that the Australian CPI increase has been around 2.5 per cent per annum, TransGrid's labour prices have been forecast to increase at approximately $CPI+2$ per cent. Since labour costs make up the majority of opex, Transpower argues TransGrid's allowed cost path was of the form $LCI-2$ per cent or CPI (since $LCI=CPI+2$). Because the TransGrid cost path is escalated using input costs rather than the CPI, the efficiency target of 2 per cent is inclusive of economy-wide productivity gains. This is because the CPI is effectively an output index which already includes the effects of economy-wide productivity growth whereas these effects are not built into an input price index.

With regard to measuring output growth, I have previously agreed with Transpower's argument that some allowance should be made for increased growth in capacity resulting from investments in duplexing, reconductoring and thermal upgrades. I suggested these investments might justify increasing the estimated growth in system capacity from 0.2 per cent (based solely on line lengths and voltages) to 0.3 per cent per annum over the regulatory period. Transpower argues that this increase in overall transmission capacity over the next five years is likely to be too conservative given that it has substantial investment plans. Transpower argues that a minimum growth in system capacity of 0.5 per cent per annum should be used. When combined with the Electricity Commission's estimate of throughput growth of 1.7 per cent per annum this leads to a growth factor of 0.9 ($=1.7*1/3 + 0.5*2/3$) per cent per annum as compared to my earlier estimate of 0.7 per cent per annum. Given the uncertainty surrounding these estimates and the relative closeness of the two positions now, I have no objection to using the Transpower growth factor of 0.9.

Taking the proposed 2 per cent efficiency target and the growth factor of 0.9 per cent, Transpower's proposed cost path is $LCI-2+0.9$ or $LCI-1.1$. Transpower goes on to argue that if the Commission prefers to base the cost path on CPI, then assuming $LCI=CPI+1.1$, the appropriate cost path would be CPI. Transpower argues that the differential of 1.1 per cent is at the lower end of the range of likely differences between the CPI and labour price increases and is also consistent with the economy-wide productivity growth rate. The logic here appears to be that we would normally expect economy-wide output price change to be less than economy-wide input price change (for all inputs) by the extent of the growth in economy-wide total factor productivity.

The framework now being advanced and articulated by Transpower appears logically sound. There are, however, some remaining doubts about the magnitude of the parameters being used to populate the framework. Chief among these is the magnitude of the achievable opex partial productivity improvements. The figure of 2 per cent per annum is quite conservative compared to the measured gains that have been achieved by the New Zealand distribution lines businesses. A lack of consistent data on Transpower's opex performance has hampered efforts to measure Transpower's actual opex partial productivity growth historically. Similarly, we have been unable to test Transpower's assertion that it has already achieved most of the available 'catch-up' gains in earlier corporatisation phases due to a dearth of consistent data for Transpower. We have also not had the opportunity to conduct an international benchmarking study of transmission business productivity levels.

Other weaknesses in the Transpower argument relate to the mixing of partial productivity and price effects and the corresponding total input effects. However, a lack of relevant data again hampers accurate application of the framework in this respect.

Despite the relative lack of hard data available, the position being advanced by Transpower is consistent with the quite limited relevant information currently available. Given the context of the overall administrative settlement offer, indexing the opex path forward by the CPI is likely to place some incentive on Transpower to achieve further opex efficiencies.

To allow future price thresholds to be set with a higher degree of accuracy, it would be desirable to require Transpower to supply more consistent data through time on the price and quantity of each of its key inputs and outputs.