



27 June 2014

Submissions
Commerce Commission
PO Box 2351
Wellington

Dear Sir/Madam

Counties Power Submission: Transpower Individual Price-Quality Path

1. Introduction

Counties Power appreciates the opportunity to make a submission on the Commerce Commission's (ComCom's) draft decision "Setting Transpower's individual price-quality path for 2015 -2020".

Counties Power operates the electricity distribution network in south rural Auckland and north Waikato. Counties Power is owned by the Counties Power Consumer Trust on behalf of the 38,000 customers it serves.

Counties Power operates over 3,000 km of lines, including an extensive 110kV sub-transmission network as well as a 33kV sub-transmission network.

Counties Power's geographical location means that all Transpower transmission lines supplying Auckland pass through Counties Power's territory. From these transmission lines Counties Power connects to the grid at the Bombay 110kV substation and the Glenbrook 220kV substation.

2. Strata Technical Advisor Report

Counties Power's submission on the ComCom draft decision relates to the supporting document 'Strata Technical Advisor Report on the Transpower New Zealand Limited IPP Proposal for RCP2 – 16 May 2014'. Within the Strata Report Counties Power's submission is in reference to paragraph 307 (a) and appendix 'A.1 PD30 – Otahuhu – Wiri Transmission Capacity'.

COUNTIES POWER LIMITED

Paragraph 307 (a) and appendix A.1 covers Strata's findings of Transpower's proposed investment to ensure sufficient capacity at the Wiri substation for N-1 supply. Of the six options to resolve this constraint Transpower has sought \$18.5m for their preferred option, which is a 220kV connection to the Bombay substation.

This option has significant implications for Counties Power's future network design and the supply of power to one of New Zealand's fastest growing regions. In this submission, Counties Power seeks the ComCom to consider additional factors that appear to be absent in Strata's report.

3. Bombay substation

The substation was originally built around the 1920's. Power flows from the south to the substation via a double circuit 110kV line from Hamilton and an 110kV line from Arapuni. From Bombay the power flows north to Wiri and Otahuhu.

The Bombay substation supplies power from the southern part of Papakura to the northern Waikato area down to Meremere. The substation is the only grid supply for sixty percent of Counties Power's network, with most of the region's growth occurring in the area connected to the Bombay substation.

Ninety-six percent of the substation capacity is used to supply the Counties Power network. The remaining four percent supplies WEL Networks via a 33kV connection to its northern-most network area in Meremere.

Counties Power takes supply at 33kV from its second grid connection point at the Glenbrook substation. The 33kV supply and associated 33kV sub-transmission system results in Counties Power being only able to shift small amounts of load between the Bombay and Glenbrook substations.

4. Growth on the Bombay substation

Counties Power notes that the Strata report fails to acknowledge the significant urban expansion in south Auckland and northern Waikato. In particular, the Bombay substation is the sole grid supply for the Auckland Council's southern Rural Urban Boundary expansion, the proposed Drury South Industrial Zone, four of the Auckland Council Special Housing Areas, and northern Waikato urbanisation (see the attached map). This growth is detailed below, with all areas identified supplied by the Bombay substation.

a. Rural Urban Boundary expansion

The Proposed Auckland Unitary Plan (PAUP) includes a compact city model combined with expansion of the Rural Urban Boundary (RUB). Under the RUB, urban expansion is planned for certain satellite towns (such as Pukekohe) as well as a new greenfield areas and Special Housing Areas. It also includes the overall approach to infrastructure, specifically the focus on improving the resilience and

robustness of the existing networks and providing infrastructure for new growth or intensified areas in an integrated, efficient and effective manner.

Under the expanded RUB, the growth in Counties Power's Auckland region (supplied by the Bombay GXP) is expected to grow by an additional 31,000 houses and 33,000 jobs over 30 years. These areas are shown in grey in the attached map. Additional growth is planned for by the Waikato District Council in Counties Power's Waikato region.

b. Proposed Drury South Industrial Zone

Within Counties Power's region is the proposed Drury South Industrial Zone. This region is being formed through a private plan change and it involves rezoning 361 hectares of rural and quarry land to a mix of industrial and business development.

The rezoning was approved by a panel of independent hearing commissioners. Their decision is currently the subject of three appeals before the Environment Court. If approved by the Environment Court, the development will be the biggest industrial greenfield site in Auckland and is anticipated to provide employment for approximately 6,880 people when fully developed (around 2025-2030).

c. Auckland Housing Accord

So far, four special housing areas have been announced for the Counties Power network area as part of the Auckland Housing Accord. Total housing in the four areas is approximately 8,000 dwellings¹, with the land to be rezoned over the next three years. Actual construction of the houses will be subject to demand.

d. Northern Waikato urbanisation

Urbanisation is occurring of northern rural Waikato with rapid growth in the most northerly Waikato town of Pokeno. Counties Power is currently building new high voltage distribution lines to connect a new dairy plant and new residential subdivisions. Additional industrial expansion is expected with expansion of an industrial subdivision beside the dairy plant. This region is again supplied by the Bombay substation.

5. Counties Power network expansion

Counties Power itself is putting significant investment into infrastructure within its network to support the proposed regional growth. This has been through the construction of an extensive 110kV sub-transmission network. This has included a circular 110kV circuit between south Drury and Bombay and a second circular 110kV circuit between Pukekohe and Bombay. A third 110kV circuit is currently being constructed between Pukekohe, Tuakau, Pokeno and back to Bombay. This 110kV

¹ The split of dwellings being Wesley College development 4,500, Hingaia 2,700, Anselmi Ridge 65, and Belmont 720.

transmission network has been accompanied by new 110kV substations at Opaheke, Pukekohe and a third, currently being constructed, at Tuakau.

This 110kV transmission network has been built, in part, with a view to lowering costs at the Bombay substation. These savings are made through the removal of the 110kV/33kV transformers and associated infrastructure. Under the proposed PD30 solution these savings may be lost if Counties Power is charged connection charges for the substation upgrade.

6. Demand side response

Strata proposed demand side response for a short to medium term to enable deferral of capital expenditure. Counties Power would dispute this as an option noting that:

- Transpower's forecast peaks will already assume significant demand side response through hot water load control. Counties Power has no additional demand side responses available;
- Demand side response is variable and contracted under an optional short term basis and so will not give Transpower the long-term certainty required. Consequently, relying on demand side management will risk power supply to major parts of South Auckland should insufficient demand be contracted. This is because if insufficient interruptible demand is contracted in any one year then an infrastructure upgrade fix would not be able to occur in time; and
- From Counties Power's understanding of the industrial and commercial customers connected to Bombay, we can't see that there would be any opportunity for demand side management.

Consequently Counties Power does not believe that demand side responses are a sustainable solution considering the growth in this area.

7. Consultation

Counties Power has been in discussions with Transpower about PD30 in terms of load growth, design options, and future charges. However, there needs to be a master planning process for supply to our region and Wiri. Transpower has indicated that they will proceed with further discussions once the ComCom has given a final decision.

This lack of a master plan and uncertainty around future charges is concerning. Counties Power's account manager and pricing manager have advised that they expect that no additional charges will be levied on Counties Power; however, Transpower will not guarantee this will be the final outcome. Consequently, Counties Power is supporting a solution with no visibility of the costs to Counties Power.

8. Qualified support

Due to the difficulties understanding the financial impact upon Counties Power, Counties Power is only giving qualified support while Transpower is confirming the charging arrangements. This is because while there is significant growth occurring on the Bombay substation, Counties Power is not in a position to fund the Bombay component of PD30 and the Counties Power growth alone would not warrant the 220kV Bombay upgrade. Counties Power's requirements for additional capacity at Bombay, or a new substation at the Transpower Drury switching station, would be sometime between the years 2025 to 2030.

If Counties Power was charged the connection cost for this investment then effectively the people of the Counties region would be paying for a transmission upgrade for the benefit of Auckland consumers upstream (i.e. cross subsidizing Vector's consumers). Consequently, Counties Power opposes Transpower's proposed PD30 investment if the connection charges are not classified as interconnection assets.

9. Conclusion

The Bombay to Otahuhu transmission line covers one of New Zealand's fastest growing regions. We believe that this is true both in Counties Power's area and in Vector's network supplied by the Wiri substation. Counties Power hopes that the residential and industrial expansion that we have listed will be taken into consideration by Strata and the Commerce Commission in reviewing the draft decision for funding of PD30.

Yours sincerely



Andrew Toop
Network Commercial Manager
Tel: 09 237 0321 or 027 522 6562

