Transmission Pricing Methodology – Second Issues Paper Supplementary Consultation

Submission to the Electricity Authority

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Executive Summary – Second Issues Paper Submission

As outlined in our Second Issues Paper Submission, Buller Electricity does not support the adoption of the TPM guidelines proposed by the Authority. While some aspects of the proposal have merit, the potential for implementation issues, uncertain outcomes, and unintended consequences are considered to be major risks. In terms of the overall pricing structure of the proposal and development framework, Buller Electricity supports the views of the ENA as detailed in their submission. Buller Electricity's submission is primarily concerned with a number of important issues which have been identified relating to the implementation of the proposed guidelines. These issues are highlighted in our submission, as well as our view that the information provided by the Authority is insufficient to properly assess the full and long term impacts of the proposed TPM.

Executive Summary – Supplementary Submission

This supplementary submission should be read as part of our prior Second Issues submission on 26th July 2016. Having considered the Supplementary Consultation Paper, Buller Electricity acknowledges the Authority has considered and made adjustments for some of the issues raised by us and other submitters concerning 'double counting' of Residual and Area of Benefit (AoB) Gross AMD allocators. We note and agree with the adoption of a less prescriptive new set of Guideline principles that provide Transpower with more flexibility. However, we maintain our view that the underlying pricing methodology for allocation of future benefits and costs remains difficult to forecast or predict. We also remain concerned that the implementation of the proposed guidelines will have future unforeseen cost implications for us and other smaller Distributors, for whom substantive changes to grid or network connections may occur at any time due to large connected loads or new generation projects. The criteria and relationships for making adjustments to AMD's, Prudent Discounting and/or Optimisation seem as yet unresolved. We provide an example in this Submission to illustrate our concerns.

1. Introduction

Buller Electricity appreciates the opportunity to make a submission to the Electricity Authority (the Authority) in respect of the Transmission Pricing Methodology – Second Issues Paper Supplementary Consultation.

This submission is structured as follows;

1. Introduction
2. Material Changes to the Second Issues Paper
3. Scenario for the new Network and/or Grid Connections
4. Main Submission Points

In terms of the overall pricing structure of the proposal and development framework, Buller Electricity supports the views of the ENA as detailed in their submission. Buller Electricity's submission is primarily concerned with a number of important issues which have been identified relating to the implementation of the proposed Transmission Pricing Methodology (TPM) guidelines.

2. Material Changes to the Second Issues Paper

In its Second Issues Paper, the Authority indicated Transpower would be able to adjust the Area-of-Benefit (AoB) and Residual charges;

- for material changes in Load, through Optimisation[1], or
- to ensure new Load customers face similar Residual charges to comparable load customers, or
- by way of Prudent Discounts to transmission customers in certain circumstances.

In its Supplementary Paper, the Authority is proposing to give Transpower more flexibility, including the ability to;

- select a suitable Load allocator that ensures the Guideline principles are met i.e. not necessarily the Gross AMD as defined in the Second Issues Paper,
- adjust AMD's at any GXP to account for any double counting, anomalies, or to ensure equivalence for similar customers,
- include an LRMC cost allocator and/or kVAR charge to deliver further efficiencies.

We note the Authority, in its revised results spreadsheet, has made a number of such allocator adjustments, including;

- Modifying selected GXP AMDs to account for material changes in Load since the Second Issues Paper reference dates (ref; Westpower, Buller, Top Energy)
- Aggregating certain GXPs where perhaps there are existing notional embedding agreements in place (ref; Northpower, Electricity Ashburton, NZ Steel)
- Netting off Cogeneration, proposed new Distributed Generation and/or Demand Management from selected AMDs to reduce Allocations (ref; NZ Steel/Alinta, Top Energy/Ngawha Stage 2, Norske Skog/Kawerau Co-generation)

[1] Reference Paragraph 22 – Second Issues Paper

We note that each of the above AMD allocator adjustments creates material cost reductions at the local GXP level. This creates wealth transfers between different Customers and Customer groups, due to Transpower having a zero-sum revenue pool outcome. Whilst these adjustments could have future economic benefits to all consumers, the criteria for Transpower applying these adjustments to specific GXPs is not yet clear.

The draft Guidelines also appear to contradict these modifications by not allowing payments for DG to offset Residual costs (clause 32(f)), yet the Adjusted AMDs appear to do exactly this for those example Customers. There is also the potential for conflicts with other Code provisions, for example, criteria and approvals processes in the Commerce Commission's Part 4 regime for Transmission asset valuation and approving Transmission and Network Alternative investments; and the criteria and process for approval of DG ACOT/ACOD payments included in Part 6 of the Code – Distributed Generation Pricing Principles.

Buller Electricity is concerned the allocation process is increasing complexity, transaction costs and investment risks for smaller Networks and our new Connection Customers. We have attempted to test these risks using the following future scenario and seek further clarification from the Authority (or Transpower) on how this or a similar scenario might be assessed or treated across the multiple regimes / rules and the proposed new TPM.

3. Scenario for new Network and/or Grid Connections

The West Coast of New Zealand is rich in renewable energy and other primary industry resources. Consequently, there are a number of prospective new Generation and Load projects that could create material changes to the existing Grid loads and power flows in the Upper South Island regional grid. The scale and timing of such changes are difficult to forecast or predict at a single point in time. We note MBIE's energy planning database includes at least five new electricity generation opportunities that could be committed between now and when the new TPM is implemented in 2020. These projects together total more than 150MW of new capacity vs current local regional Load of 79MW.

Developers of one such proposal, a 68MW base loaded generation station, recently made a preliminary development application to Buller Electricity and Transpower for connection cost estimates and distribution pricing details for either embedding into our Network or directly connecting to Transpower. This connection application highlights for Buller Electricity the implementation issues and commercial risks we identified in our Second Issues Paper submission. These risks are due primarily to the relative complexity, implementation timing requirements, and the flexibility of this new TPM proposal.

That is, Transpower is currently unable to advise us (or the prospective direct connection customer) on their future transmission pricing terms. Given the materiality of the AMD adjustments that could be made, how does Buller Electricity and a prospective connection customer manage the transition pricing risks?

To illustrate this new Connection option question, Figure 1 broadly outlines our understanding of the different current and future allocation parameters relevant to the West Coast, based on the published information from the Authority and MBIE.

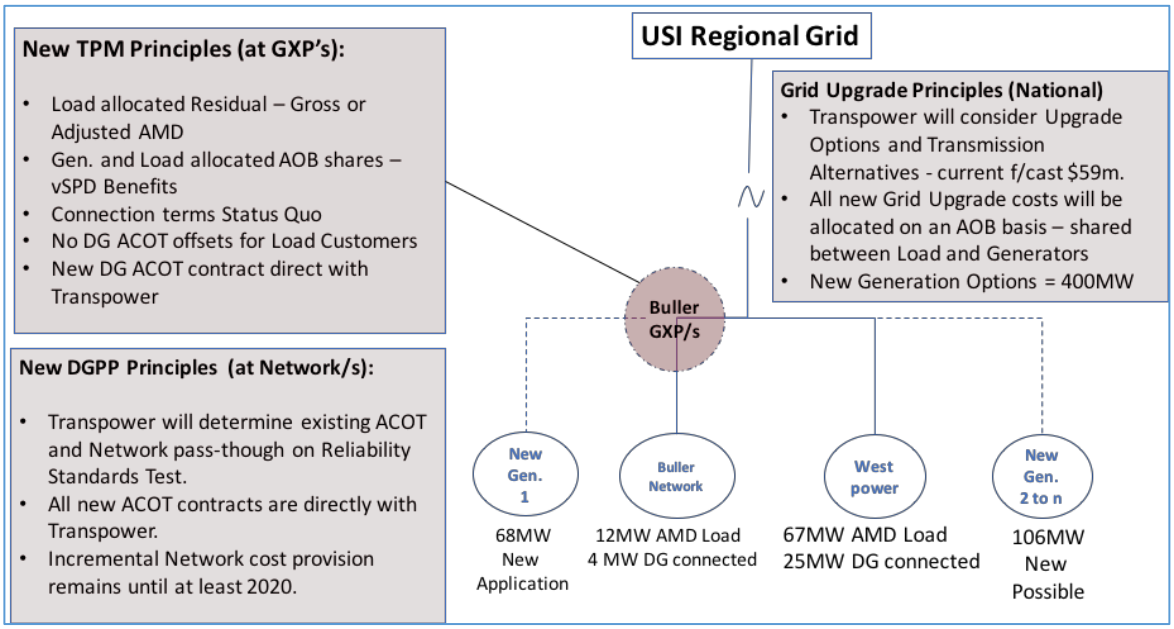

Figure 1 Summary of Allocation Parameters – West Coast and USI Grid

In this example, a fixed and unavoidable transmission charge could incentivise Buller Electricity to adopt a least cost optimisation scenario, whereby:

- Buller Electricity disconnects from the USI grid and instead takes a direct 12MW supply from New Gen. 1, the 68MW base loaded generator, and the existing 4MW hydro DG already connected to the Buller Electricity network.
- The existing Buller GXP would then become an USI GIP, with a net base loaded generation of 60MW into the USI Grid. Buller Electricity could also build a new 8 MW Standby DG or Battery Storage facility to achieve N-1 reliability.
- This would appear to potentially also be an optimal solution for Gen 1, as its grid connection costs would be reduced compared to a new Direct Connection at 68MW, any future allocated generation AoB costs would be lower and it would not face the risk of future common cost allocations.
- The West Coast regional AMD Load would be reduced and potentially Buller Electricity or other USI Connection Customers could apply for an Optimisation under the TPM Guidelines. This would reduce the allocation of residual charges to all USI consumers (increasing the allocation of the residual charges to other transmission customers).
- In addition, an USI Transmission Alternative could be applied for by Gen 1, to delay the planned $59m USI Upgrade Project. Presumably Gen. 1 would then receive an ACOT benefit from Transpower for this USI Grid Alternative.

This Alternate connection scenario is illustrated in Figure 2 below.

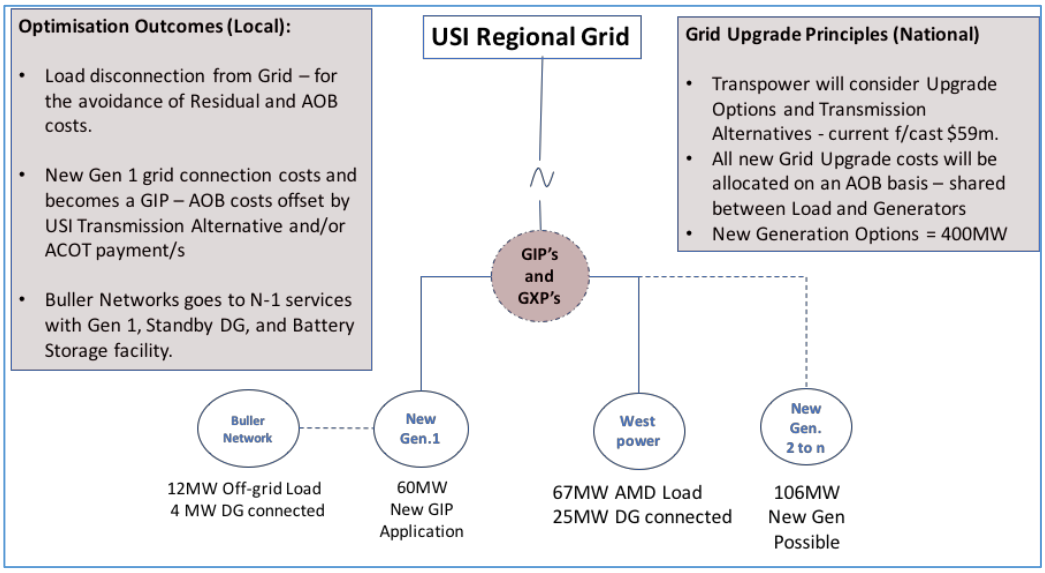

Figure 2 Grid and Network Optimisation Scenario

Our reading of the Authority's Supplementary Papers and modified results spreadsheet suggests to us this scenario is similar to that being illustrated by the Authority in its Top Energy/Ngawha Generation input assumptions. That is, the Authority has applied, under the Guideline principles, an "Adjusted AMD" based on a notional future 25MW embedded power station which optimises Top Energy's future transmission costs. Similar AMD adjustments have been made for large cogeneration plant and industrial demand bids, which would appear to be similar in nature to our Figure 2 scenario above. The transmission cost savings to Top Energy and other Industrial Direct Connect customers are substantial and increase the Residual costs to all other Networks, including Buller Electricity.

4. Main Submission Points

With regard to the general TPM change process:

- Buller Electricity supports the views of the ENA as detailed in their Supplementary Consultation submission. While some aspects of the proposal have merit, the potential for implementation issues, uncertain outcomes, and unintended consequences remain as major risks. Due to the lack of clear direction and consensus which has been able to be reached to date, it is important that the Authority puts forward Guidelines which are principle based rather than prescriptive.

- The process of TPM change should now move forward to the stage where Transpower becomes more involved and begins the task of detailed design work. Transpower needs to be given adequate scope to develop a durable TPM which is fit for purpose.

- Future changes to the TPM should be undertaken in a structured and staged manner, and be carefully coordinated with other industry reforms/changes to deliver the best outcomes. The Authority should give serious consideration to the adoption of a LRMC charge as a core component of any future TPM.

With regard to the specific issues which have been highlighted in our submission:

- We seek the Authority's confirmation that, in principle, the local optimisation scenario outlined in our submission is the type of efficiency objectives sought through the price signals of this modified TPM proposal? That is, that the Authority supports optimisation of Grid and Local generation costs by way of an Adjusted AMD.

- We are further interested in understanding what specific criteria were applied to these five examples as presented, and whether the criteria and principles applied by the Authority through these examples were akin to assuming a Prudent Discount or Optimisation as outlined in the Guidelines?

- It is important that Buller Electricity and other smaller regional Networks and Generation customers clearly understand how these Allocation Criteria will be applied by Transpower in practice, including any overlaps with other related Code approval process relationships. The current Draft Guidelines do not yet make these criteria or approvals processes clear for new connections.

We appreciate the Authority responding to Second Issues Paper submissions and providing the further supplementary information. We look forward to your final decision paper and further information on the specifics as we have noted. We would then expect to resolve in detail these points through Transpower's normal consultation processes.

Yours truly

Eamon J Ginley
Chief Executive
Buller Electricity Limited