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Submissions
Infrastructure and Resource Markets
Ministry of Business, Innovation and Employment
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TRUSTPOWER SUBMISSION: DRAFT ELECTRICITY DEMAND AND GENERATION SCENARIOS

Trustpower Limited (Trustpower) welcomes the opportunity to provide a submission to the Ministry of Business, Innovation and Employment (MBIE) on its *Draft Electricity Demand and Generation Scenarios* consultation paper (the Consultation Paper).

Our answers to a selection of the specific questions posed in the Consultation Paper are attached in Appendix A. Other parties will be better placed to comment on the questions we have not addressed.

For any questions relating to the material in this submission, please contact me on 07 572 9888.

Regards,

A handwritten signature in blue ink, appearing to read "J. Tipping".

JAMES TIPPING
MANAGER STRATEGY AND REGULATION

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Appendix A: Responses to consultation questions

Question	Response
<p>1. Do you agree with this description of the purpose of the EDGS, including the material in the appendix?</p>	<p>1.1 While we understand the primary purpose of the Electricity Demand and Generation Scenarios (EDGS) as set out in the Consultation Paper, we do not think that MBIE should underestimate how widely the scenarios are used outside of this purpose.</p> <p>1.2 There are few (if any) other publicly-available and independent wholesale energy price forecasts for New Zealand, and the EDGS have found use in a wide range of applications since they last were last published. Many of these applications have been for related policy or regulatory initiatives by other Crown departments or entities. MBIE should reference these previous applications in its final EDGS document, where possible.</p>
<p>2. In the absence of regional and prudent peak demand projections being a part of the EDGS, the Ministry would like to ask for your feedback on the best way to independently verify regional and prudent peak demand projections.</p>	<p>2.1 Given the criticality of peak demand forecasts to the transmission investment approval process, we believe that these forecasts should be put out for consultation as well and subjected to the same level of scrutiny as the EDGS. There should be full transparency of the modelling and assumptions used to determine the forecasts.</p> <p>2.2 While Transpower is likely to have the best source of information in this area, other parties will also be able to provide useful input, particularly at the sub-GXP level.</p> <p>2.3 Transpower’s approach to creating forecasts could also be benchmarked against the approaches used by the central forecasting bodies of other jurisdictions, such as the Australian Energy Market Operator (AEMO).</p>
<p>3. Do you agree that the key uncertainties identified in this section, and the proposed eight equally weighted scenarios, sufficiently represent overall uncertainty for the purpose of the EDGS?</p>	<p>3.1 As well as demand growth, the EDGS could consider changes in the way electricity is used and the intra-day patterns of consumption. These changes could result in shifts in the types of generation that is able to be built (for example if penetrations of energy storage and/or home energy management systems were to increase significantly, this could facilitate the development of more intermittent renewables and reduce the need for conventional peaking investment).</p> <p>3.2 There is also the potential for the operation and flexibility of hydro plant in particular to be constrained by increased competition for water, or by new policies for water quality management.</p> <p>3.3 MBIE could also explore how New Zealand’s energy sector may be impacted by the adoption internationally of a high carbon charge, which could impact the relative attractiveness of this market for energy-intensive industry.</p>

<p>4. Do you have any specific feedback on the proposed EDGS capital cost assumptions which are sourced primarily from the PB generation data update 2011?</p>	<p>4.1 No.</p>
<p>6. Given the current flat demand environment, should we put more weighting on low demand growth scenarios?</p>	<p>6.1 We believe that MBIE should compare its base case view of demand growth with those of the central bodies in other developed economies (e.g. the US, UK and Australia), and undertake an exercise to compare and contrast the assumptions and methodologies that underpin those forecasts.</p> <p>6.2 While other jurisdictions obviously have different underlying drivers (for example there is greater solar penetration in Australia, and more potential for agricultural growth in New Zealand), it is our understanding that those jurisdictions now place greater emphasis in their forecasts on increasing energy efficiency and price-elasticity of energy consumption than they had done in the past. AEMO, for example, has expended considerable effort over the past two years on understanding why their forecasts for the past decade have been consistent overestimates, and adjusted their forecasting methodology to account for what it has learned.</p> <p>6.3 These countries' base case growth projections are now much lower than New Zealand's, and they also consider zero or negative growth scenarios.</p>