



SUBMISSION TO THE MINISTRY OF ECONOMIC DEVELOPMENT

ON THE

DRAFT GOVERNMENT POLICY STATEMENT ON ELECTRICITY GOVERNANCE

4 April 2008

INTRODUCTION & SUMMARY

- 1 Vector appreciates the opportunity to provide feedback on the Draft Government Policy Statement on Electricity Governance (the "Draft GPS"). At a high level, Vector supports many of the amendments to the Draft GPS relating to work programmes for the Electricity Commission ("the Commission"). We are particularly interested in policy relating to distribution pricing, demand side participation and security and diversity of supply.

Key recommendation

- 2 Vector has raised a number of issues in this submission and in previous submissions that, in their own various ways, lead to the same conclusion. The number of agencies and the range and complexity of legislation and regulations are creating a situation where it is very difficult to assess any objective progress of the Government's policy objectives, or the trade-offs that occur between them. Vector would recommend that the Ministry of Economic Development (MED) initiate a review of the regulatory framework faced by energy infrastructure providers with a view to making it more transparent, efficient and effective.
- 3 Vector would be happy to meet with MED staff to discuss some of these issues further and to work with MED on an appropriate means of ensuring the best outcomes for New Zealanders who consume electricity and a range of other energy sources.

Summary of key issues

- 4 *Security of supply:*
 - Vector supports the improved transparency in Commission processes in relation to security of supply. In particular, Vector supports the requirement for the Commission to publish a security of supply policy including peak adequacy. Furthermore, we support the requirement to monitor the balance between demand growth and new generation capacity investment.
 - Vector believes the electricity and gas sectors need to be more closely linked in the development of security of supply policy. While the Draft GPS already includes the requirements that "fuels are appropriately managed" and "quality information and forecasts of thermal fuel availability ... are available", the two systems are interdependent, and yet system operator authorisations for gas and electricity are not consistent (for example there are still no

legislative authorisations devolved to the gas system operator in an emergency). Gas will continue to play a critical future role in New Zealand's transition to a reduced emissions future by balancing its ability to provide firm capacity with new renewables. Vector believes these linkages should be made more explicit in the respective gas and electricity GPS's.

5 *Regulatory frameworks:*

- As outlined in our submission on the New Zealand Energy Strategy¹, Vector believes there is a need for clear regulatory frameworks and accountabilities in the area of energy policy – in particular to clarify priorities in relation to environmental policy objectives, and security of supply objectives (which are often in conflict).
- The current fragmented regulatory framework means that infrastructure companies are often dealing with various conflicting regulation and facing potential inconsistent requirements. In order to unlock the full potential for the industry to contribute to the Government's energy strategy and emissions objectives, Vector recommends that the MED undertake a review of how all of the various policies (e.g. Electricity Governance Rules, Low User Fixed Charge Regulations, EIRA reforms, Distributed Generation Regulations and the Commerce Amendment Bill), and the administrative agencies assigned with implementing these policies, align with the Government's overall objectives. This is important to ensure that the policies are not considered in isolation, the overall policy approach is consistent, and priorities for action between regulatory agencies are clear.

6 *Demand side participation:*

- Vector strongly supports the increased participation of the demand-side in New Zealand's electricity market and welcomes further work identified to examine and understand the role of the distribution sector in the demand side in the draft GPS.
- The promotion of demand side participation has been a priority in the GPS for over five years and Vector believes that fundamental market structure and regulatory issues will need to be addressed before distribution companies can successfully participate in this area. In particular, Vector believes the MED should consider how

¹ *Submission on the New Zealand Energy Strategy, National Energy Efficiency and Conservation Strategy, Transitional Measures and Post-2012 Consultation Papers*, 22 March 2007, Vector Ltd.

subsidies provided to rural customers (Section 62 Obligation to Supply), low consumption customers (Low User Fixed Charge Regulations) and distribution generation customers (Distributed Generation Regulations) via distribution pricing interact with the Commerce Commission's economic pricing regulations and the ability of distribution companies to promote demand side participation through cost-reflective pricing.

- Vector supports improvements to current market arrangements that will recognise the value of demand side resources and provide appropriate commercial signals to participants. Vector has observed a number of instances in the past where it has been very difficult to assess how the various trade-offs between improving demand side management, increasing security of supply, keeping downward pressure on prices and meeting environmental objectives has been carried out.

ELECTRICITY EFFICIENCY

- 7 Vector supports the development of initiatives and activities in the area of electricity efficiency and the development of the demand side more generally and we hope to participate actively in this area.
- 8 Paragraph 41 of the Draft GPS refers to a comprehensive review of the potential of electricity efficiency, undertaken by the Commission and EECA, of the potential of electricity efficiency to contribute cost-effectively to achievement of the Government's electricity objectives. Vector assumes this is the KEMA report.²
- 9 Vector has requested a copy of EECA's report on the KEMA Potentials Study³ which points to some critical flaws in the KEMA report. The results show deficiencies in the data used in modelling (in particular, it appears that US data was substituted for NZ data where not available, as results tables contain some consumables products that have not been available in New Zealand for over ten years). Vector believes that extreme caution should be adopted in using the KEMA report to underpin development of proposed electricity efficiency activities.
- 10 Vector believes this is a symptom of the silos in the regulatory framework alluded to above. The report shows a focus on the electricity

² <http://www.electricitycommission.govt.nz/pdfs/opdev/elec-efficiency/potential/Kema-vol1.pdf>

³ "KEMA New Zealand Efficiency Potential Study Vol 1 Draft, KEMA Energy Efficiency Potential Study Vol 2 Technical Appendices, EECA Monitoring and Technical Group Comments."

sector without consideration of other sectors/fuels. In Vector's view, it is in New Zealand's best interests if the Commission and EECA work collaboratively to develop an understanding of energy end use in New Zealand.

Specific Comments on Electricity Efficiency

- 11 Para 47 - Vector supports the promotion of stronger demand side participation in the wholesale market and believes it is important that the Commission includes the wider electricity industry in consultation on options for increasing the efficiency of the wholesale market.
- 12 Para 49 - Similar to above, Vector believes that there should be a requirement for the Commission to consult with interested parties in the pursuit of this objective. Furthermore, Vector notes that the following would be useful additions:
 - Further clarity around the provision of financial incentives for investment in electricity efficiency (i.e. what form should these incentives take and how they would fit in with the wider regulatory arrangements facing e.g. distribution companies). Clarity would come from having clear direction on how the Electricity Commission and Commerce Commission should interact on development of pricing methodologies. The Commerce Amendment Bill requires the Commerce Commission to set input methodologies for pricing methodologies (52S), but the GPS also envisages that the Electricity Commission would also have a key role in this.
 - In relation to the development of advanced metering (which Vector believes could deliver on a number of the Commission's objectives), Vector believes the Commission's role should be to monitor progress in the area of advanced metering, rather than the development of potential rule changes. Market participants should be allowed to evolve commercially appropriate solutions (potentially subject to a set of minimum requirements which could be developed by the industry in collaboration with the Commission).
 - While Vector is pleased to see the Government's acknowledgement of the role of the distribution sector in the demand side, Vector believes the consideration needs to span wider than existing functions which largely relate to load management for network control purposes. Distribution businesses have significant potential to participate on the demand side with a direct connection to their customers. Current regulations, however, including the requirement for distribution charging to recover the bulk of fixed costs through variable charges, provide limited incentives for distribution

businesses to promote demand-side activities. The Commerce Amendment Bill envisages that the Commerce Commission will be required to create incentives for lines businesses to improve energy efficiency (54Q). There needs to be a clear interface between EECA, the Electricity Commission and Commerce Commission on how this can be achieved, and to ensure overall consistency in this area.

RENEWABLE ENERGY

- 13 Para 52 – Vector strongly supports a review of grid planning processes and will participate in the Commission’s work in this area. Vector believes, however, that the specification of the grid planning processes and approval criteria should not unduly favour grid upgrade plans that facilitate the efficient and timely development of “renewable generation” over grid upgrades for security of supply.

SECURITY OF SUPPLY

- 14 Vector welcomes the priority attributed to reliability and security of supply in the draft GPS. Improvements to the Commission’s processes in this area will provide enhanced transparency and efficiency for the industry.
- 15 Vector believes security of supply objectives should be examined holistically and take into account broader dimensions of security, including the requirements for system operation in a more complex renewable supply market together with consideration of other fuels:
- In para 89, one of the objectives for the provision of transmission services in the Draft GPS is that the national transmission grid should be planned and made available so as to facilitate the potential contribution of cost effective renewables to the electricity system. Furthermore, para 53 in the Renewable energy section of the draft GPS contains a requirement for the Commission to investigate the extent to which hydro and other generation sources can be integrated fully with intermittent wind generation. Vector believes these both have significant implications for security of supply and that this should be recognised in the security of supply section of the Draft GPS.
 - Policies in the electricity sector have spill-over impacts on other sectors, particularly upstream fuel markets (and other sectors of the economy that rely on those fuels). Vector believes it is critical that

there is a more cohesive and transparent link between the electricity and gas governance GPS's – particularly in relation to security of supply policy. As an operator of the gas transmission system, Vector has participated over a number of years in establishing contingency arrangements for the gas sector, and remains frustrated at the apparent reluctance to devolve authority to the system operator via regulation or legislation to manage a contingency or emergency situation. That said Vector is optimistic that the Gas Industry Company will be making recommendations to this effect this year.

16 Vector supports the following amendments to the security of supply policy in the draft GPS subject to the associated recommendations:

- Para 55 – Vector believes bullet one should be amended as follows: “Sufficient generation capacity is built or energy efficiency improvements made to meet ongoing demand growth *including peak demand growth.*”
- Para 57 – the “1 in 60 dry year” is replaced by a standard expressed in terms of “winter energy margin” (17 percent for New Zealand overall and 30 percent for the South Island). Vector notes our support is subject to the development of further detail on the calculation of the winter energy margin.
- Para 59 – While Vector supports a requirement for the Commission to develop and set security standards for adequacy of capacity to meet peak demand, Vector believes it is important that the standards include reference to power quality and voltage levels.
- Para 64 – The Commission should undertake and publish detailed supply and demand modelling and forecasting at least annually. Vector believes given the criticality of the underlying models to supporting robust forecasts, there should be a requirement for these models to be subject to regular independent reviews.
- Para 67 – The Commission can make recommendations to the Minister for intervention if it feels the market is failing to provide long term security. In relation to assessing whether the market could be considered as providing adequate security (out to 5 years), Vector believes there are currently issues around plant commitment and realistic construction timeframes. Vector believes that to ensure efficient, affordable security of supply, generators/retailers should be made responsible for delivering enough energy to meet demand. A well designed capacity mechanism could shift the responsibility for maintaining security of supply from the Commission to the generators/retailers – who Vector believes are best placed to

manage the risks and have a sufficient time-horizon to ensure there is sufficient generation diversity to meet their obligations up to the defined security standard.

TRANSMISSION

- 17 Para 89 – in relation to transmission pricing approaches, Vector believes priority should be given by the Commission to developing a pragmatic approach to locational transmission price signals, which reflects to remote generation the costs they impose on the system compared to generation located close to loads. Any subsidies should be made transparent.
- 18 Para 100 – Vector believes it is important that grid expansion can occur in a timely manner and that administrative processes do not unduly extend timeframes. Vector welcomes clarity in the draft GPS on the roles in relation to the development of grid upgrade plans. Vector agrees that Transpower should have responsibility for the detailed planning role while the Commission should review and assess compliance with the EGR criteria.
- 19 Para 110 – Vector believes this paragraph is inconsistent with para 89 in relation to supply diversity (which would arguably favour multiple small lines). Vector believes a clause should be added along the lines of “... and also the different levels of supply security that multiple lines may provide.”

DISTRIBUTION

- 20 Vector supports the development of pricing methodologies that are more cost reflective. As a general comment in relation to distribution pricing methodologies, Vector believes that the Government and the Commission will increasingly need to recognise that pricing structures may need to change to better promote long-term investment in network infrastructure and to facilitate more efficient use of networks. In particular to reflect the fact that the great majority of network costs relate to fixed capacity costs while current cost recovery approaches rely on variable volumes to finance those fixed costs.
- 21 Vector believes there needs to be a review of approaches to best meeting concerns about energy affordability (in relation to e.g. fixed, low income and rural households) and energy efficiency. Vector believes

that the current low user fixed charge approach could be improved on to ensure that those in fuel poverty (i.e. those who cannot currently afford sufficient electricity to have a healthy home) have affordable bills as well as encourage energy efficiency initiatives.

- 22 Para 119 – Vector believes the following technology neutral addition should be made as the term “ripple” does not allow for alternate load management technologies “arrangements for the use of ripple control (or alternative technology) for load management”.

INTERRELATIONSHIP WITH THE COMMERCE COMMISSION

- 23 Para 124 – Vector recommends the removal of any reference to Part 4A or thresholds in this paragraph given these are about to be repealed.
- 24 Para 125 – The Government requests that the Commerce Commission and the Electricity Commission review their Memorandum of Understanding by 30 June 2008 to specifically address the following matters in relation to improving incentives for electricity lines businesses in respect of:
- Managing distribution losses
 - Facilitating uptake of advanced metering infrastructure and more efficient distribution pricing
 - Ensuring target security levels for distribution networks are met at least cost
 - Ensuring distributors have incentives to invest in, or facilitate investment in energy efficiency (including consumer end-use efficiency), demand side management and distributed generation.
- 25 Vector believes the interrelationship between the Electricity Commission and the Commerce Commission is critical and we support a review of the Memorandum of Understanding to provide clarity around accountabilities in the areas listed. At a more holistic level, however, Vector believes optimal regulatory outcomes in this area will require a detailed review of the range of regulatory bodies (including the EC, Commerce Commission, MED, and EECA) and policies (including Low User Fixed Charges, Section 62 Obligation to Supply, EIRA, transmission pricing) and how to best structure the regulatory frameworks to reduce barriers, confusion and deliver on the Government’s demand side aspirations.

CLOSING COMMENT

26 Thank you for considering Vector's submission. If you have any queries, or require further information, please feel free to contact me in the first instance at ewan.gebbie@vector.co.nz or on 04-462 8657.

Yours sincerely

A handwritten signature in black ink that reads "Ewan Gebbie". The signature is written in a cursive style with a small flourish at the end.

Ewan Gebbie
Group Manager Regulatory Performance