

Submission on

Draft Government Policy Statement on Electricity Governance

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The following comments are made with reference to paragraph numbers of the draft GPS:

Deleted Para 7.

The shortcomings of the Advisory Group concept was that they were dominated by large industry players, such as MEUG and the generators, to the exclusion of more representative affected parties, such as consumer trusts, and dependent industry commentators such as the Centre of Advanced Engineering. These large players have a vested interest in maintaining the status quo with respect to the industry structure and their position in it. In NWL's opinion the spirit or intent of the GPS has not been adhered to with respect to advisory groups but the basic concept of advisory groups is good.

Para 7.

Innovation is unlikely to occur in a pure rule based market system. The EC should be required to demonstrate how it is facilitating innovation and there should scope for market intervention to allow them to happen.

Para 8.

High quality information is needed for more than just delivering efficient markets. It is also required for the efficient operation of the physical electricity system. Some essential information that is needed includes:

Real time regional demands that the Transmission Pricing Methodology is now based on. Without this input to Load Management Systems, the existing investment in load control equipment cannot be applied to managing transmission constraints.

Disaggregate North Island and South Island hydrology and water storage data to ensure that appropriate locational pricing signals are being sent for investment in new storage.

Deleted Para 11-16

Removing the references to the NZES and NZEECS leaves the GPS very weak in terms of expected delivery on the efficiency and sustainability objectives and the specific outcomes of s172N of the Electricity Act.

Para. 10

The existing market consistently fails to manage security of supply. Short term pricing signals cannot send long term pricing signals for either conservation of water or investment in more storage. In fact, high spot prices reward generators using water resources more quickly. Volatility resulting in high spot prices is very damaging to the national economy and is completely unnecessary. Consumers do not have a long term pricing signal to invest in demand side response to manage such supply side risks. Generators have a short term monopoly position and the market assists them to exploit this during periods of constraint.

Para 11.

Leaving generation development to the outcome of a competitive generation market will not deliver outcomes that are in the national interest such as security, energy efficiency, and least cost. Competition decreases coordination and system efficiency at the expense of the consumer.

Some level of system planning is required and this must address more than just transmission. Generation portfolios should be regulated with mandatory requirements to meet targets for components of renewals, fuel storage, firm supply, distributed generation, and diversity.

The specified reliability objectives should be consistent between transmission and distribution. Currently the security standards delivered by distribution companies (regulated by the Commerce Commission) are higher than the standards delivered by the transmission system (regulated by the Electricity Commission).

The fairness objectives of the Electricity Act dictate that regional economies should receive the same level of service and security as their large city based competing economies. Specifically how these objectives are being recognised in the GIT as it applies to non-core regional grids.

Para 14.

There is no storage in the Clutha and Southland areas and transmission capacity to and from the Waitaki Valley is constrained. Security objectives for the South Island may need to consider issues at a more detailed regional level. South Island generation should prioritise security of South Island supply over North Island issues.

Benmore spot price should never be higher than the Haywood spot price given that the South Island has a surplus of generation and most of the hydro storage.

Para 16.

If some stakeholders do not participate in the market then there is no opportunity for them to be involved in providing solutions to supply and demand issues. For example, last winter all thermal generation was required to be dispatched ahead of hydro.

Network Waitaki was not requested to run its diesel generators even though they could generate below the spot price.

Para 20.

The Commission should place a ranking on development options with regard to how optimal they are from an overall system perspective. This ranking should be the benchmark used for assessing national importance in terms of resource management consenting.

Para 24.

Managing water storage for security is a conflicting objective with managing water for maximum profit. If water storage is important for the EC to manage security then it should be bought and paid for accordingly so that the investment signal is more direct.

There are other ways of storing energy than hydro lakes. Alternative technologies and resources, such as flow batteries, should be included in the storage guidelines. This would ensure that all forms of generation are able to contribute to firm supply. NZ would be less sensitive to dry years if some guidelines and targets were introduced for more diversity in the way we manage security.

There is a lack of innovation and modernisation in the development of power system. Transmission centric planning results in a focus on core grid connected generation options, which are the solutions of the past. New Zealand has lost its leadership in power system planning and construction. The existing industry structure is locking us into the status quo and out of date solutions.

Para 26.

There are no reserve energy facilities in the South Island. We therefore need priority consideration with respect to use of our hydro storage. Spinning reserve is an issue for North South transfer over the DC link as it requires the use of hydro generation when water could otherwise be conserved.

Para 33.

Emergency management is only needed when the market has failed. In this scenario the system operator should take control of generation dispatch decisions.

Para 39.

Existing line company charges are an attempt to respond to a wide mix of policy objectives and pricing controls imposed by different authorities. The methodologies are not consistent with the principles established for the Transmission Pricing Methodology.

A regulated line charge methodology that is consistent across the entire nation would help deliver on the GPS objectives. Similarly, a consistent structure to retail energy tariffs, with regard to controlled load, fixed and variable components, separation of line charges, etc. would allow pricing signals to be passed through to consumers.

Para 44.

Current policy with regard to disconnection for non-payment is resulting in increased costs for those who pay their bills. Power consumers should not be funding social services. Non-payment for reasons of not being able to afford the bill should be passed over the social welfare agencies to pay.

Power companies need the ability to disconnect for reasons of power theft and safety compliance.

Deleted Para 61.

The principle that investment in energy efficiency should occur where this is cheaper than long-term costs of building extra generation and network capacity, including environmental costs, should be retained.

Para 62.

To prevent conflict with Commerce Commission objectives with regard to investment in lines, a set of standards with regard to the maximum acceptable losses a new line should be designed for, would be a more direct and cost-efficient approach to managing technical losses. Line companies should be permitted to invest in loss reduction where it is economic to do so and recover the costs accordingly.

Para 66.

To enable access to renewable resources and those targeted by smaller scale generation opportunities, some transmission investment, in both core and non-core grid assets, needs to lead the development of generation. Allowance needs to be made for the fact that multiple generation developments may well be needed to utilise a transmission development. If this is not done then only large core grid generation solutions that have access to the core grid will be developed because they are the only ones that have access to transmission investment made on behalf of the national interest.

Deleted Para 78.

NWL favours the retention of this statement. We agree that older thermal plant operation should be reduced from a base loading role to providing reserve energy during times of constraint on renewables. This would be a more economic outcome than investing in new plant that only gets used during emergencies. Further new thermal generation, in more optimum locations, with lower net emissions, should be permitted to replace this plant. The system needs some diversity in its generation to get the optimal level of benefit from renewable resources.

Para 71.

There should be no differentials in the delivery of transmission services between one region and another. Infrastructure supports economic development. One competing economy should not have an advantage over another because of location, size or pricing methodology. Service standard, as delivered to the consumer, should be equal. The contribution one consumer makes to the economy compared to another consumer is independent of size of the GXP they are connected to or the configuration of the grid at that location.

In particular, reliability and security standards should not be any different for those connected to the core grid than for those connected to regional grids. Average costing

of core grid investment is funded by all consumers so they should be entitled to the same level of service delivery.

For example, why should a coffee shop in New Market have better security than a coffee shop in Queenstown? Why should the Queenstown consumer be funding security upgrade in Auckland via the TPM's interconnection charge, when they don't get the same level of security?

The GIT is not based on providing residential, commercial and industrial customers with the grid reliability they require or even maintain existing security levels. It does not address the changing needs of customers and modernisation of the grid. It targets least cost minimum service outcomes.

Many areas connected to the 110kV regional network are facing a reduction in security from N-1 to N simply due to growth in dairy conversions and irrigation. The GUP process is based on prescribed core grid planning assumptions that are not applicable to regional development. The process is an impediment to regional economic development and fails to deliver certainty for investors nor timely delivery of upgrades.

Para 76.

Grid connected generators are users of the transmission grid and they should pay for that use on an equal basis to other users. Core grid pricing methodology does not send locational pricing signals to new generation investment. Large developments able to connect to the core grid free-ride on the transmission upgrades they trigger. Off-take consumers pay for this.

Any generation that doesn't connect to the core grid also pays for core grid upgrades to the benefit of their competitors. This situation is most extreme for Distributed Generation which may not use the transmission system at all but cannot avoid the pass through of transmission charges. There is an inherent cross-subsidy from small generators to large generators in the existing TPM. The outcome is continued development of large sub-optimal grid connected generation and transmission upgrade and lack of investment in more efficient DG alternatives.

Monopoly positions are being protected, system efficiency and performance is degrading, and the potential for electricity prices to be declining is being lost.

Para 77.

To prevent economic development opportunities being lost through inadequate supply infrastructure, the transmission network servicing a region should be required to maintain sufficient excess capacity such that it can supply a significant new load and be upgraded within the timescale of such a development. The trigger point for upgrade needs to have excess capacity sufficient for ten years growth minimum.

Transpower planning takes 2 to 8 years to complete. This period is often longer than the EC planning horizon.

The Commission's forecasts are too short to assess long term least cost solutions adequately and too conservative with respect to certainty of a development. This stifles investor confidence.

Current shortcomings with the Grid Investment Test includes:

- The long term grid development strategy is not considered with sufficient weight.
- VoLL assessment only considers direct costs. Indirect costs to the economy are not considered and opportunity costs in terms of community not being able to utilise local resources to create wealth because of a lack of adequate power supply is not considered.
- Reliability standards are not consistent between grid users.
- The test disadvantages regional grid connected consumers.
- The connection/interconnection classification of assets distorts investment decision making by grid users such that the most efficient solution is not implemented because the pricing methodology delivers them an advantage.
- The test does not consider the investment needed in distribution in order to distribute the extra transmission capacity.
- Inconsistency between distribution and transmission service standards may result in line companies not being able to deliver on regulatory and contractual obligations.
- Consumers enjoying an existing level of contracted service have invested on the basis that this service level will be maintained. They should not have service reduced arbitrarily on the decision of the Commission.
- The industry is structured on a framework of contractual agreements. These should not be compromised by the assumptions applied in the GIT.
- Energy efficiency is not considered.
- Headroom for upgrade is not considered adequately.
- The need for excess capacity is not included in forecasts.
- Certainty and timeliness of decisions do not meet the requirements of economic development.

Para 87

A streamlined process for transmission upgrades that maintained existing security levels would be of more value than the current proposal. Alternatively a percentage

threshold of investment relative to the value of existing assets would be more relevant than a fixed arbitrary figure of \$20M.

If expenditure is within depreciation funds then the need for a GIT should also be exempt.

Para 95.

Transmission has a favourable position compared to alternatives delivered by the pricing mechanism that recovers sunk cost. Investment in alternatives are subject to the risk that they will not be needed in future. Where an alternative delivers a given transmission benefit it should be rewarded for that benefit for as long as the investment in the transmission solution would have been able to recover sunk costs.

The certainty and reliability issues are unnecessarily too onerous for alternatives to get a fair consideration.

Para 99.

Sunk costs should not be protected from the risk of being made redundant by more economic solutions more than any other investment in the power system.

Para 100-102

NWL supports standardisation of pricing methodologies and tariff structures.

Para 110.

Getting fair contract terms for the purchase of energy from an independent DG owner by a retailer is the main hurdle DG development.

While some are opposed to concepts such as “feed in” tariffs (which have proven very effective overseas), it should be noted that there are inherent cross-subsidies in the pricing structures of the industry that disadvantage DG.

This might be mitigated by excluding any transmission charges for DG connections that do not inject back into the grid.

Para 114.

NWL agrees with this statement. It further suggests too much of the retailers cost is recovered via fixed charges compared to the cost recovery structures of line companies. Before industry reform fixed charges were a minor component of electricity accounts.