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Electricity Market Review
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Ministry of Economic Development
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NZCID submission on the improving electricity market performance: a preliminary report to the ministerial review of electricity market performance discussion document

The New Zealand Council for Infrastructure Development[1] appreciates the opportunity to make a submission on the 'Improving Electricity Market Performance' discussion paper released by the Ministry of Economic Development.

NZCID supports the majority of the proposed changes, although there is considerable detail needing to be developed. We believe that the recommendations of the Advisory Group should provide market participants with better incentives to avoid the need for conservation campaigns, assist with the timely and efficient development of transmission infrastructure, provide for greater participation of end-consumers in the market and refocus the regulator on delivering gains to consumers by more actively monitoring participants' performance and enlivening the process by which new and innovative responses to changing market conditions can be incorporated into the market's rules.

As requested, NZCID's submission focuses on the recommendations and follows the structure of the discussion paper. The following section provides an overview of the submission in terms of the consolidated recommendations. These issues are then discussed in detail in page order.
Consolidated recommendations – Pages 74-78

To improve the management of dry-years

NZCID supports the seven recommendations, but in respect of recommendation three proposing clarification of the roles and responsibilities for security of supply we suggest that more detail is required on who, how and when it is intended that the roles and responsibilities for managing security of supply will be clarified. We elaborate this request further in the section on security of supply below.

[1] NZCID is a non profit organisation. Members comprise a diverse range of leading private and public organisations including infrastructure equity owners, financiers, constructors, service providers, public sector agencies, and major infrastructure users. Information on the Council, its members, policy and work can be found at www.nzcid.org.nz . In developing its policy position on infrastructure issues, NZCID consults extensively with its member organisations, undertakes workshops and seminars on policy and undertakes independent research. This submission represents the views of NZCID as a collective whole, and may not necessarily represent the views of individual member organisations, some of whom will be making their own individual submissions.

To help restrain the costs of generation

NZCID strongly supports these recommendations, and notes the initiatives Government is currently taking to improve certainty on Resource Management Act process. We fully encourage the Advisory Group to encourage the current reviews of the RMA and water allocation to consider the matters highlighted in recommendation nine, and in particular:

- Whether and how the 'call-in' process could be used to better effect for generation projects (new and existing); and,
- Other fast-track mechanisms for consenting (or re-consenting) nationally significant generation projects.

To improve procedures for upgrading transmission services

NZCID supports the intent of the two recommendations to improve procedures for upgrading transmission services, and suggests that the next step needs to be the development of a specific proposal that can be commented on. A key consideration in any grid upgrade improvement proposal is that it be transparent and achieves the desired objectives of removing duplicity of regulatory processes and increased competition.

To improve wholesale and retail competition and help restrain prices

NZCID supports the intent of the recommendations to improve retail competition and restrain prices. However, there is a need for a business case to be developed in respect of the three swap options proposed to establish which option - or whether any of the options - will in fact result in the desired improvements. Overall, however, we strongly support the thrust of this group of recommendations seeking a more accountable, responsive, transparent and customer-focussed industry.

To improve the governance of the electricity sector

NZCID strongly supports rationalisation of the regulatory structures overseeing transmission investment. There should only need to be one regulator overseeing investment decisions and there is unnecessary duplication between the functions of the Commerce and Electricity Commission and EECA under current governance arrangements. Disestablishment of the Electricity Commission and establishment of a single Electricity Market Authority with a clear responsibility for market facilitation and enforcement of market rules seems to provide an effective solution. Whether the EMA should be established as Crown Entity or in some other form needs further assessment.
Also, as applies to all the recommendations, NZCID is keen to see a sense of urgency and commitment to take the next step of developing a fully detailed proposal for consultation and implementation.

That is, overall, NZCID considers the recommendations to be a useful start and pointed in the right direction. But significant elaboration is needed to inform the recommendations and establish whether their implementation will achieve the desired improvements, and demonstrate how they will support government's economic objectives, an area of the review that falls well short of what is required. Our submission elaborates this concern below.

There is also a need for the development of an implementation programme setting out information on how the transition would be managed in a practical sense, when it will occur and the timetable for and extent of legislative change required.

Integration with economic strategy and goals

A noticeable weakness of the discussion paper is the lack of evidence that the Review has been undertaken with consideration to an overall strategic context such as consideration of how improving electricity market performance along the lines proposed will enable and/or support New Zealand's high level economic goals.

Paragraph 10 of the discussion paper summarises the objective being sought:

"A well-functioning market should provide a reliable supply of electricity at efficient or competitive prices, that is, prices which are as low as possible consistent with ensuring reliable supply over the long term"[2]

NZCID supports this objective but we are concerned that there are no performance indicators (KPIs) or criteria that would define its achievement or a specific strategy to deliver what is proposed.

NZCID agrees that a more competitive electricity market is a desirable objective. There is an implied indication of wanting a strategy based on using competitive tools to deliver a better performing market. However, NZCID believes that a review of this scale needs to show how improvement to the electricity market will benefit New Zealand's economic growth and improved productivity objectives.

The only indication from the Review as to how, in a tangible way, the review's proposals should contribute to the Government's broader strategic approach to revitalise the economy is in paragraph 3 of the terms of reference. This states that:

"….the Government is particularly concerned to ensure that the electricity sector contributes to economic growth by providing for security of supply and efficient prices."

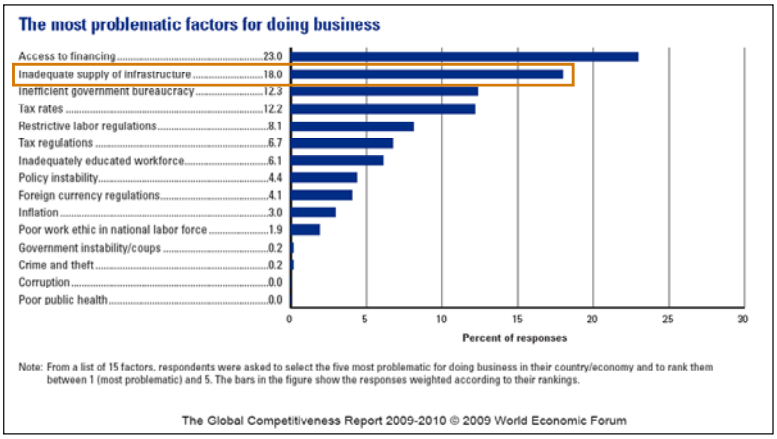
However, this matter is not looked at in any detail in the discussion paper. In fact, the Government has a range of key economic objectives focused on increasing productivity growth, catching up to Australia, increasing exports, improving international competitiveness, reducing regulation and maintaining high levels of employment, and all of which require support from an efficient 'low cost' electricity sector.

In short, if New Zealand is to achieve its economic objectives, the nation's electricity demands need to be satisfied in a manner which is 'least cost' to the economy so that scarce resources are not wasted, and the sector is 'competitive' with comparable markets such as other small economies/ nations.

The three tables below highlight New Zealand's perceived poor quality of electricity supply and weak global competitiveness.

[2] See Review section one, page 11, paragraph 10.

Infrastructure inhibiting NZ's global competitiveness

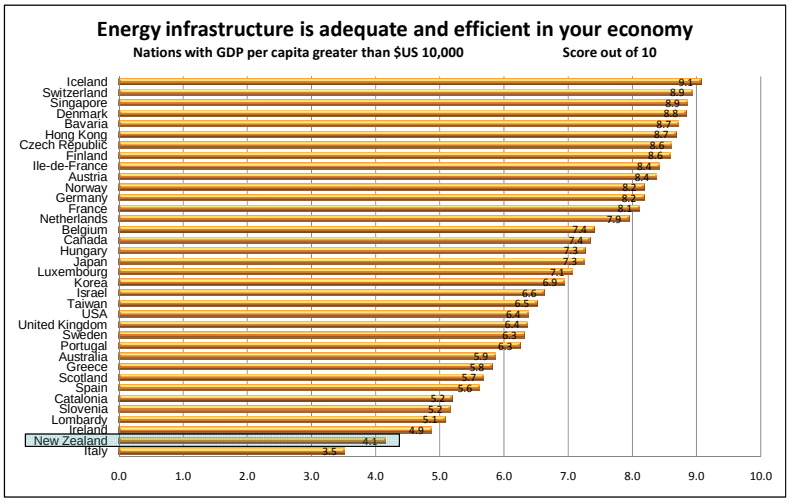


Perceived Quality of electricity supply

The quality of the electricity supply (lack of interruptions & lack of voltage fluctuations)
1= worse than other countries, 7 = meets the highest standards in the world

Source: World Economic Forum Executive Opinion Survey (2009)

Ranking of Energy Infrastructure
2006 IMD Executive Opinion



The tables (above) provide a platform justifying the case for why the Review needs to be conducted with a sense of urgency and commitment to strategic action. There is no escaping from the fact that achievement of the Government's overall energy policy objective is fundamentally important to both New Zealand's international competitiveness, and the quality and standard of living of New Zealand's population.

The Review should highlight the key connection between economic and efficient energy supply need; a key outcome of the proposals should be to lift New Zealand from below 50th into the top 10 of country ranking for quality of electricity supply.

NZCID supports suggestions that the objective to improve New Zealand's electricity market performance needs to be measured against some strategic but relatively uncomplicated goals (for which KPIs can be developed), such as:

Do the proposals enhance New Zealand's overall living standards by:

- Elevating New Zealand's competitive ranking for quality of electricity supply into a top-10 global position;
- Making businesses more productive and competitive;
- Providing incentives for innovation in the production, use and consumption of electricity; and
- Enhancing the quality of life of consumers.

NZCID submits that a redesigned electricity market needs to be based on an objective to contribute to restoring New Zealand's international competitiveness ranking into the top 10 of OECD nations in terms GDP. In order to achieve this objective, we agree with others that *encouragement of business-led growth needs to be put at the heart of the reform agenda* consistent with the following outputs:

- A market-based framework where generators and retailers are competing vigorously over a robust transmission network, and businesses and residential consumers are trading in a way that enables them to manage their risks at efficient prices;
- A focused, stable regulatory and governance framework delivering an investment climate where local and international firms assess they can risk their capital to invest in the right generation technology at the right cost at the right time;
- A market where the participants regard electricity as a stable 'given' commodity, and do not need to undertake political intervention to resolve their issues, and where politicians are able to set policy and then rely on market outcomes;
- A transparent information regime regularly detailing the industry's performance in a way that facilitates understanding and confidence about the sectors contribution to New Zealand's economic growth and living standards;

NZCID's detailed comments on the recommendations are covered in the balance of our submission.

Security of Supply – Pages 13-18

As noted above, NZCID supports the intention of the recommendations in this section of the Review aimed at providing the right incentives for generators to manage supply so we don't have dry years, or, the number of dry years are reduced to 'real' dry-year events, principally by making it very costly for them to run short (rather than have the "free" option of asking for consumer conservation).

It is fundamentally important to the efficient operation of the electricity market that all participants face the right incentives to appropriately manage their dry-year risk.

While consumer conservation is a useful option, consumers should be rewarded for using it. Further, it should be a commercial option, not a social, uncompensated obligation. Relying on consumer conservation is unfair on manufacturers and producers attempting to be productive against external pressures of unreliable, higher cost energy supply and/or social pressures to reduce power usage.

The requirement for generators to carry a share of the costs of a rising spot market through a dry-year shortage *should* encourage them to better manage supply availability, and thereby reduce dry-year incidents.

NZCID notes that since the introduction of electricity wholesale market in 1996, periods with extreme low inflows have resulted in very high spot market prices, and conservation campaigns were required in 2001, 2003 and 2008, and planned in 2006.[3] Clearly, if frequent dry-year events continue despite the introduction of a more balanced regime in which the generators carry a share of costs, then an option for generators (and the nation) long-term is to consider building more generating capacity.

The introduction of a more balanced cost sharing regime for dry-year events will also assist getting a better understanding of the *real* need for building more generating capacity.

NZCID acknowledges that the proposed form of across-the-board cost-benefit allocation should be used in the context of scarcity pricing (e.g. in concert with scarcity pricing, rather that as the primary solution). We submit that it would be inappropriate to force generator-retailers who are in a balanced, or 'long' market

[3] Review document, Security of Supply section, paragraph 13, page 13

position and who therefore would not benefit from an enforced savings campaign to face this cost. Imposing risk of supply shortages onto generators needs to be targeted at those who are unhedged in a conservation campaign.

An added advantage of greater targeting of this risk would be an increased inability for the supplier facing this cost to simply pass it on to their customers. This would likely be the outcome were all suppliers to face the impost.

Further work is needed in respect of specific detail of how the proposal will be structured and delivered including who would qualify to receive these payments, a fair method of allocation; e.g. on a value of energy used rather than on households versus non-households (so as to not unfairly capture low electricity using SMEs), and to get some assurances that the costs associated with its implementation (i.e. monitoring and enforcement) do not outweigh the cost of the problem.

NZCID suggests if a more equitable cost sharing arrangement is introduced it be reviewed after 3-4 years. This will enable a fairness test, to better assess whether the number of dry-year events have in fact been reduced as a result of the measures and to help develop a more strategic case for building more capacity to meet New Zealand's real growth demands.

Costs of ne supply – Pages 25-32

NZCID notes the Review assertions that the cost of new generation is going up and therefore it is going to be increasingly hard on energy intensive enterprises. This underlying fact reinforces the urgency of the Review and case to be vigilant to ensure that we address costs we have some control over, and don't add further imposts on costs of supply to our exporters and manufacturers and other 'internationally competitive' businesses. Mechanisms like climate change and RMA which render New Zealand producers uncompetitive with foreign suppliers who don't face those imposts need to be rigorously monitored and restrained.

New Zealand Inc stakeholders need to be confident that new capacity is being built in a timely manner, at an efficient cost (including the most appropriate technology), and in the right location. NZCID strongly recommends the Review make rapid progress to implement the proposals to:

- Remove barriers to the development of new generation and the re-consenting existing generation capacity; and
- Achieve and brand New Zealand's electricity sector as a stable investment destination.

Generation projects are often major users of natural resources and can have adverse environmental effects that cannot always be fully avoided, remedied or mitigated. This means that, to the extent that generation is desirable from a regional capacity perspective, the environment, communities and individuals (at the local level) have to bear some adverse effects or accept that electricity supply will be at risk with the social and economic consequences that shortfall might entail.

Furthermore, the costs and benefits of electricity generation connected to a national transmission network typically fall within *different jurisdictions*. Often the costs are local but the benefits regional or national (or are at least experienced outside the district or region that experiences the costs). There is the *potential* for

local concerns about adverse impacts to outweigh both regional and national benefits in the absence of articulation, representation and mandated relevance of those benefits.

There are particular issues relating to the development of *renewable electricity generation* and the recognition to be given to the benefits of renewable energy. It is apparent that recent thermal stations (being gas fired) have been consented more rapidly and decisions appealed less often than renewable projects involving new hydro, wind or geothermal resources. Barriers to more renewable energy development are complex but the ability of decision-makers to recognise and take appropriate account of the *environmental benefits* will be critical to future renewable energy supply.

There is still no National Policy Statement on generation and most Regional Policy Statements contain no stated objective to ensure regions have a secure supply of energy. Rather the objectives and policies are focussed on sustainable use of energy resources and the avoidance remedy or mitigation of any adverse affects of development proposals relating to the production, distribution and use of energy. Yet the supply of energy is a vital resource for the nation. There can be no sustainable management of natural and physical resources without energy, of which electricity is a major component.

It is therefore strongly recommended that a national policy statement spell out the importance of the provision of energy supply as a nationally significant activity and that the benefits associated with energy supply should be taken into account by decision makers. Indicative wording for the policies might include:

1. District and regional plans should recognise electricity generation as a *nationally significant activity.*

2. Local authorities should, when preparing plans and considering any consent application relating to energy supply, have regard to the social (including health) and economic benefits associated with availability and end use of supply by taking into account the extent to which supply capacity provides any of the following potential *positive effects*:

    (a) improved security of supply of energy;

    (b) reduced risk of interruption to supply;

    (c) lower cost of energy supply than otherwise;

    (d) transmission benefits (including reduced dependence on the national grid and reduced loss of electicity in transmission); and diversification of New Zealand's electricity generating base.

While NZCID agrees that the recommendations proposed by the Review will contribute to the attainment of these outputs, as noted above, they need to be incorporated in a comprehensive strategy supported by a programme of action steps with milestones clearly targeted towards "Improving Electricity Market Performance" in a context of contributing to achieving New Zealand's overall economic growth objectives.

Transmission & Distribution - Pages 34-36

NZCID agrees with the Review assertion that effective and efficient transmission has a vital role in ensuring that consumers are provided with reliable, reasonably priced electricity, which will ultimately enable sustained economic growth for New Zealand.

Grid congestion and constraints inhibit the ability of electricity markets to deliver efficient outcomes. Without efficient base infrastructure, the energy market can neither operate effectively, nor provide the required level of security. Accordingly, NZCID welcomes the Review team's continuation of the recent trend of proactive reassessment of how to improve the regulatory framework for transmission.

The two linked suggestions proposed by the Review to improve procedures for upgrading transmission services[4] are pragmatic steps supported by NZCID. The upside of a simpler, less prescriptive Grid Investment Test (GIT) *and* an integrated regulatory regime solely under the Commerce Commission *should* introduce increased competitive tension in the generation-distribution market, so it is not the exclusive domain of the big generators alone.

However, NZCID does have some practical concerns in respect of how the proposed changes will in fact result in increased competition and resulting lower prices to end users as follows:

That is, while NZCID supports in principle the recommendation to amend the Grid Investment Test (GIT) to make it clearer, simpler and less prescriptive, and to take into account wider competition benefits, we have some concerns in respect of how transparency and public monitoring will be managed to ensure the proposal will in fact reduce, or loosen accountability, as claimed by the Review, for securing least cost outcomes for consumers.

Obviously, change to the GIT must be ultimately achieving improved net public benefit. NZCID would like to see the proposal set out in the Review supported by some specific evidence that changing the 'GIT' to "make it clearer, simpler and less prescriptive" will in fact result in reduced costs and better long term investment.

Similarly, in respect of the second linked recommendation to transfer approval of major grid upgrades to the Commerce Commission to ensure integrated consideration of transmission expenditure, performance and prices, subject to rules on service and reliability standards, pricing methodologies and the grid investment test set by the electricity regulator.

NZCID concurs that this proposal looks justified by addressing an obvious regulatory duplication by removing other agencies such as the Electricity Commission from the regulatory control regime. We strongly agree that there should be only one economic regulator for the electricity sector and that the regulator should cover the economic regulation of both transmission and distribution systems.
However, NZCID recommends further consideration be given to reinforcing how to ensure the objectives sought from a reformed transmission regulatory framework – encourage long term investment at least cost outcomes for consumers – will in fact be achieved by making this change.

Likewise, NZCID strongly believes that there should only be one grid planner. We agree that a well structured transmission regulatory regime should provide transparency to make it clear that those parties best able to manage the risks associated with project implementation be accountable for their

[4] Review Recommendations 15 and 16, page 76.

management. That is, Transpower's accountability for the design, build and operation of the grid should be clearly established. If Transpower underperforms against its mandate, NZCID contends that if clear accountabilities are established any failure of its corporate governance processes should then be able to be addressed directly by government, rather than by a regulator.

NZCID supports suggestions for Transpower improving its relationship with stakeholders by adopting a procedure to submit its grid upgrade proposals to an appropriate industry high-level peer review at an early stage in the planning process. Such a peer review process would serve to provide stakeholders with greater confidence that its views are being taken into account at the start of the planning process and that the grid is being right-sized, at the right cost, for the right reasons. Undertaking this level of peer review, NZCID suggests, would help mitigate stakeholder and community concerns at an early point in the planning process.

Wholesale & retail prices - Pages 38-42

NZCID agrees that in principle increased competition should result in improved wholesale prices and retail prices.

We have some concerns that the Review team has opted to take the view that the market competitive outcomes sought from the electricity market cannot alone guarantee improved performance and that forced change to the ownership structure is desirable. A consideration for taking this view appears to be based on the small size of New Zealand's wholesale market.

Accordingly, the Review concludes that undertaking a swap to establish a new asset owner in the South Island will provide the new owner with energy to retail and thereby achieve a more competitive market. NZCID questions whether an imposed swap option regime will in fact achieve the desired improvements.

Instead, NZCID's preference is that market participants be provided with appropriate commercial incentives to change their commercial behaviour, and that if this is done properly it will lead to improved outcomes for end-consumers. In a market-setting, the emphasis should logically be towards setting the over-arching policy framework within which the market participants operate, rather than restructuring the entities (in this case two SOEs) and forcing them to compete.

That is, NZCID has reservations whether a complex restructuring of the SOEs aimed at achieving greater competition will in fact achieve the competitive benefits expected from it. However, if the swap option approach is to be pursued, NZCID strongly recommends that a business case be developed setting out a benefit-cost assessment, including costs of restructuring and potential for disruption to the SOEs current performance.

Rather than proceeding with an enforced swap option in the first instance, NZCID suggests that it may be more beneficial to implement the other reform proposals, especially those aimed at greater competition in the transmission area and establishing a simpler, accountable regulatory regime under the Commerce Commission.

Subject to the outcome of the suggested review in say three years of the success of the other proposals, if the benefits of increased competition in the transmission area do not materialise, there could be value in re-looking at the notion of further restructuring including to force increased competition among the wholesale companies.

On the other hand NZCID strongly agrees that much more needs to be done to improve retail contestability with ultimate benefit to consumers of more choice, more service and lower (than would otherwise be the case) cost.

NZCID submit that a big part of the answer in this area is to get some effective rules (and technology) established so customers can switch between retailers quickly and reliably in the proposed 3 days.[5] Compared to other markets, New Zealand is a long way behind in this area. A properly organised promotion under an effective, active regulator has big potential to achieve a relatively simple quick win. NZCID agrees that the introduction of smart meters would greatly assist to shorten the time frame for switching between retailers. We suggest assurances need to be received that the introduction of this technology is available in the quantities required for a large scale conversion and can be installed *before* the proposed campaign to promote the benefits of customer switching is launched, otherwise the credibility of such a campaign will end up being questioned. We note that under the current 23 day conversion regime there is a lack of clarity around options and timeliness with the result that many customers have lost faith in the effectiveness of a switching process.

Governance – Pages 60-70

As already noted, NZCID supports the recommendations that regulation of Transpower (which is currently split between the Commerce Commission (CC) and the EC, with considerable overlap and with totally different approaches) should all be consolidated into one regulator, just like other regulated monopolies (e.g. telecoms, Vector and others). We believe that this is an appropriate response, and will give greater consistency and transparency to the regulation of Transpower for the reasons set out earlier.

NZCID also agrees that functions relating to the day-to-day maintenance of security of supply are best left to the System Operator.

Also as noted, NZCID supports the proposal to replace the Electricity Commission (EC) with a much more narrowly focussed Electricity Market Authority (EMA) as a specialist market regulator[6], with more independence from government.

We agree that establishing an independent regulator will help ensure that policy decisions affecting the market don't get distorted by such matters as low income customers or energy efficiency or the like. As important socially as these policy areas might be, NZCID believes they should be dealt with elsewhere, not by a market regulator. The inevitable outcome of these kinds of matters being saddled on the regulator (as they have been to date) is that the cost falls on other customers (such as businesses and the productive sector generally) as a hidden cross subsidy.

However, NZCID requests more work be done on the form and shape of the proposed new regulatory entity, including looking at other options to the creation of the EMA as a Crown entity as proposed and the relationship envisaged between the EMA with the regulatory role to be played by the Commerce Commission in this area.
This request is based on observations that:

[5] Review Recommendation 25, page 77.
[6] See Review section on Governance, pages 60-70, and in particular paragraphs 192-230 and Recommendations 26-29.

- Regulatory problems in the electricity market are not especially different to those in other sectors – is setting up an EMA likely to duplicate potential role of the Commerce Commission?

- Need for a truly independent regulatory authority with strong accountability to industry participants and broader stakeholders; an EMA might become identified as an inclusive part of the electricity sector and therefore partisan?

Finally, NZCID supports the suggestion that a work stream should be established by the Ministry of Economic Development to fully investigate the costs and benefits of an ISO model for New Zealand. This work stream should be scheduled as part of the implementation phase of the reform, and be informed by ensuring an international 'best practice' regime is established at all levels of the sector in a context of doing everything required to lift New Zealand's quality of supply performance ranking from its current place of 53 into the top-10 group of nations.

Conclusion

NZCID strongly agrees that the recommendations are in the right direction, but regard them as a first step on a reform process. Having made a good start to identify what is needed to improve electricity market performance, it is important not to lose momentum in the coming months.

It is now very important that the assurances set out in the Review and by Government creating an expectation of positive changes is actually delivered. To ensure the momentum of change is maintained, NZCID recommend that urgency be given to preparing a timetable for the next stages of the Review together with milestones for the various steps required. It would be unacceptable if the momentum of this Review were to stall only to be re-stimulated by a further dry-year situation or some other crises associated with the electricity sector. In short we see the Review as an opportunity to make meaningful change based on clear strategic intent and effort by government to:

- Lift New Zealand's quality of supply performance and ranking;
- Give confidence to consumers that there are clear outcomes to be achieved from the Review and that these are in the process of being delivered (especially the emergence of a more competitive retail market); and,
- Ensure that the new regulator makes rapid progress on a number of key design elements.

At an early point after consideration of submissions to this Review, NZCID recommends that a further round of consultation be undertaken that enables stakeholders to look at the specifics of the action plan needed to implement the reform programme. We suggest that a timetable demonstrating the clear intention to implement a reform programme, as much as the detail of the changes proposed, will do a great deal towards regaining the confidence of consumers.

Yours faithfully

Stephen Selwood
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