



TRANSPOWER

Keeping the energy flowing

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Gareth Wilson
Manager, Electricity Group
Ministry of Economic Development
PO Box 1473
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Dear Gareth

Ministerial review of electricity market performance

1. We welcome the opportunity to comment on the discussion paper entitled "Improving Electricity Market Performance" dated August 2009.
2. First, the review team should be commended for producing what is a well written report which accurately defines the current problems and offers practical solutions to the issues facing the electricity sector.
3. There will be challenges in the implementation and transition from the present governance arrangements and it will be important for the industry and the Electricity Commission (EC) not to take their "eyes off the ball", particularly in relation to progressing ongoing market development initiatives, while the transition progresses. However, we believe this is achievable.
4. As a general comment, we support the objectives and most of the detail of the principal recommendations from the review. However, there are some specific areas, especially relating to the proposed governance and structure of the Security and Reliability Council (SRC) and the assignment of accountabilities between the Electricity Market Authority (EMA), SRC and System Operator (SO), where we believe further definition is required and / or where enhancement would better give effect to the intent of the proposals.
5. Accordingly, our observations and recommendations focus more on the proposed governance arrangements and implementation issues rather than on the detail and merits of specific market design solutions. We have structured our comments around the relevant recommendations and presented these as an attachment to this letter in the order presented in the discussion paper.

6. In summary, our headline comments and recommendations are:

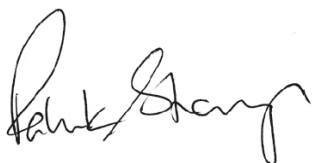
Review recommendations	Transpower's position	Transpower's Recommendation
<p>Recommendations 1 to 7 to improve the management of dry years</p>	<p>We support:</p> <ul style="list-style-type: none"> • The clarification of roles and accountabilities for security of supply 	<p>We recommend:</p> <ul style="list-style-type: none"> • That a clearer distinction be made between short, medium and long term security of supply – including clearer definitions of the respective accountabilities of the EMA and the SO, in order to give effect to the review's intent.
<p>Recommendations 15 to 16 to improve procedures for upgrading transmission services</p>	<p>We support:</p> <ul style="list-style-type: none"> • The objective of making the Grid Investment Test (GIT) simpler and less prescriptive and that responsibility for approving the GIT be with the EMA • The recommendation that the economic regulation of transmission services be consolidated under the Commerce Commission (CC). 	<p>We recommend:</p> <ul style="list-style-type: none"> • That the criteria and process that EMA should follow when developing the revised GIT be defined. • That the recommendation be extended to require the EMA to undertake a review of the grid reliability standards at the same time as the GIT revision. • That in order to reflect the review's intent more effectively it be clearly stated that the role of the EMA is to set the rules (GIT, GRS etc) and the role of the CC is to enforce the rules under the Commerce Act (Part 4) arrangements. • That the recommendations explicitly include a review of the processes and requirements in the existing Part F of the EGRs prior to adoption by the EMA.
<p>Recommendations 17 to 25 to improve wholesale and retail competition and help restrain prices</p>	<p>We support:</p> <ul style="list-style-type: none"> • The recommendation that a transmission hedging mechanism should be introduced as a priority 	<p>We recommend:</p> <ul style="list-style-type: none"> • That the discussion paper remains neutral on the specific hedge instrument that should be adopted but clearly state the outcome expected.
<p>Recommendations 26 to 29 to improve the governance of the electricity sector</p>	<p>We support:</p> <ul style="list-style-type: none"> • The disestablishment of the EC and the reallocation of its functions to other agencies • The establishment of an SRC as an expert advisory body with respect to the SO's ongoing system management and security performance. • The recommendation to transfer operational aspects of the current EC functions to the SO. 	<p>We recommend:</p> <ul style="list-style-type: none"> • That the rule development process to be adopted by the EMA be prescribed, making a distinction between longer term policy (market design rules) and rules which refer to day to day operational and technical matters. • The SRC be established as an expert advisory body independent from the EMA and key principles to guide its design and operation be developed.

7. We support the proposed elimination of overlapping responsibilities between the EC and the Commerce Commission (CC), with clear accountability for the economic regulation of transmission services being assigned to the latter. In our view, placing the approval of major grid projects under the CC's Part 4 framework will ensure that an appropriate level of regulatory oversight is applied to transmission investments with accountability for performance outcomes placed squarely on Transpower.
8. We specifically support a move away from a process that attempts to optimise the merits of each individual project in isolation, with project expenditures allocated and capped separately. We have argued for some time that such an approach inevitably leads to suboptimal cost and engineering outcomes, results in disincentives to innovate over the longer term and constrains the ability to plan and develop the grid in a strategically integrated way.
9. We do not believe that the project by project approach, including duplication of analysis of relatively small projects, which has been applied by the EC under Part F of the Electricity Governance Rules, has actually yielded net benefits and resulted in lower cost outcomes for customers. Savings can always be identified on discrete projects, but the overall effect of taking this tactical approach, rather than considering investment in a more strategic way, is to increase whole of life costs across the system as a whole.
10. Some parties argue that a less intrusive regulatory control regime potentially introduces the risk that expenditure might not be incurred efficiently. We do not agree with this. We note that the Commerce Commission will have at its disposal a number of mechanisms to mitigate this concern. These include a detailed ex ante review of forecast expenditures (possibly using third party experts), clearly mandated rules set by the EMA governing how and when Transpower will be required to apply a Grid Investment Test (GIT) and conduct consultation on its proposals, as well as an option to review, ex post, actual expenditures incurred during a regulatory period.
11. The Commerce Commission's proposed framework also better aligns the incentives to ensure efficient expenditure by allowing the company and customers to benefit from a share of any out-performance against approved expenditure forecasts.
12. Key to the effective implementation of the proposed allocation of functions between the EMA and the Commerce Commission is the definition of a suitable GIT and Grid Reliability Standards (GRS). To this end we do not consider that sections of Part F of the rules can be simply transferred over to the new entities without a substantial review.
13. We agree with, and accept, the recommendation to transfer operational aspects of the current Electricity Commission function to the SO; including the responsibility for contracting for market services, information and forecasting functions relating to security of supply, reserve energy and emergency conservation campaigns.

14. Given this wider remit, the need for transparency in relation to the SO's decision making is paramount. This will be particularly important in relation to the SO's process and rationale for the letting of market services contracts. It will be incumbent on the SO to ensure that "least cost" outcomes are achieved and, where appropriate, third party services are awarded on a contestable basis. To this end, we envisage that the competitive selection of service providers, as required by the current rules, will continue. This is in keeping with Transpower's outsourcing philosophy and business model.
15. It is important that ongoing market design initiatives continue during the transition from the present governance arrangements.
16. We recommend that an independent transition unit be established under the aegis of the Ministry of Economic Development (MED), with an independent chair with the mandate, to oversee the transition from the current EC governance to the new EMA, SRC and SO structure. The transition unit could utilise resources seconded from the industry. The transition unit would only remain in existence until the EMA was established and the rules and regulations governing the new functions and accountabilities were in place.
17. The independent SRC could also be established early and before the new arrangements are formally in place. The SRC could usefully apply its expertise (in conjunction with the industry) to progress those aspects of the transition that relate to security and reliability, including the proposed transfer of functions from the EC to the SO. The SRC's role would then shift to its "normal" function once the implementation was complete and the EMA had been established.
18. Recognising the importance of achieving rapid and effective progress, Transpower is willing to contribute expertise to these interim transitional bodies as required.
19. Finally, we are aware that Transpower, as an organisation, needs to continue to make improvements across a range of its business functions and we too will face a challenge to position ourselves where we can play an active role to support the development and success of the new arrangements. We are committed as a company to a process of continuous improvement and supporting the transition to the new governance arrangements.

We would be happy to engage with you further on these matters and to provide any follow-up detail as requested.

Yours sincerely



Patrick Strange
Chief Executive

Attachment to Transpower letter dated 16 September 2009

Comments on specific recommendations

This attachment provides further comment on some of the specific recommendations presented in the discussion paper.

Recommendation 2

Floor on spot prices

1. We have no comment on the concept of applying a floor price during public conservation campaigns. However, with regard to setting a price floor for forced power cuts, the design details of such a scheme will be critical in order to ensure that it does in fact incentivise market participants to provide sufficient supply.

Recommendation 3

Roles and Responsibilities for Security of Supply

2. The clarification of roles and accountabilities for security of supply outlined in Table 2¹ is helpful.
3. There are some amendments that we believe would enhance the proposed clarification of roles and responsibilities. We envisage that these matters would largely be dealt with during the implementation stage, but we recommend that some principles be established as guidelines for the implementation. These principles include:
 - **Security of supply:** a clear distinction should be established between real-time, near term and long term security of supply. This principle should seek to clarify the boundary between the SO's responsibility in real-time and near term and the EMA's accountability in the investment time frame. In practice, we would see the EMA being responsible for ensuring that the rules incentivise the industry to maintain security of supply, and enable the SO to secure security services in the near-term (months or even years ahead) and manage system security in real-time.
 - **Technical expertise:** The balance of technical expertise and capability between the SO and the EMA should be explicitly recognised. The EMA should have a capability weighted towards regulatory expertise whilst the technical expertise should reside with the SO. This will avoid a repeat of the unnecessary duplication of technical resource². A requirement for the EMA to consult the SO on technical / operational rule amendments at an early stage in the process should be formalised. The SO, with SRC oversight, should be required to provide

¹ *Improving Electricity Market Performance*, August 2009, Volume 1

² It may be worth re-labelling the EMA from "authority" to "regulator" to emphasise the primacy of its oversight and industry regulatory role.

neutral and transparent advice to the EMA, in keeping with the “reasonable and prudent operator” requirement of the current rules³.

4. Further discussion of the role of the SRC in relation to security of supply is included under our response to recommendation 29.

Recommendations 15 and 27

Grid Investment Test, Grid Reliability Standards and Transmission Pricing Methodology set by EMA

5. We support the principle that our investments should be subject to economic analyses as part of achieving least “whole of life” cost outcomes and we agree that a Grid Investment Test (GIT), set out in the rules, is the right vehicle. However, we also support the objective of making the GIT simpler, clearer and less prescriptive as well as requiring the GIT to consider a broader range of benefits.
6. Having the GIT rules defined by the EMA (subject to consultation, etc) is appropriate as this provides a clear distinction between the rule setter (EMA) and rule enforcer (Commerce Commission). It would avoid ambiguity arising from possible different interpretations of the high level recommendation if the review recommendation could set out more precisely the criteria and process that the EMA should follow when developing the revised GIT rules.
7. For example, we suggest that the recommendation should specify that the revised GIT should move from a narrow market benefit test to a wider national cost benefit test – and be utilised as a guide to inform planning judgements, rather than the results being required to be followed deterministically. In addition, the application of the GIT and associated process requirements should be commensurate with the size and nature of an investment, with a less onerous process specified for lower value, less nationally significant investments.
8. We agree that the revised GIT rules should require Transpower to invest to maintain the Grid Reliability Standards (set by EMA). As these planning standards set the balance between reliability and cost, they are integral to the development of the revised GIT. The current standards do not adequately take account of the uncertainties associated with estimating probabilities of particular events which may have severe impacts if they occur, but which have low probabilities of occurrence. We consider that there is now an opportunity to review the Grid Reliability Standards to align them with international best practice. We recommend that a review of the Grid Reliability Standards should be specified as a requirement for the EMA to undertake when the revised GIT is being developed.
9. The intent of the review recommendation is clearly to separate the functions of rule making (EMA) from their enforcement (CC). We agree with this allocation of regulatory functions. As written, an inadvertent

³ Electricity Governance Rules and Regulations – Part A

consequence could be that that EMA also see an enforcement role, especially in relation the Transpower's application of the rules around the GIT and Grid Reliability Standards.

Recommendations 16 and 27

Transfer approval for major grid upgrades to the Commerce Commission

10. We fully support the recommendation that the economic regulation of transmission services should be consolidated under the Commerce Commission, as Transpower's single economic regulator.
11. The Commerce Commission's proposed regulatory framework for Transpower under Part 4 of the Commerce Act, which will apply from 2011 onwards, is designed to accommodate such a change.
12. Individual price-quality path regulation under Part 4 of the Commerce Act could utilise regulatory incentives to encourage efficient outcomes, such as rewards/ penalties for achieving superior/ deficient network service levels and incentives to encourage efficient least "whole of life" cost outcomes. When developing this framework the Commerce Commission is expected to draw on the experience of established regulatory mechanisms applied in other international jurisdictions.
13. It is important to note that individual price-quality path regulation under Part 4 will not lessen the tensions (or requirements) on Transpower to justify its investments economically. Our investment proposals will still be subject to independent expert review, but the degree of regulatory oversight is expected to be more closely aligned with the scale and scope of the investments.
14. We envisage that, for major grid upgrades which transfer to the Commerce Commission, in order to have the efficiency of expenditures confirmed by the Commission as part of a revenue allowance, we would be required to demonstrate that the GIT process (as defined by EMA) had been followed and that our internal processes for capital planning and delivery align with good industry practices. This rightly places the responsibility and accountability clearly with Transpower to plan and maintain the grid openly, transparently and with appropriate consultation. We do not see this as a departure from the current GIT philosophy, but rather a transfer of the "burden of proof" to Transpower as the grid planner.
15. Integrated decision making with respect to the approval of Transpower's expenditure is stated as a key objective arising from the review. To achieve this outcome we consider it essential that the Commerce Commission does not simply replicate the current Part F approvals approach when developing the regulatory framework under Part 4 of the Commerce Act.
16. We consider that the Commerce Commission should take the opportunity to develop a more integrated approach to the approval of our forecast

capital and operating expenditures (for a regulatory period) and set an aggregated expenditure allowance with incentives tied to performance against this overall allowance – rather than adopting a more intrusive and piecemeal approach such as establishing expenditure caps for individual project investments (which is the current Electricity Commission approach). We acknowledge that this will require a degree of confidence in the accuracy of our multi-year expenditure forecasts, on which the revenue allowance will be based. The Commerce Commission and Transpower may consider it necessary to put in place transitional arrangements before progressing to a revenue approval which is based on a fully integrated expenditure allowance – but the development of the framework to achieve this outcome should be agreed as the longer term aim.

17. We note that, as part of the implementation of the new regulatory arrangements, significant amendments will be required to those parts of the current Part F rules which would presumably remain under the jurisdiction of the EMA, for example, Section II (Benchmark Agreement), Section III (GIT and Grid Reliability Standards), and Section VI (Interconnection Asset Services). We recommend that, as part of the implementation, the transition unit undertakes a full end to end review of Part F.

Recommendation 18

Transmission hedging mechanism

18. We support the recommendation that, as a priority, a transmission hedging mechanism should be introduced to assist retailers to manage risk created by transmission congestion. We are, however, surprised that the discussion paper advocates the implementation of locational rental allocation (LRA) as the specific hedge instrument, as the EC is currently engaged in consultation on the various transmission hedging options. We recommend, therefore, that the final recommendations arising from the review remain neutral as to the outcome of any future consultation on transmission hedging mechanisms, but clearly state a preference for a mechanism that facilitates retail competition whilst preserving demand side incentives.

Recommendation 19

Demand-side participation

19. We fully support all possible initiatives to facilitate the active participation of the demand side in the market. However, whilst there are valid arguments to support the proposal for real-time “not ex post” spot prices we believe that the same is true for the provision of “ex post” spot prices. We suggest that this is a recommendation that is given further consideration.

Recommendation 22

Guidelines and Standards on smart meters

20. We agree in principle with the recommendation as stated, but have some reservations about the focus on specific technologies such as smart meters. Our view is that recommendations in the broad area of smart networks should be focussed on maintaining the principles of open and non-discriminatory access and the potential for adopting common standards for the associated devices, communications and applications. This would align with the approach being developed in other international jurisdictions, such as the US.⁴

Recommendation 24

Publishing wholesale market data

21. We support the requirement for free and open access to all real (or close to real) time market and physical system data, but note the non trivial nature of the work needed to implement such a regime.

Recommendation 26

Establishment of an Electricity Market Authority

22. Transpower sees the transfer of the regulatory/governance functions of the Electricity Commission to the proposed EMA as a very positive contribution to the achievement of the objectives of the Ministerial Review.

23. We interpret the primary role of the EMA as being a focus on market design and rules development to support the long-term efficient operation of the market and ensure long-term system security. This clear focus, coupled with its constitution as an Independent Crown Entity, should facilitate a faster decision making process and result in the necessary market improvements being implemented more expeditiously than has been the case under the current arrangements.

24. We believe that the effectiveness of the recommendations in relation to the role and function of the EMA could be further enhanced through the following:

- **Rule making power and process:** We concur with the decision to assign the single point of accountability for the rules, and the power to change the technical rules, to the EMA. Our concern is ensuring that the process to effect a required rule development or change occurs expeditiously and that the industry is recognised within the rule change process as being the primary source of expertise, especially in relation to technical and operational matters covered by the rules. Any revised rule change process administered by the EMA should enable and

⁴ Report to NIST on the Smart Grid Interoperability Standards Roadmap, EPRI, August 10 2009

require the industry to work together to develop rule change proposals (under regulatory oversight and subject to possible EMA veto).

- As referred to in the discussion paper, there is a need to distinguish between the processes used for the development of longer term policy (market design) rules and those used for the development of technical / operational rules. In our view, the EMA should focus its resources on channelling industry input to the development of market design policy and the rules that result from this work. The industry, in conjunction with the SO, should provide expertise to support the EMA's policy development work as well as apply its expertise to the development and ongoing refinement of the operational / technical rules.
- There is an opportunity to reintroduce a very positive aspect of the previous NZEM's rule change process, viz. the requirement that rule change decision and management be conducted (by the EMA) within a defined timeframe.
- It is also important to ensure that any interested party should be able to make a proposal for rule change to the EMA. We support the recommendation that the EMA use industry working groups to prepare rule changes, as required, but consider that both working groups and the EMA should be required by legislation to consider or reject rule changes within a specified period (say 60 days) and that rule changes should be able to be proposed by any interested party.
- **System Operator services revenue recovery.** It is proposed that the SO continue to contract with the EMA for the services defined by the rules, and that the Commerce Commission provides oversight of the SO's costs under the contract. The Review proposal is that the System Operator Service Provision Fees (SOSPA) fees would continue to be recovered by an EMA levy on the industry. In order to continue to fulfil this function, the EMA would need to be a credible counterparty to the SO, which would inevitably tend to drive the EMA towards greater involvement in technical and operational matters than is intended. As a regulated service, there seems to be no reason why SO revenues could not be effectively regulated by the Commerce Commission under Part 4 with SO and NZX/M-co market service fees recovered via a separate allocation mechanism specified under the revised transmission pricing methodology. This would align the regulatory regimes (and principles) for transmission and system operations services, with grid reliability standards and system and market operations performance obligations (respectively) being set by the EMA, and the revenues to achieve them being regulated by the Commerce Commission.

Recommendation 27

Transfer approval of major grid upgrades to the Commerce Commission

25. Please refer to the comments above on Recommendations 15 and 16.

Recommendation 28

Functions of the System Operator

26. Transpower agrees with and accepts the recommendation to transfer operational aspects of the current Electricity Commission function to the System Operator. The creation of the independent SRC, as advocated above, would provide an appropriate level of additional governance for the System Operator in its discharge of these extended functions, as well as its management of near-term as well as real-time security of supply.

27. With regard to the transfer of contracting for market operations to the System Operator, pursuant to rules set by EMA, Transpower envisages the continued competitive selection of service providers as required by the current rules⁵. Similarly, procurement of ancillary services⁶ would continue in accordance with the procurement plan in the rules. This is in keeping with Transpower's outsourcing philosophy and business model.

28. We support the preparation of a revised form of Statement of Opportunities (SoO) being undertaken by the MED as part of its long term energy forecasting role. To avoid any future ambiguity, we recommend that it be clearly stated that the SoO is for information only and that SoO scenarios are not to be prescriptively linked to the application of the GIT. In addition, the relationship between the system security forecast (SSF) prepared by Transpower as System Operator, the annual planning report (APR), prepared by Transpower as grid owner, and the revised SoO prepared by MED, should be clearly defined.

Recommendation 29

Security and Reliability Council

29. We fully support the recommendation to create a Security and Reliability Council (SRC) and consider that this will be a central element of the relationship and interaction between the System Operator, the industry and the EMA. As such, the SRC deserves very careful design consideration with input from key industry stakeholders.

⁵ The current service provider contracts, other than for the System Operator itself, are for Clearing Manager, Pricing Manager, Reconciliation Manager, Registry, and for the Wholesale Information and Trading System.

⁶ The five current ancillary services are frequency keeping, instantaneous reserve, over frequency reserve, voltage support and black start.

30. Consequently, Transpower would like to provide its recommendations for the key principles to guide that design. These are that the SRC should:

- be an expert advisory body independent from the EMA;
- have no formal role in the rule making process other than providing expert advice to the Government, EMA, the System Operator and the industry on operational security and reliability matters;
- advise and monitor the System Operator's fulfilment of its obligations under the rules and help ensure that the System Operator's capability is fully utilised; and,
- be an independent expert voice of the industry and wise counsel.

31. The independent status of the SRC and the expertise and credibility of the SRC Board Members are considered by Transpower to be essential requirements for the success of SRC's expert oversight and advisory role. The SRC's independence would also facilitate increased transparency and more expert challenge of any "value judgement decisions" that the System Operator is required to make within the rules and is likely to lead to more collaborative industry involvement to address security-related matters when this is required.

32. The membership of the SRC could either be elected or directly appointed (or a combination of both) but its members should be expert in the technical aspects of the industry, credible and act in an independent capacity

33. The SRC could be constituted as either a statutory or non-statutory body. There are precedents in New Zealand for both constitutional forms. Non statutory bodies include, for example, the Telecommunications Carriers Forum in the telecommunications sector and the Gas Industry Company in the gas sector. Both of these bodies represent their respective industries and perform a regulatory function recognised by the governing statute with a regulatory back-stop in the absence of industry agreement.

34. Given that the SRC, as envisaged, would not be an industry body, per se, but rather an independent expert council with defined functions under the overall governance arrangements we believe that it would be appropriate for the SRC to be formally constituted as a statutory body possibly pursuant to the Electricity Governance Regulations.

35. Irrespective of the SRC's finally constituted form we believe that a transitional SRC could be established relatively quickly, with industry support, to support and expedite the transitional process.