

**New Zealand Commerce Commission
Draft Determination
Electricity Governance Board Limited
April 26, 2002**

Comments

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At the request of Transpower, I reviewed the Commerce Commission's Draft Determination of April 26, 2002, in the matter of the application of the Electricity Governance Board Limited (EGBL) for authorisation of the arrangements under the proposed "Rulebook" and governance arrangements for a restructured electricity market. The present comments are offered in anticipation of the opportunity to appear before the Commission.

In general, the Draft Determination covers the major issues that it must address in considering the competitive effects of the proposed rules and governance structure. However, when viewed from the perspective developed largely in the context of United States restructuring discussions, a few issues present themselves for further consideration in light of the experience in developing new institutions for a restructured electricity market. The trajectories of restructuring in the United States and New Zealand are not the same, but many of the underlying problems are common because of the common features of the electricity system.

The most important common feature is the recognition that the physical wholesale market and its requirements for coordination constitute a natural monopoly that calls for mandatory common rules and efficient pricing. While it would appear that this core principle is not in dispute, the EGBL application and, to some extent, the Draft Determination do not squarely address or resolve the paradox that is created when "competitive" merits are claimed as a consequence of the voluntary nature of the arrangements. Voluntary decisions by market participants about the choices they will

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make under the rules are central to the wholesale market design. This form of voluntarism exists under both the EGBL model and the Commission's counterfactual case. But this voluntarism does not extend to participation under the rules or the need to adhere to common protocols in order to deal with the unavoidable and complex interactions in the grid. New Zealand has been a world leader in its understanding of this need for a well-designed, integrated wholesale market. I concur in the view that emphasizes the the critical importance of the wholesale market design. Hence, my comments are limited to a further consideration of some of the important details that support this overall vision.

In particular, I would outline for future discussion with the Commission a view of the experience with so-called "stakeholder" or self-governance arrangements, the role of industry in decision processes in the presence of regulators, and some implications for transmission investment.

Self-governance. The United States has regulators in both Federal and state governments with distinct responsibilities in the case of electricity markets. Hence, there has not been true self-governance of electricity restructuring. However, the experience in the United States is relevant in that the Federal regulators took an approach similar to that of the New Zealand government. The regulators preferred not to exercise a decision-making role in the development of the institutions and rules for a restructured electricity market. Rather, until recently the approach has been to provide broad guidance and principles but to allow the stakeholders or market participants to develop their own market designs and institutions. The theory was that voluntary cooperation would embrace experimentation and allow for a diversity of approaches. A thousand flowers would bloom.

The unhappy experience in the United States has been the great cost of bad decisions and worse decision-making processes. As discussed further in a review of this history, I described the "reforms of reforms" that have been necessary.² For example, the market implosion in California was the direct result of bad decisions made through almost unanimous consent, or its appearance, by the stakeholders. The government bodies that might have acted in the public interest to reject the "self-governance" results chose to defer to the presumed superior approach of the stakeholder process. A similar story can be told about Texas, or about the agonizing delays of the Pacific Northwest and Southeastern regions, and so on.

The resulting market failures can be attributed directly to the bad choices made in the stakeholder process. The lesson learned by the regulators was the importance of regulation and of a decision body that can act with authority. There is no guarantee that the decisions by a government body will be optimal, but the experience in the United States has been that it would be hard to do worse than the self-governing stakeholder processes. Even the Wall Street Journal, a usual opponent of government meddling, has supported this insight:

² William W. Hogan, "Electricity Market Restructuring: Reforms of Reforms," Journal of Regulatory Economics, Vol 21, No, 1., January, 2002, pp. 103-132.

"...the California experience highlights one of the great paradoxes of deregulation -- that it can be more difficult than regulation itself. The notion government regulators can simply close up shop, and let a fully functioning and competitive marketplace emerge, has been disproved time and again. Libertarians argue all market problems have their roots in government actions. Maybe so, but that is a chicken-and-egg argument that has little use when overhauling a marketplace that has been controlled by the government for a century. ...

California's bungled effort to create a free market for energy shouldn't be seen either as an argument against Enron, or an argument against electrical deregulation. Instead, it should be taken as a lesson that 1) deregulation of the nation's electrical system needs to be designed by smart people who are acting, as much as possible, in the public's interest; 2) the deregulated system needs to have very clear rules that apply nationwide, and don't vary state to state; and 3) those rules need to be enforced by a well-staffed, muscular federal-regulatory agency.

Deregulation, it turns out, is hard government work."³

This should come as no surprise. The research on voluntary self-governance, of which there is a great deal, has regularly stressed that the successful cases depend on narrowly defined boundaries with relatively homogeneous interests.⁴ In the presence of heterogeneous interests among the participants, the tendency to compromise does not follow the Coasian model of the most efficient outcome with side payments. Rather, the voting process can lead more to a least common denominator solution that sacrifices efficiency.

A preference for self-governance in the complex electricity industry reflects an old argument that stakeholders will necessarily make efficient choices because to do otherwise would burden them with added costs. However, as summarized by Douglass North, the most notable early proponent of this view, the evidence forces an opposite conclusion:

"Incremental change comes from the perceptions of entrepreneurs in political and economic organizations that they could do better by altering the existing institutional framework at some margin. But the perceptions crucially depend on both the information that the entrepreneurs receive and the way they process that information. If political and economic markets were efficient (i.e., there were zero transaction costs) then the choices would always be efficient. That is the actors would always

³ Allan Murray, "Enron in California Teaches A Lesson About Deregulation," Wall Street Journal, Editorial Page, May 14, 2002.

⁴ Elinor Ostrom. Governing the Commons: The Evolution of Institutions for Collective Action. Cambridge: Cambridge University Press, 1990. Henry Hansmann, "When Does Worker Ownership Work? ESOPs, Law Firms, Codetermination and Economic Democracy," The Yale Law Journal, Vol. 99, no. 8, June 1990.

possess the true models or if they initially possessed incorrect models the information feedback would correct them. But that version of the rational actor model has simply led us astray."⁵

Hence, given the complications of electricity restructuring, strong conflicts in the interests of market participants, and the overwhelming weight of experience, the Federal regulators have now come to a view that their role is critical. The evidence is in the new and aggressive push from the regulators to adopt regional transmission organizations, embrace a standard market design, and to pursue aggressive steps to mitigate market power and promote the development of infrastructure. The new view is that within a framework of efficient rules and incentives, market participants disciplined by market forces will produce good outcomes. But the market participants cannot be relied on to create the rules that provide the incentives.

Industry Decision Process. The Draft Determination casts a stark contrast between informed decision processes under the control of the industry and the perils of executive decision by an EGB with regulatory authority. This contrast plays an important part in the balancing of costs and benefits between the alternatives. However, the hypothetical presents a false dichotomy.

Consider the case of PJM in the United States. Covering the Mid-Atlantic states, the PJM Independent System Operator has an independent board and operates under direct supervision of the Federal regulator. Utility market participants also enjoy oversight by the state agencies in the several states covered by its markets. The PJM market is, therefore, heavily regulated and formally insulated from control by market participants. However, PJM is also closely tied to the market participants by an extensive and serious stakeholder process through which PJM discusses and shapes nearly every major decision. And there is a “members committee” through which PJM member-participants vote their preferences for market rule changes. However, the independent Board has the ultimate say within PJM, and even its proposals are subject to final FERC approval.

Even the strongest critics of the failures of electricity restructuring have been careful to note the success of the PJM process in adapting the rules and protocols to be responsive to the concerns of the market participants. It is commonplace for the participants to note that PJM treats them like customers and their advice in the decision process is given serious attention.

However, this advice is not the same thing as a voting procedure that determines control. In the end, the independent board and the regulators can make decisions to promote the public interest even if this is not supported by a majority of the market participants. Critically, this feature is absent in the proposed EGBL design. In most cases, the advice of the PJM stakeholders is useful and is used. But the ability to make independent decisions is described by PJM not as an impediment to receiving good

⁵ Douglass C. North, Institutions, Institutional Change and Economic Performance, Cambridge University Press, 1990, p. 8.

industry advice but rather as providing an incentive for industry to give the best advice possible.

The choice, therefore, is not between the EGBL process and independent but uninformed action by a regulator. For most operational decisions, the EGBL process can work as defined. But for some circumstances when the EGBL process fails, the force of regulation will be needed to produce results that support the public interest.

Infrastructure Investment. A likely example where voluntary processes will fail to provide decisions in the public interest is in the case of infrastructure investments in transmission. Of course, this does not imply that market-based transmission investment is unlikely. To the contrary, with the introduction of financial transmission rights to create viable property rights in an interconnected grid, there should be merchant transmission investment in New Zealand just as has begun to appear in Australia and the United States.

However, for large transmission projects with potential free-riders, it is widely accepted that there is a problem of potentially efficient transmission investments not being made. In this event, the role of a regulator becomes both to approve regulated investments and to compel the otherwise unwilling beneficiaries to pay for the cost of the expansion.

The free-riding effect can take either of two forms. First, investment may simply be neglected, with costs dispersed among the market participants. Everyone is worse off, but no coalition can appear to correct the problem without the voice and authority of the regulator. This would be, for example, the most likely outcome in the United States, and the latest report from the Department of Energy suggests that this bias against transmission investment is already a serious problem.⁶

In the case of New Zealand, the presence of Transpower with its special mandate to serve the public interest creates another way the problems would emerge. Transpower's customers may argue that they are willing to accept a lower quality of service in lieu of the transmission investment, but in the event the poor service, when experienced by end-consumers would be politically unacceptable and Transpower would be forced to act. In some cases, expensive emergency measures would be required. In other cases, transmission investment would be made outside the EGBL approval process and without a contract to cover payment for the service provided. In effect, Transpower could be put in the position of being effectively required to serve customers who could exploit the voluntary EGBL process to avoid payment.

Neither case would be good for New Zealand or its electricity market. Hence, the absence of a regulator would not necessarily lead to efficient transmission investment. Rather, it is likely to lead to inefficient under investment in transmission.

The argument in the Draft Determination that regulation may lead to over investment in transmission does not seem supported by experience. It is difficult to

⁶ U. S. Department of Energy, National Transmission Grid Study, Washington D. C., May, 2002.

finance and build transmission expansions. The general sense in the United States is that the regulated system has not kept pace with the needs of the market. Furthermore, it is well-accepted that a principal source of the market power in electricity systems arises from pockets of load and generation created by transmission constraints. Faced with such problems, investment in transmission mitigates market power and produces benefits that would not be captured in the usual investment analysis.

In short, the experience in the United States would tilt the argument in the direction opposite to the conclusions of the Draft Determination. The market alone is likely to produce too little transmission investment. The realization is growing that with the many changing patterns of electricity trade, transmission is even more important. There is little concern in the United States that regulation is producing too much transmission investment.

Infrastructure investment in transmission is only one example where voluntary processes will fail to provide decisions in the public interest – albeit that it is one of the most important and one on which the Commission has to date focused much of its attention. However, the difficulty of making efficient rule changes may be equally important in the long-run. In the case of the United States, the move towards an efficient wholesale market design that looks much like the New Zealand model was resisted successfully by market participants in every region except New York. It was only the conviction on the part of regulators in Washington that the public interest demanded efficient and transparent markets that produced the current movement towards a standard market design. And the process is not complete in the United States. Absent the strong continued force of the regulators, whose authority has recently been reinforced by the Supreme Court, there is no assurance or expectation that good electricity markets would emerge. Given this hard won experience, it would be painful to watch New Zealand repeat our mistake in relying too heavily on a mirage of voluntarism in a market whose technology requires mandatory rules.