

Path to CRE – Developing the Authority’s work programme for 2012 and beyond

Introduction and background

1. The Authority commenced operations on 1 November 2010 with an initial strategic focus for its first year of operation set around: meeting the requirements of s42 of the Electricity Industry Act 2010 (Act); implementing its new functions, establishing its Advisory Groups and engaging with the sector.
2. The Authority is now nearly a year into that journey, making it timely to develop a longer term strategic direction to achieve the CRE aspirations specified in the Authority’s Statement of Intent (SOI).

SOI outcomes (CRE aspirations)

3. The statutory objective for the Authority sets out the regulatory goals or mission of the Authority. Consistent with that objective the Authority has published an SOI for 2011 – 2014 that states the Authority is pursuing the following outcomes (referred to as CRE aspirations in this document):
 - (a) *Competition (C)*: Widespread confidence among investors and consumers in the competitiveness of New Zealand’s wholesale and retail electricity markets (within the bounds of a small economy that is unable to import electricity);
 - (b) *Reliability (R)*: Widespread acceptance among consumers of efficient levels of supply reliability across the ‘supply chain’ (generation, transmission, distribution, and retailing); and
 - (c) *Efficiency (E)*: Widespread recognition that New Zealand’s wholesale and retail electricity markets, and transmission and distribution arrangements, are efficient mechanisms for coordinating electricity production and consumption, and for facilitating timely and innovative investment in the electricity system.
4. As underlined in the above statement, the CRE aspirations emphasise the Authority’s focus on perceived performance, not just actual performance, but perceptions will be strongly influenced by actual performance over time.
5. The Authority is preparing annual assessments of actual market performance, with the first one due for release by the end of 2011. In future years, these assessments will influence stakeholder views of the performance of the electricity market, just as the 2009 Ministerial Review of Electricity Market Performance (Ministerial Review) is influencing current thinking.

The current ‘state of play’

6. The Authority has recently commissioned two surveys – one of residential electricity consumers and one of electricity sector stakeholders – to provide feedback on consumers’ and sector stakeholders’ views of the electricity market’s performance in meeting the CRE

aspirations. The executive summaries of the surveys and a set of figures graphing the findings are attached. The original survey questions are also attached¹.

Competition

7. The first aspect of CRE is widespread confidence among investors and consumers in the competitiveness of New Zealand's wholesale and retail electricity markets (within the bounds of a small economy that is unable to import electricity).
8. Both survey results show that there is a widespread lack of confidence among electricity consumers regarding the competitiveness of New Zealand's electricity retail market.
9. Significantly, for both the consumer survey and sector stakeholder survey competition in the electricity retail sector rated was regarded as worse than for a number of other sectors – online bookstores, telephone companies, banks and other financial institutions, electrical goods stores and supermarkets. Only the petrol station retail market rated worse than the electricity retail market.
10. Having said that, 38% of respondents to the sector survey believed competition in the retail electricity market was more than adequate, compared with 35% that thought the level of competition was less than adequate. The corresponding figures from the residential consumer survey were 36% and 35%, respectively.
11. The survey results reaffirm the recommendations of the Ministerial Review. It stated that “There appears to be room for substantial improvement in the level of competition at the retail level.”² The report noted that “... energy costs for residential and commercial users appear to have significantly exceeded the movement in the cost of new supply” and that “retail margins for retail users in particular appear to have increased substantially in recent years.”³
12. A large proportion of sector stakeholders' did not know the ancillary services market well enough or perhaps were not aware of it to provide their views. As a result there are low numbers for the areas tested in terms of “good” and “poor” performance. As indicated, in the graphs attached, the net result between those that thought it was “good” and “poor” are not substantial for most of the aspects measured.
13. The level of competitiveness in the hedge market was regarded as poor, particularly in regard to the ASX market for long-term hedge contracts and the over-the-counter market. Consumers in the residential survey were not asked to rate these markets because they were expected to only have a limited experience with these markets.
14. The views of sector stakeholders on the competitiveness of the ancillary services market was expected and appears to reflect the well known view within the industry, and amongst some large consumers, that substantial net benefits are potentially available from making the IR

¹ Note the Consumer survey and the Sector Stakeholder survey asked respondents to rate “*There is a reliable supply of electricity each day, that is, a good balance is achieved between the cost of power cuts versus the cost of maintaining power lines, which is funded by the daily fixed charge on your electricity bill.*” The words “...which is funded by the daily fixed charge on your electricity bill” are incorrect and should have been omitted.

² Improving Electricity Market Performance – Volume 1, Page 42.

³ Op. cit., page 41.

and frequency keeping (FK) markets nationwide markets. The benefits are primarily in the form of enhanced competition for the provision of IR and FK services.

15. The competitiveness of the spot market is perceived to be substantially better, with 51% of sector stakeholders agreeing prices in the spot market generally reflect the outcomes expected in a workably competitive market compared with only 24% disagreeing with that statement.
16. Part of the reason for the view among consumers that the retail market is uncompetitive no-doubt arises from the fact that New Zealand has been transitioning through a long period of rising electricity prices, driven by the economics of generation where the cheapest fuel sources are exploited first and then the more costly sources are exploited in their merit order, with the rising pattern of prices disrupted by large gas discoveries and technological developments affecting the cost of supply.
17. Several initiatives have already been adopted and implemented, and may, once the effects bed-in, change consumers and sector stakeholders' views of the competitiveness of electricity market, especially of the retail market. These initiatives include the Ministerial Review initiatives of transferring the Tekapo A and B power stations from Meridian to Genesis, virtual asset swaps, and the Authority's introduction of the "What's my Number" customer switching campaign. Further, a number of other initiatives have or are close to being developed and will be implemented over the next 18 months. These include the introduction of financial transmission rights, more standardised distribution tariffs and use of system agreements.

Reliability

18. The second component of the CRE aspirations is widespread acceptance among consumers of efficient levels of supply reliability across the electricity supply chain.
19. Prior to these surveys it had been difficult to assess the level of consumer acceptance of current reliability levels.
20. The consumer survey indicates the majority of consumers have some degree of comfort with current reliability levels and a degree of comfort that the right balance is being achieved between reliability and cost. The reality is though that these results are likely to reflect to some extent the fact that there has not been a major supply interruption (bar those caused by 'acts of god' eg Christchurch earthquake) or a 'dry-year' in recent years.
21. Amongst sector stakeholders there was a high level of confidence that there is an efficient level of day to day reliability. However, there is less confidence that the current level of security supply is efficient, in the sense that the expected cost of power interruptions is not thought to be well balanced against the costs of achieving that level of reliability through reserve generation and demand response capability. Nevertheless, slightly more respondents agreed the current level of security of supply is efficient (34%) than disagreed with that statement (33%).
22. Interestingly, sector stakeholders do not think that consumers understand the trade-offs between costs and reliability. Presumably, this reflects a view that consumers' day-to-day concerns are with prices and it is difficult for participants to justify to consumers higher prices on the prospects that such higher prices may lead to a security interruption being avoided. Investors were regarded as understanding this trade-off better.

23. Initiatives have been implemented that are designed to improve reliability. Most notably, these include the implementation earlier this year of the customer compensation scheme which requires retailers to pay \$10.50 per week to their customers on fixed price variable volume tariffs when public conservation campaigns (PCC) occur. The scheme has also specified in the Code the precise conditions for when PCCs will occur. Moreover, the proposed implementation of a \$10,000 price floor in cases of emergency load shedding should provide stronger incentives on parties to provide last resort plant. The proposed stress test should also heighten participants' focus on their ability to cope at times of high spot prices and reduce the predisposition of parties short on generation and long on retail to opportunistically lobby for interventions to suppress spot market prices.
24. Further, the physical and virtual assets swaps arising from the Ministerial Review are now implemented, reducing the extent the three state-owned generators are long or short on generation during prolonged dry periods.
25. In summary therefore, although the customer compensation scheme addresses only one part of the gains retailers receive when PCCs occur, when combined with the physical and virtual assets swaps, and the proposed scarcity pricing initiatives enough may have been done or in the process of being developed to discourage participants from suppressing spot prices during dry periods when they are long on retail and hedge commitments.

Efficiency

26. The third component of the CRE aspirations is widespread recognition that New Zealand's wholesale and retail electricity markets, and transmission and distribution arrangements, are efficient mechanisms for coordinating electricity production and consumption, and for facilitating timely and innovative investment in the electricity system. The focus here is on transaction and regulatory costs rather than competition and reliability.
27. Forty two percent of consumers in the residential survey and 40% of sector stakeholders rated the industry as good for the overarching efficiency of the market – “the New Zealand electricity market ensures electricity is generated and supplied efficiently.” Therefore, from an overall perspective efficiency scored best for consumers and second best to reliability for sector stakeholder's across the three CRE aspiration components.
28. Across those aspects of the market that were tested for efficiency in the sector stakeholder survey (transmission and distribution, retail, hedge and wholesale), more respondents thought they were inefficient than efficient, for all of them bar the wholesale market. Sector stakeholders generally regarded the market as a more efficient mechanism for coordinating electricity production and consumption than for facilitating timely and innovative investment in the electricity system. This was particularly true for perceptions of the wholesale market. For both “coordination” and “investment”, however, the hedge market scored poorly for efficiency.
29. The breakdown of the results for efficiency reflects the Authority's understanding that most parties directly involved in New Zealand's electricity markets think that the core market arrangements stagnated somewhat during the last seven or so years.
30. Nearly all of the projects on the Authority's current work programme provide efficiency improvements to some degree, even if they are predominantly targeted at improving competition or reliability. Some are particularly focussed at efficiency considerations such as the proposed new Part 10, transmission pricing and demand side bidding and forecasting.

Regulatory constraints and strategy

31. This section outlines the regulatory framework for the Authority and discusses considerations which give rise to the high level regulatory strategy principles for developing the Authority's future work programme, and the prioritisation therein.

Regulatory framework

32. The Electricity Industry Act 2010 provides the overarching regulatory framework for the Authority. The Act specifies the scope of activities the Authority can engage in, the range of parties it can regulate, and the manner in which it must make Code amendments.
33. The Authority's interpretation of its statutory objective, its charter for advisory groups, and consultation charter elaborate on the framework provided by the Act. To the extent it needs to amend the Code to achieve its CRE aspirations the Authority has stated a set of Code Amendment Principles (CAPs) that it intends to abide by. The CAPs emphasise clear problem identification and quantified cost-benefit assessments, and the tie-breaker principles place a strong focus on dynamic efficiency when cost-benefit assessments are inconclusive.
34. The tie-breaker principles were developed to evaluate Code amendment proposals on a case-by-case basis, but some of them also provide useful guidance for developing the Authority's regulatory strategy for the medium term.
35. The relevant tie-breaker principles in this regard are: a preference for small-scale 'trial and error' options, which are easily scalable and reversible; a preference for greater competition; a preference for market solutions; a preference for flexibility to allow innovation; and a preference for non-prescriptive solutions.

Regulatory strategy – Work Programme development

The basic approach

36. The core problem for the Authority, as for all regulators, is to strike an effective and credible balance between regulating an activity too lightly and regulating it too heavily. Regulating an activity too lightly means the Authority will fail to materially correct the problem identified, and therefore fail to serve the long-term interests of consumers and potentially undermine its credibility with Parliament. On the other hand, regulating an activity too heavily can cause a number of adverse consequences, including encouraging the regulated party to exit the regulated activity, discouraging other parties from entering a regulated activity, or encourage lobbying directed at undermining the durability of an arrangement/s
37. The basic approach to striking the right balance is to avoid a 'one size fits all' regulatory solutions. Offering a menu of regulatory options, when possible, allows regulated parties to choose the option that best meets their circumstances.

Proposed regulatory strategy principles

38. Briefly, the Authority considers that the following regulatory strategy principles should govern its approach to regulation, whether it be code amendments or market facilitation measures.
 - (a) As far as possible adopt regulatory arrangements that move the problem over time to a situation where the first-best solution can be adopted;

- (b) Where possible, avoid 'one size fits all' approaches to regulation when regulating parties that may exit the regulated activity;
- (c) Adopt regulatory approaches that over time reveal more about the true nature of the problem and the true constraints on regulatory intervention, so that more effective regulation can be designed as the regulatory problem and regulatory constraints are better understood over time. The aim is to address the cause not the symptom;
- (d) Avoid as much as possible the slippery slope of ever more intrusive interventions arising from poorly designed regulatory interventions;
- (e) Avoid regulatory interventions that are not likely to be credible when adverse events occur; and
- (f) Strive to achieve regulatory predictability because this is particularly important when regulating high capital investment industries such as electricity.

The current work programme

39. As outlined above in the discussion on the survey findings, along with the Ministerial Review initiatives the Authority's current work programme should go some way to addressing the concerns consumers and stakeholders have in relation to the CRE aspirations. A summary of the current work plan is attached. The intended effects of some of the core work programme initiatives are discussed below:
- (a) The proposed scarcity prices for emergency load shedding situations (at \$10,000 per MWh) should encourage consumers to increase their hedge cover, which in turn should increase confidence among providers of last resort plant that they will earn commercial returns on their investments;
 - (b) The proposal to require parties exposed to spot prices to complete 'stress test' assessments, and to warrant they're comfortable with their risk exposures, should reduce their willingness to lobby for interventions to suppress spot prices and encourage them to hedge their exposures, once again increasing the confidence of providers of last resort plant;
 - (c) The additional hedging activity should increase incentives on providers of last resort plant (if they're more heavily hedged) to price more competitively, and the greater confidence that commercial returns can be earned on last resort plant should increase competition to enter that segment of the market. Also, when the dispatchable demand regime is adopted and attracts at least one participant it should increase competitive tension in the spot market during supply shortages. All of these factors should assist with achieving a more demonstrably competitive spot market;
 - (d) The Minister's Letter of Expectations to the Authority, dated October 2010, requests the Authority put in place disclosure requirements on all generators with more than [500] MW of generation. In response, the Authority's Wholesale Advisory Group (WAG) is progressing a project to consider how more robust, timely and comprehensive information, including on fuel and supply risks can be provided to the market;
 - (e) The customer switching campaign, the review of ASX market maker agreements, the review of spot market prudential and settlement arrangements, the more

standardisation of distributor tariffs and use of system agreements, and introducing inter-island financial transmission rights (FTRs) should go some way to re-balancing the competitive playing field for smaller and non-vertically integrated retailers;

- (f) Introducing the demand-side bidding and forecasting (DSBF) regime should assist with providing robust forward estimates of future spot prices, which should assist with encouraging short-term demand response and generation unit commitment;
- (g) The Wholesale Advisory Group (WAG) is progressing a review of wholesale settlement and prudential requirements. This should lead to improvements in efficiency and reliability and also has implications for achieving better competitive outcomes.
- (h) The Retail Advisory Group is progressing a project to develop more robust processes for dealing with stranded customers which should improve perceptions of reliability and efficiency; and
- (i) Specific initiatives are already in the work programme to bring in nationwide markets for IR and FK.

Conclusion

- 40. Consumers and sector stakeholder's perceptions of the level of competition, reliability and efficiency generally ranges from average to poor.
- 41. Although a number of initiatives have been implemented through the Ministerial Review process and are in the process of being developed and implemented by the Authority, it appears that consideration needs to be given to additional measures. The development of the Authority's Work Programme for 2012 and beyond offers consumers and sector stakeholders the opportunity to input into the development of an enduring work programme for the Authority, which will meet the Authority's statutory requirements and be consistent with good regulatory making processes and principles.
- 42. Accordingly, we expect participants to be well prepared for the two strategy forums being convened by the Authority and be in a position to contribute ideas, particularly on the key themes that need to be addressed by the Authority in developing its work programme for 2012 and beyond.