Summary of Submissions

2017/18 Appropriations

and Strategic Priorities

10 February 2017

Contents

Executive summary

The Electricity Authority (Authority) has consulted on its proposed appropriations (its funding) and strategic priorities for 2017/18.

Consultation on appropriations is required by the Electricity Industry Act 2010 (Act). We report to the Minister of Energy and Resources (Minister) on our recommended appropriations.

The consultation will also inform the development of our 2017/2021 Statement of Intent (SOI), the 2017/18 Statement of Performance Expectations (SPE) and the 2017/18 work programme.

Submissions were received from: Electricity Networks Association (ENA), Mercury, Meridian Energy, Major Electricity Users' Group (MEUG), Nova Energy (Nova), Pioneer Energy, Powerco, Transpower, Trustpower, Unison Networks (Unison), and Vector.

Support for the proposed appropriations

There were a range of views in the submissions received on the proposed level of overall appropriations. The Authority considers that across the submissions there was a reasonable level of positive support.

Section 4 addresses the submission comments about the appropriations.

System operator proposed enhancement project for EDF phase III

The system operator has proposed a service enhancement project in relation to Phase III of the electronic dispatch facility (EDF).

Section 5 addresses the submissions about the system operator's proposal.

Support for the strategic priorities and programmes

The strategic priorities outlined in part 2 of the consultation paper were generally supported at the overall level by comments in submissions.

Multiple comments were made on the strategic priorities, programmes and projects. There are a range of views on what should be the Authority's priorities. However, there was general support for the strategic focus on enabling a level playing field, including for new technologies and business models.

Section 6 addresses the comments on the strategic priorities and programmes.

We will refine the strategic priorities for the SOI and SPE, to be published in June. We will develop the programme and project details for the work programme, to be published in July.

Other matters were raised in submissions

Other matters were raised in submissions that were not directly related to the appropriations and work programme. These are covered in section 7. We will further consider these matters in our work programme planning later in the year.

1 Introduction and purpose of this report

1.1 Section 129 of the Electricity Industry Act 2010 (Act) requires the Electricity Authority (Authority) to consult on proposed appropriations for the coming year before seeking appropriations from the Minister.

1.2 Consultation on the proposed appropriations took place from 25 October 2016 to 6 December 2016[1]. The submissions were published on the Authority's website on 20 December 2016.

1.3 In addition to consultation on our appropriations and strategic priorities, the consultation included the first proposed service enhancement project from the system operator under the new system operator service provider agreement (SOSPA).[2] The proposal is for Phase III of the EDF. The appropriation proposal includes additional funding to enable the Authority to make decisions on the system operator's proposal.

1.4 This report has been prepared to support the process of reporting to the Minister with our recommended appropriations, as required by section 129(2) of the Act.

1.5 Further analysis of submissions will be carried out as part of developing our 2017/2021 Statement of Intent (SOI), 2017/18 Statement of Performance Expectations (SPE) and 2017/18 work programme.

2 Submissions

2.1 Submissions were received from:

(a) Electricity Networks Association (ENA)

(b) Mercury

(c) Meridian Energy

(d) Major Electricity Users' Group (MEUG)

(e) Nova Energy (Nova)

(f) Pioneer Energy

(g) Powerco

(h) Transpower

(i) Trustpower

(j) Unison Networks (Unison)

(k) Vector.

1 The consultation paper is available at http://www.ea.govt.nz/about-us/corporate-projects/201718-planning-and-reporting/consultations/#c16218

2 The SOSPA is our contract with Transpower to provide the system operator service. The new contract came into effect on 1 July 2016. The SOSPA is available at http://www.ea.govt.nz/operations/market-operation-service-providers/system-operator/what-the-system-operator-does/

3 Overall views

Overall level of support

3.1 Feedback was sought on the overall level of support for matters covered in the consultation paper, using the following scale:

	Support	Partially support	Neutral	Oppose	N/A – do not have a view

Meridian

We continue to support the work of the Authority. Since its inception, the Authority has implemented numerous industry improvements, bringing material benefits to electricity consumers. As identified by the Authority in its consultation document, the industry is evolving quickly and the Authority will also have to evolve its approach to meet these new challenges. There also remain a number of ongoing projects of critical importance to the industry.

Nova

Overall level of support:

7. Please indicate your overall level of support for the following:

	Level of support
Our strategic priorities (part 2 of the consultation paper)	Partially Support
Our programmes (part 2 of the consultation paper)	Partially Support
Our proposed appropriations (part 3 of the consultation paper)	Support
The system operator proposed service enhancement projects (part 4 and appendix C of the consultation paper)	Partially Support

Comments

It appears the Authority is putting excessive emphasis on trying to shape the electricity market in New Zealand into a data intensive commodity market. There is no doubt potential for the market to develop that way, but then in the absence of retail differentiation and value added product offerings, the market may also then become reliant on a centrally planned and funded data warehouse (or the regulated equivalent within the retailer's own systems), artificial market artefacts such as Powerswitch, and the need for the central authority to provide consumer education around demand based network charges, exposure to spot prices, differences in supply agreements etc.

There is a lack of evidence that this is in fact the best option for electricity consumers in the long run.

Pioneer

Overall level of support

7. Please indicate your overall level of support for the following:

	Level of support
Our strategic priorities (part 2 of the consultation paper)	Oppose – Too Broad
Our programmes (part 2 of the consultation paper)	Partially Support – Too Costly Simplify
Our proposed appropriations (part 3 of the consultation paper)	Partially Support – Focus on Rules Management
The system operator proposed service enhancement projects (part 4 and appendix C of the consultation paper)	

Comments

Pioneer has consistently submitted that the Code and industry is complex. New entrants will never face a level playing field when the complexity of the rules and operating environment imposes significant costs on new entrants who do not have the scale to absorb these costs in the way that the larger incumbent operators can.

We are concerned that the complexity of the Code will stifle innovation and the move away from the bulk supply model. Part of this programme of work must include consideration of whether some rules remain relevant, or even if “the market” is relevant when ‘participants’ are end consumers.

As we said in our submission on the 2016/17 appropriation paper, Pioneer is concerned to ensure that the Authority:

- avoids initiating rules that are unnecessarily complex and so stifle innovation
- ensures a level playing field for existing and new technologies, and innovations that achieve the same outcome (eg reduce peak demand).

Powerco

Powerco welcomes the opportunity to comment on the Electricity Authority’s (the Authority) consultation paper 2017/18 Levy-funded appropriations and strategic priorities, dated 25 October 2016. We also support the submission of the Electricity Networks Association (ENA) on this matter.

Transpower

Your overall level of support

	Level of support
Our strategic priorities (part 2 of the consultation paper)	Support
Our programmes (part 2 of the consultation paper)	Support
Our proposed appropriations (part 3 of the consultation paper)	Support
The system operator proposed service enhancement projects	Support

Vector

2. We support the Authority's new and forward-looking focus on new technologies and business models in the electricity sector, and the development of markets enabled by these technologies.

3. We are, however, concerned that some of the Authority's existing key initiatives, on which the Authority and industry participants have spent considerable resources over many years, remain unresolved. We recommend that the Authority de-prioritise these initiatives, if not remove them from its work programme, and focus on forward-looking initiatives.

Authority comment: overall level of support

3.2 We note that there were a range of views in submissions received on the matters covered in the consultation paper, namely our strategic priorities, the proposed appropriations and the proposed SOSPA service enhancement projects. The Authority considers that across the submissions there was a reasonable level of support or partial support. We have also noted the support and comments for individual appropriations below.

3.3 We note the concerns regarding the complexity of the Code and the industry more generally. The nature of electricity generation, transportation and consumption naturally gives rise to a relatively large number of participants and interactions which flow through to the Code. We have a number of approaches and projects underway that are intended to minimise or reduce Code complexity where appropriate to do so, such as:

(a) Review of Wholesale Market Trading Arrangements: This project is likely to be considered by the new Market Development Advisory Group, and is an opportunity to simplify the trading Code (part 13) provisions, making them more easily understood, and shifting some of the complexity to documents referred to by the Code and administered by service providers.

(b) Hedge market – cap product development and further development of ASX products: The Hedge Market development projects are prime examples where the Authority is achieving significant enhancements via market facilitation, rather than mandating obligations in the Code. Such an approach enables greater innovation, flexibility and adaptability to opportunities in the underlying market.

(c) Spot market – settlement on real time prices: The spot prices that are currently used to settle the wholesale energy market are only known with certainty two days after any individual half hour trading period. This adds uncertainty and a degree of complexity to real time decision making by consumers, retailers, generators and instantaneous reserve providers. The proposed shift to settlement on real time prices will effectively remove this uncertainty and simplify decision making.

(d) Data and data exchange: review of data and data exchanges between participants (including service providers). Some stakeholders have strongly argued that improving data exchange could greatly reduce transaction costs. Better data and data exchange also has the potential to promote retail competition and efficient market operation.

Impact of the Authority's work

3.4 Submissions were sought on the question: "What is your view of the impact of the Authority's work on the following groups over the last six years", using the following scale:

	Strongly positive	Positive	Neither positive or negative	Negative	Strongly negative	N/A – do not have a view

Nova

The impact of the Authority's work

8. What is your view of the impact of the Authority's work on the following groups over the last six years:

	Level of support
Electricity consumers	Neither positive or negative
Generators	Neither positive or negative
Retailers	Neither positive or negative
Transmission and distribution companies	N/A – do not have a view
Other (please specify below)	
Your company / the group you represent	Neither positive or negative

Comments

The work on reducing reserves requirement and frequency keeping costs has been a clear benefit to consumers. Much of this has resulted from the upgrade of the HVDC link.

Initiatives, such as promoting trading in electricity derivatives, have helped participants to manage risks and understand future price expectations.

Pioneer

The impact of the Authority's work

8. What is your view of the impact of the Authority's work on the following groups over the last six years:

	Level of support
Electricity consumers	Neither positive or negative - Costs & Benefits are neutral
Generators	Positive - stabilised earnings Strongly negative - EA has reinforced the Gentailer VI model
Retailers	Positive - Introduction of Tier 2 retailers Negative - EA's focus on price counters retail value

	Level of support
Transmission and distribution companies	Neither positive or negative - Managed by ComCom under Part 4 Negative - EA & ComCom working independently on same issues – prefer Cross Agency approach
Other (please specify below)	Strongly positive - Market maker provisions positive Reduced transaction size Negative - TPM proposal Strongly negative - DGPP proposal
Your company / the group you represent	Strongly negative - Pioneer Energy

Comments

The Authority's work over the last 6 years appears to be following a "diminishing returns" industry effectiveness profile. Early gains in supply stability, focus on competitive outcomes and reduction in new entrant barriers were positive, but latterly the Authority has become bogged down chasing more academically driven 'economic' efficiency programmes.

Pioneer urges the Authority to consider a different approach to creating liquidity in the hedge market. The hedge market improved but more recently has stagnated and in the last few months gone into decline. In our view, there is room for further improvements to achieve a liquid market that offers fair pricing of risk.

Pioneer has consistently asked the Authority to consider the benefits of requiring Gentailers to sell a certain portion of their generation volumes through the ASX market. Activity by speculators and financial institutions is not going to achieve the step change required to achieve efficiently priced risk products.

Authority comment: impact of the Authority's work

3.5 We note the comments on the perceived impact of our work to date.

3.6 We complete regulatory statements when developing regulatory initiatives as required by the Act. We only proceed with initiatives for which our cost-benefit assessment shows long-term benefits to consumers. We also undertake post-implementation reviews of initiatives to check what impact they have had.

3.7 We note the differing views on the impacts for some work areas, such as the performance of the hedge market. This is an example of a work area that remains a high priority given its relevance to all three limbs of the Authority's statutory objective. The criticism that the market has "stagnated" or "gone into decline" will be carefully considered against environmental factors such as the current level of hydrology and relatively low price volatility experienced over the majority of 2016. When taking these factors into account, we are of the view that trading levels on the ASX have remained at reasonable levels. As part of our development work in the hedge market area, we remain open-minded to the possibility of mandating certain requirements, but have a preference for voluntary arrangements, or if those are insufficient, to consider ways to incentivise behaviours.

3.8 We note the comments on the impact of the TPM and DGPP projects. The TPM project remains in development. The Authority's final decision on whether to proceed with a

TPM proposal will depend on whether the proposal provides a long-term benefit to consumers. Our assessment of the regulatory impact of the recently made decisions relating to the DGPP project showed that the changes are expected to have economic benefits to the economy as a whole of $33m in net present value terms by reducing inefficient investment and inefficient operation. The estimated benefit to consumers from a reduction in annual average ACOT payments is $25 million to $35 million under the current TPM as they will receive lower prices.

3.9 We expect our focus on facilitating innovation in technology and business models will unlock significant benefits for consumers.

3.10 Our strategic focus, and in particular how we measure the impact of our work, is being considered further in developing our 2017/2021 SOI and 2017/18 work programme.

4 Overall appropriations

4.1 The overall proposed appropriations were set out in Table 1 of the consultation paper.

4.2 Submissions included the following comments on the overall proposed appropriations, using the following scale:

	Strongly positive	Positive	Neither positive or negative	Negative	Strongly negative	N/A – do not have a view

MEUG

3. MEUG agrees with the proposed total operational expenditure of $73.937m for 2017/18, the security management contingent appropriation of $6m over the five years starting 1 July 2017 and the contingent appropriation for the electricity litigation fund of $1m for 2017/18. The $2.1m (2.8%) decrease in operational funding is welcome.

Nova

Authority appropriations (part 3 of the consultation paper)

9. Please indicate your level of support for our proposals for the following appropriations:

	Level of support
Electricity governance and market operations	Strongly positive
Security management	Positive
Electricity litigation fund	Neither positive or negative

Comment

Nova is pleased to see the new system operator service provider agreement in place and the disciplines associated with that. We note that the SO operating expenses are projected to increase by 2.5%, and additional expenses are projected for future additional projects. At a time of minimal electricity demand growth and low inflation, it would be good to see the costs of those new projects being offset by efficiencies and savings being made in other areas.

Pioneer

Authority appropriations (part 3 of the consultation paper)

9. Please indicate your level of support for our proposals for the following appropriations:

	Level of support
Electricity governance and market operations	Positive - Physical Market Negative - Financial Market
Security management	Negative - Disconnection with TX Peak Pricing Strongly negative - Customer Compensation Scheme
Electricity litigation fund	N/A - No views

Comment

Pioneer believes the current nodal pricing system is more complex and disaggregated than is warranted. It would be much more preferable for smaller and new entrant participants to use less priced nodes, at reference nodes that are aligned for physical and financial market prices.

Pioneer in its TPM and DGPP submissions has expressed real concerns that the Authority proposes to remove transmission system peak price signals in the belief that nodal spot pricing will provide more efficient investment signals. There is no empirical or anecdotal evidence supporting this belief. We note that another government agency, EECA, values the contribution of its levy funded programmes by valuing the benefits of reducing peak demand.

Security management would improve if the larger Participants that have concentrated market power in both storage and in thermal capacity were required to sell and buy through the wholesale market, rather than continue their reliance on internal portfolio risk management.

Powerco

Powerco supports the Authority's intention to reduce the total appropriations slightly from 2016/17 by $2.1 million. We also support the Authority's intention to maintain the appropriations for its own operations unchanged from the previous year. [footnote: We could not find any statement in the consultation paper about whether the appropriations are presented in real or nominal terms. We assume they are presented in nominal terms and thus the proposal is for a decrease, in real terms, in the Authority's appropriations from 2016/17 to 2017/18. Clarity on this would be useful in future appropriations papers.]

Transpower

We support the funding level sought by the Authority through appropriation that is to be recovered via levy. In addition, we:

- discuss the changed approach of the Authority to its work programme consultation
- outline our support for the proposal to improve the electronic dispatch facility
- request that unresolved questions relating to the Authority's disconnection power be addressed

	Level of support
Electricity governance and market operations	Positive
Security management	Positive
Electricity litigation fund	Positive

Trustpower

1.1.2 It is now six years since the Electricity Authority (Authority) was established. Since that time it has completed its organisational build, addressed the matters set out in section 42 of the Electricity Industry Act 2010 (Act) and implemented a significant number of initiatives to enhance wholesale and retail market competition.

1.1.3 The Authority has said that it has now shifted its focus to the efficient operation of the industry. Trustpower considers that this is absolutely appropriate. However, we would have expected that this shift would result in careful prioritisation of projects to those likely to deliver demonstrable value to consumers in the near to medium term, including by a reduction of industry costs to serve.

1.1.4 The Consultation Paper does not establish that this has occurred. Further, we consider that more can likely be done to reduce the Authority's operational costs.

2 Overall appropriation

2.1.1 For this reason, Trustpower does not support the Authority's proposed overall appropriation of $73.937 million for 2017/18.

2.1.2 We consider

- having completed the work programme implied by section 42 of the Act, it is appropriate that, rather than hold its base level of expenditure constant, the Authority reduces its expenditure. This could be readily achieved if the Authority leveraged more off industry expertise in its work programmes and more rigorously prioritised its policy reform;
- the Authority has not made a strong case for not passing on to consumers the step down in system operator fees, which has occurred as a result of the system operator having now fully recovered the costs of several historical asset investments;
- the Authority's decision to continue its consumer participation facilitation measures beyond the three-year project approved by Cabinet is not well justified in the Consultation Paper (see section 3 below); and
- the Authority should fund any expenditure on litigation costs over the $500,000 contingency out of its $18 million operating budget, rather than have recourse to additional levy funds, as this will ensure that it has incentives to follow processes which are likely to suppress rather than inflate these costs.

Unison

Unison appreciates the Authority's proposed appropriation decrease for 2017/18. The decrease demonstrates that regulatory intervention has made advancements in respect to the more straightforward matters. Accordingly, it would be reasonable to expect further reductions in future years as major projects such as the Transmission Pricing Methodology (TPM) Review reach a conclusion.

Authority comment: overall appropriations

4.3 There were a range of views in the submissions received on the proposed level of overall appropriations. The Authority considers that across the submissions there was a reasonable level of positive support.

4.4 Several submissions noted appreciation of the decrease in the Authority's overall appropriations.

4.5 If the electricity industry were to remain static, we broadly agree with the notion that the work required to refine the regulation of the industry should decline over time. However, as submissions generally acknowledge, the industry faces potentially far-reaching changes in the near future from emerging and evolving technology. In the context of this period of change, a reduction in the funding available to the Authority would reduce its capacity during a critical period where the demand on the Authority's limited resources is likely to be higher.

4.6 The assertion that the Authority does not carefully prioritise projects is incorrect. Rather, we consider suggestions on initiatives that stakeholders make as part of this consultation, and we work through a robust process of prioritising projects, to develop a work programme that delivers the highest long-term benefits for consumers. We manage the work programme dynamically throughout the year, including reprioritising projects where appropriate, to ensure the maximum benefits are provided to consumers.

4.7 Further detail on the feedback received in relation to components of the overall appropriations is provided in the sections 4.11 to 5.7. A response to concerns raised regarding the complexity of nodal pricing is provided below.

4.8 The belief that nodal pricing is too complex and disaggregated is not a new concern. It has been expressed in the past, and we gave it careful consideration when undertaking the review of the spot market.[3] What that review highlighted is that while nodal pricing does create complexity for wholesale market participants, that complexity is warranted given that it incentivises decisions and outcomes that are efficient in both real time and into the future. We have observed that wholesale markets without nodal pricing suffer from increased complexity in other ways, such as the requirement for separate payment mechanisms to bring on resources or reduce demand in constrained regions. Often these separate mechanisms are themselves complex and are less transparent and difficult to hedge than the underlying spot market. We also continue to undertake work to enable participants to better manage locational price risk caused by nodal pricing, such as dispatchable demand and the trading of Financial Transmission Rights.

4.9 One submitter suggested that security management would improve if larger participants were required to sell and buy through the wholesale market. We note that all electricity consumption and generation connected to the grid is required to be purchased and sold through the wholesale (spot) market via the clearing manager.

Overall comments: Electricity industry governance and market operations appropriation

4.10 The following comments were made:

3 http://www.ea.govt.nz/development/work-programme/pricing-cost-allocation/exploring-refinements-to-the-spot-market/

MEUG

3. MEUG agrees with the proposed total operational expenditure of $73.937m for 2017/18…The $2.1m (2.8%) decrease in operational funding is welcome.

Authority comment: Electricity industry governance and market operations appropriation

4.11 Consistent with previous years, the Authority Board continues to commit to holding Authority operating costs constant in nominal terms.

4.12 The reduction in the overall appropriation, as outlined in sections 3.5–3.7 of the consultation paper, is due to a reduction in system operator costs, which primarily arises from the system operator completing full recovery on several historical asset investments during 2016/17.

4.13 The Authority has considered feedback on the overall Electricity industry governance and market operations appropriation, including the views provided on specific components summarised in the following sections. We intend to recommend the appropriation level of $73.937 million as consulted on.

Facilitating consumer participation

4.14 Facilitating consumer participation is funded within the Electricity industry governance and market operations appropriation.

4.15 The consultation paper outlined our proposal to budget $2.5 million in 2017/18 for facilitating consumer participation, including continuing the What's My Number campaign. This level of funding is the same as 2016/17.

4.16 The following comments were made:

MEUG

8. The EA propose a $2.5m budget in 2017/18 for facilitating consumer participation. That work includes the "What's my number campaign". The work planned for 2017/18 is new and follows the $2.5m per year over three years Government approved funding programme that will conclude 30 June 2017. MEUG support this new proposal because the overall EA operational budget, including this one year extension of $2.5m for facilitating consumer participation, will still be less next year than this year. MEUG's view would be different if the overall EA budget had increased.

9. We also suggest some of the $2.5m funding in 2017/18 for facilitating consumer participation be invested in the C&I sector.

Nova

Facilitating consumer participation - Nova supports the Authority continuing to fund consumer engagement, but questions how the money is spent. We suggest that the money currently spent on the What's My Number campaign may be better spent on other consumer engagement projects. Competition is unlikely to suffer as consequences of reducing spend on the What's My Number campaign, as alternatives are likely to fill that space.

Powerco

Based on the limited information provided in the consultation paper, Powerco is broadly supportive of this programme but would have appreciated more information so we could reach a more informed view.

However, we support continued consumer education programmes, particularly in relation to the risks of trading on the spot market and how end-user price structures relate to real industry participant costs.

Trustpower

3 Further expenditure on consumer participation measures

3.1.1 On 14 April 2014, Cabinet approved the Budget amounts set out below to provide for a programme to promote the potential benefits of switching, and facilitate the ease of the switching process for consumers, in accordance with the Electricity Authority's statutory functions.

	$m - increase/(decrease)				
	2013/14	**2014/15**	**2015/16**	**2016/17**	**2017/18 & Outyears**
Non-Departmental Output Expense: Electricity Industry Governance and Market Operations	-	2.000	3.000	2.500	-
Total Operating	**-**	**2.000**	**3.000**	**2.500**	**-**

Source: http://www.treasury.govt.nz/downloads/pdfs/b14-info/b14-2900420.pdf

3.1.2 That programme has now been completed and implemented.

3.1.3 The Authority has noted in a number of forums that competition and innovation in the industry has increased significantly since the structural reforms in 2010. It has also said that in the light of this improved competition it considers that there may be fewer pro-competitive initiatives worth pursuing in the future and that as a result it will shift its emphasis to projects that promote operational efficiency.

3.1.4 We were therefore surprised to see that the Authority is seeking to continue the project for an additional year to that approved by central government.

3.1.5 The Authority's rationale is particular weak. It says that:

- there is money available (in the form of a reduced expenditure from an entirely unrelated area); and
- further expenditure is consistent with the Authority's statutory objective of promoting competition.

3.1.6 Accordingly, we do not support this proposal.

3.1.7 However, for the avoidance of doubt, we support the continuation of funding for the Powerswitch website by the Authority, as we think this is a well-known and respected tool. The competitive process will be enhanced by consumers continuing to have access to comparative information on this trusted website.

3.1.8 More generally we think the proposal raises concerns about the extent to which the Authority has made a genuine attempt to set priorities and contain its operating expenses in this appropriation process.

Authority comment: Facilitating consumer participation

4.17 Facilitating consumer participation in electricity markets is one of the Authority's strategic directions for market development. Making sure that consumers have good information and can take advantage of the choices available to them will lead to greater participation and competition.

4.18 The WMN campaign is one aspect of facilitating consumer participation. The campaign continues to:

(a) positively influence people to shop around for electricity

(b) create more informed and active consumers

(c) provide (along with Powerswitch) a credible and independent channel for consumers to shop around

(d) put pressure on retailers to offer the 'best deal' to consumers

(e) provide an acquisition channel for small and new entrant retailers

(f) help create a more competitive retail electricity market.

4.19 The WMN campaign also complements other retail initiatives, especially the work that may arise from our endeavours to improve the outcomes from the retail data project. Other projects currently on our work programme relating to facilitating consumer participation include: data and data exchange; and multiple trading relationships.

4.20 The Authority is proposing to continue the campaign in 2017 and 2018, and continue to fund the price comparison services provided by Consumer NZ's Powerswitch for three further years. It will also be making specific decisions about the priority of other initiatives intended to facilitate greater consumer participation as part of its 2017/18 work planning process.

Electricity Authority operating costs

4.21 Electricity Authority operating costs are funded from the Electricity industry governance and market operations appropriation.

4.22 Submissions included the following comments in relation to the Electricity Authority operating costs within the *Electricity industry governance and market operations* appropriation.

Pioneer

Pioneer acknowledges the Authority plans to keep its operating expenses at the same level as forecast for 2016/17 but this is an increase of $354,000 on actual costs in 2015/16. This funding is for the Authority's seventh year of operation. We suggest the work required to refine regulation of the industry should decline over time, particularly if the Authority was focused on simplifying the market requirements.

Trustpower

4 Expenditure on employees

4.1.1 We note that, according to the Authority's annual reports of 2010/11 and 2015/16, from 2010 to 2016, the number of permanent staff of the Authority has increased from 48 to 60, an increase of 25%.

4.1.2 Over this same period, the number of employees on a salary greater than $100,000 has increased from 31 to 43, an increase of 39%.

4.1.3 This increase in both employee numbers and salary levels raises obvious risks around the incentives that might apply to the development of the Authority's ongoing work programme.

4.1.4 This factor, in combination with the ongoing lack of transparency about individual projects discussed in the next section, is why we consider it is imperative that the Authority engage an external organisation every five or so years, to assess, and provide confidence to, consumers and levy payers about the overall levels of the Authority's costs.

4.1.5 As the Authority is now in its sixth year, this should be done in 2017.

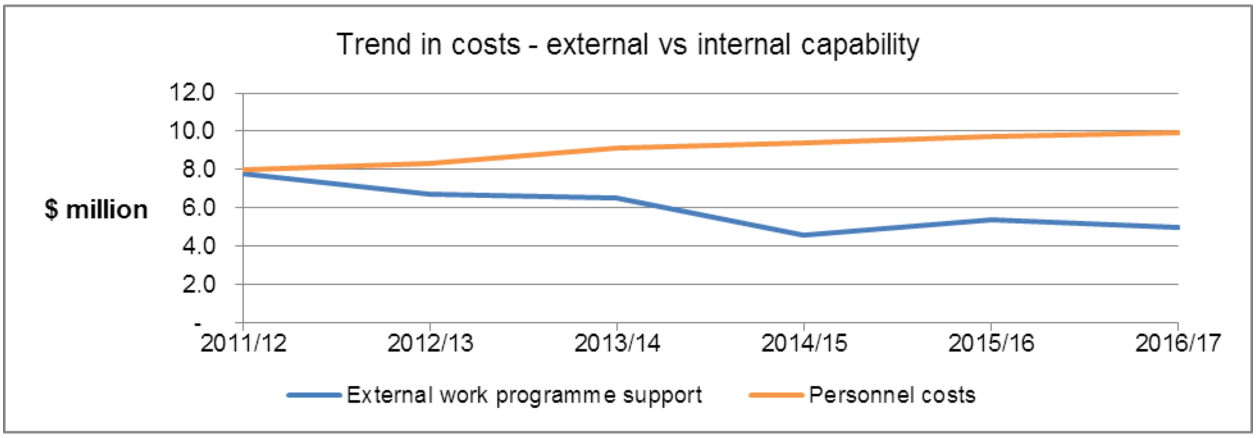
Authority comment: operating costs

4.23 Consistent with previous years, the Authority Board continues to commit to holding Authority operating costs constant in nominal terms.

4.24 If the electricity industry were to remain static, we broadly agree with the notion that the work required to refine the regulation of the industry should decline over time. However, as submissions generally acknowledge, the industry faces potentially far-reaching changes in the near future from emerging and evolving technology. In the context of this period of change, a reduction in the funding available to the Authority would reduce its capacity during a critical period where the demands on the Authority's limited resources is likely to be higher.

4.25 To continue to work within a fixed operating budget, the Authority must manage its funding prudently and carefully balance efforts to restrain our spending with the need to progress important work in a timely and robust manner.

4.26 We made a conscious decision, in 2012, to increase internal capability and to reduce reliance on external consultants. This strategy has been implemented. As a result, personnel numbers and costs have increased moderately and external advice costs have decreased more substantially—these trends are illustrated in the graph below. The Authority considers that it now has a good balance between internal capacity and the use of external consultants where specific expertise is required.



4.27 The Authority pursues continuous improvements in operating expenditure efficiency, including leveraging all-of-government procurements and shared service arrangements.

Contingent appropriations

4.28 We have two appropriations that are contingent in nature: Security management and the Electricity litigation fund. We will not incur expenditure against these as part of our normal operations, rather, these appropriations are in place to allow us to respond quickly and effectively should certain events or situations arise.

4.29 We consulted on an Electricity litigation fund appropriation of $1.000 million for 2017/18, which is an increase of $0.556 million from 2016/17.

4.30 We also consulted on a new Security management appropriation to replace the existing appropriation, which expires on 30 June 2017. We consulted on a proposed new Security management appropriation with the same terms and value ($6 million over five years), to be available from 1 July 2017. Continuing to have a Security management appropriation available will enable the system operator, should the need emerge, to be able access funding to respond quickly in the event of an emerging security situation.

4.31 The following comments were made.

Meridian

We support the increase to the Authority's electricity litigation fund. It is important the Authority has sufficient resources to respond to any legal challenges which might arise, most notably with respect to transmission pricing.

MEUG

3. MEUG agrees with the proposed … security management contingent appropriation of $6m over the five years starting 1 July 2017 and the contingent appropriation for the electricity litigation fund of $1m for 2017/18.

Authority comment: Contingent appropriations

4.32 We intend to recommend the $0.556 million increase in the Electricity litigation fund appropriation as consulted on.

4.33 During 2017/18 the Authority intends to advance market development initiatives that have the potential to have net benefits of hundreds of millions of dollars for consumers over the next decade. The projects are contentious as they may have adverse financial impacts on some parties. The increase in funding will ensure the Authority is well placed to deal with any litigation that may arise, and thereby continue to act effectively for the interests of consumers.

4.34 Since the establishment of the Authority in 2010, several parties have engaged the Authority in litigation. The more significant instances are outlined in the table below.

Type of proceeding	Instigating party	Result
Appeal to the High Court against the Authority's decision that an undesirable trading situation (UTS) developed on 26 March 2011	Genesis Power, Contact Energy, Todd Energy, Bay of Plenty Energy	Appeal dismissed by the High Court
Appeal to the Court of Appeal against High Court decision the Authority was correct that a UTS developed	Genesis Power	Appeal abandoned

Type of proceeding	Instigating party	Result
on 26 March 2011		
Application to the High Court for a declaratory judgment regarding whether components of the NAaN project were ‘connection’ assets or ‘interconnection’ assets	Vector	Application dismissed by the High Court
An appeal to the Court of Appeal against the High Court’s decision not to grant Vector’s application for a declaratory judgment	Vector	Appeal abandoned
Appeal to the High Court against the Authority’s decision to decline Vector’s application for an exemption from the transmission pricing methodology in respect of components of the NAaN project	Vector	Appeal abandoned
Application to the High Court for judicial review of the Authority’s process decisions relating to the TPM and DGPP reviews	Trustpower	Application declined by the High Court
An application to the High Court for a declaratory judgment that the Authority does not have jurisdiction to introduce a default distribution agreement	Vector and Entrust	Fixture allocated on 23-24 May 2017

4.35 We intend to recommend a new Security management appropriation as consulted on. Continuing to have a Security management appropriation available will enable the system operator, should the need emerge, to be able access funding to respond quickly in the event of an emerging security situation.

4.36 The negative economic impacts of even an adequately funded and well-run security event could run to hundreds of millions of dollars. The electricity shortage that occurred in 1992 was estimated to have adversely impacted the June 1992 quarter gross domestic product by 0.6% or approximately $400 million in today’s terms. A poorly-funded security event would lead to negative economic impacts of a similar or higher magnitude. In such cases the impacts of not incurring security management expenditure could be steadily worsening negative consequences for the security of electricity supply; resulting in extended calls for voluntary savings and a forced series of rolling outages across New Zealand.

4.37 The proposed funding would provide a working contingency to initiate emergency management actions such as planning and initiating a public savings campaign. This funding is unlikely to be sufficient to cover a sustained emergency management action, in which case additional funding would be sought based on an assessment of the particular emergency.

5 System operator service enhancement projects

5.1 A key aspect of the new SOSPA is for greater consultation before the system operator invests in assets to enhance the services they provide. The system operator has proposed a service enhancement project in relation to the electronic dispatch facility (EDF). This is a component of the market system that sends dispatch instructions to, and receives acknowledgements from, electricity generators and reserve providers.

Information on this project was provided by the system operator in Appendix B of the consultation paper.

5.2 Based on the EDF Phase III project's high-end cost estimate, which reflects the system operator's additional investment in system assets, the system operator would recover up to a maximum of $4.995 million from the Authority over the asset's assumed useful life.

5.3 The following comments were made.

Mercury

Operate the electricity system and markets

We support the System Operator proposed service enhancement projects however would be concerned if the consultative process takes an extended period of time. This could result in individual participants realising a financial advantage until changes are effected.

Meridian

Meridian supports the System Operator's (SO) proposed service enhancement project to enhance the current electronic dispatch facility. Meridian participated in the SO's workshops on this issue earlier in the year and found them useful. Our specific responses to the SO's questions on this project are attached in Appendix A.

Appendix A: Meridian response to consultation questions

	Question	Comment
1	Do you agree that a transition away from GENCO to a new dispatch facility is merited?	Yes.
2	Is a transition away from GENCO by December 2020 feasible? If you do not agree, what would be a feasible timeframe to transition away from GENCO?	Yes.
3	If you operate a GENCO, would you commit to transition away from GENCO if that were a requirement for this investment to proceed?	Meridian is likely to be able to commit to a transition, although commitment will ultimately depend on the solution adopted. Meridian supports the use of ICCP as an alternative communications protocol in a replacement electronic dispatch facility.
4	Provided a new dispatch facility is being implemented, do you agree that the 'Redundancy Option' is an appropriate approach? If not, which alternate approach do you consider is appropriate, and why?	Yes, Meridian agrees improving redundacy is an important feature of a new electronic dispatch system.
5	Do you agree that the long term end benefits outweigh the investment cost and merit the proposed investment?	Yes.
6	Are there any other quantifiable or qualitative benefits that we have not discussed?	No.

MEUG

Electronic Dispatch Facility

The cost-benefit-analysis (CBA) by the system operator could be improved by considering the costs to existing participants using GENCO in shifting to EDF. That may not change the recommendation but at least an idea of the scale of participant costs may assist in assessing if the December 2020 switch date is feasible. The CBA is summarised on p16 as:

> "The indicative net cost over a 15-year period, based on costs and identified efficiencies is estimated at $1.4M. This NPV accounts for a real pre-tax discount rate of 7.00% and depreciation of the benefits over 15 years. The NPV includes current dispatch system avoidable cost savings and savings that can be made implementing new functionality in future as a flow on effect of this investment."

From this information MEUG has been unable to replicate the CBA*. It is essential that requests for funding have sufficient information for interested parties to be able to replicate and test for themselves the sensitivity of the CBA. [footnote * The interpretation of the text quoted in the preceding paragraph is difficult to interpret because concepts such specifying a pre or post tax discount rate and deprecation are relevant for commercial investment CBA and regulatory price/revenue setting but not for national economic CBA.]

Nova

Do you agree that a transition away from GENCO to a new dispatch facility is merited?

Yes, given the paper infers general industry backing that:

a) this is what industry participants have generally been requesting

b) the current GENCO system / protocols are inflexible and un-scalable

Is a transition away from GENCO by December 2020 feasible? If you do not agree, what would be a feasible timeframe to transition away from GENCO?

It should be feasible if the appropriate project and technical team is established and robust project disciplines applied from the outset.

We are cognisant that the related Inter-Control Centre Communications Protocol (ICCP) initiative appeared to incur significant changes in scope and deliverables over an excessively long gestation and implementation period, and that project / initiative was fraught with significant delays.

If you operate a GENCO, would you commit to transition away from GENCO if that were a requirement for this investment to proceed?

Yes, on the basis that:

a) on the merits promulgated by the paper, it should improve reliability, while through increased flexibility it should reduce integration costs to existing participant systems, and

b) existing participants won't face a significant or material increase in dispatch-related costs.

Provided a new dispatch facility is being implemented, do you agree that the 'Redundancy Option' is an appropriate approach? If not, which alternate approach do you consider is appropriate, and why?

The paper does not clarify whether 'Redundancy' can be achieved without first doing 'Enablement'.

On the assumption there should be no technical reason why it shouldn't, at an (apparent) incremental costs of $0.2m for Redundancy, versus and incremental $1m to achieve Enablement, there would seem a value proposition through progressing Redundancy as part of the initial project; and deferring Enablement to the point where it is categorically identified that this enablement is required to deliver 'the flexibility and scalability to enhance the dispatch service offering in line with future industry developments and enable these changes to be implemented more effectively'. That way, the 'future industry developments' that require this 'enablement' can pay the appropriate user-pays contribution at the appropriate time, rather than have them cross-subsidised in advance by existing customers who may not have a need for the additional functionality.

This has the potential to reduce project costs by 20%.

Do you agree that the long term end benefits outweigh the investment cost and merit the proposed investment?

We would expect that replacement of early 2000's technology with something more recent would bring cost reductions and improvements in service.

Our concerns are:

a) The NPV analysis appears overly subjective and unqualified / unquantified.

b) No detailed comparison on historic Genco costs vs future costs.

c) Transpower should be assessed whether they have given enough attention to keeping legacy Genco systems current under its obligations as an RPO, and the service delivery expected under SOSPA arrangements. We struggle to see how the project could be categorised as a 'service enhancement project' in the context of technical / communications solutions readily provided by other similar service providers in today's environment. On this basis, the project should be delivered without any additional SOSPA funding, i.e. Transpower should be able to fund the development through cost savings and efficiency gains.

d) What is the anticipated Genco delivery cost increases for existing participants? The paper is silent on this aspect

e) The fine print (footnote 4) is of concern – this should be treated as a lump-sum project from the outset and remove any ability for Transpower to recover on an open-ended and uncapped time and costs basis (taking the lessons learnt from recent market system upgrade projects and ICCP implementation)

Transpower

Support a levy increase for upgrading the dispatch facility.

We support the change made by the Authority to the System Operator Service Provider Agreement (SOSPA) that supports greater industry engagement on service provider proposals for service enhancement. We consider the use of this appropriations paper to be an effective and appropriate way to consult on the potential increase in service provider costs on levy payers.

As detailed in the consultation paper and at appendix B, we are proposing a service enhancement project to upgrade the current Electronic Dispatch Facility. We developed the scope of the upgrade through a series of four stakeholder workshops to ensure industry needs were taken into account.

The upgrade will provide alternate communications protocols to the current GENCO system (support for which expires in 2020), a web services testing facility, and configuration changes. The result will be a more accessible and less costly means to receive dispatch instruction so that a greater range of participants can contribute to setting wholesale electricity prices.

We consider our proposal to be closely aligned with the Authority's strategic priorities, supporting both:

- evolving technologies and business models through enabling new competition in the wholesale market (programme A)
- operational efficiencies, through removing technical barriers to market participation (programme E).

In light of the Authority's priority to introduce dispatch-based real time pricing market, which necessities changes to existing market tools, we view the proposed upgrade project as timely and pertinent.

Trustpower

6.2 Proposed replacement of GENCO

6.2.1 An example of a technical barrier to entry and ongoing participation are the rules which underpin the use of the GENCO software. Appendix B of the Consultation Paper includes a business case from the system operator for investment in a new electronic dispatch facility (EDF) to replace the current GENCO system.

6.2.2 The Authority seeks feedback on that business case from levy payers and other stakeholders on this proposal, which is expected to cost $4.995 million and have an impact on appropriations for six years from 2018/19 (i.e. next year's levy).

6.2.3 Trustpower supports this project as we consider that the GENCO system is inhibiting innovation and efficiencies in the market. It is demonstrably not suitable for the changing market environment. For example, we experienced a significant number of issues with this system in our recent shift to new premises, interfacing with modern equipment and/or third parties' equipment. This involved having to get hold of people who wrote pieces of code twenty or so years ago, developing "work arounds" for old communication protocols and recourse to telephone dispatch.

6.2.4 As a result, our view is that the implementation of a new system will enhance the efficient operation of the industry and be in the long term interests of consumers. It should be progressed without delay.

Authority comment: System operator service enhancement projects

5.4 The system operator may modify its proposal after considering submissions from this consultation. Feedback might also enable quantification of benefits that have not yet been estimated.

5.5 The Authority must consider the system operator's proposal, along with any feedback from consultation, and approve or decline the proposal.

5.6 Based on the supportive feedback, the Authority will request funding approval based on the costing that was consulted on. This will enable the Authority to approve the initial stage of work, should the final business case presented by the system operator show positive net benefit. Requesting the funding prior to the final business case being considered does not imply that the Authority will approve the initial or any further work. If the Authority does not approve the proposal the costs will not be collected from levy payers.

5.7 A decision on whether to support the initial stage of work is expected to be made prior to 30 June 2017.

6 Strategic priorities and programmes

6.1 The consultation paper provided an outline of our strategic priorities and programmes.

Overall comments on the strategic priorities

6.2 The following comments were made, using the following scale:

	Strongly positive	Positive	Neither positive or negative	Negative	Strongly negative	N/A – do not have a view

ENA

3. Priorities

ENA members are concerned at the ongoing allocation of high priority to work programmes that are consuming resources which should be allocated elsewhere. Projects such as TPM, DDA and ER have consumed large quantities of industry resource over several years but have failed to make meaningful headway. Reducing the priority of these projects (or even stopping further work) will result in levy reductions and allow the Authority to focus on value-add forward looking initiatives. It is also important to ensure that money spent on projects that shore up the centralised industry model do not prejudice emerging alternatives.

Nova

10. Please indicate your level of support and provide comments on our proposed programmes.

Programme	Level of support
A: Evolving technologies and business models	Positive
B: Consumer choice and competition	Negative
C: Pricing and cost allocation	Positive
D: Risk and risk management	Positive
E: Operational efficiencies	Strongly positive
F: Compliance	Positive
BAU: Monitor, inform and educate	Positive
Other	

Comment

While a significant investment has been undertaken to shape the electricity retail market, it is likely that many of the gains would have been delivered by the competitive market in any case. The telecoms market has evolved rapidly and delivered innovations to the market without a regulator attempting to shape those developments, e.g. consumers generally recognise the availability of number portability without a website promoting that, supported by millions in advertising expenditure.

There is a risk that, by continually pushing to consumers ‘that electricity is a commodity product that they should always be paying the lowest possible price for’, the EA reduces the capability of retailers to deliver to consumers a service package that matches consumer’s preferences and expectations. It also seems to ignore retailers expanding into composite offerings including dual fuel, communications services, and different services models, any of which may be of greater value to many consumers than simply adopting the lowest cost electricity tariff.

Facilitating consumer participation - Nova supports the Authority continuing to fund consumer engagement, but questions how the money is spent. We suggest that the money currently spent on the What’s My Number campaign may be better spent on other consumer engagement projects. Competition is unlikely to suffer as consequences of reducing spend on the What’s My Number campaign, as alternatives are likely to fill that space.

Review of prudential arrangements – Some aspects of the prudential arrangements operated by the Clearing Manager should be reviewed. The new methodology has resulted in a significant cost increase for a number of participants. Principally the application of the ASX price projections and the lack of provision for reserve generation capability when determining forward liability exposure has increased the prudential calculations well above the true market exposure at times.

Pioneer

Strategic priorities and programmes (part 2 of the consultation paper)

10. Please indicate your level of support and provide comments on our proposed programmes.

Programme	Level of support
A: Evolving technologies and business models	Neither positive or negative - Needs Cross Agency participation
B: Consumer choice and competition	Negative - Churn = Cost
C: Pricing and cost allocation	Strongly negative - Lost the Way
D: Risk and risk management	Negative - No Liquidity
E: Operational efficiencies	N/A - Marginal Impacts
F: Compliance	Negative - Too Complex
BAU: Monitor, inform and educate	Neither positive or negative -Academic Approach
Other	

Comments
Pioneer has submitted on the proposed Advisory Group changes and has expressed the view that the Innovation Group, together with the Emerging technologies and business models programme, should be developed under a cross-agency governance model which includes the Commerce Commission and MBIE remits. The Authority’s narrow statutory objective will limit its analysis and views on emerging technologies.

The Authority is far too intrusive in the retail market. Consumer choice is an outcome of competition and the Authority is not doing enough at the wholesale market liquidity level to ensure fair retail competition. Programmes to entice consumers to regularly change suppliers on price serve only to increase retail overhead and hygiene services costs, to the long term detriment of all consumers.

Pricing and cost allocation is again a competitive market outcome. The Authority should only monitor and manage wholesale market outcomes to ensure access to supply. The Commerce Commission manages regulated businesses, so the only pricing issues the Authority should be concerned with are the strength of the wholesale market price signals. Currently spot energy price signals are weak and are uncorrelated with demand. In addition the new TPM proposes to remove peak capacity price signals from the system. The Authority's programme focus is in wrong areas.

Hedge risk management for participants requires market liquidity, which is not up to scratch. Pioneer describes the Customer Compensation Scheme as the "ambulance at the bottom of a cliff". The cliff is a lack of adequate financial market liquidity and market supply risks are only being managed as Gentailer natural hedge limits. The Authority should undertake an investigation of the Risk Parameters and Policies of the Gentailers to confirm their commitment to ensuring all of market supply risks.

The Operational Efficiencies programme should also focus on reducing complexity across the breadth of the Code as a way of achieving an increase in efficiency.

Pioneer queries how the Authority prioritises projects for post implementation reviews (PIR). These reviews appear to be a major piece of work, for example the 175 page PIR report on the demand side bidding and forecasting project. It could be useful to ask for industry input on prioritising projects for future PIRs.

Powerco

The consultation paper provides a high-level discussion of six programmes of work that the Authority intends to focus on to deliver its strategic priorities in 2017/18:

- Evolving technologies and business models
- Consumer choice and competition
- Pricing and cost allocation
- Risk and risk management
- Operational efficiencies
- Compliance.

These programmes, at a high-level, all appear reasonable areas for the Authority to consider although only limited information has been provided on the detail of projects within each programme. This differs from previous years where the appropriations consultation papers have included a list of projects the Authority intends to work on and the relative priority that it intends to give to those projects.

Powerco recommends the Authority returns to its previous approach of including this full discussion of intended projects in the appropriations consultation paper. It is difficult to meaningfully engage with the programmes given the lack of detail of what the projects are and what will be prioritised. For example, we are unclear as to the scope of the proposed project entitled "cost-allocation of ancillary services" as no further information is provided. Thus we cannot reach a view on whether this should be a high or low priority project for the Authority or indeed whether it should be included in the workplan for 2017/18.

Several proposed projects/programmes are broad on scope and the outcome of each could have far reaching implications. As the Authority will appreciate, it takes considerable time and effort to develop workable, stable and effective solutions to complex issues. Powerco has found previous Authority appropriations papers helpful as they inform our own resource planning for the following year. With only programme-level information being provided we are less sure when we will need to engage in consultation processes and how much effort will be required.

The six programmes of work the Authority intends to focus on are not a meaningful guide to the Authority's priorities as it is difficult to think of many, if any, Authority activities that would not fall within one of these programmes. While we accept that on face value each programme has value, it is difficult for stakeholders to understand the primary objectives of the Authority based on the information provided.

While we accept it is too late to change the current consultation, we recommend that the Authority publish a paper on its projects for 2017/18 and the relative priorities between them by early 2017 so we can understand the work programme and plan our resources accordingly. However, below we comment on the programmes based on the information that has been provided.

Transpower

Our priorities

Our priorities are listed below. We support:

- greater focus on ensuring consistency and coherency across different Authority pricing workstreams (in particular network, energy market, distributed generation).
- operational and market arrangements to facilitate smooth and efficient integration of emerging technologies into the power system
- the system operator improving its dispatch facility (see below)
- development of policy and procedure on the Authority for its disconnection direction power (see below)
- strategic focus on operational efficiencies particularly in reducing cost of compliance and seeking opportunities to improve delivery of delivery of the regulated product.

Strategic priorities and programmes (part 2 of the consultation paper)

Programme	Level of support
A: Evolving technologies and business models	Positive
B: Consumer choice and competition	Positive
C: Pricing and cost allocation	Positive
D: Risk and risk management	Positive
E: Operational efficiencies	Positive
F: Compliance	Positive
BAU: Monitor, inform and educate	Positive

Vector

Focusing on new technologies and business models

5. Vector welcomes the Authority's intention to re-orient its advisory groups to respond to new and evolving technologies and business models in the electricity sector.

6. The introduction of emerging technologies such as grid scale and residential batteries, solar PV, home management systems, electric vehicles, and the continued deployment and utilisation of advanced electricity meters collectively present a game-changing opportunity for the electricity sector and the wider economy. We believe a new energy future includes the wide-scale adoption of these technologies and the development of new business models that enable greater energy efficiencies and consumer choice.

7. Any regulatory framework for emerging technologies should provide the right incentives to accelerate their introduction and enhance, rather than diminish, incentives for innovation and investment. The rapid evolution of energy technologies and markets makes it more important for new assets to be tested or installed to meet the changing requirements of the industry and consumers. A desired outcome should be for investments in new technologies to be viewed as opportunities rather than being dissuaded by extensive regulation.

8. In our view, the role of the regulator should be to develop a regulatory framework for new technologies that allows innovation to flourish. It should monitor markets for new technologies, not impose prescriptive regulations that are likely to frustrate innovation.

9. Vector is committed to embracing the opportunities and consumer benefits new technologies bring. We intend to continue to develop innovative solutions to ‘traditional problems’, including providing commercial and residential batteries, solar PV, home management solutions, and electric vehicle charging.

10. We are prepared to be disrupted and be disruptive. We are exploring the practical application of relatively untested technologies to deliver improved services to consumers. For example, we will be trialling peer-to-peer trading amongst Auckland consumers using blockchain technology ─ the first in New Zealand.

11. We therefore support the establishment of the Innovation and Participation Advisory Group (IPAG) and the Market Development Advisory Group (MDAG). The members of these new advisory groups should be selected based on their strategic understanding of the implications of new technologies on electricity markets and consumers. IPAG and MDAG members, and members of the selection panels, should ideally represent a wide range of participants in the electricity industry and the wider energy sector.

Setting priorities

12. We are concerned with the Authority’s work on Transmission Pricing Methodology (TPM). It has taken up considerable amounts of the Authority’s and industry participants’ time and resources for many years without a clear resolution in sight or clear benefit from the prevailing methodology. We have identified our concerns at both principle and implementation levels, including the lack of a transition mechanism, which have led us and many other parties to believe the Authority’s TPM proposal cannot deliver durability for transmission pricing.[1]

13. Any flaws of the Authority’s TPM proposal would have broad impact on consumers, business investment, and public confidence in the electricity market. They would have impact, for example, on wealth transfers, regional development and employment, fuel poverty, security of supply risks, and economic distortions arising from recovering charges for sunk assets over fewer parties.

14. The TPM work has generated nothing but disputes, to date. We therefore continue to encourage the Authority to seek independent expert peer review of its TPM proposal and learn important and practical lessons from other jurisdictions before proceeding

further. The Authority should also consider alternative scenarios where its TPM proposal is not implemented, e.g. what grid investments will be impacted.

15. We are similarly concerned with the impact of the Authority's work on a Default Distributor Agreement (DDA). Many submissions on the DDA, including from both distributors and retailers, acknowledge that mandating the adoption of a DDA would discard the benefits and improvements made under the existing Model Use-of-System Agreement approach and impose unnecessary costs. Parties who are satisfied with their existing negotiated agreement should not be required to transition to the DDA. Those gains should instead be built upon to satisfy the Authority's objectives.

16. On the Authority's work on extended reserves, while we agree with the System Operator's proposed technical changes, we disagree with the Authority's proposed selection methodology which will use inaccurate historical data to manage grid emergencies. It increases the complexity and costs with little to no benefits to the industry or consumers. Vector supports an extended reserves regime that implements a standalone technical solution. As indicated in our submissions to the NZX and System Operator on the extended reserves draft technical requirements procedures, dated 29 November 2016, we support a standalone technical solution.

17. We are concerned with the cost overruns associated with the above initiatives relative to their initial budget for 2015/2016: [footnote: Electricity Authority (2016). *Commerce Committee 2015/16 annual review questions 1 – 102 to the Electricity Authority, Response provided: 15 November 2016*, pages 5-6.]

EA Programme or Project	Initial Budgeted Cost 2015/16	Actual Spend 2015/16
TPM	$ 450,000	$ 1,295,000
DDA	$ 60,000	$ 170,000
Extended Reserves	$ 780,000	$ 934,000

18. We recommend that the Authority 'break the circuit' in relation to the above initiatives by de-prioritising, if not removing, them from its work programme. That would result in significant reductions in the levy, and make room for the Authority and industry participants to focus on forward-looking initiatives that are widely acknowledged to deliver consumer benefits. It would enable them to more confidently face the challenges of the electricity sector that is evolving at unprecedented speeds.

Authority comment: Strategic priorities

6.3 We note the comments above, and those covered in section 3 of this summary of submissions. These raise several important considerations, which we will consider further in developing our 2017/2021 SOI and 2017/18 SPE.

6.4 We will also consider project priorities, contributions to the statutory objective, and value-for-money in detail when developing our 2017/18 work programme

6.5 We note a range of issues and concerns regarding strategic priorities were raised by submitters. Some initial responses to the key issues raised are:

(a) Extended reserves: We note the concerns regarding the progress of the extended reserves project. Most notably the selection methodology process. Separate from this appropriations consultation, detailed submissions have recently been received by the relevant service providers on the proposed technical requirements schedule and the selection methodology. We will make decisions based on our consideration of the submissions and service provider recommendations and fully explain the reasons for those decisions.

(b) Settlement and prudential security: Improvements to the settlement and prudential security arrangements have significantly reduced the volatility in calls for prudential security and at the same time have enabled a reduction in the probability of a loss occurring if a default on payment were to occur. We acknowledge that there is still room for further enchantments, and the clearing manager has and will continue to propose improvements to the methodology.

(c) Hedge market development: We continue to progress projects in this area at a top priority level. In particular, we are encouraging the introduction of cap products, and we expect the ASX to list both an energy and a capacity cap by mid-2017. Such cap products enable a wider range of parties to participate in futures trading, increasing activity levels more generally. We are also open minded to options that may improve the trading of existing products, and will take the recommendations from the Wholesale Advisory Group into account as these are progressed.

(d) Customer compensation scheme: We are currently reviewing detailed submissions on the customer compensation scheme and stress testing regime. We note that these arrangements are designed to improve incentives on parties to take responsibility for managing their own risk by forward contracting and thereby supporting security of supply. In this way, security of supply is not only supported by generator/retailers, but by all wholesale market generators and purchasers.

(e) Monitoring the wholesale market: We monitor the performance of the wholesale market to assess compliance with the Code and the potential for market improvements. Such improvements are not only focussed on “access to supply”, but consider potential benefits to all three limbs of the Authority’s statutory objective, operational efficiency, competition and reliability, for the long-term benefit of consumers. We are interested in the relationship between demand and price. We do not believe these are uncorrelated, but we are interested to understand how this relationship might be changing. We are planning to publish a report on this relationship, with a specific focus on the efficiency of overnight spot prices.

(f) Transmission pricing methodology: We note the concerns raised about the TPM project, both the commitment of resources and timeframes. The TPM is a long-standing and contentious issue for the electricity industry. Getting it right has involved a lot of effort and time. However, we consider that the effort is warranted as a more robust and efficient TPM will deliver an estimated net economic benefit of $203 million in present value terms, plus significant non-quantified benefits, in particular from the efficiency impacts of increased scrutiny of transmission investments and from improved durability.

(g) Default distribution agreement: We note the concerns raised about the DDA project. The relationship between distributors and retailers is important for retail competition and, more broadly, for innovation in technology and business models. Contrary to Vector’s comment, our current DDA proposal would allow a distributor and retailer that are satisfied with an existing agreement to remain on that agreement and they would not have to transition to a DDA. We are planning further work on the DDA proposal in 2017.

6.6 Innovation in technology and business models is likely to become increasingly important in realising long-term benefits to consumers. We want to reduce barriers to competition and entry, exit and expansion as this will let innovation flourish.

6.7 We note the comments on the benefits of the Authority’s efforts relating to competition and consumer choice and reducing barriers to entry, exit and expansion. Markets are two-sided. Making it easier for consumers to make decisions that reflect their preferences promotes competition and achieves long-term benefits for consumers. WMN and the retail data project are examples of initiatives intended to promote competition by facilitating consumer participation. At the same time, we are looking at ways to reduce the cost of doing business in the electricity sector, whether for existing participants or new participants.

6.8 We will continue to focus on promoting efficient price signals across the supply chain. We are responsible for promoting efficient transmission and distribution pricing structures where Transpower and distributors do not face strong natural incentives to adopt efficient approaches. Our expressed preference is for an industry-led approach to adopting efficient distribution pricing structures. We look forward to continued distributor and industry progress in this area.

Programme A: Evolving technologies and business models

6.9 The following comments were made.

Mercury

Promote market development

Mercury supports the Authority's focus on emerging technology as one of the main opportunities facing the electricity sector. New technologies and innovation provides scope to transform both businesses and consumers' relationship to energy services. With many traditional and non-traditional entities looking to enter this space the Authority will have an important role to play in ensuring regulation maintains a level playing field for competition and delivers long term value for consumers.

Areas we consider the Authority's work programme should focus include assessing the potential market impacts from the investment by regulated distribution monopolies of battery storage. Such investments will earn regulated returns for providing network deferral benefits but will also be operated to earn unregulated revenue in ancillary markets. As such it is important that consumers are not effectively "paying twice" for services.

One way to improve outcomes for consumers is for the Authority to promote transparency measures to enable competitive market solutions to distribution network constraints. This could include requiring distributors to provide public information on where network constraints currently exist to enable third parties to suggest investments and ensure the most cost effective solution for the consumer is adopted. This will result in more long-term efficient investment in infrastructure and lower costs to the benefit of consumers.

MEUG

Programme A: Evolving technologies and business models

4. MEUG agrees with the view in the paper that:

"Most simplistically, the electricity industry is moving away from the 'bulk supply' model that has characterised its operation over the last one hundred years or so. It is moving to a more dispersed and atomistic model where technology and new business models enable consumers to become more active participants in the market."

5. The consultation paper mentions work to be undertaken on reducing inefficient barriers to mass market uptake of demand response (DR) and distributed energy

resources (DER). We assume mass market refers to households and small medium enterprises (SMEs) with category 1 or 2 meters.

6. MEUG suggests that work should also include inefficient barriers to larger commercial and industrial (C&I) consumers because of the uncertainty that cost structures and tariffs paid by and used by C&I consumers to make investment decisions in DR and DER are efficient. We suggest C&I will be important in these markets because of economies of scale. For example larger scale batteries at C&I sites coupled with more sophisticated energy management systems available 24/7 are likely to lead on average over time to lower unit costs than a number of households with equivalent cumulative battery storage capacity.

7. Part of the value the EA could add in reviewing the DR and DER markets is to debunk misleading analysis purported by equipment vendors and the Electricity Efficiency and Conservation Authority (EECA). On the latter MEUG can provide the EA with a number of prior submissions to EECA critiquing the claimed benefits of work funded from the electricity efficiency levy.

Powerco

This programme has a strong focus on reducing barriers to new technologies and business models. In principle Powerco supports this. However, we suggest the Authority is careful to ensure that regulatory intervention only occurs where there is a clear and demonstrable positive benefit-cost ratio from doing so.

Unison

Unison supports the Authority's focus on Evolving technologies and business models. As highlighted by the Authority the industry faces potentially far-reaching changes in the near future as evolving technology expands how electricity is generated and used, providing consumers with greater choice and control over their energy needs.

Unison considers it important that this programme focuses on increasing competition and efficiency by removing barriers to innovation and participation. A key component of this is the role of distribution pricing and ensuring the information and data gathered by retailers through metering is accurate and fit for purpose. This will become even more crucial as distribution companies rely on this information to model pricing structures that are adaptable to the evolving needs of consumers.

Authority comment: Evolving technologies and business models

6.10 Innovation in technology and business models is expected to facilitate greater participation and competition across the electricity supply chain, including in the provision of natural monopoly services of electricity transmission and distribution.

6.11 We want to focus on reducing inefficient barriers to development and use of evolving technologies and business models across the supply chain.

6.12 We note the feedback in relation to competing uses for demand response and distributed energy resources. We note that efficient distribution pricing is important to assist all consumers – large industrial and households – to make investment and consumption decisions. The objective of our distribution pricing project is to promote efficient distribution pricing. We expect efficient distribution pricing to support efficient investment in demand response and distributed energy resources. We also have a number of other related pieces of work in this area, including an update to the guiding regulatory principles for demand response. We will be making specific decisions about the priority of initiatives relating to evolving technologies and business models as part of our 2017/18 work planning process.

Programme B: Consumer choice and competition

6.13 The following comments were made.

Mercury

Consumer choice and competition

Access and privacy of electricity consumption data is an important issue. Consumption data has value in a wide range of applications including for network planning and enabling new forms of business and customer participation in the market. Mercury supports cost reflective and market based provision of data to ensure a level playing field for all potential applications, both present and future.

Mercury is of the view there are currently no barriers to data being provided to consumers and third parties.

Consumers are currently able to access consumption data either directly via their retailer or subject to an authorisation process to nominated agents, subject to appropriate protections for consumer privacy. The measures and assurance needed to protect consumer privacy in our view will only increase as more granular data is made available and potentially becomes more personal in nature.

In terms of business-to-business interactions, consumer data is readily available via commercial arrangements with Meter Equipment Providers (MEPs) who invest in the metering infrastructure to capture consumption data. The cost of this capital and the on-going costs involved with collecting and maintaining the data and equipment (as well as the development of new services and innovation) are incurred by the MEP and recovered via commercial arrangements. Retailers and some distributors are currently subject to such arrangements which are important to the on-gong sustainability of the market and ensuring a level playing field in terms of access to data. We consider all parties should be subject to the same market arrangements for access to data in the future.

Electricity Distribution Businesses also have the ability to access consumption data as part of their use of system agreements with retailers for network planning purposes. As the boundary between regulated and non-regulated services blurs the risks of networks using such data for commercial purposes increases. We support consideration of further regulatory measures to provide greater transparency as to how this data is being utilised and being kept separate from unregulated activities.

MEUG

Programme B: Consumer choice and competition

8. The EA propose a $2.5m budget in 2017/18 for facilitating consumer participation. That work includes the “What’s my number campaign”. The work planned for 2017/18 is new and follows the $2.5m per year over three years Government approved funding programme that will conclude 30 June 2017. MEUG support this new proposal because the overall EA operational budget, including this one year extension of $2.5m for facilitating consumer participation, will still be less next year than this year. MEUG’s view would be different if the overall EA budget had increased.

9. We also suggest some of the $2.5m funding in 2017/18 for facilitating consumer participation be invested in the C&I sector.

Powerco

Based on the limited information provided in the consultation paper, Powerco is broadly supportive of this programme but would have appreciated more information so we could reach a more informed view.

However, we support continued consumer education programmes, particularly in relation to the risks of trading on the spot market and how end-user price structures relate to real industry participant costs.

The consultation paper did not mention the workstream regarding the Default Distribution Agreement. This may be because the Authority intends to complete this project in the 2016/17 year or this may be an oversight. Powerco would welcome clarity on the Authority's timeframe for this project. Overall, we support it being resolved as quickly as possible.

There are some additional projects Powerco recommends including in the Authority's work programme for the coming year. These projects may already be included in one of the Authority's existing work programmes, but this is not apparent from the consultation paper. These projects are:

- Provide for better access to meter data. In addition to the Authority's efforts to improve consumers' access to their usage data, it is important for the entire industry to have more open access to ICP meter data. This information is essential for networks to continue to deliver improved services. We would encourage the Authority to consider Code amendments that would allow distributors access to and usage of ANZSIC data and meter data for purposes related to the delivery of regulated distribution services.
- As an example, the industry needs access to better quality ANZSIC code data. It has been noted in current submissions to the Authorities proposed amendments to Part 8 of the Code for the implementation of the extended reserves regime. Regardless of whether the proposed regime proceeds in its current format or not, the industry needs good information of the type of customers on the network. This is supplied to the electricity registry in the form of ANZSIC code data.

Unison

(c) Default Distribution Agreement (DDA)

Unison continues to be of the view that the Authority's focus should be on revising the voluntary model Use of System Agreements (UoSAs) based on the successful negotiation of contracts between distributors and retailers, rather than on Code changes to set a default of core terms.

Unison submits that a more targeted approach by the Authority, in conjunction with a review of the current MUoSA terms, would be a more appropriate regulatory response to consider. This would address the issues of distributors still offering legacy-type UoSAs or deviating from the core principles of the MUoSA (in particular equal access and even handed treatment), and reduce the barriers to entry for new retailers, while at the same time providing greater regulatory certainty.

Such a response would help achieve the Authority's objective while at the same time not undermining the negotiation that has already been undertaken in good faith, and the investment the industry has made in this area to date.

Authority comment: Programme B: Consumer choice and competition

6.14 We want to reduce barriers to competition, by reducing barriers to entry, expansion and exit, as this will facilitate parties competing to offer consumers more choices. As part of this programme, we are looking at ways to reduce the cost of doing business in the electricity sector, whether for existing participants or new participants.

6.15 On the demand-side, the WMN and the retail data project are examples of initiatives intended to promote competition by facilitating consumer participation. The rate of consumer switching (from one retailer to another) over the last year has been at record high levels and is positively correlated with the WMN campaign, which suggests the campaign continues to facilitate consumer participation. Making it easier and quicker for consumers (and for their appointed agents) to obtain useful information is likely to enable them to take better advantage of the choices available to them, leading to even greater participation and competition.

6.16 We note comments on access to, and exchange of, consumption data and on the nature of the relationships between counterparties, e.g. between distributors and retailers. We will be making specific decisions about the priority of initiatives relating to consumer choice and competition as part of our 2017/18 work planning process.

6.17 We note the concerns raised about the DDA project. The relationship between distributors and retailers is important for retail competition and, more broadly, innovation in technology and business models. We note that our current DDA proposal would allow a distributor and retailer that are satisfied with an existing agreement to remain on that agreement and they would not have to transition to a DDA. We are planning further work on the DDA proposal in 2017.

Programme C: Pricing and cost allocation

6.18 The following comments were made.

ENA

1. Strategic focus - Promote market development

The ENA acknowledges the Authority's focus on efficient pricing, and that more efficient transmission and distribution pricing will continue to be an important strategic goal in 2017/18. The Authority's Programme C appears to have four work streams that are targeted at ensuring prices are cost-reflective and service based.

ENA members are concerned that the Authority may be underestimating the engagement and support, and hence the resource requirements that the Authority will need to ensure that the distribution pricing work stream is successful. Members believe that the Authority needs to allocate sufficient resource/budget to support the EDBs' own efforts to reform distribution pricing. Members are committed to moving distribution pricing arrangements forward to meet market needs and better reflect costs, but they consider that the Authority must actively support their efforts.

Members consider that leadership of the type of pricing change that is being talked of is a "whole of sector" responsibility which includes EDBs, retailers and regulators. The Authority needs to ensure that it budgets appropriate resources to support industry's role.

Mercury

Pricing and cost allocation

Mercury supports the focus on shifting toward more efficient distribution pricing over time. We also agree that given the wide range of situations among various geographical locations the circumstances for each EBD will be different. While it will be difficult to suggest a single pricing approach, there is value in promoting further standardisation among tariff structures and we support and welcome the initiative by the Electricity Networks Association to work toward this goal.

In Mercury's experience, the majority of consumers have a preference for simple, easy to understand pricing. We see that one downside of the current drive for more cost reflective and service based pricing is a potential proliferation of tariff structures to an already heavily complicated system. Consumer education will be important in any transition and in this respect we support the Authority's drive toward the roadmap approach. We also support the Authority view that it is retail competition that will determine pass through of distribution pricing structures by retailers and therefore there is no need to mandate pass through.

Mercury also looks forward to the Transmission Pricing Methodology project reaching its conclusion in the period of this work programme.

Operate the electricity system and markets

Mercury is keen to see the electricity market transition from island-based cost allocation to national cost allocation. This is crucial to a well-functioning national reserves market which encourages participants in both islands to efficiently offer and compete for reserves.

Meridian

Transmission pricing

Meridian considers reaching a fair and durable approach to transmission pricing remains the most important project on the Authority's work programme given the significant implications for the industry and consumers. We support the Authority committing all necessary resources to resolving this issue as soon as possible.

Distribution pricing

With adoption of new technologies growing, we agree it is a critical time to ensure consumers and industry participants are facing appropriate price signals. We strongly support the Authority's ongoing work on distribution pricing to ensure this outcome is achieved.

MEUG

Programme C: Pricing and cost allocation

10. In paragraph 2.34 is the statement, with underline text emphasised by MEUG:

> "This programme aligns with our improve price signals strategy. We want to ensure prices for energy, transmission and distribution services are cost-reflective and service based. Achieving this will assist consumers to base their decisions on correct information/signals."

11. MEUG suggest the word "consumers" be replaced by the words "consumers and suppliers where market mechanisms are feasible (and exacerbators then beneficiaries when not)". This change will then make it clear that first it's the investment and decision

making of both end consumers and parties in the supply chain that are important. Second market as well as non-market cost allocations should be within the scope of Programme C work. The preferred reference to exacerbators then beneficiaries is consistent with the EA decisions and reasons paper “Decision-making and economic framework for transmission pricing methodology” dated 7 May 2012.

12. Paragraph 2.34(c) refers to the ancillary services of instantaneous reserves and frequency keeping as work streams for improving cost allocation 2017/18. Cost allocation of extended reserves should be added to as MEUG, and we believe other parties, have material concerns with the transaction costs and efficiency of the planned implementation to meet the cost allocation set out in the code.

Powerco

Powerco supports the Authority progressing and resolving the long-running projects on the transmission pricing methodology and distributed generation pricing principles (DGPPs). This is not to say that we necessarily support the Authority’s proposals in these areas but there is value to the industry and consumers in the improved certainty that will come from finalising these projects.

We note the recent release of the DGPP decision2 and encourage early review of and consultation on amendments to the Code to give effect to this decision. This will assist distributors in navigating through the transition period and also help to inform the distributed generators who receive ACOT about the changes to their revenues. We also remind the Authority that our prices are released in January each year for consultation prior to taking effect in April. Therefore it is essential we understand the effect of distributed generation pricing changes as early as possible.

In relation to the distribution pricing review, we consider that it is important for the industry to have clarity regarding broader regulatory requirements (particularly the Low Fixed Charge regulations) and issues of equity, price shocks and the strength of pricing signals need to be considered.

This programme also includes improving demand response market mechanisms. At present dispatchable demand is a transmission only mechanism and its limited uptake to date suggests it has not been very effective. We support further development of Transpower’s demand response programme, but it also can only send price signals related to transmission constraints and does not yet provide sufficient demand response to meaningfully manage most grid constraints. We support the development of a consistent and practical framework and clear rules for demand side response that can apply across both transmission and distribution.

Trustpower

6.3 Improved administered prices and cost allocation methods

6.3.1 Trustpower supports well justified policy reform. This has not occurred with the Authority’s proposals for reform of the TPM Guidelines or reform of Schedule 6.4 of the Code.

6.3.2 The Authority has received a large number of submissions and independent expert reports from stakeholders explaining in depth why these reforms will not meet the Authority’s operational efficiency objectives and/or its Code change requirements. It follows these initiatives will not be in the long-term interests of consumers.

6.3.3 Going forward, we would suggest that where a matter is particularly complex, involves substantial change and is likely to be contentious, the Authority should use independent experts and advisory groups to stress test its own thinking and inform and critique its work much earlier in the policy development process.

6.3.4 In suggesting this, we acknowledge that advisory groups will not resolve all issues, and will often not reach consensus, but we are confident that their use will lead to lower costs and a more efficient use of resources (both within the Authority and across the industry). Similarly, a greater use of experts will enhance stakeholder confidence, strengthen the evidential basis for the policy approach and reduce the risk of regulatory failure.

Unison

(a) Distributed Generation Pricing Principles (DGPPs)

Unison is supportive, in principle, of the Authority's recent decision not to remove the DGPPs from the Code, and to instead shift responsibility for determining ACOT payments from distributors to Transpower. The Authority is proposing to amend the Code to prevent DG that does not efficiently defer or avoid transmission costs from receiving ACOT payments. However, Unison understands that the existing contracts distributors have with DG owners may still prevail, exposing distributors to a significant financial risk that they may be left with stranded contracts. This is still of great concern to Unison. The Authority needs to carefully consider the current contractual arrangements that distributors and DG owners have entered into, in good faith, in the current regulatory context. In addition, Unison urges the Authority to consider to the Authority to consider a more thorough examination of the purpose of Part 6 at the time the Code amendments are drafted, as noted in our submission to the Authority in July.

(b) Distribution Pricing Review

Unison supports the direction the Authority is pursuing with its distribution pricing review. Unison agreed with the Authority's three key concerns with existing 'consumption-based' pricing structures:

- they are likely to lead to inefficient investment in solar panels
- they may lead to inefficient investment in distribution networks, and
- there is concern about whether they are durable.

Unison acknowledges that current pricing structures do not align with the services consumers receive. More cost reflective pricing approaches would better signal to consumers the value of the network service they receive and allow them to make more efficient choices about the merits of alternative technologies.

Unison believes there are valuable lessons to be taken from the move towards cost-reflective pricing in Australia, along with behavioural response research that has been undertaken. The Australian experience to date highlights the probable constraints that will impact initial voluntary uptake, and then more importantly the way a more integrated approach could ensure optimal usage of such pricing. New Zealand has an opportunity to benefit from this experience when setting similar policy.

(d) Review of Low User Fixed Charge Regulations – omission in paper

Unison continues to be concerned about the omission of work to examine the low user fixed charge (LUFC) regulations. These regulations have been a barrier to distributors putting in place the most service-based and cost-reflective pricing options. The Authority has recently released guidelines on the interpretation of the LUFC, in particular the definition of variable charges. Unison welcomes these guidelines and notes that the Authority has provided clarity on variable charges and what these could include. However, there are still aspects of the guidelines that need further refinement and would benefit from further consultation and debate.

Unison submits that the Authority needs to carefully consider the role of fixed charges in the mix of pricing structures. The Low Fixed Charge Regulations effectively require distributors to set high variable charges to consumers, whether they be charges for capacity, demand or consumption during peaks. As a result, consumers will always face an avoidable price, even though underlying costs are fixed over the medium term, which means costs will be shifted to other consumers. We recommend the Authority continue to examine the consequences of the Low Fixed Charge Regulations, for efficient pricing.

In addition to the LUFC guidance, Unison believes that Authority should still consider points made by the Retail Advisory Group's (RAG) draft paper: Effects of Low Fixed Charges. In particular: "the overall implication of this analysis is that consumers, in aggregate, pay more for less under the regulations than under the notional efficient tariff". This observation by the RAG suggests that further work by the Authority to advocate change to the regulations, or their rescinding, would be consistent with the Authority's statutory objective to promote the efficient operation of the electricity industry for the long-term benefit of consumers. Unison urges the Authority continue with such work.

(e) Transmission Pricing Methodology

There has been great uncertainty in the area of transmission pricing, particularly over the past four years. Unison notes that the Authority had originally intended to conclude its review of the Transmission Pricing Methodology (TPM) in the 2017/18 year, and would be grateful for assurances that this remains the Authority's intention. The ongoing reviews have consumed significant industry resource, and a conclusion with clear direction would be welcomed.

Authority comment: Pricing and cost allocation

6.19 Efficient pricing and cost allocation are critical to supporting efficient markets. Hence we are looking at making pricing and cost allocation more efficient across the supply chain – the spot market, ancillary services, transmission and distribution.

6.20 Innovation in technology and business models is likely to become increasingly important in realising long-term benefits to consumers. Efficient pricing and cost allocation will let innovation flourish without creating perverse outcomes such as consumers investing in technology based on inaccurate price information. For example, the prevailing consumption based distribution pricing structures encourage consumers to invest, potentially inefficiently, to reduce their consumption without necessarily reducing their peak use of the network.

6.21 We note parties support for the industry-led approach to more efficient distribution pricing. We recognise the significant effort that will be required from distributors and retailers and stakeholders. In addition to monitoring progress, we have said that we will facilitate the industry-led approach.

6.22 We note the comments relating to the TPM and DGPP projects. Our response to these comments is provided in paragraph 6.5(f) above.

6.23 We can confirm that the work on cost allocation will include the assessment and design of any compensation mechanism for extended reserves.

6.24 We note the suggestion by Mercury that instantaneous reserve should be allocated on a national basis. The Wholesale Advisory Group is currently finalising its recommendations on the allocation of instantaneous reserve taking into consideration views expressed within submissions (including the submission provided by Mercury) on its related discussion paper. We will progress this matter by evaluating the Wholesale Advisory Group recommendations. These are expected to be finalised and provided to the Authority by 30 June 2017.

6.25 Several submitters commented on the Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations (LFC Regulations). The Authority does analyse the market effects of the LFC regulations, but it is not within the Authority's jurisdiction to make changes to them.

6.26 We note that dispatchable demand has to date had limited uptake. We are undertaking a review of a Code amendment proposal by EnerNOC that has the potential to facilitate dispatchable demand participation to conforming nodes (forms of load other than large industrial load). We are also progressing work on updating the guiding regulatory principles for demand response, this will provide useful guidance on the future development and integration of demand response across the transmission, distribution and retail perspectives.

6.27 With regard to the suggestion by Trustpower that the Authority should use independent experts and advisory groups; the Authority does in fact already make extensive use of advisory groups and external experts. Specifically with regards to the TPM project, we have utilised a Transmission Pricing Advisory Group, have considered the work and material from the Transmission Pricing Technical Group established by the Electricity Commission, the Authority's predecessor, and engaged a wide range of experts to provide advisory services, including EGR Consulting Ltd, Concept Consulting Group Ltd, Roger Proctor Policy Consulting, Sapere Research Group Ltd, Buddle Findlay, and Oakley Greenwood Ltd. Furthermore, the Authority has made extensive use of consultation processes to evaluate and inform its thinking, and the development of the TPM proposal incorporates components reflecting suggestions from submitters.

Programme D: Risk and risk management

6.28 The following comments were made.

ENA

2. Strategic focus – Operate the electricity system and markets

ENA members generally support the Authority's strategic approach of ensuring a fit-for-purpose market services strategy and that high-standard services are delivered to stakeholders. Members note there are various work programmes that contribute to this strategic focus which, to a greater or lesser degree, involve ENA members. One high priority work programme that has a direct impact on members, and that members do not support, is the development of a centralised extended reserves' manager. In the context of this submission, members have concerns about the scale of the budget and resources that are being allocated to this programme.

Members are aware of the development costs that have been required for this work to date and they urge the Authority to reconsider whether allocating further budget of that magnitude is appropriate. This is especially important given that there is a better alternative, which is proposed in recent ENA submissions to the system operator and NZX on extended reserves.

In those submissions, ENA members asked the system operator to empower EDBs to develop and provide a four-block AUFLS scheme on a dynamic basis. Members also proposed that no further work be carried out by NZX to develop a centralised selection process. As such, members consider that no further appropriations should be allocated to these aspects of the extended reserves' development project.

Mercury

Risk and risk management

With respect to hedge market development, Mercury's preference is for the market to grow according to demand, with regulation only considered as a last resort and subject to a clear net benefit test. Mercury thanks the Authority for its recent positive response to the request from industry participants for consideration of adding another central North Island Financial Transmission Right market node. We believe this is an important positive development that will support effective hedging with the wholesale market in the future.

MEUG

Programme D: Risk and risk management

13. One of the potential lessons of the blackouts in South Australia on 28 September 2016 is to ensure the system operator has the necessary visibility and tools aided by appropriate market settings to manage more atomistic DER. The system operator has, we understand, been following the changing supply patterns in South Australia and will be publishing initial insights of the blackout event relevant for New Zealand. The EA could consider longer term trends and whether any institutional or structural changes may be needed to the role of local distributors and the system operator in terms of managing extreme and sudden security of supply risks where there is dispersed and atomistic DR and DER.

Powerco

Based on the limited information provided in the consultation paper, Powerco is broadly supportive of this programme but would have appreciated more information so we could reach a more informed view.

There are some additional projects Powerco recommends including in the Authority's work programme for the coming year. These projects may already be included in one of the Authority's existing work programmes, but this is not apparent from the consultation paper. These projects are:

- Review and refine the EIEP1 business requirements for Traders to provide billing/volume information to the Distributor. Although the EIEP1 format has been regulated since November 2014 (version 10), the business requirements (ICP billing/volume information, normalisation, prior period, submission, errors) are not clearly defined. This has resulted in different interpretation / understanding amongst different participants for different billing methodology types.

Authority comment: Risk and risk management

6.29 We note and have responded above to concerns regarding the extended reserve selection methodology.

6.30 We note the general support for a market facilitation approach to hedge market development. We appreciate the positive feedback regarding the potential addition of a central North Island Financial Transmission Right node.

6.31 We are aware that the system operator is considering whether any lessons can be learned from the recent supply issues in South Australia. We are also taking an interest in this analysis and whether it has any implications for the Authority's work programme.

Programme E: Operational efficiencies

6.32 The following comments were made.

Powerco

Based on the limited information provided in the consultation paper, Powerco is broadly supportive of this programme but would have appreciated more information so we could reach a more informed view.

There are some additional projects Powerco recommends including in the Authority's work programme for the coming year. These projects may already be included in one of the Authority's existing work programmes, but this is not apparent from the consultation paper. These projects are:

- Review the Grid Reliability Standards (GRS) and their application to planning and investment for transmission spur assets. Currently the GRS are cumbersome and inefficient in relation to spur assets and are also not well understood or applicable to the distribution context (which most connection assets of Transpower operate in).
- This is evidenced in the Grid Investment Test (GIT). The GIT primarily focuses on measuring economic benefits through the different merit order generation dispatch schedules that would apply to the various transmission upgrade options. This requires a sufficiently broad range of generation types and capacities to be available on the load side of the grid constraint. Furthermore, it usually anticipates operational flexibility inherent in a widely interconnected grid architecture. This is rarely the case for transmission spur investment, which is usually radial in nature and has few if any generation options.
- The Code does facilitate a transmission spur investment, even if the nominal GIT test is not positive, via a confirmation of support from affected end use customers. This is essentially the process Powerco would normally undertake for a major project regardless of economic test outcomes. These provisions of the Code requiring evidence of customer support are therefore somewhat redundant.
- We consider that Code changes in this area would improve efficiencies and provide better certainty for transmission spur asset planning. Powerco would be happy to provide more details of our concerns in this area to the Authority.

Transpower

We request Authority consultation on its disconnection direction power

In our submission in November 2015[4] to the Authority's 2016/17 appropriations and work programme we pointed out that the programme did not include the Authority's planned consultation for policy for disconnection of direct purchasers. We note that the 2016/17 work programme did then include a project albeit at lowest priority (project # 3.7 Review of trader default arrangements for 'direct consumers').

However, the project description[5] appears to make the project a compliance issue instead of the policy issue that the promised consultation requires.[6] The project does not appear to cover the development of policy and procedure on the Authority in its potential exercise of its power to direct us (and other lines companies) to disconnect 'direct consumers'. Without this development we consider there is a risk that the default provisions (shortened or otherwise) may not be effective in the manner intended. We append at Appendix B our previous letter to the Authority (April 2015) that outlined our concern with this lack of development. This concern remains.

Trustpower

6.1.2 As noted earlier, we think that operational efficiencies should be at or near the top of its priority list. Within the possible projects under this area, the removal of technical barriers to entry would be our first priority.

…

6.4 Code reviews

6.4.1 Over-regulation is a significant burden on market participants and is also likely to increase industry costs to serve and/or stifle innovation and competition.

6.4.2 As it is now twenty years since the wholesale market began we think that it is appropriate to reconsider whether some of the matters currently included in the Code and as a consequence, subject to a formal regulatory processes, could be entrusted to the service providers to undertake within frameworks established by the Authority.

6.4.3 For example it does not seem to us to be consistent with the efficient operation of the industry to have two rounds of consultation on the System Operator's procurement plan during which only one submission is received (from Meridian Energy to the system operator).

6.4.4 Accordingly, we suggest that instead of the Authority's 'technical and non-controversial' code review next year the Authority set up an ad hoc advisory group with an independent Chair, representatives from the industry, consumers, MBIE, and the Authority to make recommendations on areas where the Code can be reduced in scope or complexity.

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4 http://www.ea.govt.nz/about-us/corporate-projects/201617-planning-and-reporting/consultation/#c15604

5 Target for project: Achieve assurance that the necessary disconnections are in place and practical, or identify any necessary amendments to the Code to enable this assurance to be achieved. Consider and make decisions on any applications for a shortened post-default exit period. Review the post-default exit period provisions (this will only be undertaken once at least one application has been considered). http://www.ea.govt.nz/about-us/strategic-planning-and-reporting/our-work-programme/

6 The Authority intends to undertake consultation early next year to seek further views on disconnection procedures for direct connect consumers that purchase their electricity from the clearing manager http://www.ea.govt.nz/dmsdocument/16798

Authority comment: Operational efficiencies

6.33 We agree with Powerco that it would be desirable to review the GRS to ensure that the GRS is effective in promoting efficient transmission investment, including in relation to transmission spur assets, and efficient investment and operation across the electricity industry. Review of the GRS is a pending project on the Authority's work programme. Subject to progress on other projects and availability of resources, we agree it would be desirable to commence reviewing the GRS in 2017/18, starting with establishing the scope for the review.

6.34 We note the range of feedback from Trustpower on operational efficiencies and make the following initial responses:

(a) Removal of technical barriers: We agree that this is a worthwhile objective. The establishment of the new advisory groups provides renewed opportunity to consider where inefficient technical barriers might be alleviated or removed, and a number of projects also seek to achieve this, for example the Review of wholesale market trading arrangements project.

(b) Over regulation: We can and do pursue market facilitation rather than Code amendment in many circumstances. A good example is our encouragement of market making for ASX futures products. However, in other circumstances, Code amendment is appropriate. We give careful consideration as to which approach is best for each development area.

(c) Entrust service providers to undertake more of the functions currently under the Code: We agree that where appropriate that increased functionality under the Code can be entrusted to service providers. If implemented appropriately, this facilitates a more flexible and responsive system. However, it remains appropriate to continue to capture key functional elements within the Code and to require Authority approval of important service provider methodologies/procedures before they become operational. Examples of the use of such an approach include the FTR allocation plan, and the clearing manager's settlement and prudential security methodology. We have adopted a similar approach with the establishment of the extended reserves technical requirements schedule finalised by the system operator and the selection methodology recommended by the extended reserves manager.

Programme F: Compliance

6.35 The following comment was made.

Powerco

Based on the limited information provided in the consultation paper, Powerco is broadly supportive of this programme but would have appreciated more information so we could reach a more informed view.

Authority comment: Compliance

6.36 We consider that the consultation paper provided sufficient information to enable participants to reach informed views for the focus areas, at this stage of the planning process i.e. our appropriations and strategic direction.

Business-as-usual function: Monitor, inform and educate

6.37 The following comment was made.

Mercury

Monitor, inform and educate

In general Mercury supports this work however we would suggest that the Authority focus on balanced education of consumers who may be impacted by current or future market conditions. In our view monitoring, informing and educating purely to satisfy the ticking of this objective off will not be an efficient process. Mercury would not want consumers to perceive that the communications and initiatives the Authority suggests are of little or no value as saturation point has been reached.

Authority comment: Monitor, inform and educate

6.38 We agree that the way in which the Authority communicates with and provides education to consumers' needs to constantly evolve. We will continue to review the effectiveness of our communications with consumers, and continue to explore refinements to, and new options, regarding how we communicate with consumers.

7 Other matters raised in submissions

7.1 Other matters were raised in submissions that were not directly related to the setting of 2017/18 appropriations, or development of the SOI, SPE, and work programme. These matters have been addressed below.

7.2 Where these comments impact consideration of the appropriations proposal, these have been considered as part of developing the recommendations to the Minister. Other comments will be addressed in the normal course of business.

Achievement of the Authority's vision

7.3 The following comment was made.

Trustpower

7.1.1 The Authority's vision is to be a world-class electricity regulator delivering long term benefit to the consumers and contributing to the New Zealand economy. In order to achieve this vision we consider that:

- partnership with industry is important in the exercise of all its functions including through a more committed use of advisory groups in its market development activity;
- the Authority should use market studies and scenario analysis to provide insight into when change might be required;
- evidence-based problem definitions will build more support for change rather than descriptions of hypothetical problems; and
- the Authority should allow the market to adapt and change rather regulate in anticipation of change as ongoing interventions are unlikely to be successful and will obscure the impact of earlier change.

7.1.2 We encourage the Authority to take this feedback into account as it develops tis work programme further.

Authority comment: Vision

7.4 We note the feedback on how we might best achieve our vision.

7.5 We agree that advisory groups provide important advice on market development. To this end, we are in the process of establishing two new advisory groups, the:

(a) Innovation and Participation Advisory Group (IPAG), focussing on issues specifically related to new technologies and business models, and consumer participation

(b) Market Development Advisory Group (MDAG), focussing on further evolving the 'machinery' of the electricity markets.

7.6 We aim to set out a clear problem definition, undertake analysis of options, and provide reasoning for our preferred options. Where appropriate and where information is available, we would support this with a quantitative assessment. As we have commented earlier,[7] in general our preference is to use market facilitation measures rather than regulation. However, in some circumstances regulation is appropriate. We give careful consideration as to which approach is best in any particular instance.

Project management and transparency

7.7 The following comments were made.

Vector

Enhancing processes

19. We consider that the Authority can make improvements around the sequence and timing of obtaining information from industry participants. For example, the Authority expects distribution businesses to publish their plan for introducing efficient pricing by April 2017 ─ prior to its proposed review of the pricing principles. In our view, it would make more sense for the review of the pricing principles to occur first so the refreshed principles could serve as reference points for the pricing plan. This would avoid problems associated with moving targets and unnecessary iterations.

20. The Authority has signaled it would take action on aspects of a distributor's pricing plan that are not to its satisfaction. However, there could be aspects of pricing arrangements that are not mutually reinforcing or involve trade-offs; it may not be possible for certain objectives to be achieved at the same time or to a similar extent. For example, the objective of making progress towards service based pricing and bringing stakeholders and the community along may not be achieved in parallel.

21. We suggest that the Authority consider the potential interdependencies and offsetting effects of various aspects of pricing arrangements when it reviews a distributor's progress with respect to its pricing plan.

22. In relation to extended reserves, the Authority has amended the Code in 2014 before the proper design of the scheme was developed. This approach was costly and inefficient as it led to further Code amendments in 2016 to address gaps that were

[7] At paragraph 6.34.

subsequently identified. It would be more appropriate to properly explore the solution and overarching framework prior to codifying a new regime.

23. We encourage the Authority to engage with industry participants more closely, and more frequently as necessary, to better understand each other's expectations and concerns around information requirements and processes.

Trustpower

6.5 Post implementation reviews

6.5.1 The Consultation Paper advises that the Authority expects to carry out one or two post implementation reviews (against impacts sought) of completed projects. No details are provided about which projects will be subject to review in 2017 or what the basis for project selection is.

6.5.2 In the last six years the Authority has undertaken numerous reviews of industry participants and consumers' behaviour but only one review of the effectiveness of its own policy work, namely last year's review of its Demand Side Bidding and Forecasting initiative.

6.5.3 This is disappointing given the size of the Authority's past and present overall work programme.

6.5.4 The feedback loop – assessing what each intervention was meant to cost and achieve and what it did, in fact, cost and achieve – is a critical part of the market development process that needs to be hard-wired into the Authority's work programme activity before new programmes are added and new projects started.

6.5.5 We recommend more post-implementation reviews in 2017.

Authority comment: Project management and transparency

7.8 **Project management:** The Authority notes the comments on project management transparency and practice. We are looking at how we can improve our project management practice, including engagement and information gathering processes and will take these comments on board in this work.

7.9 **Post implementation reviews:** Post-implementation reviews are in-depth studies of the Authority's initiatives and are carried out by the market performance team. The purpose of a post-implementation review is to evaluate an initiative against its expected outcomes. From the Authority's perspective, this enables learning about how regulatory decisions—or decisions not to regulate—are affecting the sector and whether further policy action is required. The Authority has completed four post-implementation reviews; a review of multiple frequency keeping in the North Island, the metering review, a review of the model use of systems agreement (MUoSA) and the review of the demand side bidding and forecasting initiative. For 2016/17 we plan to review the switch saving protection scheme and one other, depending on other priorities.

7.10 There are many factors which influence the ability to carry out an effective post-implementation review, such as; how long the initiative needs to bed-in for its effects to be measurable, the length of time the benefits are assumed to accrue over, whether the cost-benefit analysis included a quantitative or qualitative assessment of the costs and benefits, and the availability and quality of data to analyse the impact of an initiate. As a result, not all initiatives are amenable to a post-implementation review.

7.11 It is important to remember that post-implementation reviews, while important, are just one way of informing the Authority's market development process. Our routine market monitoring as well as enquiries and reviews into interesting events also contribute to filling-in the picture on how the market is performing, as well as the performance of the Authority's initiatives. These can highlight any deficiencies with current arrangements and, if appropriate, recorded on the Code amendment register. Further, improving access to quality information through the Authority's electricity market information portal gives both the Authority and wider industry participants a basis upon which to identify the need for Code amendments.

7.12 In addition, there are other processes which inform the market development process. For example, the market performance team recently led a high-level assessment of the adequacy of the Authority's security of supply initiatives; the result of which led to the market design team initiating the recent reviews of the stress testing regime and customer compensation scheme.

7.13 We will continue to identify options to increase the number of post-implementation reviews in the future while supporting other related work.

7.14 **Distribution Pricing review - timing:** The timing for the distribution pricing review is designed to maintain the momentum developed for reform of distribution price structures. An approach where we review the distribution pricing principles before commencing monitoring, although a more principled approach, would risk undermining the momentum that currently exists to progress reform of distribution pricing structures. It is not necessary for updated principles to be available for distributors to signal their processes and key milestones for reform.

Consultation process

7.15 The following comments were made.

Pioneer

Pioneer notes that the consultation paper does not include the work programme in the same level of detail as has been disclosed in previous consultations on the funding of the Authority. It is unclear if the Authority will be consulting on its detailed work programme due for publication in June 2017 (para 2.25). This consultation paper is specific about the Authority not being required to consult on its strategy and priorities but input is valued (para 1.1). In our view it is difficult to comment on the level and value of funding without understanding the Authority's strategy, priorities and proposed detailed work programme.

Transpower

Input on projects and prioritisation

In prior consultations on appropriations the Authority has outlined the main projects under each of the programmes of work or strategic areas.

For this consultation, and for the first time, the Authority has not outlined any projects for the 2017/18 year. Instead we assume that the 2016/17 projects are the basis, subject to an evaluative step for *strong strategic fit and value proposition.*[footnote: Section 2.26] We are unsure whether the Authority is requesting our view on strategic fit and value proposition at this point but, in any case, consider that the Authority should have made an attempt at this first.

The invitation to …*input on the priority, timing and scope for work we should undertake to deliver our strategic priorities* [footnote: Section 2.25] …is a new approach from the previous *propose / respond* model. We suggest the changed approach could benefit from a different consultation format, for example, utilising interactive and/ or collaborative mediums such as workshop. A workshop forum could allow:

- discussion and challenge as the means to derive rationale and support for particular projects or workstreams
- sharing ideas for example how to assess (ex-ante) the value proposition of regulatory intervention
- an opportunity for Authority presentation of how / where the Authority has spent levy funds.

Of course this suggestion is likely to be too late in the process for it to be effective this time round.

Trustpower

5 Adequacy of information in the Consultation Paper

5.1.1 As we have indicated in previous submissions, the efficient level of expenditure clearly depends on the mix of projects, appropriateness of priority setting, and resource levels. However, there is insufficient information in the Consultation Paper for stakeholders to be confident that the Authority has made effective decisions on these matters.

5.1.2 Despite frequent calls for more transparency from submitters in previous levy consultations, there is still no information in the current Consultation Paper about individual project costs, including past expenditure and forecast future costs for multi-year projects, or about the expected benefits.

5.1.3 Instead, submitters in the current consultation round are asked to presume a possible work programme from the Authority's general areas of work. These areas of work are organised around high-level strategic priorities and include examples of initiatives which might, depending on Authority's subsequent priority setting, be included in the work programme.

5.1.4 There is no information about the criteria the Authority will subsequently apply to firm up its work programme in June or July 2017 after the opportunity to comment on the levy has passed. Nor is there any information about what changes to the work programme from previous years are likely, noting the current work programme has 45 separate projects in it.

5.1.5 This raises real questions about whether the Authority has consulted with levy payer on "the costs that are intended to recovered by the levy" as required by section 129 of the Act.

Authority comment: Consultation process

7.16 The Authority made a conscious decision to change the emphases of the consultation process to highlight what we aim to achieve with our programme of work in the coming year rather than project specific details. Therefore we sought comments from stakeholders on strategy and programmes, not on specific projects. The Authority consults on the merits of specific projects once the alleged problems with current arrangements have been examined thoroughly.

7.17 This approach provides the Authority more flexibility to develop details of the work programme later—in response to feedback, any new information and more detailed assessment against the strategy.

7.18 We will of course consider the views of stakeholders in confirming the process for the next financial year, and we will seek to provide an opportunity for engagement on the prioritisation of the projects within the annual work programme, for example through a workshop with interested parties.

Glossary of abbreviations and terms

ACOT	Avoided cost of transmission
Act	Electricity Industry Act 2010
Authority or EA	Electricity Authority
ASX	Australian Securities Exchange
BAU	Business as usual
CBA	Cost benefit analysis
Code	Electricity Industry Participation Code 2010
CRE	Competition, reliability and efficiency (components of the Authority's statutory objective)
DDA	Default distributor agreement
DG	Distributed generation
DGPP	Distributed generation pricing principles
EDB	Electricity distribution business
EECA	Energy Efficiency and Conservation Authority
EDF	Electronic dispatch facility
ENA	Electricity Networks Association
EIEP	Electricity information exchange protocol
FTR	Financial transmission right
GIT	Grid investment test
GRS	Grid reliability standard
HVDC	High voltage direct current
ICP	Installation control point
IPAG	Innovation and Participation Advisory Group
LFC Regulations	Electricity (Low Fixed Charge Tariff Option for Domestic Consumers) Regulations 2004
MBIE	Ministry of Business, Innovation and Employment
MDAG	Market Development Advisory Group
MEUG	Major Electricity Users' Group
Minister	Minister of Energy and Resources
MUoSA	Model use-of-system agreement
NAaN	North Auckland and Northland
NPV	Net present value
PV	Photovoltaics
RAG	Retail Advisory Group
SO	System operator
SOI	Statement of Intent
SOSPA	System operator service provider agreement
SPE	Statement of Performance Expectations
SME	Small and medium sized enterprise
TPM	Transmission pricing methodology
UoSA	Use-of-system agreement
WMN	What's my number