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Electricity Review Panel
Secretariat, Ministry of Business, Innovation and Employment
P O Box 1473
Wellington 6140

By email: energymarkets@mbie.govt.nz

Dear Panel Members,

Re: Electricity Price Review Hikohiko Te Uira Options Paper for discussion

Pioneer Energy (Pioneer) welcomes the opportunity to make submissions to the Electricity Price Review Panel (EPR Panel) on your proposed options for discussion.

Pioneer commends the government for establishing this review and the EPR Panel for the detailed assessment of options outlined in the paper.

Our submission is framed around your "At a glance" recommendations summary.

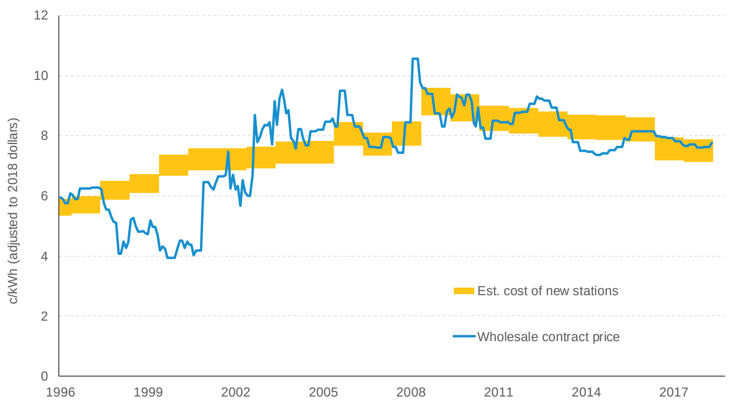
A: Strengthening the Consumer Voice

A1 – Consumer Advisory Panel

We **support** the recommendation to establish a Consumer Advisory Council, primarily to address any specific issues that ***cannot be addressed within the terms of a well-functioning and competitive electricity market.*** That is to say, the electricity market design as its stands was set-up to foster healthy competition whilst also ensuring private sector investment and security of supply.

The EPR technical review has provided sufficient evidence that the market design itself is delivering on the generation investment aspects of those core market design objectives. We can confirm that Pioneer, as a community owned generator, is an active investor in new generation. We have two new hydro plants under construction and have invested in good faith at the levels of wholesale market prices that just support new investment as indicated in Figure 1 below.

Figure 1: Wholesale contract prices versus cost of building new power stations



Source: Concept Consulting analysis. Prices and costs are adjusted for inflation and expressed in 2018 dollars.

Looking forward we note that system modelling supporting the government's 100% renewable electricity market policy generally signals higher future wholesale prices, due to a combination of external carbon costs on thermal fuels, less efficient capital investments and the need for system overcapacity.[1] For example, whereas new wind generation investment costs are forecast to be at $60/MWh to $70/MWh these LRMC assumptions do not account for system spill due to this needed overcapacity. Adding battery storage to this equation to avoid system spill also adds 50% to the capital costs to the wind. So combined our estimates of future investment costs for a 100% renewable market end up over $100/MWh, which on your current evidence is an affordability and energy poverty risk for some groups of consumers.

We therefore recommend that any new electricity industry policy or regulations introduced to reduce consumer energy hardship, and/or improve affordability, must also acknowledge other government policies introduced to reduce carbon emissions, as they are likely to exacerbate affordability issues for some segments of consumers.

Consequently, in our view a **Consumer Advisory Council will need a broader remit to also consider wider energy market options such as alternative home heating, transport energy costs including road and public transport costs and other general taxes, all of which should be considered equally.** Some of these broader areas of energy use (each with different distributions of private and public good costs) are likely to be easier to adjust via taxes or subsidies than relying purely on electricity market price interventions that impact future investment and generation supply.

A2 – Ensure Regulators Listen to Consumers

As a smaller market generation and retailer participant our experience of regulation change management is that regulators generally find it difficult to listen, let alone respond to, smaller players that are operating in niche areas and market segments. That is, their priorities seem more on focused on structural issues, investment efficiency and wider economic outcomes than on the more pragmatic use/abuse and general accessibility of the energy markets.

Good examples of where the Electricity Authority (EA) has not listened well enough on behalf of its consumers, resulting in the two-tier market pricing outcomes, are saves and win-backs, customer compensation scheme and access to consumers metering data. Independent Retailers have also requested prompt regulatory response or intervention to

[1] Transpower "Te Maura Hiko - Futures Report" of June 2018

rectify poor wholesale contracts market performance for nearly three years but it has taken a change of government before the EA has paid any real attention to these smaller Participants concerns. In each case, the EA's argument for maintaining the status quo has been couched in economic and related academic language that is difficult to relate to or lacks a more pragmatic understanding of real market outcomes or of customer experiences.

Consequently, we believe end-consumers will struggle to make anything of most regulatory changes unless there is **clearer cross-agency consensus with no obvious conflicts between how these agencies respond to government policy and their respective statutory objectives.** Examples of existing inconsistencies were discussed at the recent EPR workshops and include regulatory fairness on issues like levels of wealth transfers, rate of regulated price changes and trade-offs between policy objectives like climate change costs and energy prices.

The proposed government policy statements, as recommended by the Panel, are a good starting point and we acknowledge these are difficult to pen without creating further conflicts between new policy and existing statutory objectives. What we recommend, as an initial idea, is clearer statements on the government's regulatory priorities and how government will manage any conflicts that might arise with statutory objectives, for example:

1. Climate Change and reducing New Zealand's emissions levels is the government's primary goal across the energy sector – government requires that regulators make this objective their No. 1 priority.
2. Security of supply is essential for economic well-being. Regulators will ensure energy supply resilience to all sectors of the economy. Where security of supply is conflicted with climate change policy, regulators will ensure all other alternatives can be adopted.
3. Affordability and energy poverty are considered by government to be at or near crisis levels across the energy sectors. Price shocks to consumers due to regulatory changes greater than x% above current inflation levels are not considered acceptable.
4. Where two or more of the above top 3 priorities are in conflict, regulators will then consider the case for recommending a Just Transition initiative and refer that case to government for further actioning.

B: Reducing energy hardship

Pioneer supports the government's focus on fairness, affordability and competitiveness which should assist in ensuring fair prices for consumers.

Pioneer supports the proposals under:

B1 - Establish a cross-agency energy hardship group

Discussed above.

B2 - Define energy hardship

Defining energy hardship should be a high priority so that other initiatives are well targeted.

B3 - Establish a network of community-level support services to help consumers in energy hardship

Assisted investment in community based renewable energy projects could have a positive impact on households in energy hardship (for example, requiring the new KiwiBuild homes for low income households to have solar pv and a battery installed at the time of construction). These houses will already be at Building Code standard for energy efficiency but there may be more energy efficiency that can be incorporated (for example, positioning for passive heating).

B4 - Set up a fund to help households in energy hardship become more energy efficient

Pioneer has a preference that this fund is administered by the network of community-level support services discussed in recommendation B3. These people will be closer to those in need and should ensure maximum value from the funds.

B5 - Offer financial support for households in energy hardship

B6 - Set mandatory standards to protect vulnerable and medically dependent consumers

B7 - Prohibit prompt payment discounts

Pioneer does not use the prompt payment discount approach to billing. This is discussed in more detail under C: Increasing Retail Competition.

B8 - Explore bulk deals for social housing and / or Work and Income clients

This is an option but there are flaws in the current Whole-of-Government (WoG) contracting model.

Firstly officials are not interested in contracting with smaller suppliers, or aggregated smaller suppliers; secondly, once an approved supplier, the contracts are for an extended period of time and there is limited opportunity for new suppliers to be involved in any retendering.

Further, the WoG model cuts across local government as well as central government entities such as hospitals and schools where there is untapped potential for distributed generation options to reduce these entities use of coal-fired burners. These opportunities are not valued in any WoG tender process.

Pioneer won two tenders – one with a local government entity and one with a central government agency – on the basis of offering a competitive package (and a price less than WoG suppliers). The entities could not proceed with these contracts because Pioneer is not on the WoG panel – for the above reasons.

In addition, Pioneer has extensive experience in converting coal-fired burners to lower emission fuel. The WoG construct is a barrier to access to these potential clients.

C: Increasing Retail Competition

We believe the current electricity market design and mechanisms are at the point of diminishing returns in terms of delivering real or perceived long term benefits to consumers. Most new regulatory initiatives underway within the EA seem to add a lot of further complexity and compliance with only marginal benefits in the context of the government's wider policy agendas.

The primary market design competition issue is vertical integration and the resulting two-tier priced consumer market, as evidenced by the Panel's own analysis of a widening gap between retail prices for switchers vs non-switchers. We have evidence also of a two-tier wholesale priced market, between internal transfer prices of Gentailers and Independent Retailers. We therefore recommend the competition focus needs to be on the levels of wholesale market price certainty and market price volatility as an urgent priority. For example, many current switchers are switching due to wholesale market price volatility – in both spot and wholesale contracts markets. We make further points on reducing volatility in the wholesale markets section D below.

Regarding other common retail practices (ref. B7, C2 and C4) Pioneer and its retailing partnerships (Pulse Alliance and Ecotricity) do not use bundled network charges or prompt payment discounts (PPDs) to entice or penalise our customers. Instead our businesses have passed through all network charges at cost plus a small administration fee. We therefore agree with the Panel's recommendations to regulate these practices out of the electricity sector.

C5 - Win-backs

Pioneer has, with other smaller retailers, experienced frustration with win-backs and related predatory marketing pricing behaviours in commercial segments. **We agree with Vocus/Switch Utilities recommendation that telco sector protocols would much improve competitive behaviours and shift the focus from win-backs to retaining existing customers through more transparent market pricing practices.**

We note that the current practice of most incumbent Gentailers has been to lock-in mass market customers with longer term contracts rather than using posted standard terms and tariffs. This practice in itself is not unlike the use of PPDs to maintain a local regional stronghold and is in our view counter-productive to smaller consumers having choice without the additional burden of facing onerous contract legalities. In a word the practice is against the spirit of competition for smaller and less informed consumers and should, like PPD discounts, be regulated out of the electricity and gas residential market segments. We have no issue with term contracts for those customers looking for more bespoke pricing terms, for things like solar PV and storage, where a specific service is required to deliver value from those bespoke products.

C6 - Non-Switching Customers

We believe that higher levels of non-switching customers getting access to more competitive pricing is a measure of a healthy and competitive retail market. However, pricing outcomes are only one measure of a successful retail market. An example of retail pricing and product differentiation is Pioneer's interest in Ecotricity who's carboNZero certified products reflect value to customers utilising this certification as part of their wider business branding – that is their choice. However, this additional service cost for carboNZero supply **is currently swamped by wholesale hedge market volatility in market bid-ask price spreads** that are at times greater than total retail gross margins and often more than net retail margins over a three year contract term to commercial customers.

The two-tier pricing noted by the Panel is not just a retail price issue but also a two-tier wholesale hedge price issue. That is, if the two-tier wholesale pricing is not fixed then the retail two-tier pricing gap will widen further due to the lack of retail price competition. **This**

two tier wholesale market pricing issue (D2 and D3) is much more urgent in our view than access to pricing information (C1 and C6).

We recommend that the Panel takes some further initiatives to now prioritise some of its recommendations, so that some of the core market performance related issues are given a priority over other recommendations like enhancing customer switching sites. In our view this would be treating the cause of a two-tier priced market, rather than just dealing with solutions to alleviate the symptoms. Our simple analogy is the GP making a referral to a specialist for further targeted treatment (e.g. D2 - market-making), rather than swamping the market with more and more anti-biotics (C6 - Switching Websites).

D: Reinforcing Wholesale Market Competition

D2 – Mandatory Market Making

Market statistics and anecdotal evidence of the trading behaviours of Gentailers confirm their collective trading strategies are to maintain a “natural generation hedge” with the minimum of wholesale contract volumes. Using their retail businesses provide the most price effective generation hedge at around 80% of market share i.e. at the lowest portfolio risk levels.

Pioneer is also vertically integrated but not in the same manner of the major Gentailers. For example, we retail in the mass market segments through specialist retail partnerships (Ecotricity and Pulse Energy Alliance). Our internal retail hedges are, for the most part, used in the highly competitive commercial tender market segments and are often bundled with our process heating and energy efficiency services or with on-site generation assets. All wholesale pricing arrangements made with our partnership businesses are structured through Power Purchase Agreements (formal contracts) that are indexed directly to the main ASX reference prices. This ensures fair wholesale market arms-length pricing for our partners, provided also that ASX prices are fair and reasonable.

We note from NZX financial and investor disclosures that Gentailers appear to rely primarily on internal transfer prices between their generation and retail businesses that are, for the most part, substantially discounted to the forward ASX prices. Their internal discounts appear not only lower than the prevailing fixed price, fixed volume (FPFV) ASX prices, but also have no additional risk margin adjustments for volume weighting of intra-day demand profiles or for their offers to retail customers of fixed price, variable volume (FPVV) supply terms. These internal pricing discounts are observed at around 5% to 10% of the prevailing forward market prices, and 5% below retail profiled CFD contracts. Combined this is equivalent to the gross retail margins in commercial market segments and more than the total net retail margins of competing Independent Retailers.

Pioneer therefore agrees with the EPR Panel findings that vertical integration has created a two-tier pricing market and is now a major barrier to market share competition from Independent Retailers.

Pioneer is also concerned with the level of forward price volatility in the ASX Futures and OTC bilateral markets. For example, and in a market fairness context, the Independent Retailers have almost all of their supply volumes exposed to Gentailer CFD credit terms, or cash margin calls (an ASX Futures compliance requirement) whilst the Gentailers appear to be less than 15% exposed to ASX cash margin calls. We estimate this level of wholesale market contract exposures from ASX open interest volumes and financial market disclosures.

That is, the Independent Retailers may have to carry up to 6x the relative balance sheet cash headroom to trade ASX hedges compared with the Gentailers, on a pro rata volume basis. This imbalance in cash resourcing is further compounded when Independent Retailers must also concurrently post prudential credit in the form of bank letters of credit or cash deposits with the NZEM market for all physical spot market and for all network sales volumes. This compares with Gentailers, most of whom are able to offset their generation and network credit using credit ratings criteria and thus avoid most cash prudentials. Combined, we estimate Independent Retailers have something like 10 to 15x the balance sheet credit management demands, on a pro rata volumes basis, compared with Gentailers.

Careful observation and analysis of these specific aspects of trading market requirements and cash management demands will reveal to the EPR Panel and government that current internal transfer pricing practices by Gentailers do not truly reflect what competing Independent Retailers face in terms of market related operating costs and financial resourcing demands. This imbalance could be quickly rectified through a structural separation of Gentailers, as evidenced in other international markets. We accept the Panel's view that structural separation is perhaps circumventable using other, less draconian measures, as recommended by the EPR Panel (D1 to D4) but would like the **Panel's recommendations to make very clear to government that separation is the backstop to those measures not being implemented within a specified and short timeframe – *time is of the essence* for many of the 30+ other small retailers currently in the NZEM.**

Further we suggest the Panel considers that Gentailers could be given the alternative option to corporately separate their generation and retail businesses voluntarily in lieu of mandatory market-making. **That is, if they are not confident to embrace market making then they could opt out voluntarily by separating into two independent trading organisations. The business risks should be symmetrical for either option in terms of establishing a level playing field in both wholesale and retail markets.** We make some further observations and recommendations on market-making specifics below.

Wholesale Market Making

Pioneer and its retail partnerships are active participants in the wholesale contracts markets, both for over-the-counter (OTC) bilateral contracts and ASX (Futures) exchange traded contracts. The ASX Futures market is an essential hedge management tool, as the OTC market has limitations such as force majeure provisions in most contracts and are not generally tradeable should portfolio positions not match our hedging risk policy parameters.

Over some years of wholesale trading activity, we have had to put a hold on retail sales activities from time to time when wholesale hedge market prices have exceeded retail gross margins. Our expectations are this might be expected as a business risk within the current trading Month or for more extreme events within a trading Quarter due to hydrological or other external force majeure type events, like a gas pipeline failure. However, when wholesale hedge market prices become volatile in the following trading Quarters and following calendar year/s, then we suffer a loss in confidence using that market to hedge our retail sales.

Anecdotally, there are often media releases and commentary when these events occur along the lines of …drier than normal conditions, …lower than normal storage levels, …dry south or dry north conditions, ….the uncertainty of gas supply …and now "portfolio stress".

Statistically, there would seem to be no strong quantitative basis for making these claims when prices in the following years have a volatile response to short term market events e.g. a clear majority of future hydro inflow events show no real generation supply stress, gas field outages or transmission outages for maintenance are normal asset management events with relatively few lost hours of production in an annual context. Use of the term ***portfolio stress*** is the weakest link in explaining market outcomes. There has been no clear financial evidence to our knowledge, nor explanations of portfolio stress, in NZX disclosures for the listed Gentailers. In fact, most Gentailers have performed above budget plans through the times that they have elected to widen ASX bid-ask price spreads due to the portfolio stress provisions in their voluntary market making code. This sort of trading behaviour seems to signal more that they have lost confidence in their own market-making outcomes?

So, we can only conclude that either:

- current supply-demand balance is not adequate for normal market operational events
- current supply system is not resilient enough at 75% to 85% annual renewable generation supply levels
- Gentailers are being too risk averse, with no incentives to act otherwise; or
- the wholesale market is under-performing.

We believe all of the above factors are contributing to the true portfolio stress for Independent Retailers due to hedge market price volatility and price spreads. **We therefore support your recommendations (D1 and D2) to improve disclosures and require mandatory market making of Gentailers to improve hedge market performance.** We also recommend that:

- "Gentailers" be more formally defined under the Code, for example those with greater than say 20% generation market share, taking account of their level of market power e.g hydro storage capacity as a % of market supply, or thermal generation capacity as % of market supply.
- Gentailers be given the option to either market-make or voluntarily corporately separate their retail from their generation businesses.
- "Portfolio Stress" be more clearly defined using the same or similar criteria, tests and quarterly compliance disclosures from Boards as are used in the Stress Test regime.
- "Internal Transfer" prices that are used in lieu of registered wholesale contracts (i.e. CFDs registered on the market index) should otherwise be regulated and be reset quarterly based on the prevailing forward ASX curve, plus a 5% market risk margin representative of the Bid-Ask price spread. These transfer prices should be adjusted quarterly with the market index to ensure a competitive level playing field for all Retailers.

Further, we recommend that the rules consider:

- In the event that ***more than one*** Gentailer declares a ***Portfolio Stress*** event that wholesale market trading is suspended and spot prices are capped at agreed levels to sustain generation – i.e. at the highest marginal generation costs of peakers until such time as market making is again restored.

- Whilst the wholesale market is suspended, non-market makers are compensated under the same terms and conditions as are currently included in the Electricity Code for consumers, i.e. $10.50 per week on all open interest trades.

These measures combined should be sufficient to test Gentailers' confidence in maintaining their own wholesale market at adequate performance levels, or

otherwise voluntarily separating their generation and retail businesses and trading independently through the wholesale market.

E: Improving transmission and distribution

E6 – Ensure access to smart meter data on reasonable terms

Pioneer agrees with the Panel that consumers' own their data. We suggest the Panel and officials investigate establishing a central registry for meter data. Each user of the data would have one (and the same) agreement with the central registry. Privacy issues could be addressed and consistently applied from this registry. This would simplify access to data for all participants.

There is limited focus in the Panel's reports on the meter part of the sector but provision of meters is concentrated and it is an unregulated part of the sector. Information, its granularity and how it is used managed will be increasingly important as the power system increasingly deals with two-way flows of electricity.

F: Regulatory Environment

In Pioneer's view, the regulatory environment can work more efficiently and respond quicker to market needs if it is aligned with the government's policy environment which currently happens to also be in a state of flux. Politically, it has been recognised globally that climate change requires a bi-partisan approach to ensure future law-making and that environmental regulations are enduring and sustainable. This bi-partisan requirement is a foundation for regulation performance and for fairness to both consumers and market investors.

Pioneer and 30 other small generator/investors, with collective investments of around $2bn, experienced first-hand over the last three years how regulatory exuberance (i.e. ACOT payment removal and seeking to apply network common costs to distributed generation), without adequate checks and balances could have bankrupted those businesses that have relied upon earlier government policy and the electricity code provisions to make many of these $2bn of distributed generation investments. The EA saw fit in 2016 to summarily dismiss distributed generation investors' concerns over proposed substantive wealth transfers. They are able to make changes in Code, without considering wider policy or grandfathering provisions, and publically supported a "winners and losers" market outcome. This is not the language of a government advocating for fair and equitable treatment of its constituents, whether they be market consumers or market investors.

We would not like to see the similar (mis)treatment of Gentailers, nor of Networks, nor of Transmission providers when addressing the market pricing issues raised by the EPR. Rather we would like to see Part G – Preparing for a Low Carbon Future lifted right up the priority order so as to ensure that the regulatory environment is well informed, well prepared, and capable of making the fundamental transitions that will be required over the next decades.

G: Low Carbon Economy

G3 - Coordination among agencies

We make the following general observations in respect of a low carbon economy and hopefully providing some broader market perspective.

- Over the first 60 years of electricity developments government, with access to all available resources, built ~27,000 GWh of mostly renewable generation.
- Over the last 30 years the corporate and privately run industry has built around 15,000 GWh of new generation capacity, more than half of which were high capacity factor combined cycle gas thermal stations.
- So, around 8,000 GWh of new renewable generation capacity has been built over the last 30 years, or about one third of the renewable capacity built by government in the preceding 60 years.
- Low carbon economy forecasts foresee an increase in renewable generation supply capacity from the current 35,000 GWh to more than 75,000 GWh between now and 2050; or +40,000 GWh of renewable generation growth over the next 30 years.

This low carbon forecast is around 5x the previous 30 years renewable generation growth rates. Further, the future renewable generation growth curve is not expected to be as linear as it was in the past, but exponential in line with transport and process heat conversion growth pathways. So, in reality the renewable generation growth volumes must double, and then double again to meet the expected demand.

We question whether this renewable growth pathway is considered plausible in the current regulatory and market environment?

In our view, some things will have to change. Our initial thoughts on enabling these changes are:

- We need everything renewable that we can get safely into the system.
- We will need to make considered trade-offs between our use of environmental resources and the climate change perils we face.
- We will need more expansive policies that incentivise and reward market leadership.
- We do not need lots of regulatory distractions – with increasing complexity and diminishing returns to consumers.
- We may need a central buyer market model underwritten by government contracts as other countries have.
- We will need to balance any central buyer or government contracting model with maintaining private sector investor confidence.

This is a very large policy and regulatory challenge – let’s not address it incrementally.

Pioneer would like to see the EPR Panel recommendations agreed and adopted in much quicker fashion than we experience with current regulatory processes. Where there are risks of wealth transfers or material impacts on either investors or consumers then these should be dealt with through policy requiring fair transitions and common sense, rather than through the courts.

We appreciate the opportunity to contribute our views on EPR recommendations and present some ideas on where to prioritise and how to action some of those recommendations for your further consideration.

Yours truly

Fraser Jonker

Chief Executive