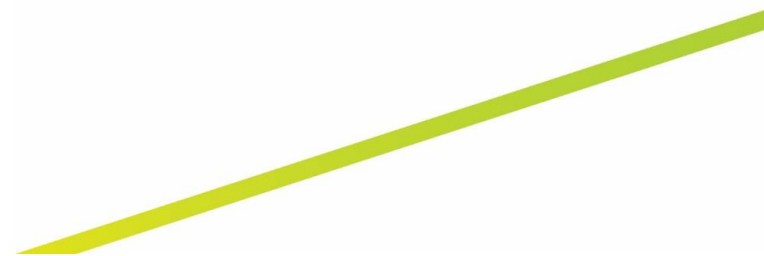




Questions raised at Customer Advisory Panel

Tuesday, 27 February 2018

Agenda item	Questions asked	Answer
Getting to know each other exercise	The panel provided one big question or point their group would like to tell Orion:	
	1. Provide a clearer understanding of what Orion does	Completed at session
	2. What is Orion thinking about for the future? Not just reactive but proactive. Compare what other countries are doing to see if it's something Orion could adopt.	Orion sees itself as an enabler of technology and energy usage where it provides a platform for customers to connect and extract value from emerging technologies and energy options. The UK and Australia have seen high penetration of Solar PV, however New Zealand hasn't seen the same uptake rates making this unlikely to become an issue in the short to medium term. New Zealand is well suited to electric vehicles with access to high renewable energy sources (hydro) and the network is well placed to aid the introduction of electric vehicles with opportunities for coordinated charging and increased utilisation of the network. Another developing concept is "peer to peer" energy trading – where you can share excess power (from your own solar/battery system) with family, friends neighbour. This 2 way power flow also requires us to make sure our network (and complementary systems) can cater for customer needs in this regard. This will mean a greater focus on the low voltage system (the power that feeds down the street and to your house) in future.



	<p>3. What is Orion actively doing and how will it manage the introduction of new technology?</p>	<p>Orion is monitoring the uptake of emerging technologies and working with industry to develop ways to enable customers to connect emerging technologies and manage the impacts on the operation and safety of electricity network. This includes scenario planning to understand what could possibly play out on our network as noted in the question above as well as taking some “no regrets” moves like this panel to understand what our customers will want to do and want us to do in the future. A current example relates to customer generation such as solar and solar/battery- we are looking to provide customers with information via our website about where the LV network might be constrained if too much generation gets connected. When this happens we might need to look at investing money to strengthen the LV network.</p> <p>We also have a comprehensive 10 year Asset Management Plan with an asset management strategy that identifies our current thinking on how we need to prepare for the future.</p>
	<p>4. There is a need to communicate Orion’s role in the community: how is Orion going to do this?</p>	<p>We have developed a strategic communications plan that seeks to raise Orion’s profile and encourage community participation in the decisions facing the community about its energy future. The channels we will use include:</p> <ul style="list-style-type: none"> • Expanded use of social media channels • Workshops, surveys and other forms of direct engagement with customers seeking out their views • Revamped, more compelling public safety and advertising • Revitalised more engaging presence at A&P shows and other public events • Initiating push communications for planned power outages • More proactive media profile • Greater leverage of Orion’s sponsorship portfolio
	<p>5. You used to pay so much more for people returning power to the grid, why has this price dropped?</p>	<p>This question relates more to retailers than us.</p> <p>For customers with something like solar, retailers used to pay the same per kWh of export (generation in excess of consumption at the house) as they charged per kWh of consumption. This artificially inflates the value of the solar generation effectively saying it is always</p>

		<p>worth around (say) 25 cents per kWh. Note that a typical solar installation will generate around 4,000kWh per year and about half of that will be exported.</p> <p>From a retailer perspective this meant they were buying energy off customers for 25 cents per kWh when they could usually buy it from the wholesale market at (say) 8 cents per kWh. Clearly this makes no sense, and hence eventually retailers changed their approach.</p> <p>Orion does have credit prices for export, but they have always been quite low (0.03 cents per kWh), particularly where the export is not at peak times which is what drives our need to invest money in assets, and PV never is.</p>
Orion: who we are, what we do	6. Orion is at the tail end of its post-earthquake recovery programme, what is Orion's next big step?	See the response to question 8 below.
Money in the jar exercise	7. How long would it be before solar and batteries are worth doing for customers?	This is hard to quantify as it is specific to a customer's load type and behaviour. Many companies are offering a range of solar and battery options, however the stability, reliability and renewable energy supplied through the grid is hard to compete with. These technologies are continually reducing in cost and may become financially viable for customers in some situations over the next few years.
	8. What is Orion currently focused on?	Orion has finished its post quake repair work. It has been significant with an outcome being that we have a safe, reliable and resilient network. Our focus going forward is really covered by the questions the panel asked. It is a combination of us making sure we do not drop the ball on our day job. That is making sure we continue to provide a network and support services that meets our customers' needs. Adding to that we need to make sure we integrate new technologies, and importantly how our customers want to use them, into our planning and ultimately our network functionality. Lastly, we are looking to lift our customer orientation and levels of service.