

# Executive summary of our customised price- quality path proposal

19 February 2013



**Orion**  
yourNETWORK

# 1 Executive summary

## 1.1 Introduction

Orion owns and operates the electricity distribution network servicing the Christchurch and central Canterbury region.

Our electricity distribution network is located between the Waimakariri and Rakaia rivers, and from the Canterbury coast to Arthur's Pass. Our network covers 8,000 square kilometres of diverse geography, including Christchurch city, Banks Peninsula, farming communities and high country.

Our network is fundamental to Canterbury's social and economic wellbeing. We transport electricity from 15 Transpower grid exit points to approximately 190,000 homes and businesses. Approximately 90% of our consumers are located in the urban area of Christchurch with the remaining 10% in rural areas.

The vast majority of our customers – over 85% – are residential households. The rest are commercial and industrial premises.

Business customers use around 60% of the electricity delivered via our network, while residential customers account for the other 40%. We have some 320 major business consumers with loads between 0.3MW and 5MW.

Orion's ultimate shareholders are Christchurch City Council (CCC) (89.275%) and Selwyn District Council (SDC) (10.725%).

Orion also wholly owns the electrical contracting business, Connetics Limited (Connetics). Connetics competes to construct and maintain substations, overhead and underground lines and associated equipment for Orion and other customers. Connetics also operates an equipment supply and distribution business and provides engineering design and consultancy services.

In this customised price-quality path (CPP) application, we propose to:

- continue to prudently repair and invest in our electricity distribution network
- restore the resiliency and reliability of our network to near pre-earthquake levels by 31 March 2019
- recover our uninsurable earthquake related costs and losses from consumers by way of higher network prices
- smooth the necessary higher prices over ten years, commencing on 1 April 2014, so as to reduce rate shock for consumers.

We believe that our CPP proposals are:

- prudent and efficient
- in the long term interests of consumers
- consistent with feedback we have received from consumers over a number of years
- consistent with post-earthquake consumer feedback, including the feedback we received on our draft CPP proposals in November and December 2012
- consistent with the section 52A purpose statement in Part 4 of the Commerce Act (the Act)

- in compliance with the Commerce Commission's (the Commission's) input methodologies (IMs).

### **1.1.1 Canterbury earthquakes**

On 4 September 2010 Canterbury was hit by a 7.1 magnitude earthquake. The earthquake had an epicentre near Darfield, about 40km west of Christchurch City. There were no fatalities as a result of this earthquake but there was widespread damage to local infrastructure and buildings. The eastern suburbs of Christchurch and the Kaiapoi township were seriously affected by liquefaction and lateral ground movement.

An aftershock sequence of more than 12,000 aftershocks of varying magnitude began that day and the sequence is ongoing. All of the earthquakes experienced since are the result of ruptures on faults not known to be active prior to September 2010.

Major earthquakes followed, the most notable being the deadly and devastating 6.3 magnitude earthquake on 22 February 2011 that struck near Lyttelton on the Port Hills, the 5.7 and 6.3 magnitude earthquakes of 13 June 2011, and the 5.8 and 6.0 magnitude earthquakes of 23 December 2011.

The event on 22 February 2011 was by far the most serious, resulting in 185 deaths.

In the worst-affected suburbs, houses and businesses were without power, water and sewerage for some time, and roads were damaged and unsafe. The Government declared a State of National Emergency in New Zealand on 23 February 2011, which remained in place for almost nine weeks. This is the first State of National Emergency in New Zealand's history declared in response to a civil defence emergency, illustrating our unique circumstances.

In the months following the earthquake, the Canterbury Earthquake Recovery Authority (CERA) was created as an arm of Government to lead the region's recovery and rebuild, led by former Orion Chief Executive Officer (CEO) Roger Sutton. Orion's leadership and highly effective earthquake responses were recognised with this appointment.

As a result of the earthquakes, the Christchurch central business district (CBD) was altered irrevocably. By mid 2012, the CERA estimated that more than 650 buildings had been demolished in the CBD. CERA estimates that there will be over 1,100 CBD building demolitions. This widespread destruction not only has a severe economic impact on Canterbury, it has also imposed significant social and cultural costs to our region and its people.

### **1.1.2 How we had prepared**

Over the last 20 years, risk identification and management have been important parts of Orion's planning.

We believed that a resilient network could play an important part in the rapid restoration of electricity supplies after a disaster and the wellbeing of our community. We were right.

Over the years, working with national grid owner Transpower, we engineered a strong electricity supply network for Canterbury. Where risk to the power supply couldn't be easily eliminated, we reduced it through better emergency training, skilled people, safer work practices and improved planning and network design.

In the mid-1990s, we participated in a local engineering lifelines study. This considered how natural disasters might affect Christchurch and Canterbury. That study prompted us to spend \$6m on seismic-protection and strengthening work for our key substations over 15 years. Many older brick buildings in Christchurch were hard hit in the earthquakes and ensuing aftershocks, but only four of our 314 (mainly brick) substations sustained serious damage.

Over 15 years we bolted transformers down and tied down other equipment in our substations. We learnt this from the 1987 Edgecumbe earthquake, when large transformers fell over, leaving some areas without power for weeks. We also braced our substation buildings, using good engineering practice based on advice from an experienced structural engineer.

We invested in good technology. We installed innovative wireless communications equipment that continued to operate throughout the earthquakes. This helped us restore power in rural Canterbury sooner than we would otherwise have been able to. Where possible, we also designed route diversity and prudent redundancy into our network.

Our pricing incentives to large electricity consumers, such as hospitals and the Police, had encouraged them to install diesel generators for use during periods of peak power demand. This meant they were well prepared with back-up power when the earthquakes struck.

Prior to the earthquakes, we developed Mutual Aid Partner agreements with other electricity distribution businesses (EDBs) to provide support in the event of large scale natural disasters. We were able to trigger these vital agreements in the aftermath of the February 2011 earthquake.

We regularly contributed to emergency readiness programmes run with Civil Defence and other utility organisations including the Canterbury Lifelines Utilities Group. These exercises enabled us to test our emergency procedures and make improvements from the lessons learnt.

Our pre-earthquake strengthening work and planning paid off for consumers and the Canterbury economy. Damage to our network, while extensive, was far less because we had already invested in network resilience. In other words, our network was resilient and performed well despite the unprecedented force of the earthquakes.

All of our preparatory work and investment was in line with what our consumers have consistently told us over many years, that consumers want us to 'keep the lights on'.

However, such was the force of the earthquakes, that some damage to our network was unavoidable.

### 1.1.3 Impact on our network

The major earthquakes have damaged our network. They have also caused significant damage to homes, particularly in the eastern suburbs of Christchurch and businesses, particularly in the central business district of Christchurch.

The damage has also compromised our network's performance, resulting in more network outages than consumers experienced before the earthquakes and making our network less resilient to future events such as major snow storms – particularly in the city's eastern suburbs.

There were extensive power cuts following the 4 September 2010 earthquake. Approximately 80% of these outages were caused when the shaking tripped the safety devices on our transformers. These devices successfully reduced damage to our lower voltage network and minimised the possibility of fire. As our substation buildings were seismically reinforced, all of them remained operational, despite some cracking, sinking through liquefaction and other damage. There was also some damage to our overhead lines and underground cables and ancillary equipment such as poles and insulators.

The damage caused by the September 2010 earthquake seemed significant; but the scale of the destruction six months later has put this into perspective.

The 22 February 2011 earthquake resulted in one of the highest ever recorded ground force accelerations. The sheer force of it meant that the damage and the impacts on consumers were about ten times greater than for the first earthquake.

This earthquake hit properties and infrastructure hard throughout the eastern suburbs. It also forced the virtual abandonment of the CBD, a significant portion of which remains off-limits over two years later. The lateral forces caused more faults on our network than we would normally see in an entire decade. Our substation buildings and poles also moved in areas badly affected by liquefaction. For example our Brighton zone substation sank over a metre into the ground, and flooding caused by liquefaction inundated other substations.

We believe that we have managed our network efficiently and prudently over many years. We believe that the relative lack of earthquake-related damage to our key substations, and our effective responses to the earthquakes, has confirmed our previous prudent investment in network resilience and our asset management practices.

Our major emergency repairs are finished, but there is still work ahead to restore resiliency and reliability back to our electricity network, consistent with consumer demands and in their long term interests. Continuity of electricity supply (and confidence in it) is absolutely vital to the future of the city, the region, our community.

Our most important roles are to keep the power on where and when it is needed; quickly respond if supply is disrupted; provide timely and accurate information during major power cuts; and efficiently supply new and upgraded connections. These roles will be particularly important during the region's recovery and rebuild phase over coming years.

## 1.2 Reasons for our proposal

Our network prices and network quality standards are regulated by the Commerce Commission (the Commission) under Part 4 of the Act.

The overarching purpose of Part 4 is to promote the long term interests of consumers. In promoting the long term interests of consumers, the Part 4 purpose statement recognises that incentives for investment, innovation, efficiency that meet consumer requirements for quality of services are central to the regulation which governs our network prices and quality standards. Thus the purpose statement contemplates and establishes a regulatory regime that balances stakeholder interests.

The purpose statement in section 52A of the Act states:

The purpose of this Part is to promote the long-term benefit of consumers in markets referred to in section 52 by promoting outcomes that are consistent with outcomes produced in competitive markets such that suppliers of regulated goods or services —

- a) have incentives to innovate and to invest, including in replacement, upgraded, and new assets; and
- b) have incentives to improve efficiency and provide services at a quality that reflects consumer demands; and
- c) share with consumers the benefits of efficiency gains in the supply of the regulated goods or services, including through lower prices; and
- d) are limited in their ability to extract excessive profits.

In this CPP application, we propose new CPP price and quality standards to apply for five years commencing on 1 April 2014. We believe that our CPP proposals are consistent with the long term objectives of Part 4.

We have applied for a CPP because our post-earthquake circumstances are no longer able to be accommodated within our current Default Price-Quality Path (DPP) settings. This is because of the significant impacts of the catastrophic earthquakes on our business.

The earthquake impacts and the need to restore network resilience and reliability mean that we have incurred and will continue to incur significant costs. These costs are not reflected in our current network prices because our regulated price cap was determined prior to the earthquakes. These prices also do not reflect our post earthquake reduced revenues, from which we must seek to recover our costs

Our regulatory DPP means that we have been unable to adjust our prices to match our revenue with our costs. This prevention of recovery of our efficient and prudent costs undermines our investment incentives as we seek to continue to invest to support the region's wider rebuild.

It is important that we continue to invest in and manage the assets which provide electricity distribution services in Christchurch and Canterbury. Electricity is an essential service, and our consumers have told us that they value this service, and that they support our plans to restore our network resilience and reliability.

The long term consequences of under investment are potentially severe for consumers of this essential service. Cost recovery is an important element of retaining our incentives to continue with this vital investment.

In workably competitive markets, prices for goods and services adjust quickly to reflect new realities and new efficient levels – whether such changes are caused by supply or demand effects. In our case, regulation has prevented such efficient price adjustment occurring for over three years. This regulatory delay means that there is a significant element of catch-up cost recovery (claw-back) in our CPP price path proposal calculations.

Our regulated network reliability limits are also fixed at pre-earthquake levels and so they do not reflect the damaged state of our network.

Accordingly, we must apply for modifications to our regulated network prices and our regulated network reliability limits.

Our CPP proposals are consistent with consumer feedback, both before and after the earthquakes (including consumer feedback on our draft CPP proposals in late 2012). This feedback tells us that our consumers want us to restore pre-earthquake levels of network resilience and reliability.

There are significant costs to achieve this. We are seeking to recover our costs.

A key element of Part 4 is to ensure that we (and all EDBs) continue to have incentives to invest for the long term benefit of consumers, to a quality that those consumers seek from us. Recovery of our prudent (but uninsurable) costs and losses is an essential element of retaining our incentives to continue to invest for the long term benefit of consumers.

If we are not able to adjust our network prices to recover our prudent (but uninsurable) costs and losses then our incentives to continue to invest will be greatly diminished – at the very time that our community expects us to continue to invest to support the wider rebuild and relocation efforts in their long term interests.

Our work to restore network resilience and reliability is not yet complete and our consumers support us completing that work, as outlined in our CPP proposal.

We seek simple cost recovery (not a gain or excessive profits) so that our interests continue to be aligned with consumers' long term interests. Cost recovery therefore includes recovery of our fair but not excessive cost of capital over time.

We have adopted a balanced approach between the interests of consumers and the interests of the company. Within the constraints of the IMs, we have deferred our proposed cost recovery to mitigate short to medium term pricing impacts on consumers.

Our CPP application and proposal documents fully set these matters out – particularly:

- our proposal to restore our network resilience and reliability back to near pre-earthquake levels by FY19
- our proposal to increase our network prices to recover our prudent (but uninsurable) earthquake related costs and losses (including our cost of capital)

- our proposal to apply an alternative depreciation method within the CPP period to reduce the amount of depreciation expense to be recovered from consumers between now and FY19 by around \$30m
- our proposal to spread our recovery of claw-back over 10 years to mitigate the price impacts for consumers, effectively delaying recovery of \$43m of claw-back related costs until after the CPP period
- how we ensure our expenditure is prudent and efficient.

The preparation of this proposal has been challenging. Ours is the first CPP application to be made under Part 4. Accordingly there are no precedents; we are the first to apply the Commission's CPP IMs; and the associated Part 4 regulatory mechanisms (the DPP and Information Disclosure (ID) regulations) are not yet fully implemented.

Further, because our CPP proposal is in response to a catastrophic event, many of the prescribed IM requirements are not directly relevant to our current circumstances. We also face unprecedented uncertainty in Canterbury as to the likely future demand for our services and the costs of providing those services. Decisions are being made by others on a regular basis that impact on our operations and plans.

Notwithstanding these challenges, we have prepared a comprehensive CPP proposal, which we believe fully meets the Commission's IM requirements.

Where appropriate, we have sought and carefully considered independent expert advice and carefully considered that advice as part of preparing our CPP proposals. We have included key expert advice (including peer reviewed expert advice on cost recovery principles) in this CPP proposal.

In late 2012, we sought feedback from our consumers on our draft proposed CPP price path and quality standards. In our accompanying CPP application document we summarise the feedback we received. We received 38 submissions from consumers and organisations. Most supported our draft CPP proposals and this CPP proposal is consistent with our draft proposals.

Consumers largely support our cost recovery proposals.

We believe that our CPP proposal reflects prudent and efficient expenditures and realistically achievable quality standards which together meet the long term interests and demands of our consumers. Our price path proposals reflect our desire to mitigate the pricing impacts on consumers by spreading our cost recovery over the long term.

Our decision to apply for a CPP has not been taken lightly. However we believe it is appropriate for us to do so after carefully considering the long term interests of our key stakeholders – namely consumers, the broader Canterbury community and our shareholders.

### **1.3 Proposed quality standard**

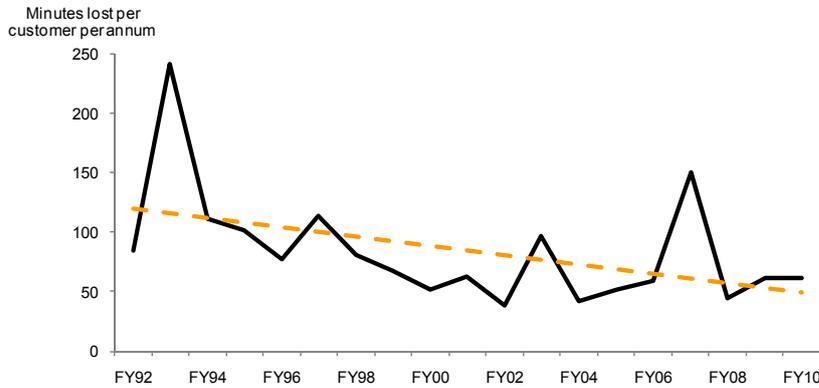
Prior to the earthquakes our electricity distribution network was one of the most reliable in New Zealand. In the five years to 31 March 2010, we were:

- the fifth best performing EDB in terms of average interruption duration (SAIDI)

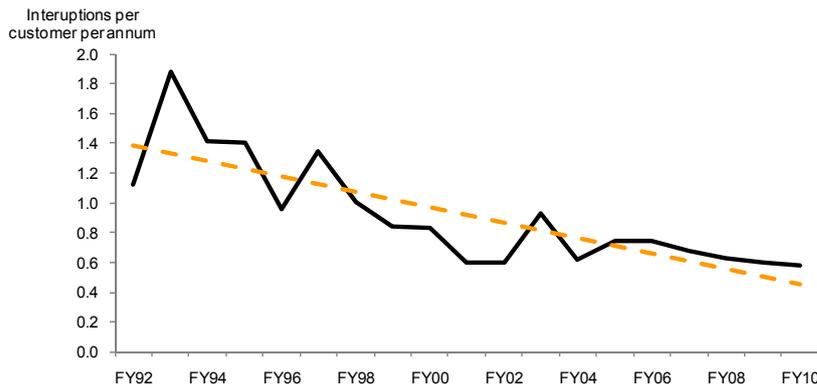
- the second best in terms on average interruption frequency (SAIFI).

This reflects continual improvements in our reliability since the early 1990s, as illustrated below. The charts also illustrate the impacts of extreme weather events with significant disruption in FY93, FY97, FY03 and FY07 due to severe snow storms in Canterbury.

Orion SAIDI performance from FY92 to FY10 with trend

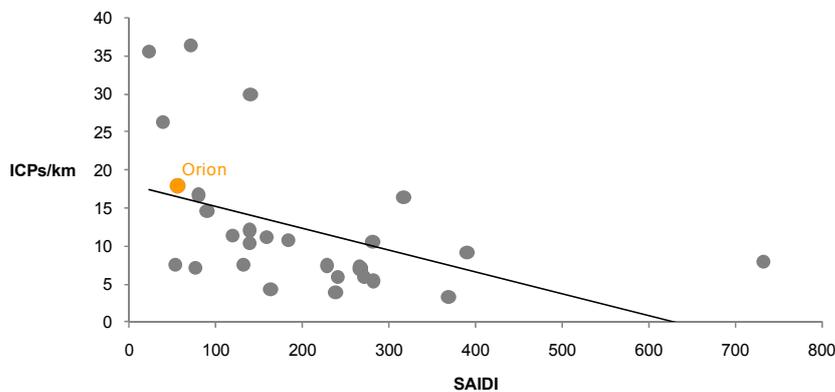


Orion SAIFI performance from FY92 to FY10 with trend

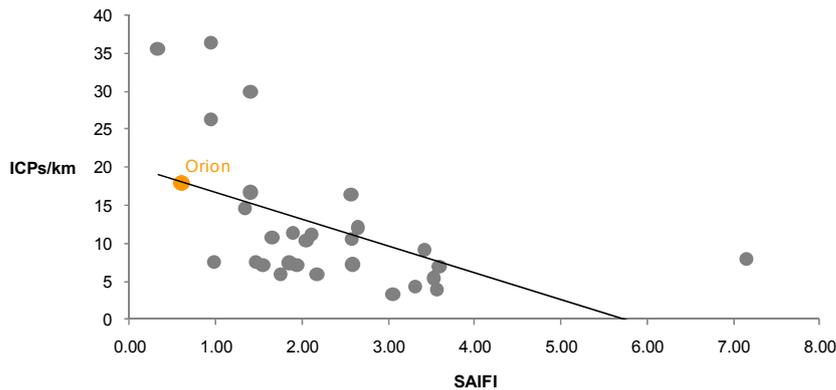


Our pre-earthquake performance is consistent with the expectations of our consumers, and, as illustrated below using FY08 - FY10 data, is as expected for a relatively high density network.

New Zealand EDBs average SAIDI FY08 - FY10 (class B & C)



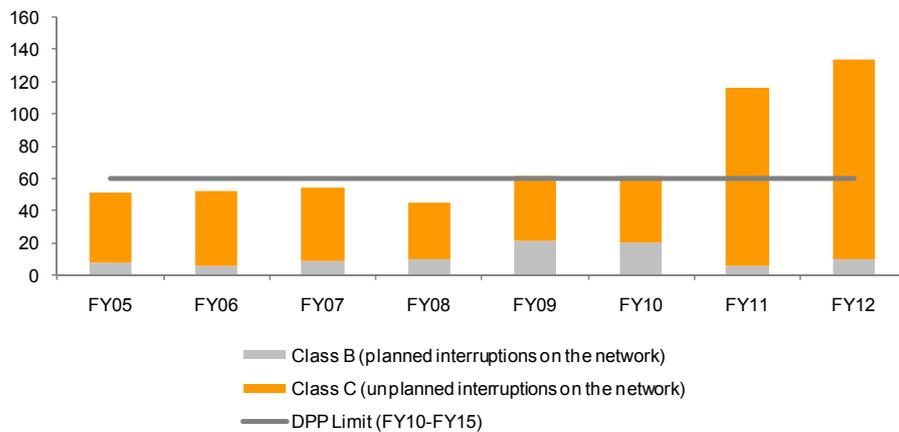
New Zealand EDBs average SAIFI FY08 - FY10 (class B & C)



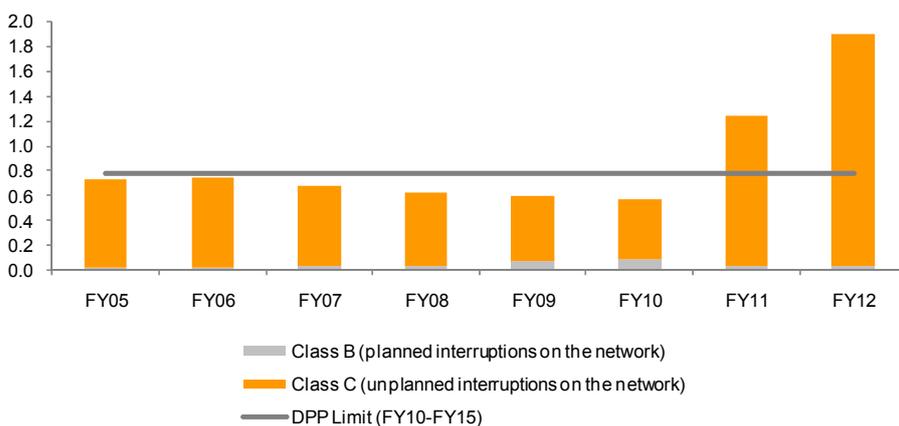
Our current DPP quality standards (which are expressed as SAIDI and SAIFI limits) are 59.7 SAIDI (minutes) and 0.76 SAIFI (interruptions). These limits are based on a regulatory methodology which makes adjustments for extreme and normal variation in the datasets used to set the limits and assess performance against them.

As a result of the damage to our network, and the houses and businesses of our consumers, we have been unable to meet these limits since the earthquakes. The FY11 and FY12 breaches of our DPP quality standards are illustrated below, along with our historical performance since FY05. FY05-FY09 represents the reference period used to establish the DPP limits.

SAIDI (normalised)



SAIFI (normalised)



Accordingly we are seeking a quality standard variation for the CPP regulatory period. The key feature of our proposed quality standard variation is that our network reliability limits increase initially to accommodate our current circumstances and the state of our network, and then gradually reduce across the CPP regulatory period, reflecting improving network resilience and reliability between now and FY19. This trend reflects the re-establishment of the resilience of our network which was severely damaged during the 2010 and 2011 earthquakes and our planned expenditures to achieve that restored resilience up to FY19.

Our proposed quality standard variation is summarised in the following table. It has been derived from detailed analysis of past SAIDI and SAIFI performance, with particular consideration of the performance of our network since the earthquakes.

CPP regulatory period						
	FY15	FY16	FY17	FY18	FY19	Current DPP standards
$\mu$ SAIDI	94.7	86.5	83.1	75.2	67.0	53.0
$\sigma$ SAIDI	9.0	8.2	7.9	7.2	6.4	6.7
SAIDI limit	103.8	94.7	91.0	82.4	73.4	59.7
$\mu$ SAIFI	1.25	1.11	1.07	0.94	0.80	0.68
$\sigma$ SAIFI	0.11	0.09	0.09	0.08	0.07	0.10
SAIFI limit	1.36	1.21	1.16	1.02	0.87	0.78

In the above table:

- $\mu$ SAIDI and  $\mu$ SAIFI means the average annual SAIDI/SAIFI in the normalised dataset
- $\sigma$ SAIDI and  $\sigma$ SAIFI means the standard deviation of daily SAIDI/SAIFI values in the normalised datasets multiplied by the square-root of 365.

These variables are summed to determine the SAIDI and SAIFI limits.

Our proposed CPP network quality standards are consistent with our expenditure plan, are realistically achievable and importantly reflect expected significant improvements in our reliability performance over the CPP period, consistent with the expectations of our consumers.

We aim to restore our network to pre-earthquake levels of resilience and reliability. Our proposed quality standards achieve near pre-earthquake levels by FY19. As illustrated above, our pre-earthquake performance is consistent with that expected for a largely urban network.

Based on consumer feedback we have received over many years prior to the earthquakes we believe that consumers were satisfied with the levels of network resilience and reliability we had prior to the earthquakes.

Feedback on our draft CPP proposals in late 2012 (post-earthquakes) indicates that the majority of consumers who responded to our draft CPP proposals want us to return to pre-earthquake levels of network resilience and reliability. This target and feedback is consistent with the regulatory rules which have applied to us for the best part of the last decade, which have established a 'no material deterioration' reliability standard for all EDBs subject to the Part 4A thresholds regime, and more recently the Part 4 price-quality regime.

We anticipate that there will be year on year variations in network reliability. Our quality standards have been developed using a similar approach to the current DPP limits, to attempt to accommodate such variation. We note that we have a higher than usual degree of uncertainty about our expected reliability performance given the damage to our network, the impact of the city recovery plans which are only just emerging and the impacts of others working around our network.

We have carefully considered how to achieve the quality of supply sought by our consumers. We propose a glide path which incorporates year on year improvements in network reliability as the best means to meet our consumers' needs. This glide path is consistent with the level of investment provided for in our price path, which includes a number of important projects within the CPP regulatory period aimed at restoring our network resilience and reliability. The glide path also reflects our view of the likely planned and unplanned interruptions to our network caused by external parties and external events.

Notwithstanding the significant improvements we have proposed, we do not expect to achieve the same level of reliability by the end of the CPP period, as we had prior to the earthquakes. We expect further improvements in our reliability will be made after the end of the CPP.

## **1.4 Proposed price path**

### **1.4.1 Financial impact of earthquakes**

We have not increased our network prices in response to the earthquakes due to regulatory constraints. We implemented a CPI related price increase on 1 April 2011 that was prepared pre-earthquake. We had no increase on 1 April 2012 and we are implementing a further CPI related price increase on 1 April 2013. These price increases are in line with the current DPP regulation which applies to us. Accordingly, our prices have not kept pace with general inflation due to the nil increase on 1 April 2012.

Our costs have increased significantly and our revenues have decreased due to reduced demand arising from disruption to our consumers. Further, we need to continue to spend above historical levels for the foreseeable future to restore our network's resiliency and reliability, and to support the city rebuild and growth.

For example, the following table summarises the material cash impacts (relative to pre-earthquake forecasts) for two financial years, FY11 and FY12. We note that as time goes by it becomes more difficult to distinguish between earthquake and non-earthquake spending and revenue impacts.

Financial impact of earthquakes		
(\$m pre-tax)	FY11	FY12
Increased operating expenses	12.6	14.0
Increased major capex	-	10.6
Reduced electricity delivery revenue	3.1	20.6
Insurance settlement revenue	-	22.3

A comparison between our CPP forecasts and our 2010 AMP (published in March 2010, prior to the first major earthquake in September 2010) demonstrates that, for FY13 to FY19, we are now forecasting:

- \$156m more in network capex than in 2010
- \$22m less in network maintenance than in 2010.

These values are expressed in FY13 real terms and exclude the impact of increases in non network expenditure, such as our new head office site and building, and input cost inflation which has increased in Canterbury post-earthquakes.

### 1.4.2 Uninsurable costs

We believe we prepared as prudently as possible for the possibility of catastrophic events. We estimate our pre-earthquake seismic protection and planning has saved us \$60m to \$65m in direct asset replacement costs. It also avoided considerable further disruption to our community's economic and social well being.

Orion, like other infrastructure entities, cannot feasibly insure its entire network against catastrophic damage. Orion has not insured overhead lines and underground cables because it has been, and still is, uneconomic to do so. Even before the 22 February 2011 earthquake, an annual insurance premium for lines and cables alone was estimated to be around \$100m (based on an asset replacement value for cables and lines of around \$1 billion). This is clearly uneconomic and it is even more so after the earthquakes.

The premiums charged for other network assets, such as substations and buildings, are more affordable. Consequently, we have and continue to fully insure all of our key substations and our head office at full replacement cost. We continue to insure our remaining substations and other assets where insurance premiums are at a prudent level.

An independent expert report prepared by international broker Marsh confirms that EDBs around the world face the same insurance circumstances: that is underground cables and overhead lines risks are normally uninsured because insurance underwriters are not able to provide material damage and business interruption coverage for them. Marsh also confirms that, in its opinion, our approach to insurance has been entirely appropriate, reasonable and consistent with that of other network companies in Australasia.

### 1.4.3 Recovery of prudent and efficient costs

In this CPP, we propose to recover our prudent and efficient costs to provide electricity supply services to Canterbury. We believe that electricity consumers should pay the prudent and efficient costs for our electricity supply services provided at a quality consistent with their demands. We have been unable to recover our fair costs since the earthquakes because of the regulatory constraints imposed on our prices. We believe that it is in consumers' long terms interests for us to recover our costs.

Electricity consumers are the beneficiaries of the services we provide, and it is appropriate that consumers pay for the actual prudent and efficient costs of those services in both good times and bad. Cost recovery retains our incentives to continue to invest in our network, for the long term benefit of consumers. Non recovery diminishes those incentives. Cost recovery also enhances the efficient allocation of resources by ensuring appropriate consumption and investment decisions are made by consumers.

We have carefully considered an option to reduce the size of our proposed line price increases and not fully recover our costs. We have rejected this option because it would not be in the long term interests of consumers (because it would reduce our incentives to continue to invest) and so would be contrary to consumers' long term interests and the Part 4 purpose statement.

We have also taken and carefully considered expert independent economic advice on this issue (refer appendices 1 and 2 for copies of these reports prepared by Jeff Balchin of PwC and James Mellsop and Will Taylor of NERA).

The expert advice strongly advocates full cost recovery.

Mr Balchin observes that price regulation seeks to protect consumers from the misuse of monopoly power while ensuring the provision of services which meet their demands. These objectives are '*almost universally*' achieved by setting regulated prices to recover prudent and efficient costs, including a commercial return on investment.

This tension is explicitly addressed in the Part 4 purpose statement, particularly in its requirement for the regulatory framework to:

- provide incentives for suppliers to invest and innovate
- limit a supplier's ability to extract excessive profits.

Mr Balchin notes that catastrophic events raise the costs of providing the service and lead to a loss of revenue. He concludes that following a catastrophic event, prudent and efficient costs (including the impact of lost revenue) should be recovered from consumers consistent with the treatment of costs in general.

Mr Balchin also considers how such costs (including lower revenues) should be recovered. He concludes that compensation after the event (ex post) is more practical than the alternative (a self insurance revenue allowance included in regulated prices before any such events) because the latter (ex ante) alternative is very difficult to achieve. He also concludes that an ex post approach is consistent with the regulatory regime which currently applies to us.

Mr Balchin also tests whether our proposals are consistent with outcomes which are expected in competitive markets. This test is fundamental to the overarching Purpose Statement of Part 4 of the Act, which sets out the regulatory framework which applies to us. He observes that all investors, irrespective of the nature of the market, expect to make a commercial return on their prudent investments after recovering efficient costs.

The key difference for regulated businesses is when they are able to recover their costs. Mr Balchin observes that the limited nature of the insurance market for EDBs, and the fact that prices are regulated means that EDBs, like Orion, are restricted from including reasonable ex-ante allowances for uninsured costs in their prices, unlike firms operating in competitive markets.

Finally Mr Balchin observes that it is reasonable for Orion to expect to achieve a commercial rate of return. He concludes that this outcome holds irrespective of ownership, and notes that setting cost reflective prices for consumers encourages broad economic efficiency by encouraging efficient consumption decisions.<sup>1</sup>

This expectation of full recovery of costs over time is essential to the long term sustainability of all businesses, including EDBs. As Mr Balchin states:

*Absent an expectation of cost recovery it is not possible for a business to remain in operation over the medium to longer term.*

*The expectation of future cost recovery is particularly important in the context of electricity networks. This reflects the essential service nature of electricity and that its provision involves significant sunk assets with costs recovered over an extended period of time; sometimes up to 40 years or more. If investors perceived there were risks that they would not be able to recover at least their efficient costs of service provision over time, there would be a diminished incentive to make future investments to the detriment of reliable supply for consumers.<sup>2</sup>*

Our proposal, which seeks to recover our fair costs, which we have been prevented from recovering since the earthquakes, is therefore consistent with the long term interests of our consumers. It is necessary for us to recover these costs in order for us (and other EDBs) to have a reasonable expectation of earning a fair return over time, and therefore continue to make the investments required to meet consumer demands for electricity distribution services.

In their independent expert peer review, Messers Mellsop and Taylor of NERA, agree with Mr Balchin's findings. They also conclude that uninsurable losses resulting from the earthquakes should be recovered from consumers on an ex post basis.<sup>3</sup>

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<sup>1</sup> Refer Jeff Balchin, PricewaterhouseCoopers, Long term-incidence of cost recovery following a catastrophic event, 17 December 2012, pages 2-4 (included as appendix 1)

<sup>2</sup> Ibid page 8

<sup>3</sup> Refer, James Mellsop and Will Taylor, NERA, Peer review of PwC report on cost recovery following a catastrophic event, 30 January 2013 (included as appendix 2)

We note that under recovery of efficient and prudent costs would also be contrary to our statutory obligation under section 36 of the Energy Companies Act to operate as a successful business.

The value of investment in essential infrastructure is well demonstrated by the earthquakes. Our long term prudent investment in network diversity, seismic strengthening and risk mitigation measures significantly reduced the impacts of supply interruptions for consumers. Had we not made these investments, consumers, and the wider Canterbury community, would be considerably worse off.

Our proposed cost recovery includes ex-post compensation for reduced revenues as a result of the earthquakes which has contributed to our under recovery of our costs since the earthquakes.

Consistent with the independent expert advice we have received from PwC and NERA, we believe that where reduced consumption arising from a catastrophic event has contributed to under recovery of costs, EDBs should be compensated for this on an ex-post basis under a CPP, to ensure they are able to recover prudent and efficient costs. No provision for uninsurable catastrophic risk was allowed for in our pre earthquake DPP price path.

#### **1.4.4 Claw-back**

The Part 4 provisions for a CPP made in response to a catastrophic event allow us to look backwards to the date of those events by including the value of 'claw-back' in our price path proposal. In this instance claw-back reflects the shortfall in revenues required to recover our costs, which occurred following the catastrophic event(s), up to the date that the CPP comes into effect.

As the earthquake activity commenced in September 2010, we have considered the impact of the earthquake events which have occurred from that date up to the commencement of the CPP period, up to 1 April 2014. This is our proposed claw-back period.

Our proposed claw-back allowance seeks to recover our earthquake related costs which were not anticipated when our DPP price path was set. This ex-post cost recovery is:

- consistent with the manner in which the DPP price path was set (because our DPP price path includes no allowance for unanticipated costs of this nature)
- in the long term interests of consumers.

It ensures that we retain the economic incentives to continue to provide the services that consumers require of us because we are compensated for our prudent and efficient costs in providing those services, including a risk adjusted commercial return on our investment.

Our proposed claw-back recovery extends over ten years, beyond the end of the CPP period. This reflects our desire to mitigate pricing impacts on consumers where possible within the regulatory rules and methods we must apply.

### **1.4.5 A CPP in response to a catastrophic event**

The earthquakes changed our operating environment, and our costs in providing the services demanded by our consumers. Since 4 September 2010 we have been unable to recover our costs, because of the constraints of our DPP price path. Many of our earthquake related costs are not insurable.

Consumer demand and our revenue significantly reduced after the earthquakes. Our efficient costs of distributing electricity to each consumer in Canterbury consequently changed – despite our prudent insurance programme and our prudent pre-earthquake seismic strengthening and network resiliency programmes.

The DPP sets price and quality standards for us for a period of five years. Within those standards there is cost and volume risk as well as network reliability risk for us. All of these factors were detrimentally affected by the earthquakes. The DPP was not intended to be able to fully accommodate these potential impacts where they arise from a future catastrophic event. The Act provides for a CPP alternative, and indeed the DPP Determination and IMs acknowledge the situation where an EDB subject to the DPP may be required to apply for the CPP in response to a catastrophic event.

In this instance, provision is included for claw-back which may be applied on an ex-post basis to address the consequences of the catastrophe that were not anticipated (and hence reflected) in the DPP price path or quality standards.

This is the situation we are faced with, and hence we have prepared this proposal on the basis that our CPP will address the cost, volume and reliability impacts on our business since September 2010 that the DPP has not been able to accommodate.

A fundamental principle, as articulated by PwC and NERA, is that workably competitive markets permit providers to recover efficient costs. It is the characteristics of the relevant market that determine whether costs caused by events like the Canterbury earthquakes are recovered before or after the relevant event, or through a combination of both. Importantly in this context, there is no conceptual difference between unanticipated impacts on demand (and hence revenue), and unanticipated costs.

Claw-back is caused by the regulatory delay in resetting prices to new efficient levels, relative to what happens in workably competitive markets. In workably competitive markets prices adjust quickly, in our case our prices cannot adjust quickly due to regulation.

The price control regime has prevented us from adjusting our prices to efficient levels post earthquake in a timely manner. In a workably competitive market and in the absence of price control we would have been able to quickly adjust its prices to new efficient levels that reflected the new demand and supply cost realities. Instead, we must continue to recover revenue well below pre-earthquake levels for at least three years up to 1 April 2014 due to a regulatory constraint. Our pre-earthquake prices are no longer cost reflective and therefore cannot be considered to be efficient.

It is reasonable and in consumers' long term interests for us to recover our efficient costs and to recover these costs from consumers. We believe that the legislative intent is that we should be able to do this on an ex-post basis (where a catastrophic event has occurred) through a CPP so that our incentives to continue to invest for the benefit of consumers are preserved.

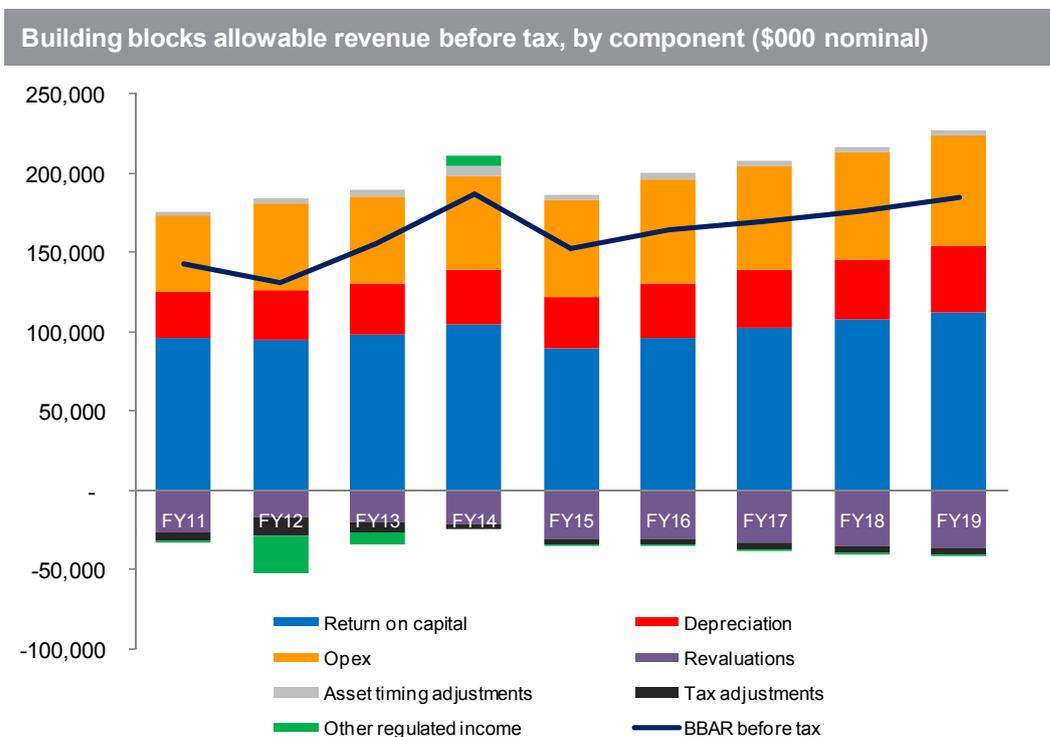
Our proposed claw-back recovery in our CPP price path is consistent with this intent.

We have made no allowance in our CPP proposal for unanticipated costs associated with possible future catastrophic events. We have no self insurance allowance in our opex forecast. If such events occur within the CPP regulatory period, we are able to reopen the CPP to address the impacts at that time. Thus we propose an ex-post approach to the recovery of the consequences of potential future catastrophes, as anticipated in the IMs. This is the same as the ex-post claw-back allowances that this CPP proposal addresses for the consequences of the 2010 and 2011 Canterbury earthquakes.

### 1.4.6 Building blocks allowable revenue

We have determined our required revenue allowances using the methods set out in the CPP IM which have been determined by the Commission as being consistent with the Part 4 purpose statement. These revenue allowances are consistent with fair prices for consumers and providing appropriate incentives to suppliers to meet consumer requirements over the long term, in their long term best interests.

Our building blocks allowable revenue (BBAR) for the CPP regulatory period, and prior years incorporating the claw-back period, is illustrated below.



BBAR before tax (\$000)	Current Period		Assessment Period	
	FY11	FY12	FY13	FY14
Return on capital	95,824	95,144	97,776	104,195
Depreciation	29,337	30,838	31,917	34,211
Opex	48,146	54,914	55,238	59,397
Revaluations	(26,617)	(17,271)	(20,476)	(21,110)
Asset timing adjustments	1,960	2,737	4,538	6,202
Tax adjustments	(5,236)	(11,725)	(6,367)	(3,184)
Other regulated income	(488)	(23,710)	(7,438)	7,021
<b>BBAR before tax</b>	<b>142,926</b>	<b>130,926</b>	<b>155,189</b>	<b>186,732</b>

	CPP Period				
	FY15	FY16	FY17	FY18	FY19
Return on capital	88,878	95,654	102,781	107,294	112,367
Depreciation	32,285	34,388	36,238	38,274	41,230
Opex	61,738	65,809	65,449	66,997	70,460
Revaluations	(30,546)	(30,834)	(33,357)	(35,023)	(36,752)
Asset timing adjustments	3,468	4,115	3,168	3,540	2,748
Tax adjustments	(3,174)	(3,686)	(3,964)	(4,102)	(4,129)
Other regulated income	(830)	(848)	(866)	(885)	(904)
<b>BBAR before tax</b>	<b>151,819</b>	<b>164,599</b>	<b>169,450</b>	<b>176,095</b>	<b>185,020</b>

The return on capital allowance has been calculated using the cost of capital determined in September 2012 by the Commission for a five year CPP price path commencing 1 April 2014. We have applied the DPP cost of capital for the claw-back period, as this is the cost of capital allowance which applies to EDBs subject to the DPP within this period (including Orion if we had not required a CPP).

In deriving the building blocks for the CPP regulatory period, we have chosen an option available in the CPP IM to modify our depreciation allowances using a non standard depreciation approach. This is the only mechanism available to us (within the regulatory methods we must use) to reduce the building blocks within the CPP regulatory period, for a given expenditure plan.

Our proposed approach, which reduces the depreciation to be recovered within the CPP period relative to the standard approach, allows us to better align the recovery profile for our return of capital allowance with the economic recovery expected in Canterbury over the same period. This is also consistent with our desire to minimise price shocks within the CPP regulatory period as much as possible, consistent with consumer feedback we received on our draft CPP proposals in late 2012.

We propose to recover depreciation on new assets constructed following the earthquakes at a slower rate than the standard straight line method applied for DPPs and the default method for CPPs. We believe this is consistent with the long term interests of consumers as the recovery profile better matches the demand for our services which is expected to recover relatively slowly over the CPP regulatory period.

Our proposed depreciation approach reduces the amount of revenue we propose to recover during the CPP regulatory period, and it increases the amount we propose to recover in later years, once demand has recovered. Our proposed approach is consistent with the standard approach, in present value terms, over the life of the assets concerned.

Our proposed claw-back allowance uses the same methods as prescribed in the CPP IMs for the forward looking component of the price path. In determining the value of claw-back we have deducted from BBAR, the actual revenue we have and expect to receive over the claw-back period, including our insurance proceeds.

### 1.4.7 Proposed price path

Our proposed price path comprises maximum allowable revenue (MAR) before tax of \$156m for FY15, and an X factor of -1.19% for FY16 - FY19 to apply in the CPI-X component of our price path. The present value of the MAR series after tax is equivalent to the present value of the series of BBAR after tax. This is illustrated below.

Derivation of maximum allowable revenue series (\$000 nominal)	CPP Period				
	FY15	FY16	FY17	FY18	FY19
Inflation rate		2.17%	2.17%	2.17%	2.17%
X factor		-1.19%	-1.19%	-1.19%	-1.19%
Weighted average growth in quantities		0.79%	0.80%	0.85%	0.76%
MAR before tax	155,598	162,136	168,974	176,185	183,540
Regulatory tax allowance	14,234	15,742	16,437	17,183	17,852
MAR after tax	141,364	146,394	152,536	159,002	165,688
TF <sub>REV</sub>	1.028	1.028	1.028	1.028	1.028
MAR after tax year end	145,252	150,420	156,731	163,375	170,245
	<b>PV at 1 April 2014</b>				
<b>PV of series of MAR after tax</b>	<b>642,505</b>				

Note: The annual rate of change in the price path is specified as CPI-X, thus an X factor of -1.19% means real price increases of 1.19%

Present value of series of BBAR after tax (\$000 nominal)	CPP Period				
	FY15	FY16	FY17	FY18	FY19
BBAR before tax	151,819	164,599	169,450	176,095	185,020
Regulatory tax allowance	14,234	15,742	16,437	17,183	17,852
BBAR after tax	137,585	148,857	153,012	158,912	167,168
TF <sub>REV</sub>	1.028	1.028	1.028	1.028	1.028
BBAR after tax (year-end)	141,369	152,951	157,220	163,282	171,765
	<b>PV at 1 April 2014</b>				
<b>PV of series of BBAR after tax</b>	<b>642,505</b>				

We also propose that our CPP price path includes the recovery of claw-back. The following table summarises the value of claw-back which we have determined for the period 4 September 2010 – 31 March 2014. The present value of claw-back at the commencement of the CPP regulatory period is \$86.3m.

The value of claw-back (\$000 nominal)	Current Period			Assessment Period	
	FY11a	FY11b	FY12	FY13	FY14
BBAR before tax (year end)	57,569	90,313	135,466	160,570	193,207
Actual and projected revenues (year end)	64,195	76,681	129,322	141,091	143,937
Difference	(6,626)	13,632	6,144	19,479	49,270
PV of difference for FY11	8,808				
PV of difference			7,157	21,023	49,270
<b>Total PV of difference (at 1 April 2014)</b>	<b>86,259</b>				

Our proposed claw-back recovery increases MAR before tax in FY15 to \$164.8m, as illustrated below. The proposed claw-back recovery in FY16 - FY19 is consistent with the slope of our MAR before claw-back over the CPP period. That is, it is consistent with an annual CPI-X rate of change where X is equivalent to -1.19% (and hence provides for annual average price increases of CPI + 1.19%).

MAR including recovery of clawback (\$000 nominal)	CPP Period				
	FY15	FY16	FY17	FY18	FY19
MAR before tax	155,598	162,136	168,974	176,185	183,540
Clawback recovery over CPP period	9,175	9,560	9,964	10,389	10,822
MAR before tax plus claw-back recovery	164,773	171,696	178,937	186,574	194,362

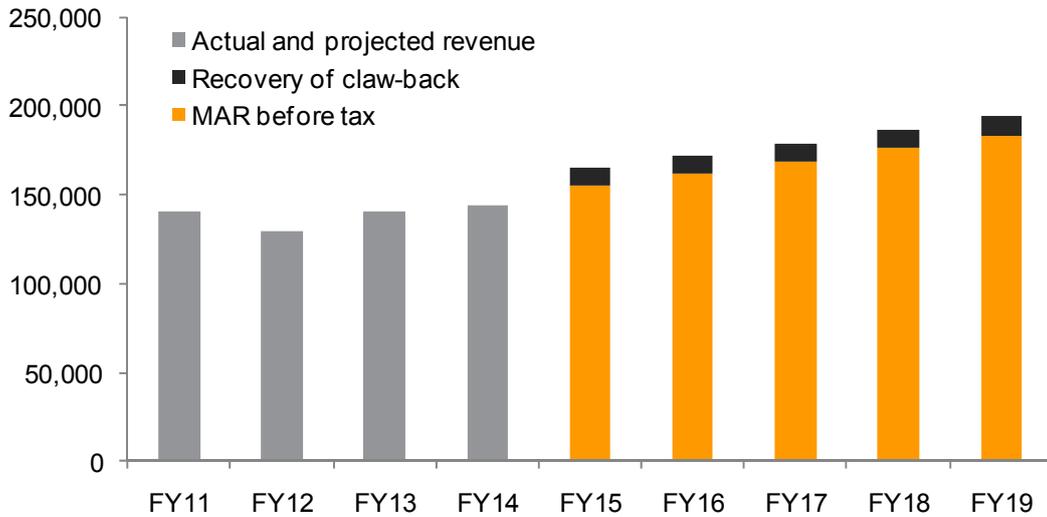
Our proposed price path will not fully recover our claw-back costs within the CPP regulatory period. Our CPP period will be 5 years. We propose to recover our claw-back over 10 years in order to mitigate the price impact on consumers during the CPP period. We propose to recover \$43.13m (in present value terms) of the \$86.3m of claw-back (half) over the CPP regulatory period.

We propose to recover the remaining \$43.13m (in present value terms) in the 5 years immediately following the CPP period (to FY24). The table below shows the value of claw-back, and the proportions recovered during the CPP regulatory period and subsequently.

Claw-back recovery (\$000 nominal)	PV at 1 April 2014		PV at 1 April 2019	
Value of clawback	86,259			
Value of clawback to be recovered in CPP period	43,130			
Value of clawback to be recovered after CPP period	43,130		57,418	

The chart below illustrates actual and projected revenues in the years prior to the start of the CPP regulatory period and the MAR (including the claw-back component) during the CPP period.

**MAR before tax plus claw-back recovery (\$'000 nominal)**



Our proposed price path (including claw-back) represents a nominal increase to allowable revenue of 18.5% in FY15, and approximately 4.2% each year from FY16 to FY19. After removing the effects of forecast inflation and growth in quantities, this represents real price increases of 15.0% in FY15 and 1.19% each year from FY16 to FY19.

## 1.5 Expenditure plan

The key objective of our capex and opex programme is to restore network resilience and meet the long term needs of our consumers for a safe, reliable and cost effective electricity distribution service.

Our capex and opex forecasts are for the following core activities, which are consistent with how we manage our business and plan our future needs.

<b>Capex</b>	<b>N e t w o r k</b>	<b>Major Projects</b>	
		<b>Reinforcement</b>	
		<b>Replacement</b>	
		<b>Customer Connection / Network Extension</b>	
		<b>Underground Conversions</b>	
		<b>Asset Acquisitions</b>	
	<b>Non Network</b>	<b>Non System Assets</b>	
<b>Opex</b>	<b>N e t w o r k</b>	<b>Maintenance</b>	<b>Emergency</b>
			<b>Scheduled</b>
			<b>Non-Scheduled</b>
	<b>Non Network</b>	<b>Network Management and Operations</b>	
		<b>General Management, Administration and Overheads</b>	

In our proposed capex programme we will:

- build new assets to restore resiliency to our network and to meet new demand from consumers (including for the rebuild and new subdivisions)
- purchase local spur assets from Transpower and integrate them into our subtransmission network
- replace existing assets to ensure we continue to meet our network performance targets
- construct a new head office as our office buildings have been demolished following extensive earthquake damage.

In our opex programme we will:

- maintain our network and operate it in accordance with good industry practice
- respond to unplanned events in a timely and effective way
- accommodate the Christchurch rebuild
- ensure the performance of our assets is maintained, consistent with consumers needs.

We aim to ensure our expenditure is prudent and in the long term interests of our consumers. However it has been and continues to be necessary to increase our opex and capex, over pre earthquake levels, for the foreseeable future. This increase is necessary to restore the resilience in our network and improve our service levels to those which are more consistent with the level our consumers expect from us. We are very mindful of the impact of this on our costs to deliver electricity and we continue to seek to find ways to improve our planning and project execution.

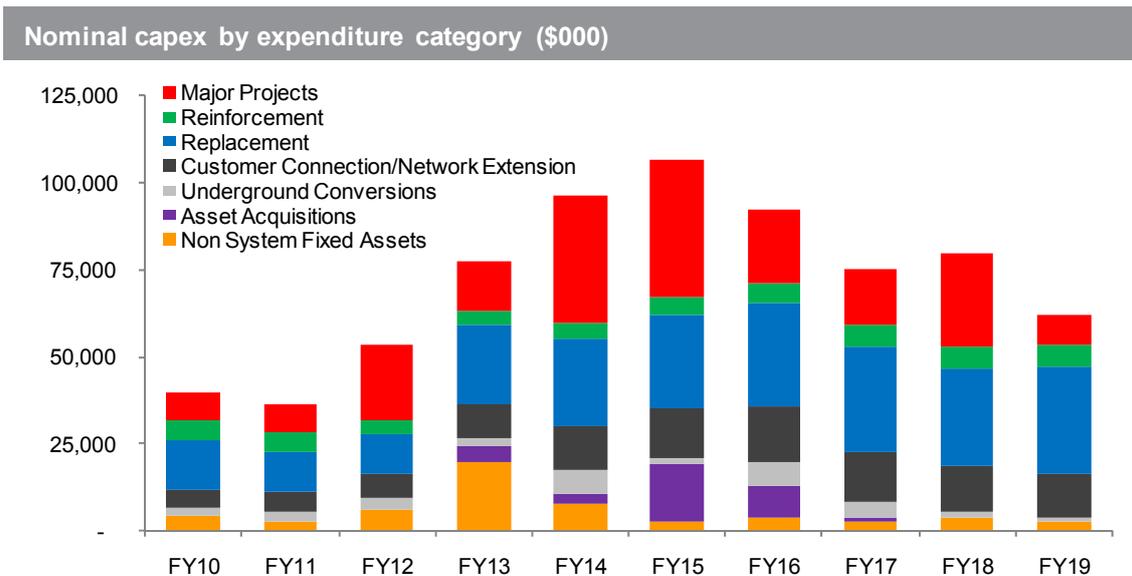
We believe that our outsourced field work model facilitates competition in our local contracting market. It enables us to acquire the most efficient prices for our works programme commensurate with the quality of service, skill levels and expertise we require for our network.

We have benchmarked our historical capex and opex costs against other EDBs and believe that these measures demonstrate that our project delivery practices are consistent with the efficiency objectives of the Part 4 purpose statement.

We note that there is increasing pressure in Canterbury for infrastructure resources and we are starting to see upward pressures on contract prices and labour costs. We are confident that our competitive tendering processes will continue to ensure that we are able to deliver our planned projects as efficiently as possible but we have not been able to maintain our unit costs at pre-earthquake levels due to local demand pressures.

### 1.5.1 Planned capex

Our historical and forecast capex programme, by activity, is illustrated below. Our capex data is presented for the period FY10 to FY19. Our opex data (refer below) is presented for the period FY08 to FY19. Due to damage to our records and financial systems from the 2011 earthquakes we have not been able to re-categorise our FY08 or FY09 capex data into this CPP presentation format.



Nominal capex by expenditure category (\$000)	Current Period			Assessment Period	
	FY10	FY11	FY12	FY13	FY14
<b>Expenditure Categories</b>					
Major Projects	8,119	7,855	21,236	14,346	36,329
Reinforcement	5,304	5,318	4,480	4,150	4,939
Replacement	14,361	11,465	11,181	22,903	24,907
Customer Connection/Network Extension	5,113	6,058	6,898	9,650	12,829
Underground Conversions	2,588	2,475	3,627	2,300	6,570
Asset Acquisitions	-	-	-	4,188	2,700
Non System Fixed Assets	4,134	2,912	5,880	20,030	7,977
<b>Total</b>	<b>39,618</b>	<b>36,083</b>	<b>53,301</b>	<b>77,567</b>	<b>96,252</b>
	CPP Period				
<b>Expenditure Categories</b>	FY15	FY16	FY17	FY18	FY19
Major Projects	39,442	21,068	15,623	26,961	8,354
Reinforcement	5,348	5,725	6,135	6,310	6,544
Replacement	26,433	29,739	30,225	28,058	30,600
Customer Connection/Network Extension	14,523	15,616	14,612	13,100	12,703
Underground Conversions	1,768	6,862	4,460	1,758	1,096
Asset Acquisitions	16,784	9,419	1,198	-	-
Non System Fixed Assets	2,409	3,771	2,601	3,633	2,621
<b>Total</b>	<b>106,708</b>	<b>92,200</b>	<b>74,854</b>	<b>79,820</b>	<b>61,920</b>

Our capex projects and programmes are mainly associated with network security, resilience, new consumer demand and maintaining our service capability. Before spending capital on our network, we consider a number of options including those available in demand side management and distributed generation.

The earthquakes caused significant damage to our network. We are proud of our pre-earthquake network architecture and engineering strategies to minimise the impacts of such events and we are pleased with our operational response during the response and recovery phases. There is much to be learnt from an event of this scale and this, coupled with permanent network damage, is resulting in inevitable changes to our pre-earthquake network development plans.

In particular the earthquakes have prompted us to review:

- the architecture of our network
- our network security of supply standard
- some of our design standards
- our load forecasts
- our embedded mobile and fixed standby generation strategy.

While these reviews are ongoing, our capex forecast incorporates our most up to date knowledge and thinking on each of these.

The key driver for our urban network capex programme over the CPP period is our drive to restore network resiliency, and accommodate the post earthquake relocations and rebuild.

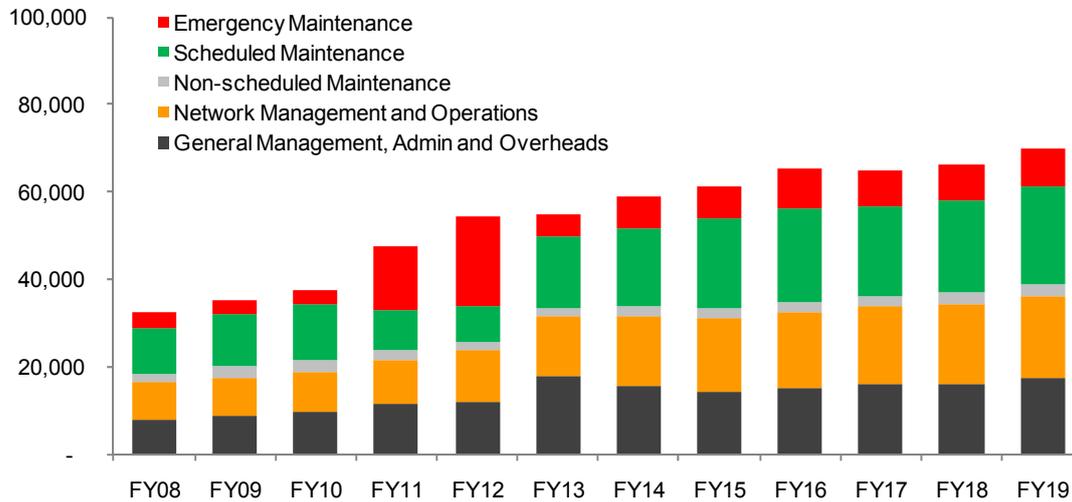
The acquisition of Transpower spur assets located within our network supply area is a core part of our urban subtransmission development plan.

The key driver for our rural capex programme is meeting growth (particularly relating to the dairy industry) and maintaining appropriate quality of supply.

### 1.5.2 Planned opex

Our historical and forecast opex programme, by activity is illustrated below.

**Nominal opex by expenditure category (\$'000)**



Nominal opex by expenditure category (\$'000)	Current Period					Assessment Period	
	FY08	FY09	FY10	FY11	FY12	FY13	FY14
Emergency Maintenance	3,608	3,122	3,495	14,534	20,603	4,925	6,903
Scheduled Maintenance	10,443	11,887	12,577	9,045	7,910	16,210	18,009
Non-scheduled Maintenance	1,888	2,426	2,684	2,494	1,829	1,995	2,118
Network Management and Operations	8,410	8,712	9,498	10,122	11,795	13,681	15,989
General Management, Admin and Overheads	8,038	8,928	9,484	11,414	12,181	17,829	15,736
<b>Total</b>	<b>32,387</b>	<b>35,076</b>	<b>37,738</b>	<b>47,609</b>	<b>54,319</b>	<b>54,640</b>	<b>58,753</b>

Expenditure Categories	CPP Period				
	FY15	FY16	FY17	FY18	FY19
Emergency Maintenance	7,311	9,197	8,092	8,443	8,810
Scheduled Maintenance	20,323	21,138	20,619	21,042	22,065
Non-scheduled Maintenance	2,250	2,394	2,502	2,614	2,732
Network Management and Operations	16,916	17,487	17,706	18,166	18,661
General Management, Admin and Overheads	14,406	15,025	15,965	16,154	17,584
<b>Total</b>	<b>61,205</b>	<b>65,242</b>	<b>64,884</b>	<b>66,419</b>	<b>69,852</b>

Our opex plans have been prepared consistent with our overarching asset management planning practices, which reflect our lifecycle management strategy for our electricity assets. We use condition based maintenance practices for our network equipment and this is reflected in this plan. We aim to manage our assets prudently to provide a reliable and appropriate quality service for the long term benefits of our consumers.

Our support activities, those not directly related to constructing, maintaining and renewing our electricity distribution system, support our core asset management processes. Our infrastructure team is responsible for developing and implementing our asset management policies and practices. Our corporate teams (corporate, finance, commercial, information technology (IT), human resources (HR), communications) provide the necessary systems, management support and direction to enable these functions to operate efficiently and effectively.

Our opex on network assets is dominated by scheduled maintenance. FY11 and FY12 are exceptions to this, and as illustrated above we incurred large emergency maintenance expenditure following the earthquakes in these years.

Our scheduled maintenance forecast increases in FY13 and continues to be higher than that we have spent pre-earthquakes. This reflects two key factors: the need to restore the condition of our damaged network assets; and the cost pressures we face in our local contract market due to the accelerating construction activity in Canterbury.

Our forecast opex also includes significant expenditure in network and corporate support services which are predominantly office based. This is represented by the network management and operations and general management, corporate and overheads opex categories.

### **1.5.3 Deliverability**

We use a range of contracting resources to deliver our works plan. Our ability to respond so quickly to the unforeseen demands resulting from the earthquakes and re-prioritise our projects and programmes accordingly demonstrates the flexibility that we have available to us in our market. Notwithstanding the resources available we apply project prioritisation assessments when scheduling our planned works.

We are confident we can deliver the capex and opex programme we have included in this proposal. Our use of a number of contractors for field work is a core component of this deliverability objective. In addition we have recently increased and are continuing to increase our office based resources to provide the necessary planning, operations and contract management support for these projects.

## **1.6 Forecasting uncertainty**

In applying for a CPP we are required to put forward detailed forecasts for a seven year period (ie: a two year assessment period and a five year regulatory period). Once a CPP proposal is submitted, and the Commission has completed its assessment, we are unable to modify our forecasts. This differs to our AMP planning process where we update our forecasts annually on the basis of further information and analysis.

Under normal circumstances, we would expect to be able to adequately manage forecasting uncertainty within a regulatory period. Indeed the five year DPP price path and quality standards require us to do so. However we are not currently operating under normal circumstances and new information is constantly emerging about the condition of our assets, the future needs of our consumers, our input costs and the development of the Canterbury region.

We have collated together all of the information we can reasonably acquire, and used our expertise and judgement to prepare the forecasts on which this CPP proposal is based. No doubt, information will emerge subsequent to submitting this proposal which, if incorporated, would cause us to modify our views and/or forecasts. This is the nature of the process however, and as we are constrained by the two year catastrophic event application window, we have proceeded with this application in good faith. It is therefore appropriate to consider the challenges which face us in committing to a long term plan during a period of unprecedented uncertainty.

Our expenditure forecasts include no contingency allowances other than an annual scheduled maintenance allowance of \$1.5m (real) per annum over and above our asset specific scheduled maintenance forecasts. This allowance is regularly included in our AMP forecasts and is used to provide for uncertainties that impact maintenance (predominantly scheduled maintenance, but potentially also non-scheduled and emergency) expenditure. In addition in our corporate opex we have a special projects budget. This is an annual provision to accommodate responses to specific issues which may arise. For example this budget has been used to fund the preparation of our CPP proposal this year. In FY11 and FY12 it was directed to the abnormal costs we incurred in responding to the earthquakes.

We have included no provisions in our CPP proposal for future catastrophic events. Should we experience high impact events during our CPP regulatory period, which are unable to be accommodated in the CPP price path and quality standards, we will seek to re-open the Commission's CPP Determination in accordance with catastrophic event provisions of the CPP IM.

The time constraints and our focus on rebuilding our network have resulted in a CPP proposal which concentrates primarily on our consumers' needs, our associated investment requirements, our network performance, and the appropriate price and quality standards which are consistent with those needs. Accordingly we have not included in our proposal any efficiency sharing incentive mechanisms. While we might consider these when operating in more normal circumstances, we do not believe they are appropriate for us at this time given our primary focus is in returning to a business as usual position.