

31 MARCH 2022

# SAFETY DELIVERY PLAN

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# 1. INTRODUCTION

As set out in our CPP Proposal, the key driver for uplifting our level of investment was to ensure we could effectively address current and emerging safety risk on our network.

Reflecting the importance of safety-related investments in our CPP proposal, we are providing our “Safety Delivery Plan”. This is consistent with the Electricity Distribution Information Disclosure (Aurora Energy Limited) Amendment Determination 2021 (Determination, available [here](#)) published by the Commerce Commission on 31 August 2021. In its decision, the Commission required us to set out how the capital and operational expenditure projects and programmes that we will deliver during the CPP period are expected to reduce our network safety risks. This document fulfils that requirement. A reference of how this document meets regulatory requirements is included in Appendix A.

The Safety Delivery Plan should help customers and other stakeholders understand expected safety outcomes from our investments.

## 1.1. FURTHER ENGAGEMENT

To ensure this Safety Delivery Plan is effectively communicated to customers and other stakeholders, we will hold a series of regional engagement information sessions, summarising the main aspects of the plan.

## 1.2. CERTIFICATION

This Development Plan was prepared and certified in accordance with clause 11.3 of the Determination on 30 March 2022. A copy of the Director’s Certificate can be found in Appendix B.

## 2. MANAGING SAFETY RISK

This chapter discusses our approach to managing safety risk on our network. It provides an overview of our approach to network risk management, including a high-level summary of risk sources and how these are mitigated.

### 2.1. CONTEXT

Safety is Aurora's first and most important asset management objective. This involves understanding how electricity assets can cause harm, analysis of the exposure to safety risks based on where and how assets are installed and the likelihood of assets to reach an unsafe state.

Most of our assets represent various grades of safety risks which are mainly related to asset failure. We continue to adopt an uncompromising approach to safety and will act when we believe there are safety risks for the public, our contractors, or our staff. As set out in our CPP proposal our additional investment is mostly safety driven.

### 2.2. MANAGING NETWORK RISK

We recognise two parts of network safety risk:

- safety of public
- safety of personnel

Safety of public is associated with the health of electricity assets in proximity to members of public, while safety of personnel depends on how safe assets are by design and health, and how safe are our contractor practices.

#### 2.2.1. Our Critical Risks

Our Critical Network Risk is harm to either a member of public or to personnel by an asset. The consequences of this risk are immeasurably greater than other technological or business risks.

##### Harm to a member of public due to asset failure or malfunction

The public safety risks are higher for primary assets with exposure to public (such as support structures and overhead lines) or with protection and automation functionality (such as earth fault protection). Protection system risks arise because of the critical role of protection as a risk control measure to de-energise power when a fault occurs on other assets. Risk quantification requires a comprehensive understanding of the failure modes of assets and the consequence of each type of failure mode. We include vegetation damaging our assets or by reaching exposed live assets as one of the asset failure modes.

##### Harm to personnel due to an asset failure or malfunction

Harm to personnel is more likely to occur with exposure to deteriorated or failed assets either by operating these assets or being in proximity at the time of a sudden failure.

## 2.2.2. Risk Mitigation Strategy

We consider a number of risk management strategies to achieve as low as reasonably practicable/possible (ALARP) safety risk. ALARP or similar phrases are widely used in safety regulation. When following the ALARP principle to safety management, an organisation will implement or execute all reasonable actions to reduce safety risk. When ALARP has been achieved, the cost or effort of all remaining possible actions to reduce safety risk are grossly disproportionate to the safety benefit gained.

When making a choice between the implementation of different risk controls it is important to understand their effectiveness. We consider a hierarchy of controls as outlined below.

- **Eliminate:** removal of asset; this strategy is mostly unpracticable for existing network assets providing a required function/purpose
- **Substitute:** asset relocation to a safer location or replacement with a safer option; this is the most effective strategy available for Aurora Energy
- **Engineering:** asset maintenance, improvement of design standards, addressing specific failure causes; we will use this strategy as a complimentary measure to the more effective Substitute
- **Administrative: procedures for** delivery of planned works; public awareness campaigns; emergency response procedures; this is a complimentary strategy

Table 2.1: Summary of our Network Risk Register

RISK DESCRIPTION	IMPACT OF RISK	MITIGATION
Asset Failure	Harm to Public	Elimination: asset decommissioning and removal
		Substitution: undergrounding of OH assets
		Substitution: asset relocation to locations with reduced or no exposure
		Substitution: proactive asset replacement
		Substitution: asset upgrade and refurbishment
		Engineering: installation of enclosures and exclusion zones
		Engineering: asset inspection and condition monitoring
		Engineering: vegetation management
		Administrative: documentation and standardisation
		Administrative: public communication campaigns
	Harm to Personnel	Substitution: proactive asset replacement
		Engineering: Safety in Design
		Engineering: non-contact asset inspection and maintenance
		Administrative: contractual competence and hazard management
		PPE: compulsory use of PPE by all personnel

Proactive replacement of assets with a higher safety risk is the most effective option to reduce the network safety risk for both public and personnel.

### 2.2.3. Asset Health to Risk change-over

As outlined in our Asset Management Development Plan we are in the early stages of developing our risk quantification tools. We are also improving our data to support asset condition assessment and we are expanding the factors contributing to asset criticality.

This Safety Delivery Plan demonstrates the start of our journey to transition from asset health as a proxy for risk quantification to our first publication of risk quantification taking account of the combination of likelihood of asset failure expressed through Asset Health Index and consequence of asset failure depending on asset location.

The original design of our asset replacement programmes was based on the numbers of assets reaching poor asset health grades. More recently we have defined areas on our network that represent higher safety consequences such as higher population density and proximity to places of interest. We have introduced five levels of public safety criticality zones, and fire risk zones as defined by Fire Emergency New Zealand (FENZ). Public safety zones are determined by considering the level of transport use on roads and population density around points of interest such schools, shopping centres and sports venues etc.

In our Annual Delivery Report, we will show progress toward improved Asset Health and Asset Risk reduction.

### 2.2.4. Asset Safety Risk Evaluation

Asset risk is defined as the product of the likelihood of a failure mode occurring with the consequence of the failure mode. Our risk framework includes a matrix table to report different levels of risk for different combinations of likelihood of failure and consequence.

The likelihood of an asset failure due to deterioration has been managed within the Asset Health framework, which combines an assessment of asset condition with age.

Our new approach to risk quantification considers asset health, as a proxy to likelihood of failure alongside asset criticality as a proxy to consequence of failure. Within this framework we calculate asset safety impact depending on its location within safety zones implemented in our geospatial information system (GIS) as defined above.

After applying Asset Health and Criticality criteria to every asset within a fleet, we place assets on the risk matrix. On the vertical axis of our risk matrix there is asset health index representing the likelihood of asset failure. On the horizontal axis of this matrix is the Asset Criticality ranking of assets representing consequence of failure.

In our Risk Control and Management Standard, the safety definition for the critical/major consequence category is described as 1 to 3 fatalities or permanent disability. Catastrophic consequence is described as multiple fatalities, implying 4 or more relative to critical/major consequence. In our analysis we consider that the category of “Catastrophic consequence” is not plausibly applicable as it is very unlikely to expect an Aurora asset to cause 4 or more fatalities. There are possible exceptions to this, such as assets that start a fire in a populated area. We intend to give this further consideration, including whether the catastrophic and critical/major definitions could be approved/calibrated better in our risk matrix shown below. Note that regardless of classification between major and catastrophic, assets with a ‘possible’ or higher likelihood of failure are defined as intolerable risks. This could be considered as a conservative determination of

intolerable risks but in the context of ALARP we consider this approach to be appropriate for the safety consequences being considered.

Figure 1: Aurora's Corporate Risk Matrix.

		Impact				
		Insignificant	Minor	Moderate	Major	Catastrophic
Likelihood	Almost certain	Low	Medium	High	Extreme	Extreme
	Likely	Low	Low	Medium	High	Extreme
	Possible	Insignificant	Low	Medium	High	High
	Unlikely	Insignificant	Insignificant	Low	Medium	High
	Rare	Insignificant	Insignificant	Low	Medium	Medium

Intolerable Risks

We applied this matrix to each asset fleet where our high level review concluded there was potential for safety risk to be above our risk tolerance – the intolerable risk zone. The outcome of our analysis is demonstrated as a quantity of assets in each location of the risk matrix, as shown in Figure 2.

Figure 2: Example of Asset Fleet Risk Profile for the fleet of OH Structures - Poles

EEA		C4	C3	C2	C1	C0	
		Impact					
		Insignificant	Minor	Moderate	Major	Catastrophic	
H1	Likelihood	Almost certain	3925	1097	610	847	0
H2		Likely	813	198	166	179	0
H3		Possible	5623	1215	770	851	0
H4		Unlikely	5769	1756	1018	1261	0
H5		Rare	16964	4127	2489	3464	0

Assets with the greater consequence exposure represent greater risk even with lower likelihood and are prioritised for remediation works or additional risk management controls.

## 3. INVESTMENTS TO MANAGE SAFETY RISK

Consideration of safety risk plays a key role in our asset management decisions – from asset replacement decisions through to operations and maintenance decisions. Below we list our capital investments and Opex activities included in our Project and Programme Delivery Plan<sup>1</sup> (PPDP) and how we expect these to reduce safety risk during the CPP Period.

### 3.1. SAFETY-RELATED CAPEX

Our planned Capex investments over the remainder of the CPP Period are discussed in our PPDP. This sets out expenditure for each disclosure year. Below we list the capital investments having the highest safety improvement effect. As described earlier, we especially focus on taking all practical steps (ALARP) toward replacement of a backlog of deteriorated assets with the greatest public exposure. Table 3.1 provides a list of the key renewals required to reduce public and worker safety risk. Each action addresses identified risks such as:

- the replacement of poor condition poles, conductor and crossarms in highly populated areas significantly reduces the probability of a live conductor coming to ground and causing harm to members of the public. Identifying and prioritising end-of-life, high consequence poles, crossarms and conductor is a key focus of our asset management renewal strategy and resulting PDPP
- the deterioration of transformer winding insulation and oil can cause a fault and explosion in a public location resulting in harm to nearby public or a fire that could spread to a wider area. Our plan enables replacement of aging distribution transformers in high-risk locations across the network
- oil-filled switchgear can have a similar failure mode and public safety risk to distribution transformers, and also has an elevated risk to the safety of workers during switching which we manage in the short term through operational control measures. Our plan enables renewal of these assets in line with our hierarchy of controls mentioned above to ‘substitute’ (renew) assets rather than rely on ‘engineering’ or ‘administrative’ controls
- the public and worker safety risk associated with underground cables is relatively low except for the occurrence of cast iron pot heads (a cable termination method where cables exit a trench and terminate on a pole). Cast iron pot heads have a known failure mode of rupturing and scattering pieces of cast iron. To manage this public and worker safety risk, our plan will replace all cast iron potheads with modern termination technology and thereby eliminate this failure mode
- protection systems are designed to detect network faults to enable automatic isolation of the power supply when a fault occurs. We rely on protection systems to significantly reduce the probability of live lines on the ground, or that a fire starts when a fault occurs. Our plan will replace ageing and

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<sup>1</sup> A copy of our PPDP can be found on our website, [www.auroraenergy.co.nz](http://www.auroraenergy.co.nz).

obsolete protection systems and therefore improve the reliable detection and isolation of faults on the network

We also make provision in our plans to replace end of life poles, crossarms and conductor in lower risk/consequence locations. That is, risk assessment is mainly used to prioritise replacement, and other factors such as the cost of preventive versus reactive replacement programmes are used to determine when lower risk, end of life assets are replaced. See Table 5.3 and supporting text in our AMP for a fuller description of our renewal strategies for each asset fleet.

**Table 3.1: Key network safety-related capex investments**

ASSET INVESTMENT CATEGORY	QUANTITY OF ASSET RENEWALS DURING THE CPP PERIOD
<b>Pole replacement</b>	Replacement of 5387 poles
<b>Crossarm replacement</b>	Replacement of 15668 crossarms
<b>Overhead Conductor replacement</b>	Replacement of 358.324 kilometres of OH conductor
<b>Distribution Transformers</b>	Replacement of 299 distribution transformers
<b>Distribution Switchgear</b>	Replacement of 1442 units of distribution switchgear
<b>UG Cables</b>	Replacement of all 294 Cast Iron Pot Head terminations
<b>Protection</b>	Renewal of 386 secondary systems

## 3.2. SAFETY-RELATED OPEX

Our planned Opex activities over the remainder of the CPP Period are discussed in our PPDP. Importantly, service activities mitigate network asset risk as described earlier by informing the capital investment program through condition monitoring and by slowing the rate of asset deterioration by undertaking maintenance. Our asset Opex programmes enable prioritisation of our safety-driven capex activities described earlier.

In addition to asset Opex, we also have a programme to manage vegetation. This is an ongoing programme which targets prevention of damage to conductors by falling trees and rising electric potential near trees that may touch live electric assets.

Currently we do not have a measure of vegetation management effect on asset safety. We intend to implement individual vegetation site registration in the near future which will allow us to measure the improvement in network asset safety using a similar risk matrix methodology to the rest of asset risks.

**Table 3.2: Safety-related Opex activities**

INVESTMENT	HOW THIS EXPENDITURE HELPS REDUCE SAFETY RISK
<b>Preventive maintenance</b>	This encompasses scheduled inspections, planned condition assessments and servicing. These are typically activities that are carried out on a regular basis to inform our Capex renewal programme
<b>Corrective maintenance</b>	This is planned work arising from preventive maintenance work or as a follow-up to a fault. It includes defect rectification, repairs, and replacement of minor components to restore the condition of an asset
<b>Reactive maintenance</b>	This is reactive work, including fault response and emergency switching, carried out in response to an unplanned event or incident that impairs normal network operation

INVESTMENT	HOW THIS EXPENDITURE HELPS REDUCE SAFETY RISK
<b>Vegetation management</b>	This includes tree trimming, inspection, and liaison with tree owners. The total cost of our vegetation management programme over the CPP period is \$22,619,653. This expenditure will enable a complete cycle of vegetation management for the entire network

### 3.2.1. Preventive Opex Informs Our Corrective Opex and Renewals Capex Programme

When determining the priority, frequency and type of asset inspection and maintenance for each fleet, and each asset within a fleet, we give consideration to the risk associated with the assets. Our recent focus has been to clear the backlog of outstanding inspections. We have prioritised the inspection backlog to assets with a high level of inherent risk (e.g. old wooden poles in high population density areas) which has enabled prioritisation of our corrective maintenance and capex renewals to the highest risk assets.

As we clear the inspection backlog, we are beginning to introduce additional inspection methods and increased frequency of testing on high risk assets, e.g. acoustic testing on overhead assets in high fire risk zones.

It is important to note that our forecast renewals volumes are based on models that forecast inspection results. Actual asset replacement and timing of replacement is triggered by a preventive inspection result and corresponding consequence of failure. For example, a preventive maintenance pole inspection creates a pole grade of 0-6 and corresponding tag (red or orange). Each pole also has a criticality/consequence score. The pole grade (and colour tag) and criticality determine the timeframe for remediation which will fall into one of four categories:

- fault/immediate response
- rapid response – 90 days (red tag pole)
- within 12 months (orange tag)
- planned works beyond 12 months

So, the detail of the inspection result and asset criticality location has a significant impact on the timing of risk remediation, which cannot be accurately forecast for individual assets, but our models provide a reasonable aggregate indication across each fleet. We therefore expect variances between our delivered replacement volumes and those forecast in our PPDP and the corresponding safety risk levels. We will revise our replacement and safety level forecasts annually through the CPP period to reflect actual inspection results, especially for assets within high-risk areas.

## 4. NETWORK SAFETY RISK PROFILE

This section provides details of our critical risk evaluation before and after each regulatory year of CPP period.

### 4.1. TOTAL CRITICAL ASSET RISK

We calculate the total network risk as the summary of individual asset risks for fleets with public safety potential. We evaluated safety profiles of individual asset fleets and then counted the number or kilometres of assets in each cell of the safety risk matrix.

The CPP Determination caused some reduction of our forecast asset replacement volumes. This resulted in a lower-than-expected reduction of poor health assets for most fleets. Nevertheless, with the development of our new risk-based asset management framework we will be able to reach a greater risk mitigation effectiveness by prioritising investment in fleets and locations with a higher risk profile.

Furthermore, as expected our focus on risk quantification to enable targeted safety risk reduction has resulted in a refinement of our asset renewal forecast and plans, which were previously based on asset health only. Figures 4.1, 4.2 and 4.3 below demonstrate the impact of new information to inform an updated view of current state asset health, and the impact of our risk prioritisation on the resulting asset health at the end of the CPP period. Risk targeted forecast expenditure can mean that asset health in some lower risk fleets remains relatively static (or decline) while asset health in high risk fleets is improved as a priority.

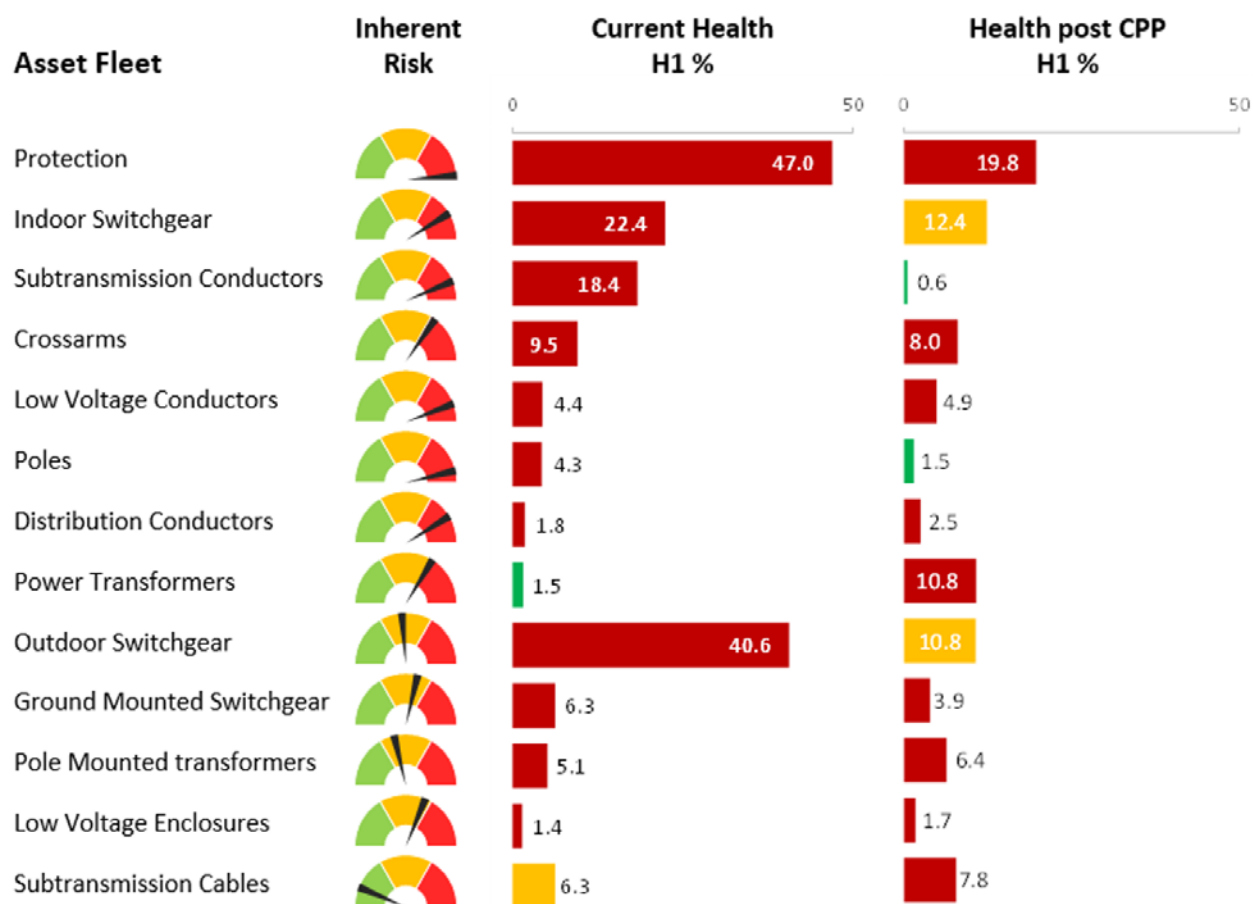
We developed our revised asset replacement programme based on:

- priority is given to higher inherent risk fleets – mostly to overhead assets with high voltage conductor the highest
- effectiveness of investment (cost vs risk reduction)
- within the intolerable risk pool, priority is given to higher probability (poor health) assets
- sustainability of the programme (balancing fleets over the timeframe)
- deliverability by Aurora's contractors

Inherent risk is an assessed level of raw or untreated risk. It is the natural level of risk inherent in an asset without doing anything to reduce the likelihood or consequence. For example, the inherent risk level of an overhead conductor is higher than an underground cable because it has a greater probability of coming into contact with the public if it should fail.

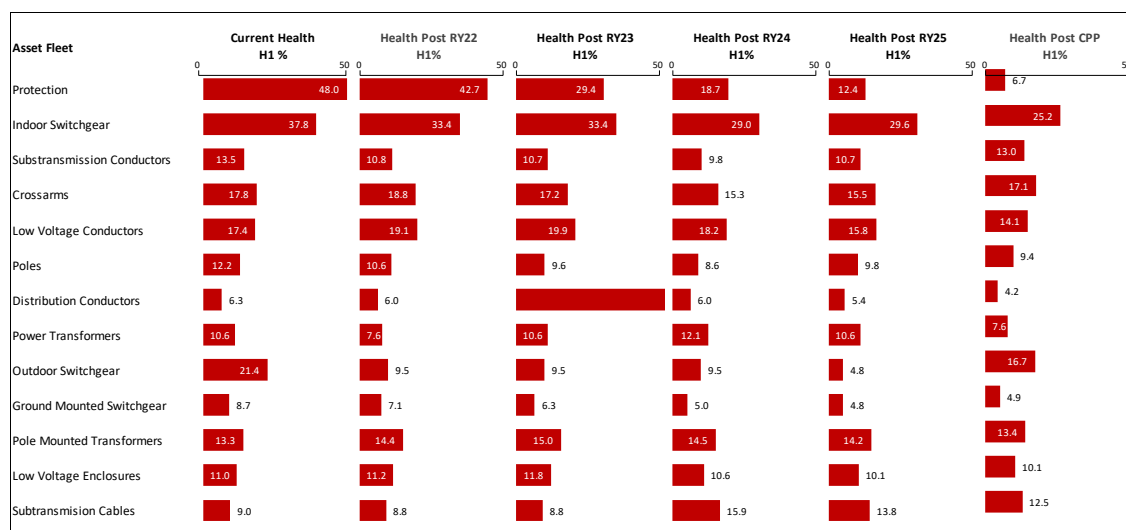
The graphic below provides a summary of the inherent risk levels of each fleet and the asset health improvement possible if we implemented our plan as per the June 2020 CPP Application.

Figure 4.1: Network Risk – Original CPP baseline & original post-CPP projection



We have updated our asset health scores for each fleet to reflect new and updated inspection information. Our updated assessment of current and forecast asset health of these fleets is shown in Figure 4.2 below:

Figure 4.2: New Asset Health forecast



As noted above, we have developed an asset fleet risk assessment model for our safety critical fleets. We note that at this time we are only able to quantify risk for a subset of the fleets with asset health scores. However, the fleets with risk quantification represent those fleets with the highest inherent and/or residual risk on the network.

In general, our asset renewals programme prioritises fleets with safety risk quantification but we continue to replace assets in most lower risk fleets where asset health indicates an end-of-life asset. See Table 5.3 in our 2022 Asset Management Plan<sup>2</sup> (AMP) for a fuller explanation of our intervention strategies for end-of-life assets.

Our Development Plan<sup>3</sup> includes initiatives to improve our asset condition and risk quantification capability. We expect to expand our risk quantification into other fleets over the CPP Period and further refine/calibrate our risk framework.

Figure 4.3: Network Risk – new risk projections

Safety-Sensitive Fleet	31 MAR 2021 %	Units Intolerable	31 MAR 2022 %	Units Intolerable	31 MAR 2023 %	Units Intolerable	31 MAR 2024 %	Units Intolerable	31 MAR 2025 %	Units Intolerable	31 MAR 2026 %	Units Intolerable
Poles	4.68%	2487	3.93%	2089	3.41%	1814	2.88%	1531	2.95%	1570	2.67%	1420
Crossarms	8.21%	7664	7.72%	7209	7.20%	6717	6.44%	6015	5.98%	5581	5.98%	5581
Subtransmission Conductor (km)	12.60%	66	9.85%	51.5	10.64%	55.6	9.78%	51.1	9.44%	49.4	8.99%	47.0
Distribution Conductor (km)	3.37%	76	2.17%	49.2	1.72%	39.0	0.48%	10.9	0.00%	0.0	0.00%	0.0
LV Conductor (km)	7.73%	72	8.23%	76.8	8.55%	79.8	8.20%	76.6	7.52%	70.2	6.76%	63.1
Subtransmission Cables (km/units*)	9.70%	8	9.46%	8.2	12.97%	11.3	22.17%	19.3	20.11%	17.5	18.35%	16.0
Distribution Cables (km/units*)	2.86%	32	1.64%	18.5	1.63%	18.5	1.58%	17.9	1.39%	15.8	1.31%	14.8
LV Cables (km/units*)	2.25%	23	2.46%	25.4	2.70%	27.8	3.06%	31.6	3.43%	35.4	3.66%	37.8
Ground Mounted Switchgear	9.73%	199	8.02%	164	7.04%	144	5.57%	114	4.25%	87	3.77%	77
Pole Mounted Switches	16.79%	197	17.90%	210	15.52%	182	12.28%	144	10.14%	119	8.18%	96
Low Voltage Enclosures	7.16%	1100	7.24%	1113	7.41%	1139	5.55%	853	4.32%	664	3.12%	480
Reclosers and Sectionalisers	8.42%	8	7.37%	7	8.42%	8	3.16%	3	4.21%	4	4.21%	4
Ground Mounted Distribution Transformers	3.18%	101	3.33%	106	3.55%	113	3.74%	119	3.87%	123	3.59%	114
Pole Mounted Distribution Transformers	3.05%	119	3.16%	123	3.05%	119	2.75%	107	2.51%	98	2.23%	87

\* Within cable renewal programmes we will remove all 294 cast iron pot head terminations over the CPP Period

<sup>2</sup> A copy of our 2022 AMP can be found on our website, [www.auroraenergy.co.nz](http://www.auroraenergy.co.nz).

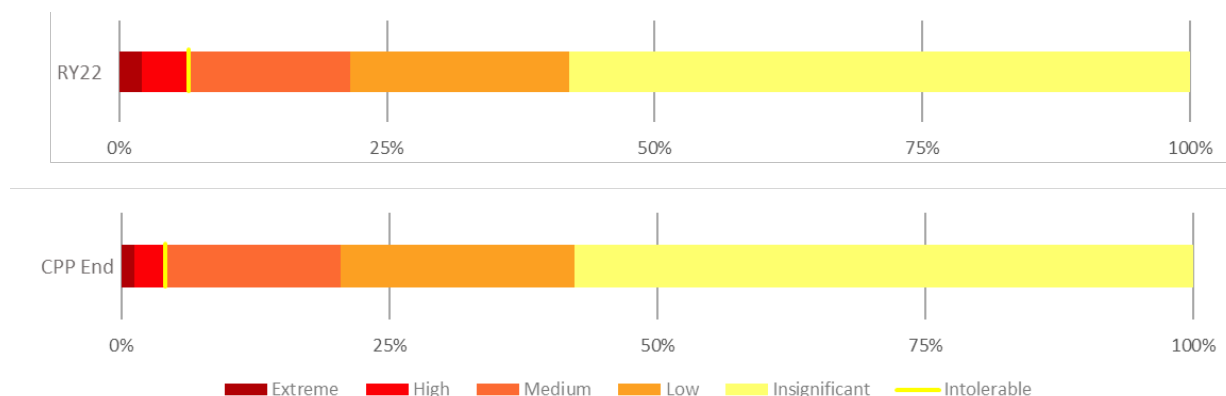
<sup>3</sup> A copy of our Development Plan can be found on our website, [www.auroraenergy.co.nz](http://www.auroraenergy.co.nz)

The numbers in Figure 4.3 include the following indicators:

- **Percentage before and after every year of CPP:** proportion of each safety-sensitive asset fleet above the risk tolerance line of our corporate risk matrix
- **Units Intolerable:** the physical asset count classified as intolerable safety risk with safety-critical location and having reached end of service life

The total network critical safety risk change is illustrated in the following:

Figure 4.4: New Total Network Asset Risk Profile Change



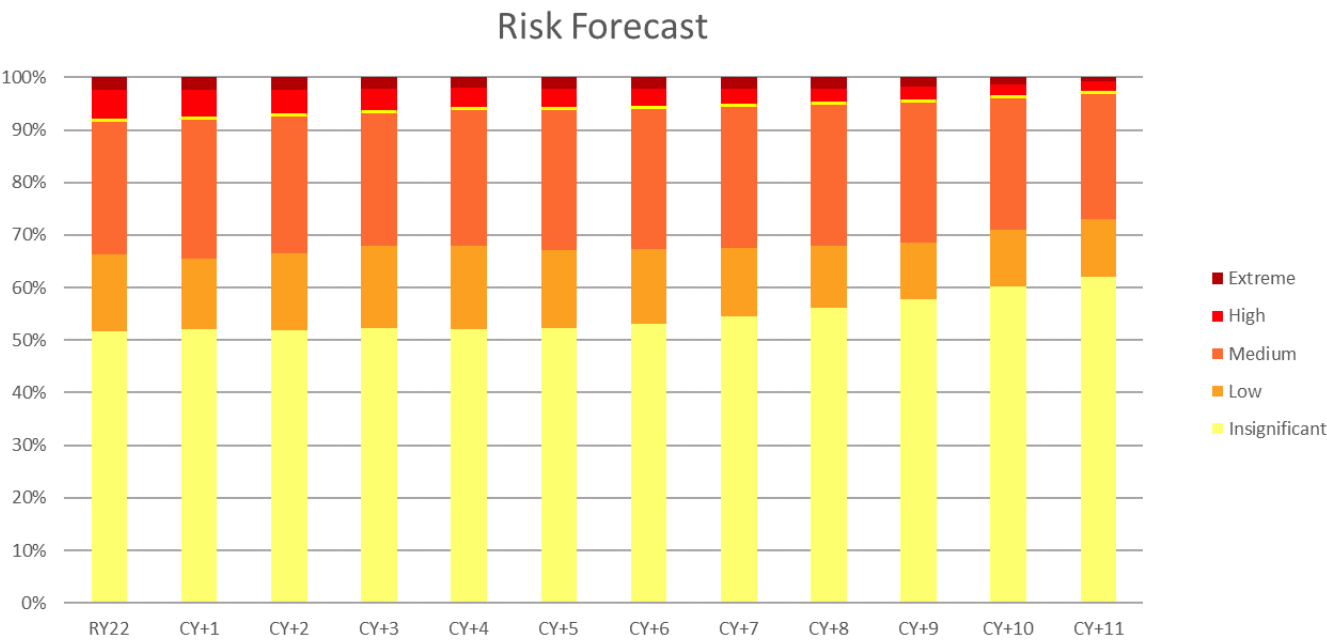
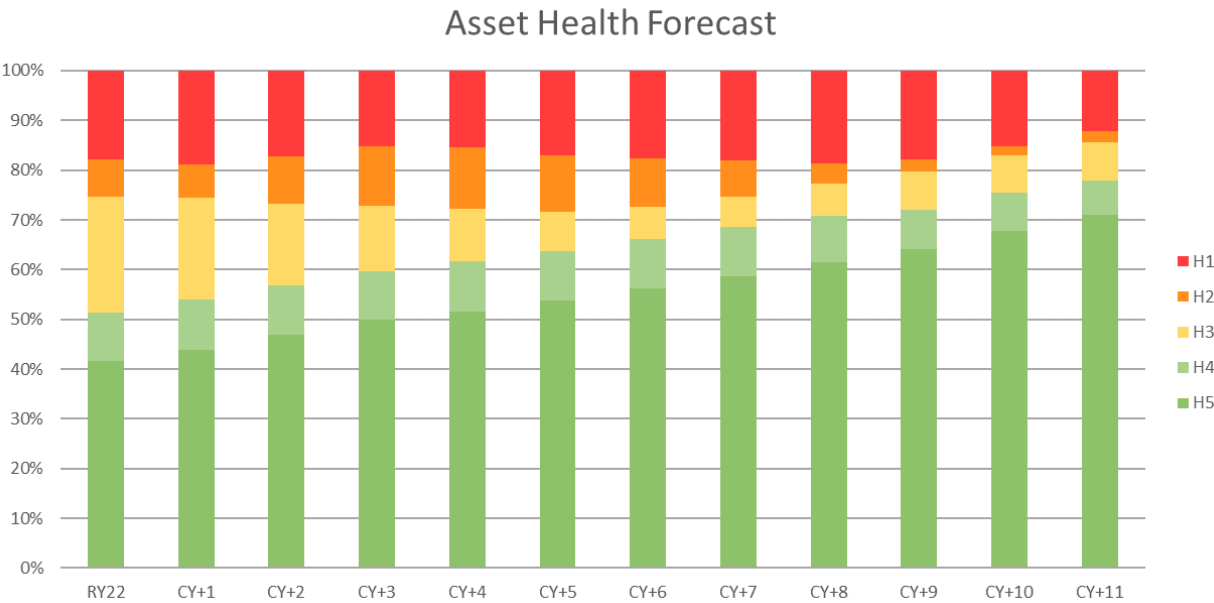
## 4.2. FLEET RISK PROFILES

We have set a data engine which collects live data from asset management software solution (AMSS) and GIS and scores each asset on the asset health scale and on the risk matrix. We have made a snapshot of the initial risk profile for every fleet correct for 31 March 2021 reflecting the start date of the CPP period. We then set a projection of how each asset fleet risk will change as we deliver our risk prioritised PPDP. At the end of each CPP year we will evaluate and report the actual risk profile of every fleet versus our plan. Our plans and forecasts will be reprioritised each year to take account of new asset inspection information, improved and updated safety risk quantification and other factors such as network growth expenditure requirements.

## 4.2.1. Support Structures

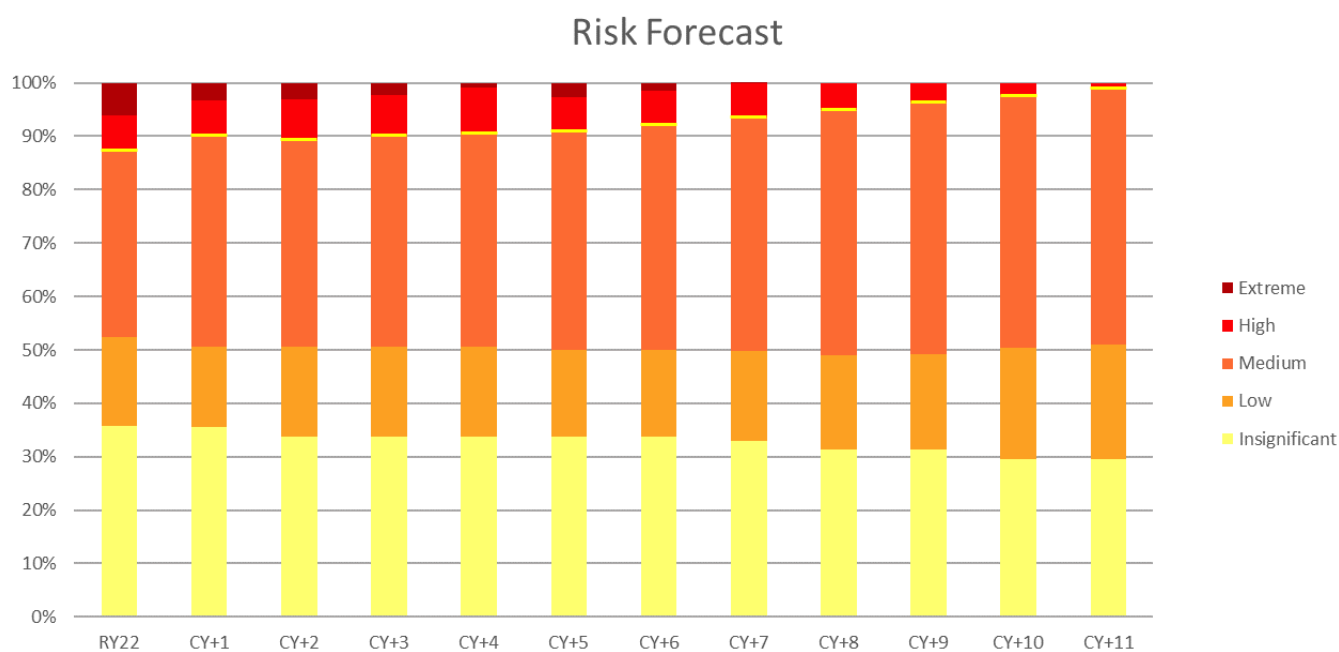
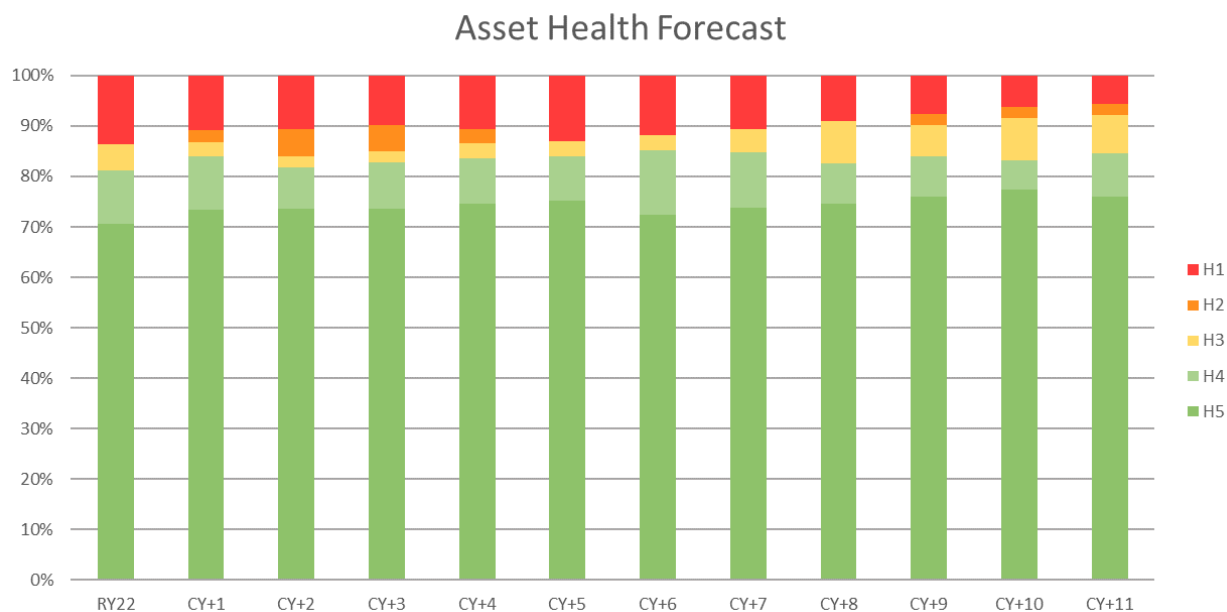
### Poles



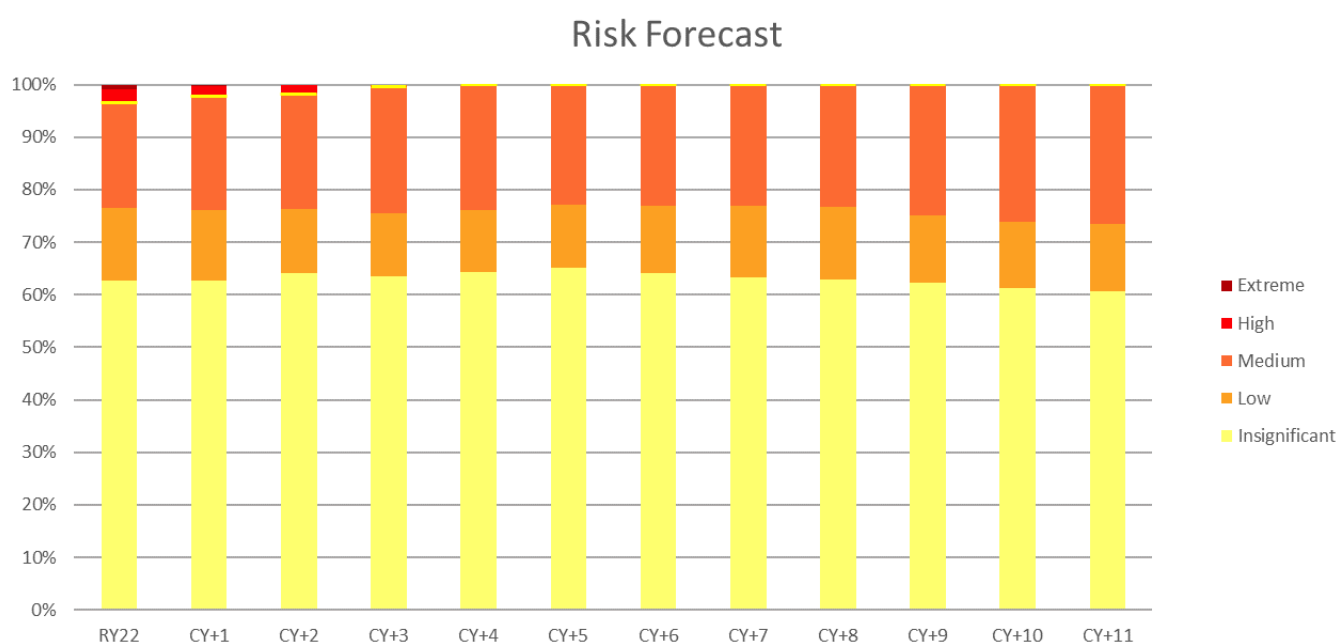
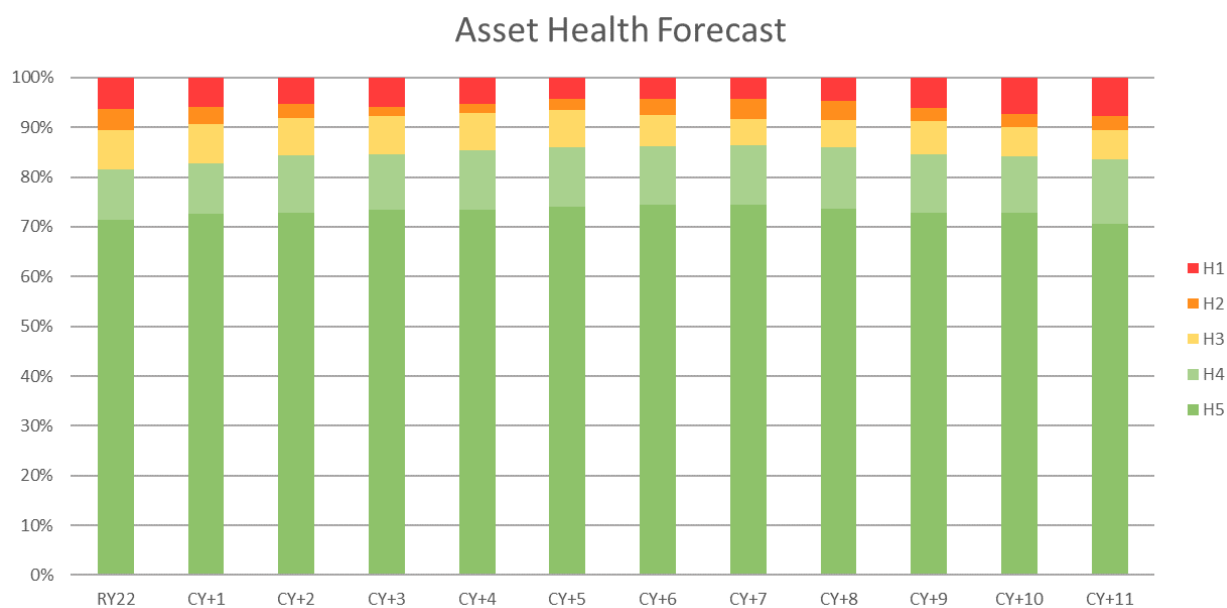


## 4.2.2. Overhead Conductor

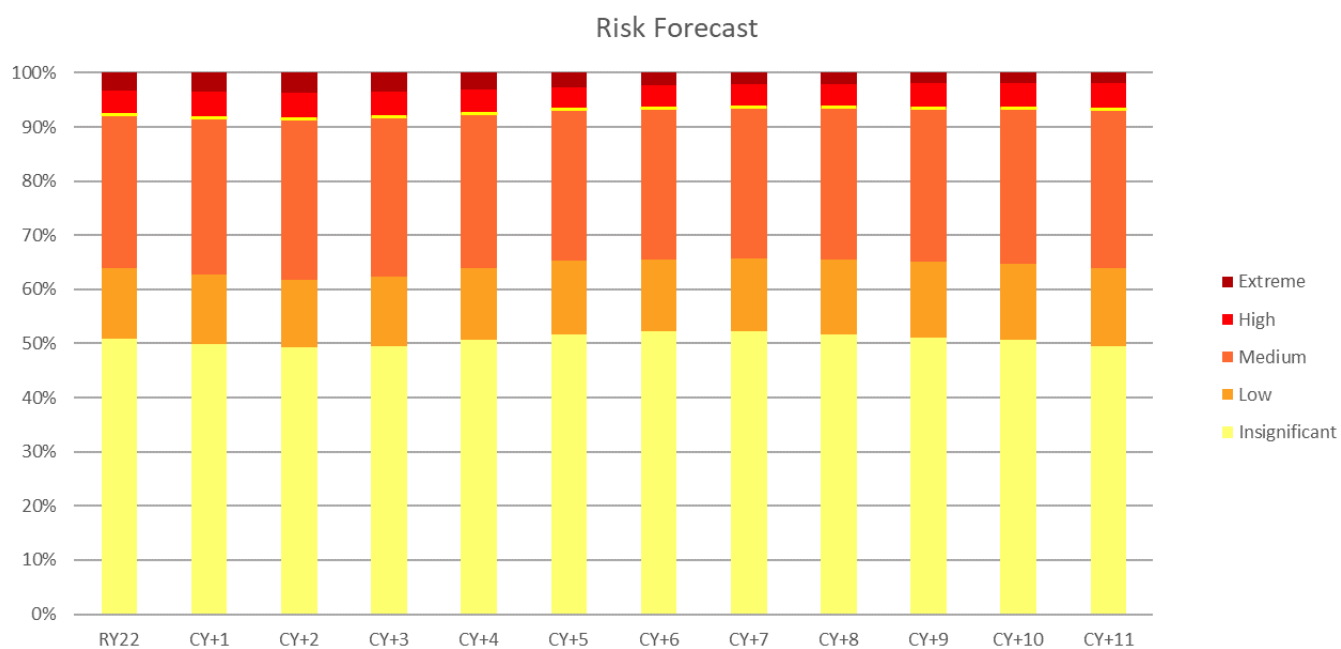
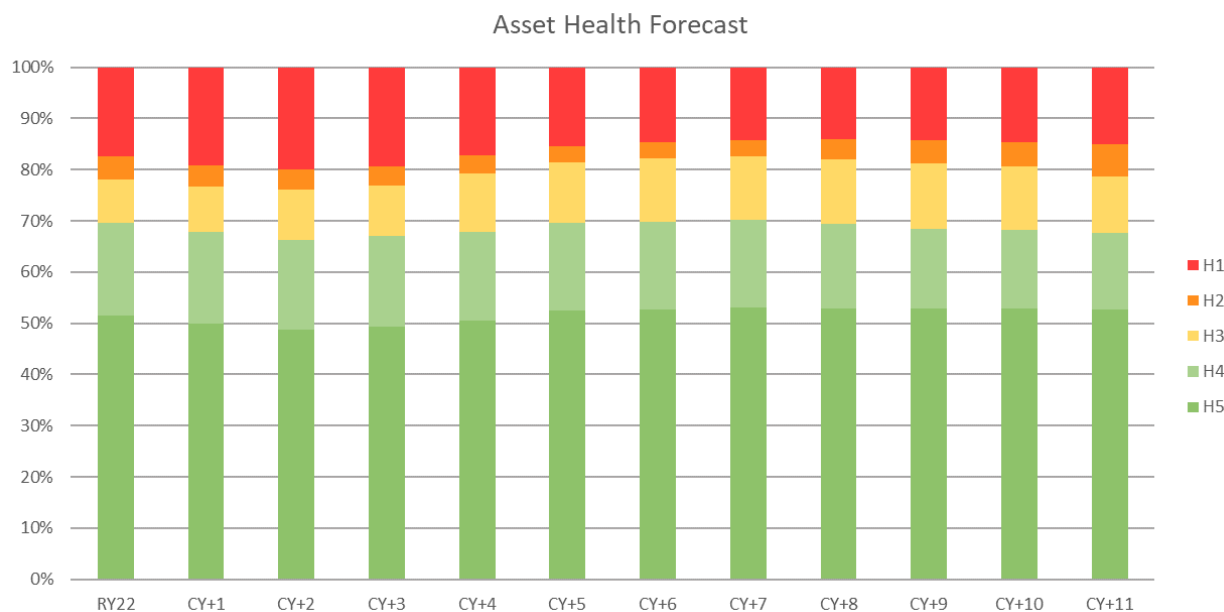
### Subtransmission



## HV Distribution



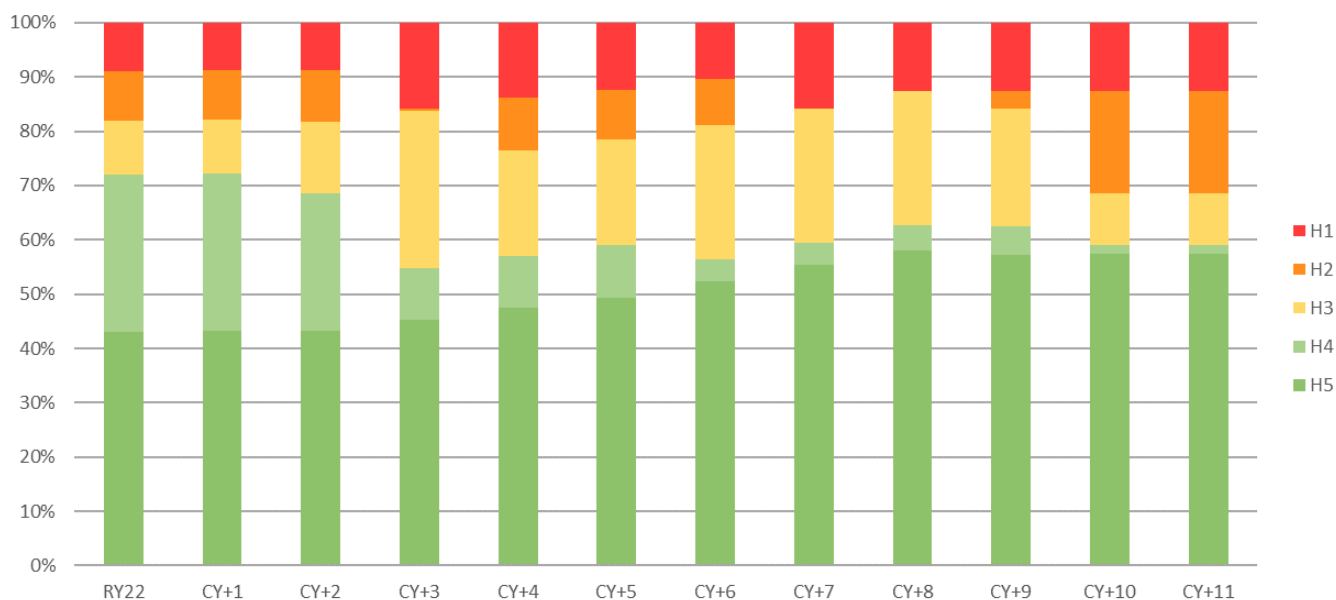
## LV Distribution



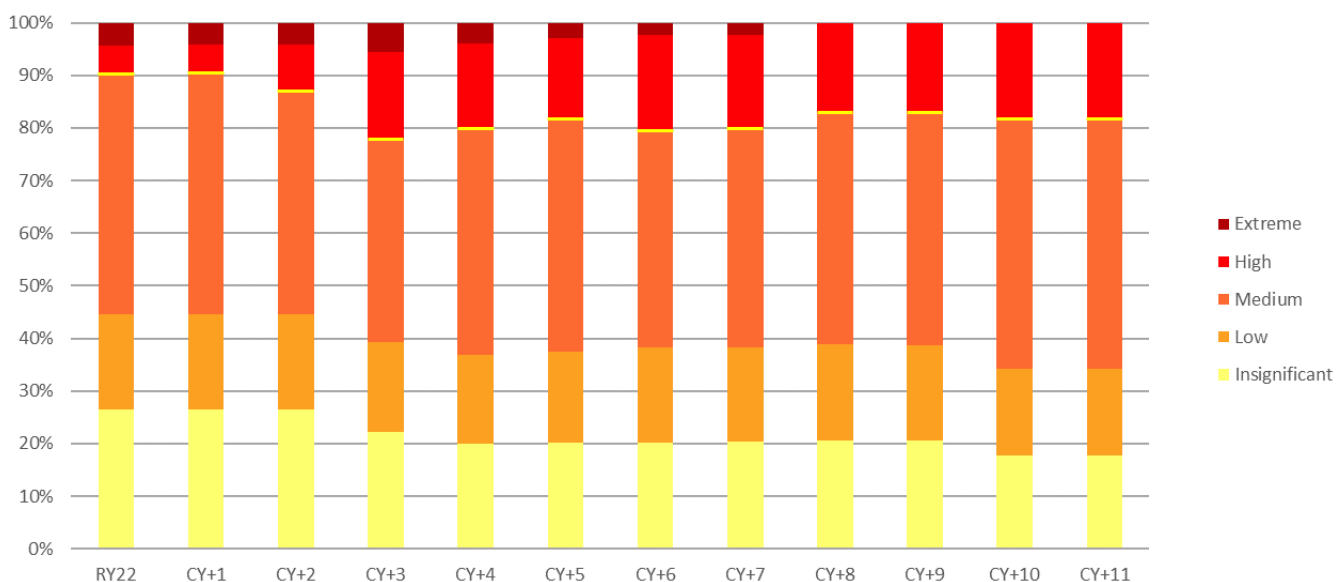
### 4.2.3. Underground Cable

#### Subtransmission

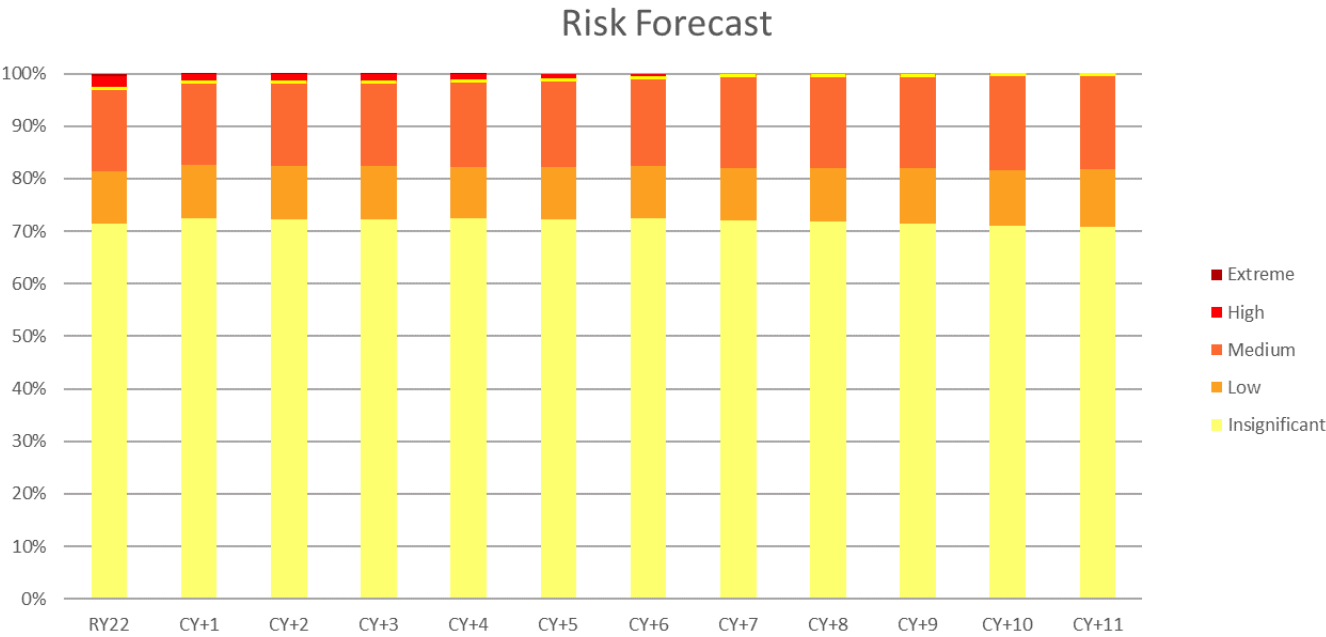
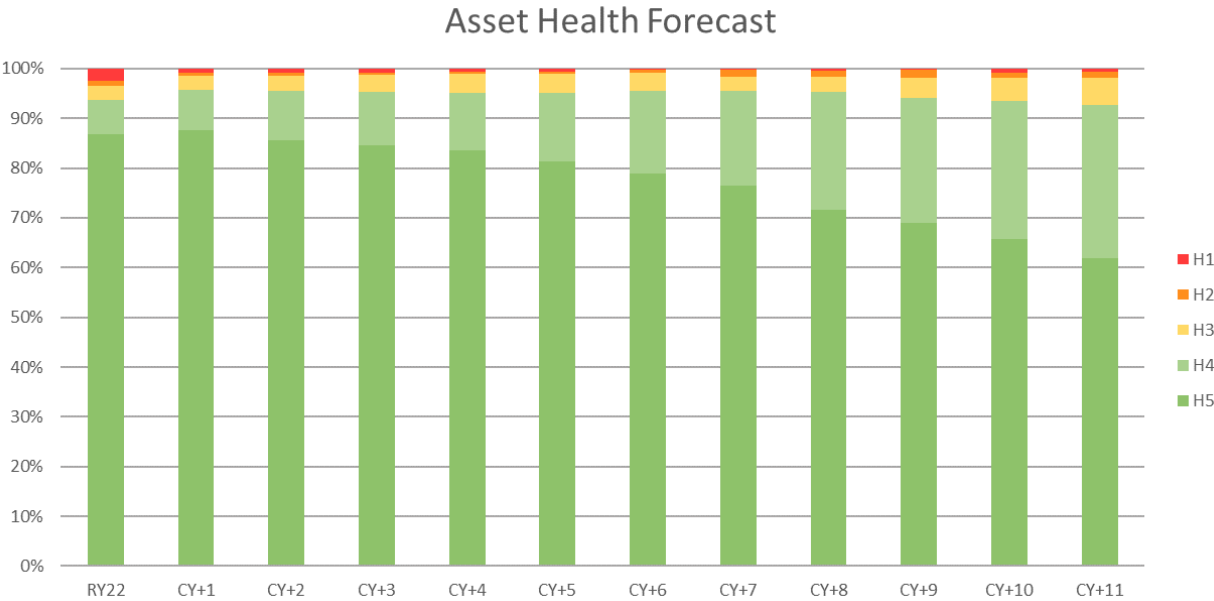
Asset Health Forecast



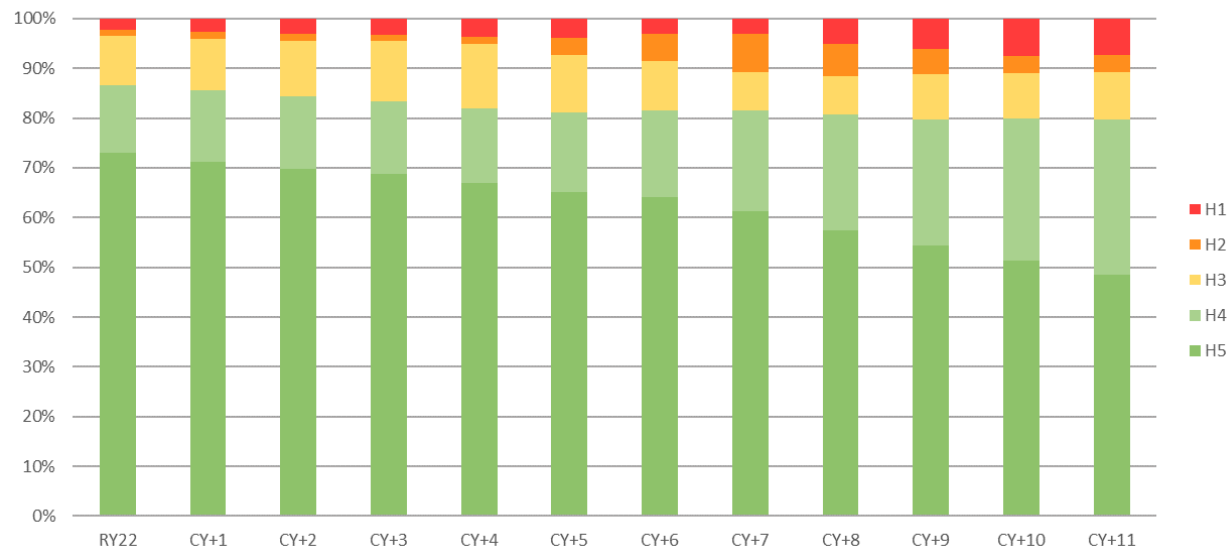
Risk Forecast



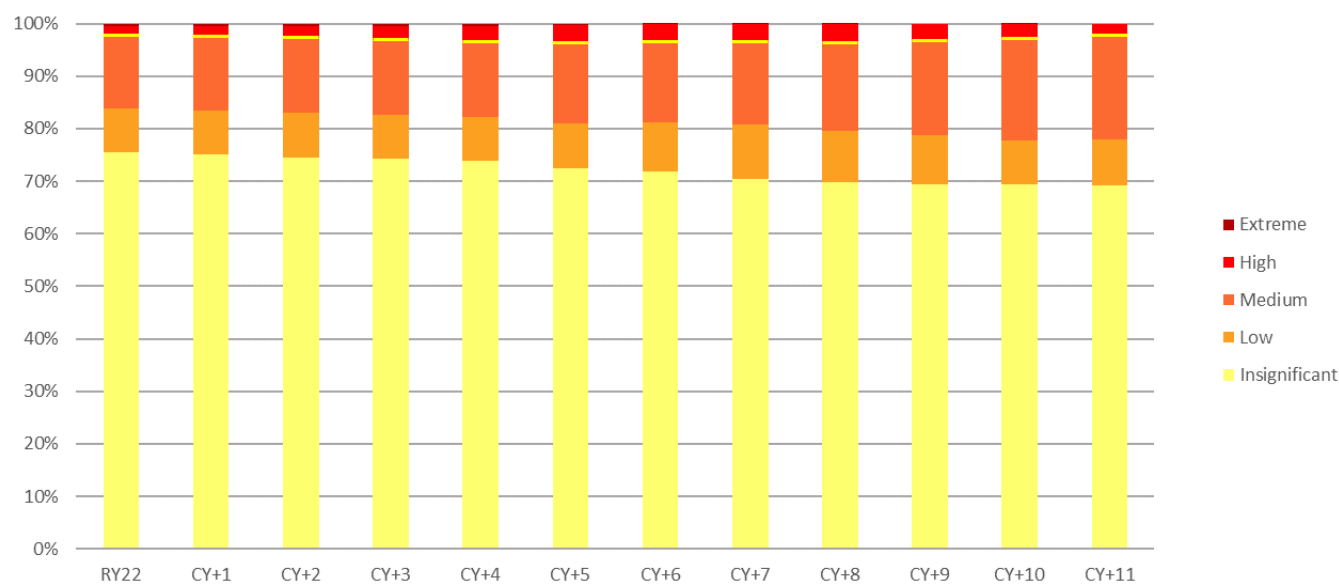
HV Distribution



Asset Health Forecast



Risk Forecast

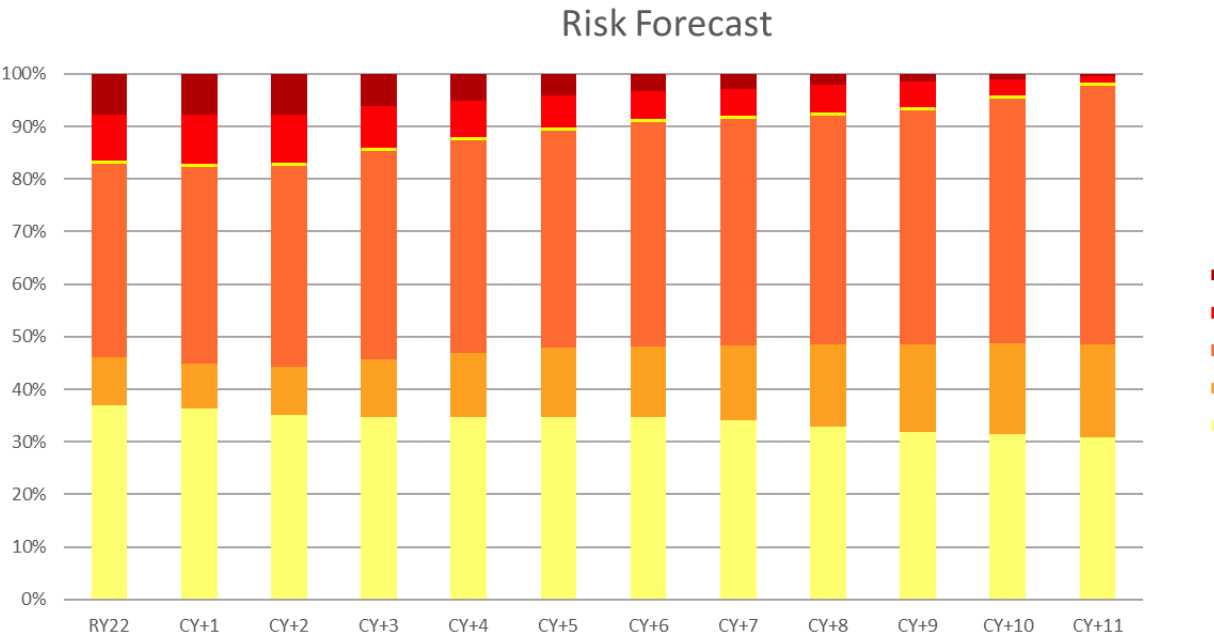
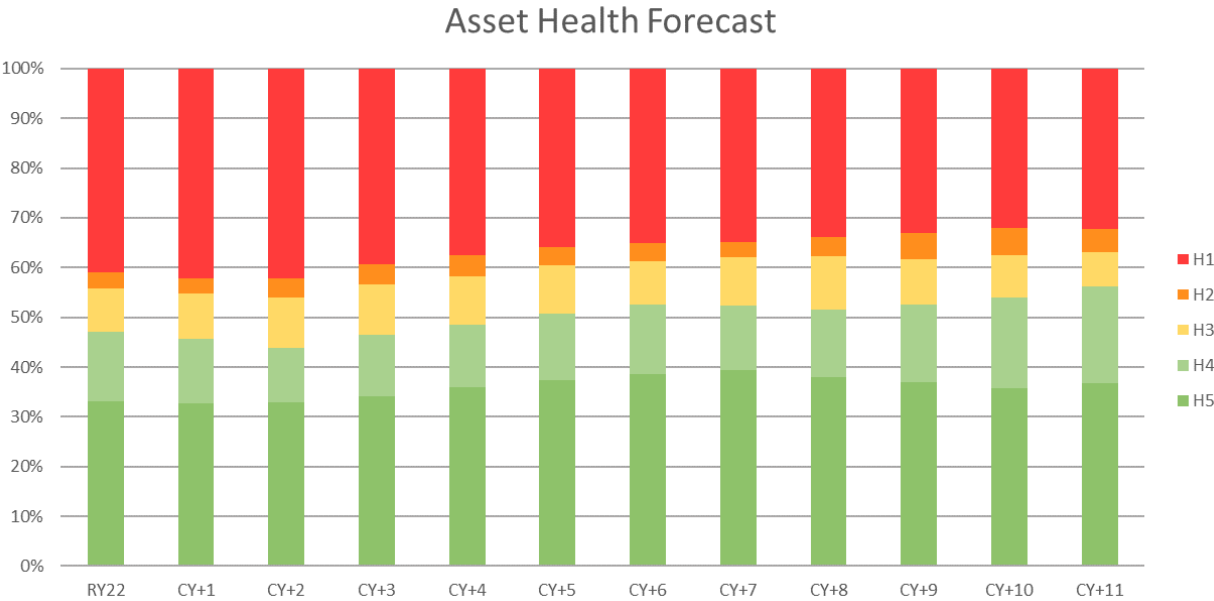


#### 4.2.4. Distribution Switchgear

##### Ground Mounted Switches

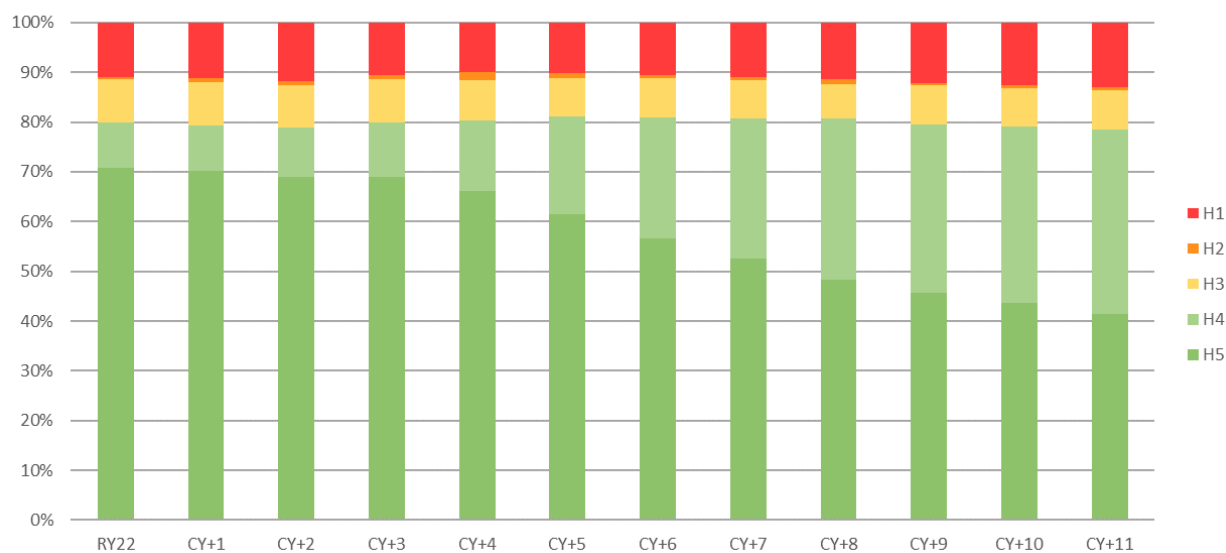


Pole Mounted Switches

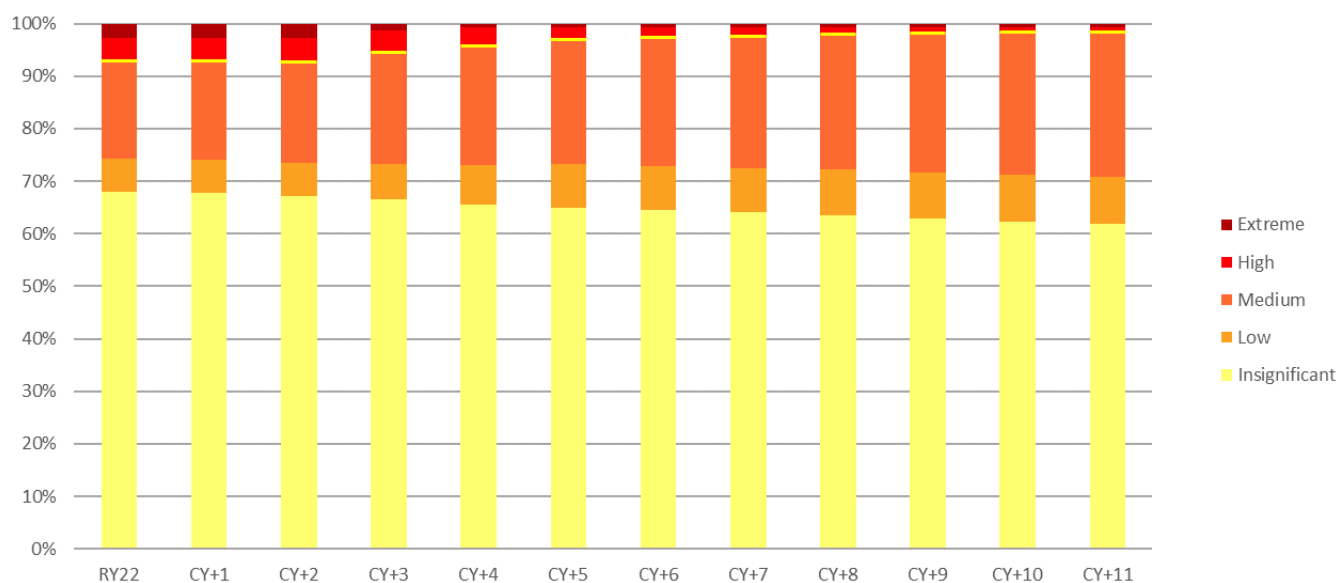


## LV Enclosures

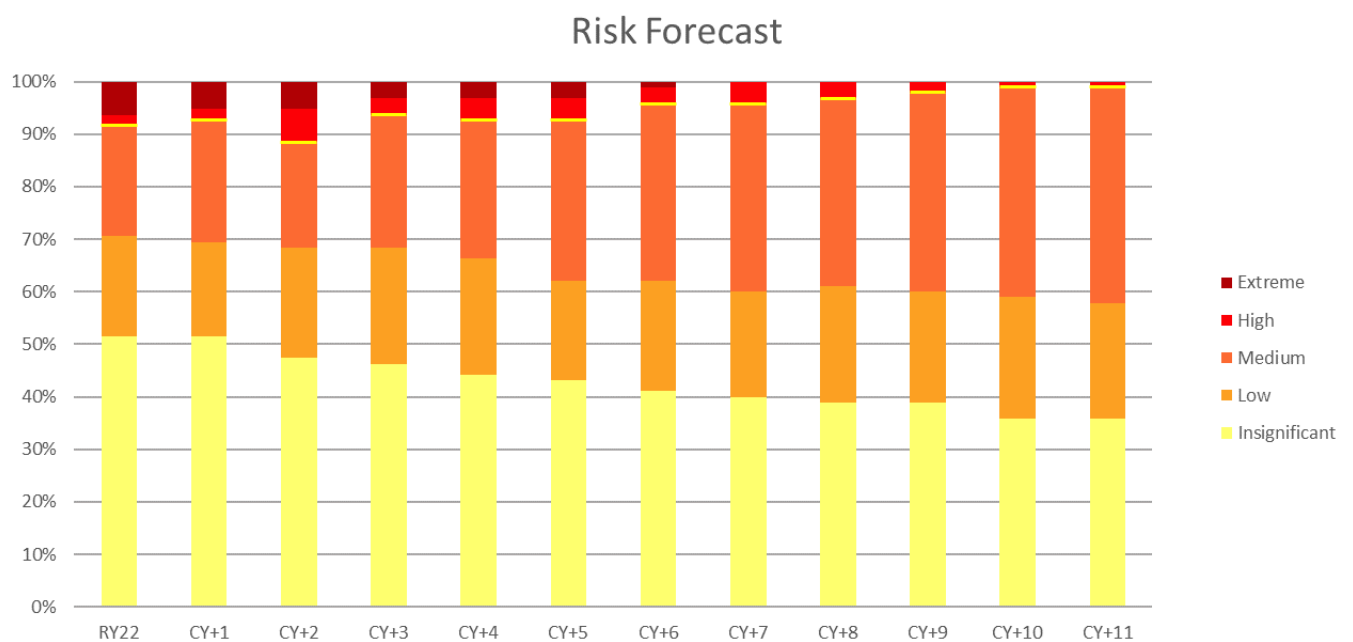
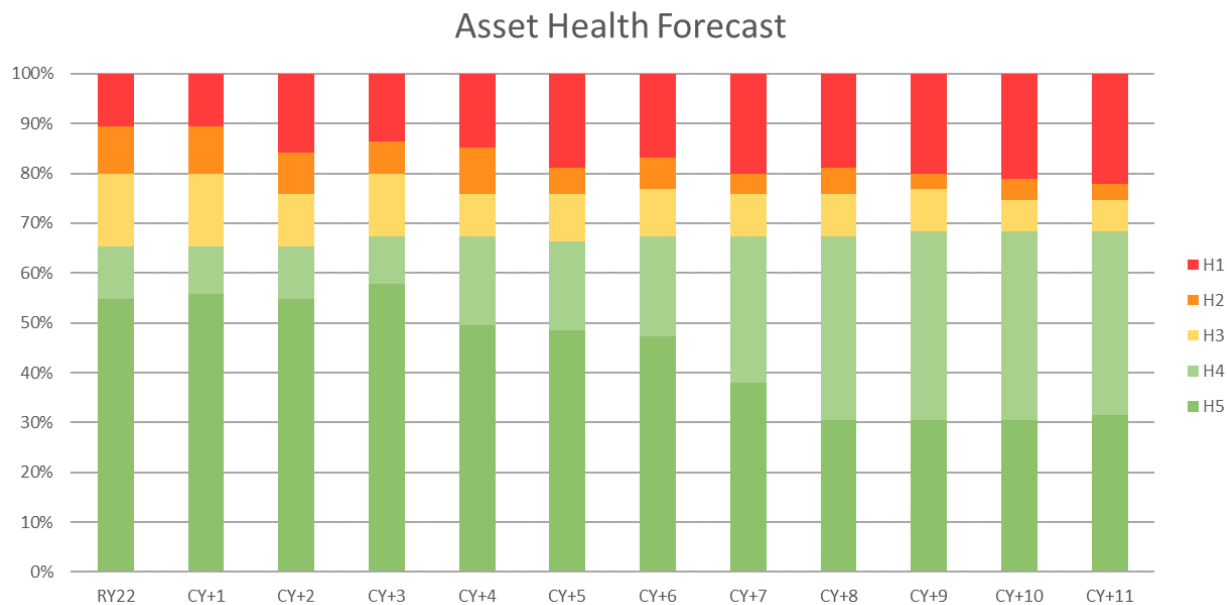
### Asset Health Forecast



### Risk Forecast



## Reclosers and Sectionalisers



## 4.2.5. Distribution Transformers

### Ground Mounted Transformers



Pole Mounted Transformers



## APPENDIX A. COMPLIANCE MATRIX

This schedule demonstrates how this Development Plan complies with the Commerce Commission’s Electricity Distribution Information Disclosure Determination 2012.

Determination Requirement	Determination Reference	Statement Reference
Aurora must do the following:	Clause 2.5.4	
by 31 March 2022, publicly disclose Aurora’s ‘safety delivery plan’ setting out for each disclosure year how the capital expenditure and operational expenditure projects and programmes described in Aurora’s project and programme delivery plan are expected to reduce Aurora’s network safety risk in supplying electricity distribution services, and includes:	Clause 2.5.4(3)	Chapters 2 to 4
an explanation of whether, and if so how and why, the expected network safety risk profile varies from Aurora’s equivalent profile at the time of Aurora’s application for the Aurora CPP;	Clause 2.5.4(3)(a)	Chapter 4
a list of the key network safety risks and the actions Aurora plans to take to reduce those risks, with reference to the principle of reducing risk to ‘as low as reasonably practicable’; and	Clause 2.5.4(3)(b)	Chapters 2 and 3
a visual representation of Aurora’s expected reduction or change in its network safety risk, grouped by asset class, as a result of delivering capital expenditure or operational expenditure projects or programmes identified in Aurora’s project and programme delivery plan under subclause (2);	Clause 2.5.4(3)(c)	Chapter 4

## APPENDIX B. DIRECTORS' CERTIFICATE

### SCHEDULE 18

#### Certification for Disclosures

Clause 2.9.5

We, Stephen Richard Thompson and Margaret Patricia Devlin, being directors of Aurora Energy Limited, certify that, having made all reasonable enquiry, to the best of our knowledge, the information prepared for the purposes of clauses 2.5.4(1) to (3) of the Electricity Distribution Information Disclosure Determination 2012 in all material respects complies with that determination.



Stephen Richard Thompson



Margaret Patricia Devlin

30 March 2022

