



# ASSET CLASS OVERVIEW UNDERGROUND CABLES

CP BUS 4.04 – PUBLIC 2026–31 REGULATORY PROPOSAL

# **Table of contents**

1.	Overview	2
2.	Background	3
2.1	Compliance obligations	3
2.2	Asset population	3
2.3	Asset age profile	4
3.	Identified need	6
3.1	Historical asset performance	6
3.2	Asset condition	8
3.3	Demand growth	9
4.	Forecast interventions	10
4.1	Forecast volumes	10
4.2	Expenditureforecast	13
Α	Risk-based HV cable replacements	15
В	HV cable metallic box terminations	19

# 1. Overview

As an inner-city distribution network with over 51 per cent of our powerlines underground, managing our underground cable system is critical to our ability to maintain network reliability and minimise safety risk as far as practicable.

Recent evidence, however, shows that HV cable risks are increasing, with growing numbers of HV cable defects. These trends are consistent with the deteriorated condition of HV cables, and in the absence of any intervention by 2031, 36 per cent of our underground cable population (i.e. ~550km) is forecast to be at high risk of failure.

Further, around 220km of our underground cables are highly aged—that is, greater than 80 years old—with 73 per cent of these being HV cables.

In comparison, our recent average cable replacement volumes have been around 5km per annum, and our underlying defect and fault driven forecasts for the 2026–31 are consistent with this. Our intervention forecast, therefore, supplements this approach with the replacement of the 10 highest-risk cable sections on our network, based on our condition-based risk management (CBRM) modelling.

We are also proposing the prioritised replacement of 85 pitch-filled metallic box terminations as part of an ongoing 10-year program (and consistent with the approach undertaken across the industry). These terminations have been found to fail explosively, and can scatter molten pitch and metal fragments that pose a safety and reliability risk to people and property.

Given the scale and criticality of our underground cable network, and the evidence of ongoing deterioration in underlying condition, we consider our forecast replacement volumes are modest and represent 'no regrets' investments. In total, we are only proposing to intervene on 0.2 per cent of our cable population.

A summary of our forecast expenditure for underground cable systems for the 2026–31 regulatory period is set out in table 1.

EXPENDITURE	FY27	FY28	FY29	FY30	FY31	TOTAL
Corrective cable: LV	0.9	0.9	0.9	0.9	0.9	4.7
Corrective cable: HV	5.3	5.3	5.3	5.3	5.3	26.7
Risk-based: HV cable	1.6	1.6	1.6	1.6	1.6	8.1
Risk-based: HV cabus boxes	2.1	2.1	2.1	2.1	2.1	10.4
Underground pits and pillars	2.7	2.7	2.7	2.8	2.8	13.7
Total	12.7	12.7	12.7	12.7	12.8	63.6

#### TABLE 1 UNDERGROUND CABLE SYSTEMS: EXPENDITURE (\$M, 2026)

Note: the underground cable expenditure included in our reset RIN may not match the above due to additional allocation to this asset category drivne by other works.

# 2. Background

Underground cable systems provide the electrical conducting medium to connect low voltage (LV), high voltage (HV) and sub-transmission distribution networks.

The cables themselves are constructed with the conducting medium (i.e. conductor) in the centre of the insulated core and additional layers that provide earthing and mechanical protection. The insulation is a non-conducting material that provides an electrical and physical barrier between the energised conductors in the cable and earth.

This section provides an overview of our underground cable asset class, including a high-level summary of our compliance obligations, asset population and age profile.

# 2.1 Compliance obligations

We operate under a combination of national and state legislation which establish our obligations and the regulatory framework under which we operate.

The National Electricity Rules sets out reliability and safety obligations and the Electricity Distribution Code of Practice include performance requirements. We must also manage our network assets in accordance with the Electricity Safety Act 1998, the Electricity Safety (Management) Regulations 2019, the Electricity Safety (Bushfire Mitigation) Regulations 2023 and the Victorian Environment Protection Act 2017.

These obligations can be summarised as follows:

- Electricity Safety Act 1998 requires us to minimise safety risk 'as far as practicable' including bushfire danger
- Electricity Distribution Code of Practice requires us to manage our assets in accordance with principles of good asset management and to minimise the risks associated with the failure or reduced performance of assets
- National Electricity Rules requires us to forecast expenditure to maintain the quality, reliability and security of supply of our networks and maintain the safety of the distribution system
- Victorian Environment Protection Act (2017) requires us to reduce the risk of harm from our activities to human health and the environment and from pollution or waste.

In short, we must maintain reliability, minimise safety risk 'as far as practicable' including bushfire danger arising from our network, and reduce the risk of harm to the environment.

# 2.2 Asset population

Our underground cable systems comprise of our underground cables, joint and terminations, cable pits and pillars to provide access points, and the electrolysis cable system (which includes cables and drain boxes).

The volumes associated with each of these assets are set out in table 2 and table 3.

#### TABLE 2 UNDERGROUND CABLE: POPULATION BY VOLTAGE (KM)

CABLE VOLTAGE	LENGTH
≤ 1kV	666
> 1kV and $\leq$ 11 kV	1,460
> 11kV and $\leq$ 22kV	112
> 33kV and ≤ 66kV	79
Total	2,317

# TABLE 3 CABLE PIT, PILLAR AND ELECTROLYSIS CABLE SYSTEM: POPULATION

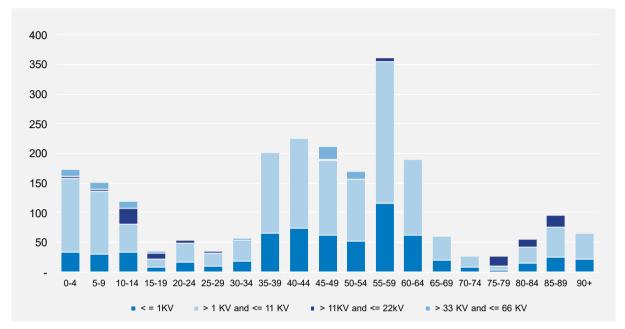
ASSET TYPE	VOLUME
HV pits	1,153
LV pits	26,393
LV pillars	682
Electrolysis cable system	21
Total	28,249

# 2.3 Asset age profile

The age profile of our underground cable population is shown in figure 1.

The expected service life for these cables is around 70-years, noting that while we do not replace underground cable based on age, the service life is the expected period of time after which the asset is unlikely to be fit for purpose (typically determined by safety, technology obsolescence and the least cost/most economic time to replace the asset).

We do not have age records for our pits, pillars and electrolysis cable systems.



## FIGURE 1 UNDERGROUND CABLE: AGE PROFILE BY MATERIAL TYPE (KM)

# 3. Identified need

The performance of our cable systems may impact our network service level as failures may lead to a loss of supply for customers, pose safety risks to our personnel and the public, start fires (for above ground terminated cables), and/or pollute the environment with an oil leak from oil insulated cable.

The identified need, therefore, is to manage our cable asset class to maintain reliability and minimise safety risks as far as practicable, consistent with our regulatory and legislative obligations.

The large volume of our cable systems population, and its underlying condition and age profile, is also driving the need to consider whether current intervention volumes will allow us to continue to prudently manage deliverability and safety factors over time.

This section outlines the historical performance and condition of our underground cable systems, which has informed how we assess (and respond, as required to) this identified need.

# 3.1 Historical asset performance

In assessing the need to intervene on our underground cable assets, we monitor several performance indicators. These include:

- · failures, which are functional failures that occur while the asset is in service
- high priority defects, which can indicate deteriorating asset condition and are leading indicators of future asset failures.

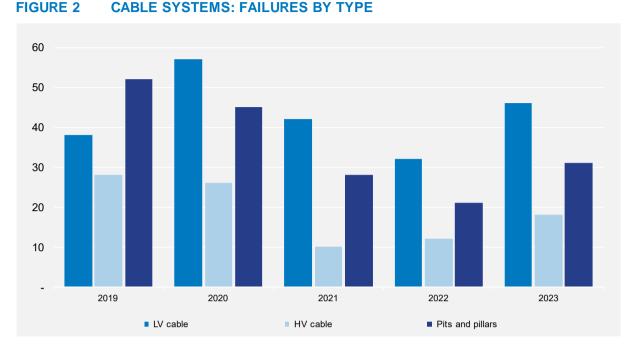
We capture historical asset failures and defects for our LV and HV cables, and pits and pillars.

# 3.1.1 Historical asset failures

As shown in figure 2, failures of all cable system types exhibited the same decreasing trend from 2020 to 2022, followed by an increase in 2023. The consistency of this trend across all cable system types is consistent with the lower demand (and therefore lower thermal loading) in the Melbourne's CBD through the pandemic.<sup>1</sup>

Failures of legacy HV cable metallic box termination have also occurred recently, with these recorded as HV cable failures. These pitch-filled metallic box terminations fail catastrophically and scatter molten pitch and metal fragments over a large area. As these metallic box terminations are typically located on poles in populated areas, their failures pose a safety risk to the public.

The majority of our underground cable is located in Melbourne central business district (CBD).



# 3.1.2 Historical asset defects

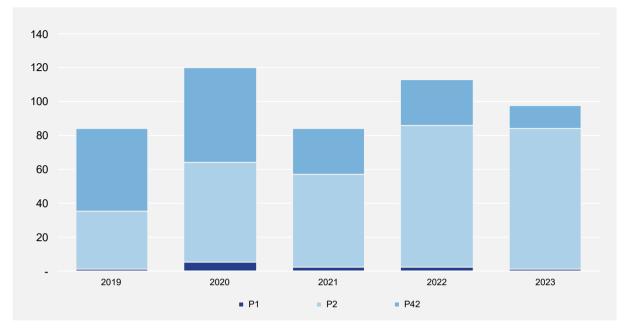
Our response to identified defects depends on the nature and severity of the defect. High priority defects that result in intervention are shown in table 4.

#### TABLE 4 RESPONSE TIMEFRAMES FOR HIGH PRIORITY DEFECTS

P1	Make safe within 24 hours of identification (replacements or repairs can occur beyond the initial 24 hours)
P42	Addressed within 42 days of identification
P2	Addressed within 32 weeks of identification

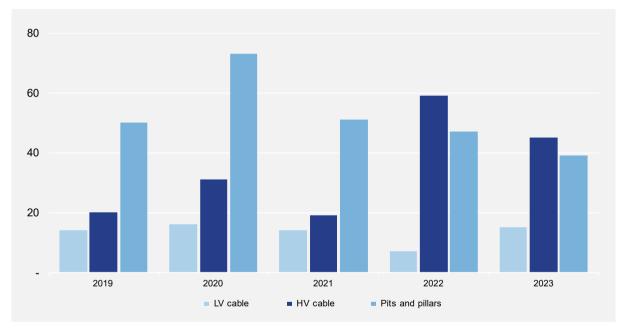
As shown in figure 3, the number of high priority cable system defects has increased from 2019. The majority of these are P2 defects.

Figure 4 highlights that the driver of the increase in defects is predominately our HV cable assets. These defects reflect online partial discharge testing that enables the monitoring of energised cables to identify any insulation breakdown in cables, cable joints and terminations that can lead to asset failure. The defects identified from online partial discharge testing are consistent with the deteriorated condition of some of our higher risk HV cables.



#### FIGURE 3 CABLE SYSTEMS: HIGH PRIORITY DEFECTS



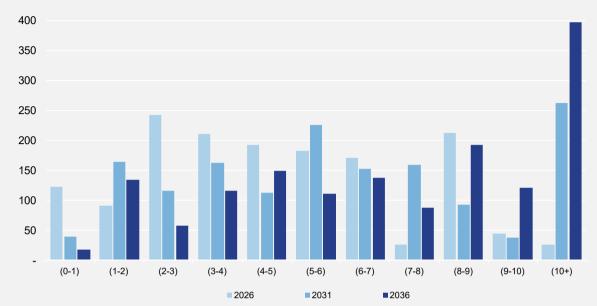


# 3.2 Asset condition

The condition of our underground cable is also an important factor in considering the extent of the need to maintain the safety and reliability of our network for customers. For our HV cable, condition is represented by the health index derived in our condition-based risk management (CBRM) model.<sup>2</sup>

The predicted health index profile for 2026, 2031 and 2036 is set out in figure 5. A health index of seven or higher is considered higher risk, indicating that the asset has reached a point where there is a high chance of failure.

<sup>&</sup>lt;sup>2</sup> We do not have health indices for of our sub-transmission and LV cables.



As shown in table 5, the proportion of assets with a higher-risk asset condition rating is increasing. This deterioration in condition, coupled with the characteristics of our HV cable population and low current level of replacements (e.g. annual replacement volumes have only averaged around 5km), supports the need to assess the prudency of moving toward more sustainable intervention volumes.

# TABLE 5 PROPORTION OF HIGHER-RISK UNDERGROUND CABLE

YEAR	POPULATION (KM)	<b>POPULATION (%)</b>
Higher-risk cable: 2026	308	20%
Higher-risk cable: 2031	550	36%
Higher-risk cable: 2036	798	52%

# 3.3 Demand growth

By 2031, the electrification of everything from homes to transport, along with ongoing population growth, will require our energy system to evolve. In particular, we forecast that peak demand across our network in 2031 will be 7 per cent higher than it is today.

Growth in demand increases the energy that would not be supplied to customers if our underground cable systems fail.

We forecast demand at an asset level. Our risk modelling uses these asset level demand forecasts to accurately evaluate the energy at risk of not being supplied to customers downstream of specific assets.

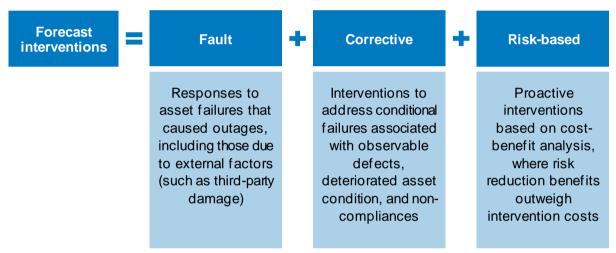
# FIGURE 5 HV CABLE: HEALTH INDEX PROFILE

# 4. Forecast interventions

Our current asset management approach for underground cable systems includes a balance of condition monitoring (such as online partial discharge monitoring), reactive repairs or replacements, and targeted risk-based replacement programs. For repairs, this typically entails cutting and replacing part of the cable with cable joints. Complete cable replacement, however, will eventually be required due to economic or technical drivers (e.g. where multiple cable sections are deteriorated, it may be prudent and efficient to replace the entire length).

Consistent with this approach, the derivation of forecast interventions for the 2026–31 regulatory period for our underground cable systems is based on three broad categories—faults, corrective and risk-based forecasts. This approach is summarised in figure 6.

# FIGURE 6 FORECAST CATEGORIES



# 4.1 Forecast volumes

For the 2026–31 regulatory period, a summary of forecast volumes for our underground cable systems is shown below. As this asset class comprises a mix of lengths and units, these are shown separately in table 6 and table 7 respectively.

In total, our forecast intervention volumes (on a per kilometre basis) represent a step-down on those completed in the 2021–26 regulatory period.

# TABLE 6 UNDERGROUND CABLE SYSTEMS: VOLUMES (KM)

VOLUMES	FY27	FY28	FY29	FY30	FY31	TOTAL
Corrective cable: LV	1.2	1.2	1.2	1.2	1.2	6.0
Corrective cable: HV	1.6	1.6	1.6	1.6	1.6	8.0
Risk-based: HV cable	0.7	0.7	0.7	0.7	0.7	3.4
Underground pits and pillars	0.2	0.2	0.2	0.2	0.2	0.9
Total	3.6	3.6	3.6	3.6	3.6	18.2

# TABLE 7 UNDERGROUND CABLE SYSTEMS: VOLUMES (UNITS)

VOLUMES	FY27	FY28	FY29	FY30	FY31	TOTAL
Corrective cable: HV	4	4	4	4	4	20
Risk-based: HV cabus boxes	17	17	17	17	17	85
Underground pits and pillars	53	55	58	60	63	289
Total	74	76	79	81	84	394

# 4.1.1 Fault and corrective forecasts

Given the random nature of underground cable failures, including the variable length of any corresponding cable replacements, our fault and corrective forecasts for underground cable systems are based on a simple average over the previous five-year period.

# 4.1.2 Risk-based forecast

Our underground cable systems forecast includes the continuation of two risk-based programs that are underway today, with further detail on each set out in appendix A and B. These programs include:

- HV cable risk-based replacement program
- HV cable legacy metallic box termination replacement program (i.e. HV cabus boxes).

Broadly, our risk assessments are underpinned by the monetisation approach shown in figure 7, which is consistent with the AER's asset replacement planning industry practice application note.<sup>3</sup>

The application of this approach for both programs compares the replacement costs with the risks of failure for each cable section. Only deteriorated cable sections with positive net present values (NPV), where risk reductions outweigh the costs, are included in our forecast. This ensures we only invest in replacements that are prudent and efficient that provide benefits to customers.

<sup>&</sup>lt;sup>3</sup> AER, Asset replacement planning industry practice application note, July 2024.

## FIGURE 7 RISK MONETISATION APPROACH



#### Probability of failure

The annual cable section probability of failure was derived from our cable CBRM model. Our CBRM model enables informed asset management decisions by using current asset information and experience to predict future asset condition, performance and risk.

Specifically, the probability of failure is derived from the cable section health index in the CBRM.

Notably, as cable failures typically occur at cable joints, increasing the number of cable joints will introduce additional points of potential failure and hence, increase the cable failure rate.

#### **Consequence of failure**

Our approach to monetising risk compares the total cost (including risk) of technically feasible options. The preferred option(s) is that which provides the maximum benefit compared to costs. Figure 8 shows an overview of how we determine the total cost of each option. It identifies the most beneficial solution to manage the cable section, based on the identified failure modes for an asset, and the corresponding likelihoods and consequences of failures.

## FIGURE 8 OPTION RISK COST CALCULATION



The determination of these consequences is summarised below:

- network performance risk (energy at risk) is determined based on forecast demand and historical average outage duration for a cable fault. The value of energy at risk is based on the AER's determined value of customer reliability, and the likelihood of energy at risk is 100 per cent upon cable failure (except for ring cable networks, where energy at risk will be avoided as there is alternate supply path)
- safety risks to our staff or member of the public are determined based on the likelihood of a person present when the failure occurs, and the likelihood of an injury or death as a result. These risks are valued using disproportionate factors and the value of a statistical life
- financial risks comprise unplanned replacement and unplanned repair impacts respectively, however, as cable system replacement is typically the only credible response to catastrophic failure (i.e. as the extent of the damage may not be repairable), the likelihood of unplanned cable replacement is typically 100 per cent. Unplanned cable replacement costs are based on historical replacement costs
- environmental risk represents the likelihood of an event whereby the environment is damaged due an event such as the loss of oil, fire, waste and disturbance.

# 4.1.3 Top-down portfolio review

As part of challenging our underground cable system intervention forecast, we considered the overall driver of our forecast interventions. The primary uplift relative to historical performance is the impact from our risk-based programs. These risk-based programs have targeted identified needs, and clear benefits cases.

As a further top-down consideration, we assessed our forecast relative to the implied age of replacement and the expected service life our population:

- our annual forecast replacement rate equates to 0.2 per cent of our total cable population. This
  implies that on average, our underground cables will need to last over 630 years before we
  replace them. While we do not replace cables based on age, this suggests our forecast
  replacement volumes are likely 'no regrets' investments
- our condition-based modelling suggests that a significant volume of underground cable will be beyond their expected service life in the current and future regulatory periods. Again, while we do not replace cables based on age, it supports the view that our forecast investment levels are not unreasonable.

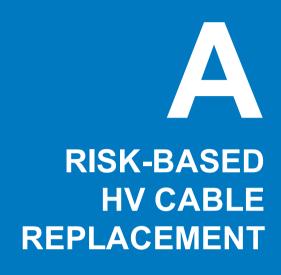
# 4.2 Expenditure forecast

To develop expenditure forecasts for our underground cable systems, we have multiplied the forecast intervention volumes by observed unit rates for different cable types.

Table 8**Error! Reference source not found.** summarises this expenditure forecast for the 2026–31 regulatory period.

EXPENDITURE	FY27	FY28	FY29	FY30	FY31	TOTAL
Corrective cable: LV	0.9	0.9	0.9	0.9	0.9	4.7
Corrective cable: HV	5.3	5.3	5.3	5.3	5.3	26.7
Risk-based: HV cable	1.6	1.6	1.6	1.6	1.6	8.1
Risk-based: HV cabus boxes	2.1	2.1	2.1	2.1	2.1	10.4
Underground pits and pillars	2.7	2.7	2.7	2.8	2.8	13.7
Total	12.7	12.7	12.7	12.7	12.8	63.6

# TABLE 8 UNDERGROUND CABLE SYSTEMS: EXPENDITURE (\$M, 2026)



# A Risk-based HV cable replacements

Historically, the majority of our underground cable replacements have been driven solely by interventions following failures or defect. However, in 2021 we established a risk-based program targeting HV cables.

The condition assessment program comprises undertaking on-line partial discharge survey of all sections of a feeder identified as poor performing. The online program will typically assess three to four feeders and approximately 120 sections of cable in total.

# A.1 Identified need

Our underground cable systems asset class comprises over 2,300km of underground cable.

As outlined in section 3.2, the proportion of our underground cable assets with a higher-risk asset condition rating is increasing—in the absence of any intervention by 2031, 36 per cent of our underground cable population (i.e. approximately 550km) is forecast to have a health index rating exceeding seven by 2031.

Further, around 220km of our underground cables are highly aged—that is, greater than 80 years old—with 73 per cent of these being HV cables.

In comparison, our recent average cable replacement volumes have been around 5km per annum.

As our cable population continues to deteriorate, and current intervention levels remain low, it is likely that HV cable failures and defects will grow. In this context, the identified need is to prudently and sustainably manage the risks (including reliability and safety) associated with HV cable failure risks.

# A.2 Options considered

Table 9 lists all the potential credible options considered to meet the identified need associated with our HV underground cable population. These options include a mix of proactive risk-based replacements of individual cable sections, as well as monitoring high risk sections using partial discharge tests.<sup>4</sup>

To assess these options, we applied the methodology outlined in section 4.1.2 and compared the net benefits of each option relative to the do-nothing base (i.e. option one). Table 10 shows the results of this option evaluation, with further detail in our attached model.<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> Partial discharge testing is method used for assessing the insulation condition of HV assets.

<sup>&</sup>lt;sup>5</sup> CP MOD 4.14 - HV underground cables - Jan2025 - Public

## TABLE 9 POTENTIAL CREDIBLE OPTIONS

#### **OPTION DESCRIPTION**

#### 1 **Do nothing different**

Maintain our existing maintenance program with rectification upon asset failure; this would lead to increasing safety and reliability risks

#### 2 Replace the five highest-risk cable sections

Replacement of the five highest risk cable sections (approximately 1.8km), based on our CBRM

#### 3 Replace the 10 highest-risk cable sections

Replacement of the 10 highest risk cable sections (approximately 3.4km), based on our CBRM

# 4 Monitor the 30 highest-risk cable sections, and replace those with high partial discharge

This option entails installing partial discharge monitoring equipment on the 30 highest risk cable sections (approximately 9.1km), based on our CBRM. Replacement would only be triggered if significant cable degradation is shown—estimated as 10 per cent of these cables

# 5 Replace the five highest-risk cable sections, and monitor the next 10 highest-risk cable sections

This option entails the replacement of the five highest risk cable sections, based on our CBRM. In addition, partial discharge monitoring equipment would be installed on the next 10 highest risk cables, with replacement only triggered where significant cable degradation is shown

## TABLE 10OPTION EVALUATION: RELATIVE TO BASE CASE (\$M, 2026)

OF	TION	PV COST	PV BENEFITS	NET BENEFITS
2	Replace the five highest-risk cable sections	2.0	2.7	0.7
3	Replace the 10 highest-risk cable sections	3.8	4.9	1.1
4	Monitor and replace those with high partial discharge	5.9	3.5	-2.4
5	Replace and further monitor for partial discharge	3.8	3.8	-0.0

# A.3 Preferred option

Consistent with our economic modelling, the preferred option is to replace the 10 highest-risk cable sections based on our CBRM (i.e. option three). This option meets the identified need, and provides the highest net economic benefits to our customers.

Sensitivity analysis was also used to test the robustness of our preferred option to potential downside scenarios (e.g. higher costs and/or lower benefits). We have (conservatively) not assessed upside scenarios, such as increased energy at risk driven by faster than expected uptake of electrification or the valuation of this energy based on revised VCRs (noting the residential nature of these loads), as it would only increase the NPV and program.

Our preferred option remained economic under these sensitivities.

A summary of the proposed costs for the preferred option are set out in table 11.

# TABLE 11PREFERRED OPTION: EXPENDITURE (\$M, 2026)

EXPENDITURE	FY27	FY28	FY29	FY30	FY31	TOTAL
Risk-based: HV cable	1.6	1.6	1.6	1.6	1.6	8.1

# HV CABLE METALLIC BOX TERMINATIONS

# **B** HV cable metallic box terminations

HV cable pitch-filled metallic box terminations were installed between 1950 and the early 1980s. We have approximately 170 of these legacy metallic box terminations remaining on our network, as most of these have been opportunistically replaced since 1998.

Of the remaining population, approximately three per cent are failing annually due to moisture ingress. We have also recently experienced catastrophic failures of these terminations, where molten pitch and metal fragments were scattered up to 50m and damaged vehicles (as shown in figure 9).

Our experience of catastrophic failure of this asset type is consistent with broader industry experience, and our peers have already replaced these metallic box terminations.

## FIGURE 9 FAILED BOX TERMINATION AND PITCH SPLATTER FROM FAILURE





# **B.1** Identified need

These pitch-filled metallic box terminations pose a safety risk to the public as they are typically located on poles in populated areas of high pedestrian and vehicular traffic, and close to private property. It can also cause damage to property and vehicles.

The failures of these metallic box terminations can also result in long outages. This is due to the complexity of the replacements, which may include making the area safe where the failure has occurred, establishing traffic management and work zones, excavating to join a new cable and remove the failed termination and cable, and replacing damaged adjacent assets such as insulators.

We have an obligation to maintain reliability and minimise safety risks as far as practicable, and hence, there is a need to address the safety and reliability risks posed by these legacy pitch-filled metallic box terminations.

# **B.2** Options considered

Table 9 lists all the potential credible options considered to maintain reliability and minimise safety risks as far as practicable.

Repair options were also considered, but the nature of these failures mean that repairs are highly unlikely to be possible or practicable.

# TABLE 12 POTENTIAL CREDIBLE OPTIONS

#### **OPTION DESCRIPTION**

#### 1 **Do nothing different**

Maintain our existing opportunistic approach of replacement upon asset failure. This option applies a 3.0 per cent failure rate for these pitch-filled metallic box terminations, consistent with annual historical failures

#### 2 Inspect and replace by priority over seven years

This option reflects a prioritised replacement program over a seven-year period, based on asset condition and risk assessments. To determine the condition and risk of the cable termination box, online partial discharge measurement and visual inspection of the cable termination box would be undertaken. This prioritisation of asset replacement is expected to reduce the annual failure rate to 2.0 per cent of unreplaced assets

#### 3 **Replace over seven years with no prioritisation**

This option reflects a prioritised replacement program over a seven-year period, but unlike option two, there is no prioritisation based on asset condition and risk. As the replacement is not focused on assets most likely to fail, the failure rate is the same as the annual historical failure rate

#### 4 Inspect and replace by priority over 10 years

This option is consistent with option two, however, the replacement program is undertaken over a 10-year period

# 5 **Replace over 10 years with no prioritisation**

This option is consistent with option three, however, the replacement program is undertaken over a 10-year period

To assess these options, we applied the methodology outlined in section 4.1.2 and compared the net benefits of each option relative to the do-nothing base (i.e. option one). Table 13 shows the results of this option evaluation, with further detail in our attached model.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> CP MOD 4.15 - metal box terminations - Jan2025 – Public.

## TABLE 13 OPTION EVALUATION: RELATIVE TO BASE CASE (\$M, 2026)

OPTION		PV COST	PV BENEFITS	NET BENEFITS
2	Inspect and replace by priority over seven years	8.9	17.2	8.3
3	Replace over seven years with no prioritisation	8.9	13.7	4.8
4	Inspect and replace by priority over 10 years	8.0	13.7	5.7
5	Replace over 10 years with no prioritisation	8.0	11.6	3.5

# **B.3 Preferred option**

As shown above, option two—a prioritised, seven-year replacement program—provides the greatest benefit to our customers. A prioritised program allows for a structured and managed approach that seeks to minimise risk, particularly safety, by targeting the most at-risk assets first.

Our preferred option, however, is to deliver a prioritised program over a 10-year period. That is, our preferred option is option four. This timeframe will provide greater flexibility in delivery, and lower up-front capital costs to customers in the short-term (relative to a faster program).

Under option four, we will replace a total of 85 of the remaining pitch-filled metallic box terminations in the 2026–31 regulatory period.

Sensitivity analysis was also used to test the robustness of our preferred option to potential downside scenarios (e.g. higher costs and/or lower benefits). We have (conservatively) not assessed upside scenarios, such as increased energy at risk driven by faster than expected uptake of electrification or escalating failure rates), as it would only increase the NPV and program.

Our preferred option remained economic under these sensitivities.

A summary of the proposed costs for the preferred option are set out in table 11.

#### TABLE 14PREFERRED OPTION: EXPENDITURE (\$M, 2026)

EXPENDITURE	FY27	FY28	FY29	FY30	FY31	TOTAL
Risk-based: HV cabus boxes	2.1	2.1	2.1	2.1	2.1	10.4



For further information visit:

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