Development and Delivery Plan

Draft Development and Delivery Plan for Consultation

Executive Summary

This Development and Delivery Plan (DDP) is an essential component in continuing to improve The Lines Company's (TLC) asset management practices and processes, ultimately resulting in a better customer experience for TLC's network customers through improved reliability at the lowest life cycle cost.

For regulatory years (RY) 2018, 2019 and 2020 TLC contravened the quality requirements of the second Default Price Quality Path (DPP) determination and following investigation by the Commerce Commission (Commission) entered into a settlement agreement with the Commission which included a set of Enforceable Undertakings (EU), which required us to undertake an Independent Engineering Review (IER) and complete this DDP to implement appropriate recommendations from the DDP.

Not meeting quality standards for our customers is something we take seriously and although we started initiating improvements seven years ago it was too late to have an impact on these breaches as it takes time for improvements to roll through. Over the past four years we have seen an improvement in our reliability of supply with TLC significantly improving its asset management practices and processes in parallel with an increased level of investment into the network. It is recognised that there are further improvements to be made and this DDP assists in delivering those.

Completing the initiatives identified in this DDP will bring us to a maturity level identified as part of the Independent Engineering Review completed as part of the EUs, bringing us further into line with the internationally recognised standard on asset management, ISO55001. This will in turn improve our management of risk and opportunity leading to a safer, more reliable, sustainable, more affordable network over time.

The operational cost (OPEX) for the implementation of this DDP is estimated to be $1.5m and the capital cost (CAPEX) is estimated to be $3.5m, all of which is already included within budgeted allowances. OPEX cost is made up of budgeted cost for staff and contractors and CAPEX is mainly due to the procurement of additional transformers to reduce the risk of long term outages. The total cost equates to $2.43 per month to the average customer's monthly electricity bill for the four year period of implementation.

The DDP takes the 75 recommendations from the IER and consolidates them into 29 initiatives, which are in turn aligned with 10 of the 21 elements of our existing asset management system. These 29 initiatives will be delivered over a period of four regulatory years (RY).

Reports on progress against planned initiatives will be published by 31 August following the completion of a RY and will note completed initiatives, deviations from plan, and remedial activity required to bring the delivery back on track and the costs associated with delivery.

At the completion of the four year programme to implement these initiatives we will complete an assessment of our asset management maturity using the same standard applied in the IER, with our expectation that we will meet or exceed the standard if we have successfully delivered the 29 initiatives identified in this DDP.

Background

The Lines Company is an Electricity Distribution Business (EDB) that is subject to price/quality regulation by the Commerce Commission under Part 4 of the Commerce Act.

The requirements of that price/quality regulation are set every five years and are known as a Default Price/Quality Path (DPP). Between 1 April 2015 and 31 March 2020 TLC was subject to the requirements of DPP2.

During that period TLC was required to meet two limits in relation to its quality of supply to customers.

- For any two out of three years
  - The average duration of interruptions to supply to customers per annum (SAIDI) was to be less than 234.18 minutes
  - The average number of interruptions to supply to customers per annum (SAIFI) was to be less than 3.47 interruptions

TLC exceeded one or both of those limits for regulatory years[1] 2018, 2019 and 2020. Following the non-compliance the Commission undertook an investigation into the causes of the exceedances.

The Commission found that TLC contravened the quality requirements set out in DPP2, and as a settlement for the contravention, TLC entered into a set of EUs with the Commission.

The key elements of the EUs required TLC to:

1. Undertake an Independent Engineering Review[2] (IER) into our asset management practices and processes.
2. Build a Development and Delivery Plan (DDP) to address recommendations and findings from the independent engineering review where appropriate.
3. Implement the items in the DDP
4. Report on progress against the DDP annually.

This document is the Development and Delivery Plan identified in 2. above.

[1] Regulatory years run from 1 April to 31 March, e.g. RY18 is 1 April 2017 to 31 March 2018.
[2] https://www.thelinescompany.co.nz/disclosures/ Enforceable Undertakings

Why we are creating a DDP

In 2017, significant changes in the governance and leadership at TLC occurred. As a result of those changes a refreshed approach to asset management was also developed, modernising the approach to managing assets and updating the systems and processes that supported them. This resulted in a step change in investment in the network going forward.

Over the past seven years, TLC has made significant progress in improving its asset management maturity[3], the level of investment in the network, and as a result the overall performance of the network. These items contribute to a more positive customer experience overall.

TLC acknowledges this DDP is a requirement of the EUs in place with the Commission and as such we have a legal obligation to deliver on it, however we also acknowledge we have further improvements to make in the efficiency and effectiveness of our asset management practices and processes. Therefore, we see this DDP as an opportunity to place additional focus and resource into supporting these improvements.

How this DDP will add value to our customers

Our purpose as a company is "Growing Communities with Energy" and as such safe, reliable, affordable and sustainable electricity supply is essential to the wellbeing of our region. Our wider stakeholders include our customers, our shareholders and our community.

On behalf of those stakeholders we are custodians of an electricity network with a book value of around $300m. Our role is to make sure the network meets the needs of today's customers and ensuring it is fit for purpose in the future. Key considerations for ensuring the network are developed for the future include the impact of load growth due to decarbonisation, the increasing effects of weather events due to climate change, and the uptake of distributed energy resources (DER) such as solar and batteries by our customers.

With our approach to operating a safe network, the balancing act we need to achieve is best represented by the World Energy Council's Energy Trilemma[4] which encompasses Energy Security (reliability), Energy Equity (affordability) and Environmental Sustainability.

Our approach over the past seven years has been to align our asset management processes and practices with the internationally recognised standard for asset management, ISO55001. This standard provides a framework that is used globally for the management of long life infrastructure such as electricity networks. It is designed in such a way as to balance the requirements of today with those of the future at the lowest life cycle cost.

Implementing the initiatives in this DDP will more closely align us with the requirements of ISO55001 and therefore improve our management of risk and opportunity. This will lead to a safer, more reliable, sustainable, more cost effective network for our customers over the long term.

[3] Refer AMMAT assessment in Information Disclosure Schedule 13 for RYs 17-24
[4] https://www.worldenergy.org/transition-toolkit/world-energy-trilemma-framework

How we've considered feedback in preparing this DDP

This DDP is open for feedback from our stakeholders on the TLC website from 20 September 2024 to 20 October 2024.

We held a specific engagement session with the Trustees of our shareholder, Waitomo Energy Services Customer Trust (WESCT), and will have five sessions with residential, business and council representatives of our Customer Advisory Panel (CAP) through this period.

The feedback is supported by a consultation document[5], which drew out the key themes and requested submitters to complete a short survey, with the opportunity to provide additional feedback on the DDP.

[DRAFTING NOTE: This section to be updated following completion of consultation]

[5] https://www.thelinescompany.co.nz/site/uploads/2024/09/Consultation-Document-Enforceable-Undertaking-final-for-web-email.pdf

What it will cost to implement this DDP

Under our EU agreement with the Commission we are required to forecast the costs of implementation and report on them at the end of each RY.

Many of the initiatives identified in this DDP were already planned for implementation and as such have already been budgeted for, and therefore included in our costs and revenue allowances going forward into DPP4. Where this is not the case, we will manage the cost of implementation within our existing budgets by substitution.

Where the spend is operational expenditure the cost is largely related to the time required by our existing team members to implement the initiatives. In the case of capital expenditure there is a mixture of external cost and internal time.

Our forecast cost of this DDP is $1.5m OPEX and $3.5m CAPEX in total over the four year implementation period. This is broken down as follows:

	Total	Cost per customer per month[6]
Operational Expenditure		
Already Budgeted and no additional cost to customer	$1.5m	$2.05
Capital Expenditure		
Already Budgeted and no additional cost to customer	$3.5m	$0.39

We will track the costs associated with implementation of the DDP on a year by year basis. Due to the range of initiatives being covered in any one year we do not believe the overhead in accounting for time at an initiative level will provide any additional insight or improvement in the end result.

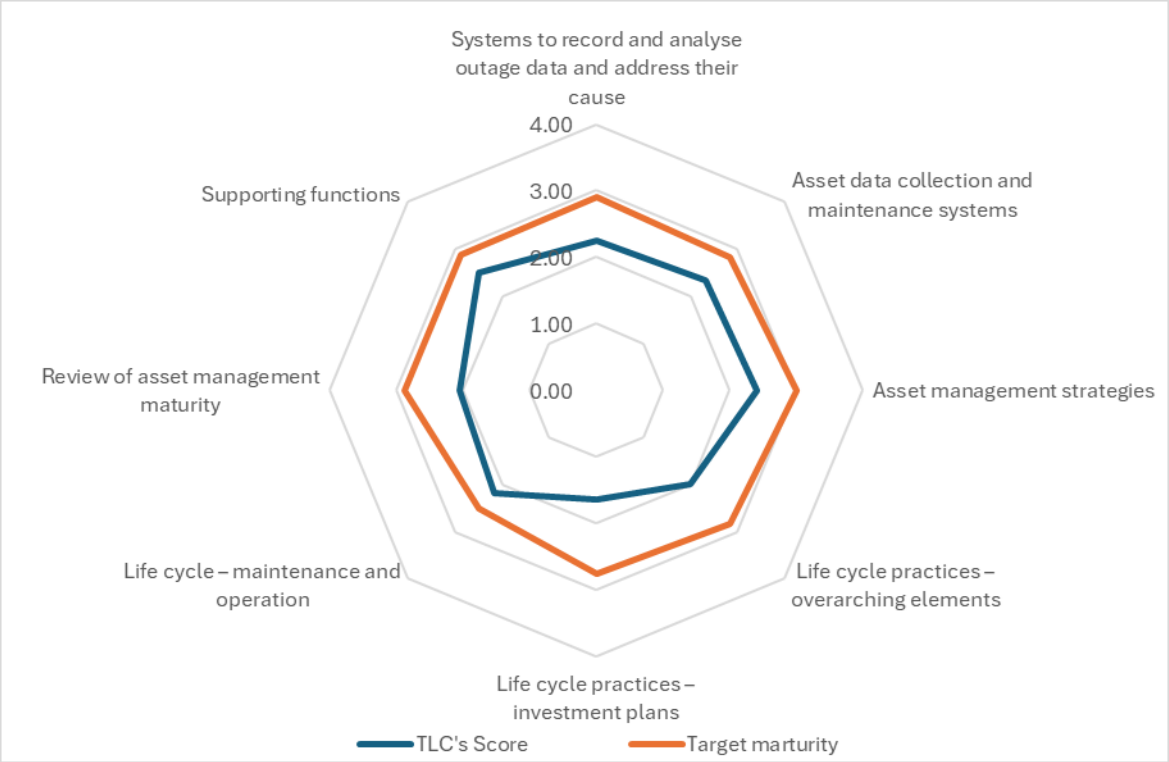
Due to the many variables associated with asset management and the subjective nature of any assessment we have not attempted to quantify the value this DDP in terms of dollars. What the DDP and improvement in the asset management framework maturity will do however is assisting with improving customer experience through the reduction of outages and focusing the expenditure in the right areas at the best possible time.

[6] Over the four year DDP implementation period

How we'll measure our success

Based on the ISO55001 standard, the IER recommended an appropriate level of asset management maturity across a range of elements based on TLC's size and structure.

The radar chart below shows the current level of asset management maturity and the targets as recommended by the IER.



Assessment of TLC's current and target maturity against our Asset Management Standard

At the completion of the four year programme to implement the initiatives identified in this DDP, we will complete another external assessment of our asset management maturity against the same standard. We expect to be at or above the recommended level of asset management maturity in the IER.

How we'll report on progress

We will report progress on each of the initiatives identified for that RY.

A detailed report will note which initiatives have been successfully completed, where there are deviations from the plan and how they will be remediated and the costs associated with delivery over the year.

A summary report will also be compiled that communicates our progress against the initiatives with our stakeholders.

This summary report will report against the twenty nine initiatives representing all the recommendations.

These reports will be available on our website no later than 31 August following the completion of the relevant RY.

How we have structured this DDP

The IER identified 75 individual recommendations for consideration across a range of asset management areas. Following our review of these recommendations, we believe all of them should be implemented over the coming four years.

There is a high degree of overlap and interdependency between the 75 recommendations, so in structuring this DDP, we have consolidated these into 29 individual initiatives that will address these recommendations. These initiatives have then been aligned with 10 of the existing 21 components in our asset management system, demonstrating the link back into and the improvement of our existing asset management system.

The initiatives are scheduled to be delivered over four regulatory years and the detail of this DDP is structured as such.

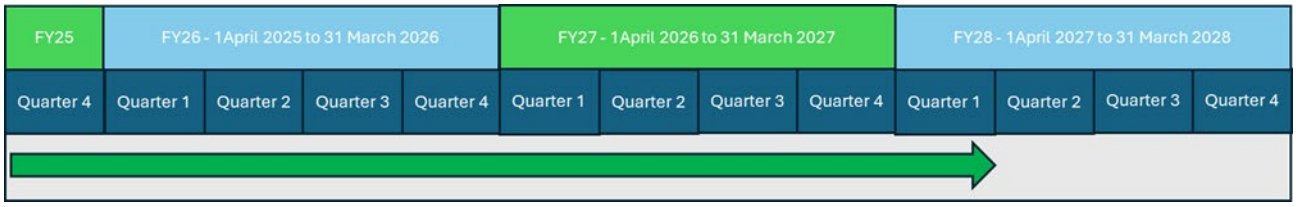
Cost

We expect the cost of the recommendations identified below will be $1.5m OPEX and $3.5m CAPEX overall. These costs are already contained with existing operational or capital budgets, meaning there is no additional cost incurred by the company in delivering them. There will be some re-prioritisation of other work programmes to ensure these are delivered as scheduled. The capital cost is mainly associated with the procurement of spare power transformers for substations and a smaller amount allocated to the initial activity in preparing for the implementation of an Advanced Distribution Management System (ADMS). Many of the improvement initiatives will change how our teams go about their daily tasks and our aim is not to add additional ongoing cost to the business.

Improvement Initiatives per Asset Management Framework Element

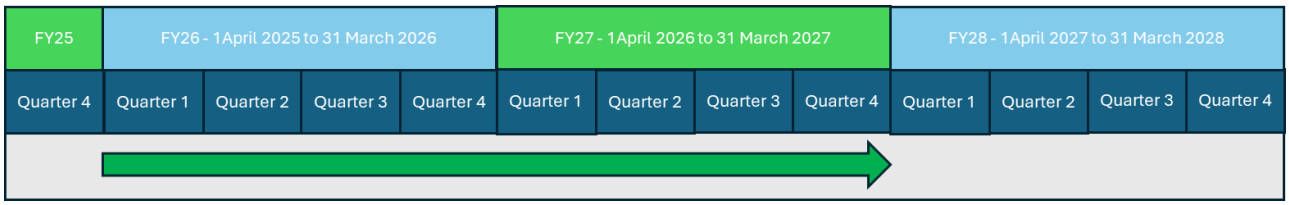
The 29 initiatives were grouped under 10 of the 21 existing elements in our Asset Management Framework. Below is the list of the 29 initiatives, the expected outcomes and the timeframe over which these initiatives will be developed and implemented.

1. People



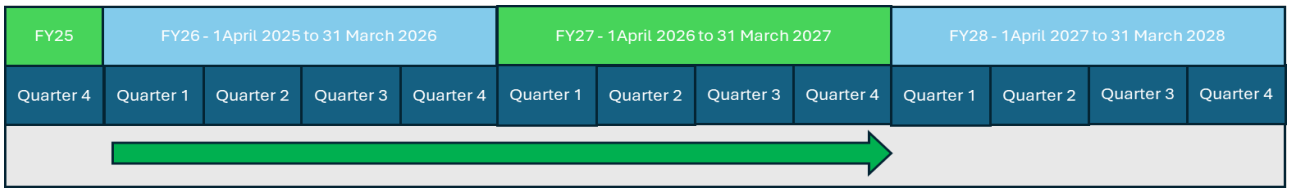
No	Initiatives	Outcome	Completion
1	Key people risk	Systems and processes are documented allowing consistent application with changes in staff.	Q1 FY28
2	Resourcing strategy	The organisation has formally identified the skills and resources it needs to operate in the current and future operating environments.	Q4 FY26
3	Competency framework	The organisation is tracking current qualifications and competencies of TLC staff in line with common industry practice.	Q2 FY27
4	AM system training	Structured, role dependent asset management training is undertaken by employees enabling a better understanding of the complete Asset Management System and participation in continuous improvement reviews	Q2 FY27

2. Asset Management System



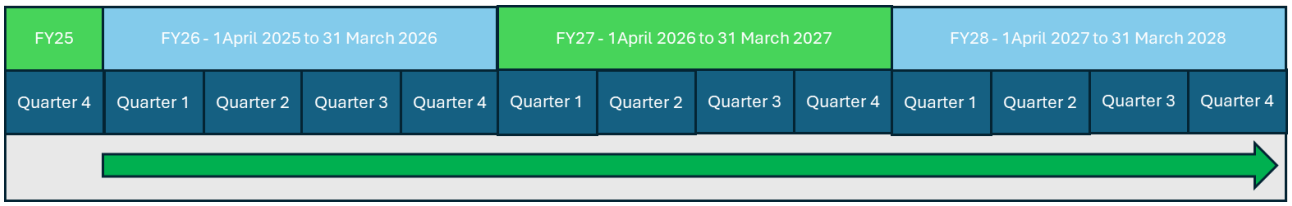
No	Initiatives	Outcome	Completion
5	AM System Improvement Plan	Continuous improvement of the Asset Management System is an ongoing part of our day-to-day business.	Q4 FY26
6	AM system improvement reporting	Improvements identified are implemented in a timely manner, ensuring Governance oversight of improvements.	Q2 FY27
7	AM System Improvements	Broader alignment with ISO 55001 is achieved in line with overall company strategy. Clarity and consistency of approach on the AMS is visible to the team.	Q4 FY27

3. Risk Management



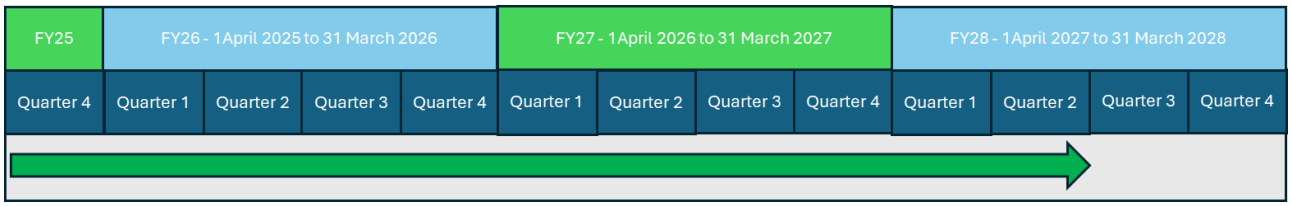
No	Initiatives	Outcome	Completion
8	Investment criticality framework	Risk and criticality related to reliability is consistently factored into expenditure planning. Consistent approach to criticality assessment results in consistent, repeatable prioritisation.	Q4 FY27
9	Resilience roadmap	Target level of resilience is identified in our resilience strategy with appropriate consideration of risk/cost/value to customers. Our overall approach to resilience is linked across assets and operations, informing our future investment decisions.	Q4 FY26
10	Vegetation risk database	Vegetation management works consider risk when plans are being developed. There will be clear alignment and linkage between our AM objectives and the level of spend associated with vegetation.	Q4 FY26

4. Asset Performance



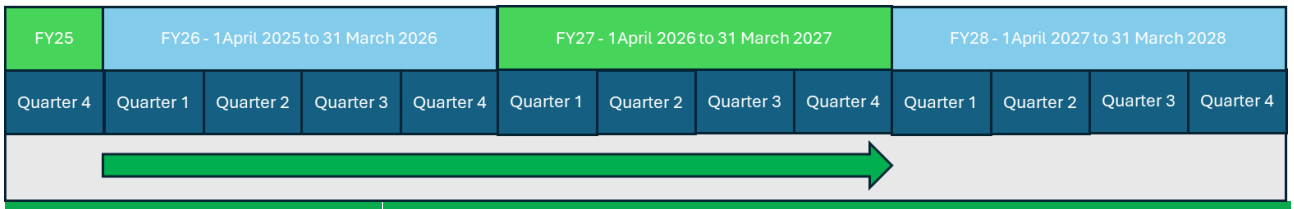
No	Initiatives	Outcome	Completion
11	Reliability data "line of site" to AM plans	Over time our reliability performance has improved as our analysis of reliability data better informs our investment in vegetation and asset management.	Q4 FY27
12	Review security of supply standards	Future investment has improved the security of zone substations, quantifying the value to customers from the improved security.	Q4 FY28
13	Review feeder standards	The security of feeders through investment has improved the value to customers.	Q4 FY28
14	Automation analysis	Planned investment in network automation has added value to customers from the improved reliability.	Q4 FY27

5. Asset Fleet Management



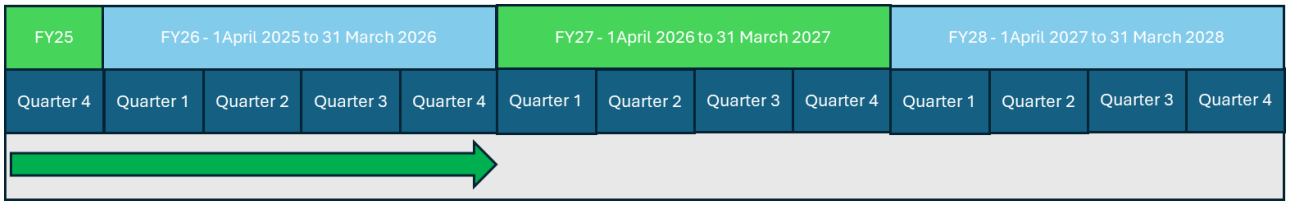
No	Initiatives	Outcome	Completion
15	Fleet plan development	Unplanned outages reduce over time through the improved consideration of criticality and risk in fleet plans. Asset risk models and systems are developed following a systematic approach to forecasting expenditure timing. Proposed investment decisions in Asset fleet plans are linked to the FMEA, resulting in improved reliability over time. A cost/benefit analysis for each inspection standard ensures there is an appropriate level of benefit of proactive inspections. A risk-based assessment of the quantity and types of transformers to be held as spares, procured and results implemented.	Q2 FY28
16	Fault data improvement	Analysis of faults and their associated causes are more efficient and targeted. Fault locations are directly linked to an outage, improving trend analysis.	Q3 FY26
17	Asset Health Indexing (AHI)	The methodology used to translate AHI into decision making are documented, improving consistency of approach should there be a change of personnel. The methodologies used for assessing condition are transparent, enabling review and improvement as industry practise evolves.	Q4 FY27

6. Asset Condition Assessment



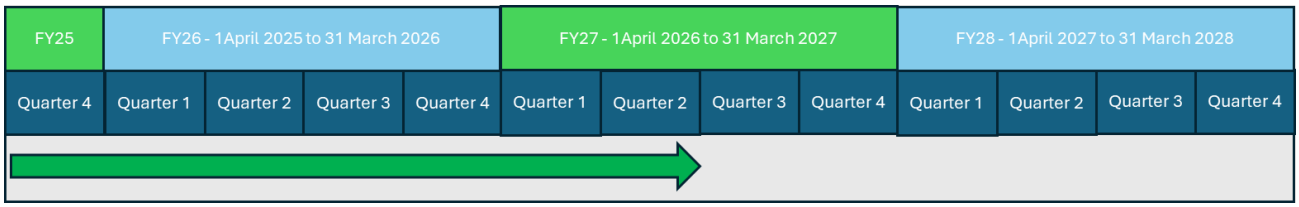
No	Initiatives	Outcome	Completion
18	Condition monitoring data	Improved asset condition data collection and accuracy has led to better decision making.	Q2 FY27
19	Review Inspection standards	Consistency and objectivity in assessments is achieved, with clear linkages to asset health measures.	Q4 FY27

7. Information Systems



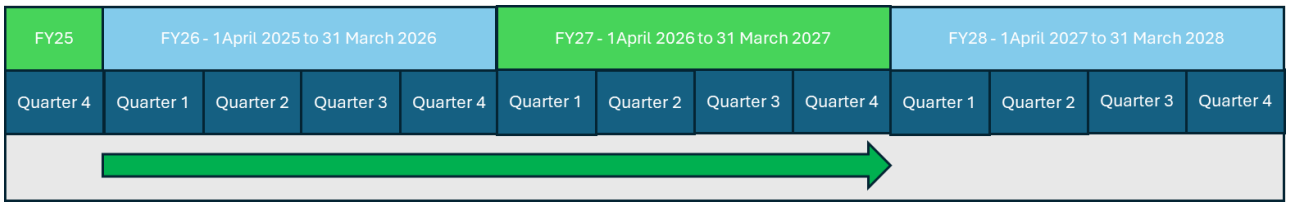
No	Initiatives	Outcome	Completion
20	Centralised AMP Reporting System	Our stakeholders have visibility of our performance against the measures established in our AMP each year.	Q4 FY26
21	ADMS Implementation	Value of the implementation of an ADMS to improve reliability and outages has been demonstrated and the business case for implementation has been approved.	Q2 FY26

8. Maintenance Plan



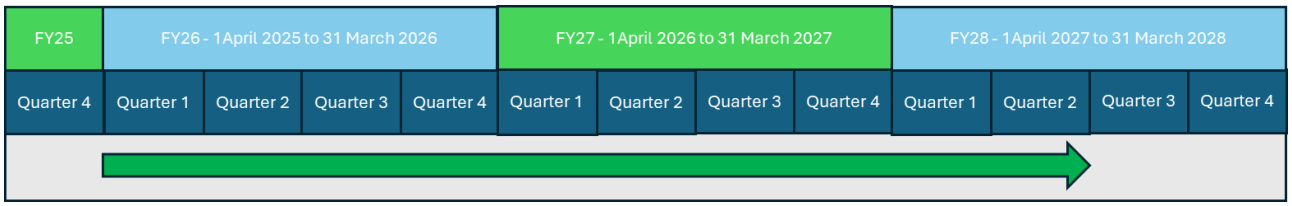
No	Initiatives	Outcome	Completion
22	Document maintenance rational	Rationale underlying our approach to maintenance is documented by our asset engineers, providing continuity should there be a change of personnel.	Q2 FY27
23	Pole inspection – best practice	On site pole testing frequency is timed to ensure any emerging issues are identified, with appropriate consideration of risk/cost/value to customers.	Q2 FY27
24	Engineering standards documentation	Maintenance standards are part of a routine review process, with exceptions visible and being actively managed.	Q4 FY26

9. Faults



No	Initiatives	Outcome	Completion
25	Improved Data	More and accurate detail as to underlying drivers of time to restore power, following an unplanned outage, are available.	Q4 FY26
26	Response improvement initiatives	Initiatives are put in place to consistently address CAIDI performance.	Q4 FY27

10. Asset Management Governance



No	Initiatives	Outcome	Completion
27	Asset Management Policy review	A clear line of sight between our AM Policy and Objectives is providing clarity for the wider team on what our priorities are.	Q2 FY26
28	Asset Management system governance	Continuous improvement of the Asset Management System is an ongoing part of our day-to-day business. Prioritisation of work is approached consistently. Planned activity is measured against baseline to improve forecasting and resourcing requirements. Evidence around prioritisation and decision making is available to support post project review and analysis.	Q4 FY26
29	Cost benefit analysis	Best value (safety/reliability/cost/risk) is delivered when making investment decisions. Highest value investment into vegetation management is prioritised and used to inform vegetation management plans.	Q2 FY28