

# 2023-27

# POWERLINK QUEENSLAND REVENUE PROPOSAL

Supporting Document – PUBLIC

## Asset Refurbishment - Standard

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# Asset Refurbishment – Standard

<b>Policy stream</b>	Asset Management	
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	General Manager Network Portfolio	[REDACTED]
<b>Approved by</b>	A/ General Manager Asset Strategy and Planning	[REDACTED]



Version history

Version	Date	Section(s)	Summary of amendment
7.0	7/08/2020	All	Document template changed to Standard, and contents updated.



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## 1. Introduction

### 1.1 Purpose

This document sets out the standard adopted by Powerlink Queensland for Operational Refurbishment. The objective of this standard is to establish the overarching principles which determine Operational Refurbishment needs, plans & projects.

### 1.2 Scope

The requirements of this Standard apply to the refurbishment of all network assets.

### 1.3 References

Document code	Document title
<a href="#">ASM-FRA-A2300019</a>	Asset Management Framework
<a href="#">AM-POL-1035</a>	Asset Management Policy
ASM-STD-A515409	Asset Maintenance Standard
<a href="#">ASM-STR-A969433</a>	Asset Management Strategy
<a href="#">FIN-FG-STD-A2466214</a>	Finance Standard
	Asset Management Plan

### 1.4 Defined terms

Terms	Definition
Asset Management Policy	Powerlink's strategic objectives with its statutory customer, stakeholder and employee requirements, and informs the intent of the Asset Management Strategy.
Asset Management Strategy	The overarching objectives for managing assets, which are reflected in the asset category methodologies.
Asset Management Plan	The "asset need" over a 10 year outlook.

### 1.5 Roles and responsibilities

Powerlink has adopted a "Distributed Asset Management" model to deliver its asset management activities, using the RAIDE-C (Recommend, Agree, Input, Decide, Execute and Communicate) accountability framework to communicate roles and responsibilities based on identified activities.

Who	What
Executives / General Managers	Accountable for ensuring that the Asset Refurbishment Standard <b>executed</b> within their respective Division / Group.
General Manager Technology and Planning	Accountable for ensuring that the Asset Refurbishment Standard is developed. Performs the <b>Decide</b> element of RAIDE-C for the Asset Refurbishment Standard.
Senior Asset Management Strategy Advisor and Manager Asset Strategies	Act as the standard coordinators for the Asset Refurbishment Standard and are responsible for: <ul style="list-style-type: none"> <li>Oversight and consistent application of the Standard; and</li> <li>Performs the <b>Recommend</b> element of RAIDE-C for the Asset Refurbishment Standard.</li> </ul>

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Who	What
All Powerlink	Awareness of the Standard and obligation to contribute to business activities in a manner consistent with the intent of the Standard.

## 1.6 Monitoring and compliance

Powerlink's Finance Standard details the activities undertaken by Powerlink that are categorised as operating expenditure. Asset refurbishment is classified as an operating expense and utilises the Finance Standard as a reference.

## 1.7 Risk management

This document seeks to clarify the boundaries and prerequisites of asset refurbishment to ensure that asset expenses are correctly classified minimising the financial risk of incorrect allocation of funds.

# 2. Operational Refurbishment Planning

## 2.1 Objectives

It is Powerlink policy to maintain plant in service, functioning correctly with regard to the original design, for as long as it is needed by customers and it is economical and safe to do so. Work done to achieve this objective is normally done under the categories of preventive or corrective maintenance.

At times, work is required on a piece of plant or equipment forming part of an asset that is preventive in nature, but is more extensive than that normally performed as part of ongoing maintenance.

The trigger to assess whether this type of work is Operational Refurbishment occurs when the field maintenance labour commitment is estimated to exceed a defined threshold.

When work exceeds this minimum labour threshold (cost), the potential operational refurbishment need is referred to the relevant asset strategies teams for coordination and project initiation. Identified needs are progressed where they meet any of the following conditions:

- The extent of the Operational Refurbishment need identified requires the engagement of multiple service provider groups across different geographic regions, and as such, the merging of the Operational Refurbishment need into a single project is considered to provide for economies of scale;
- The work required to address the Operational Refurbishment need involves the engagement of non-field maintenance resources (e.g. external contractor, design) to support or provide work deliverables;
- The nature of the work requires extensive coordination of network outage requirements within Powerlink's broader program of planned works requiring network outages;
- The work is spread over a significant time period (greater than 12 months); and
- The work involves introduction of a new technology not previously used by Powerlink.

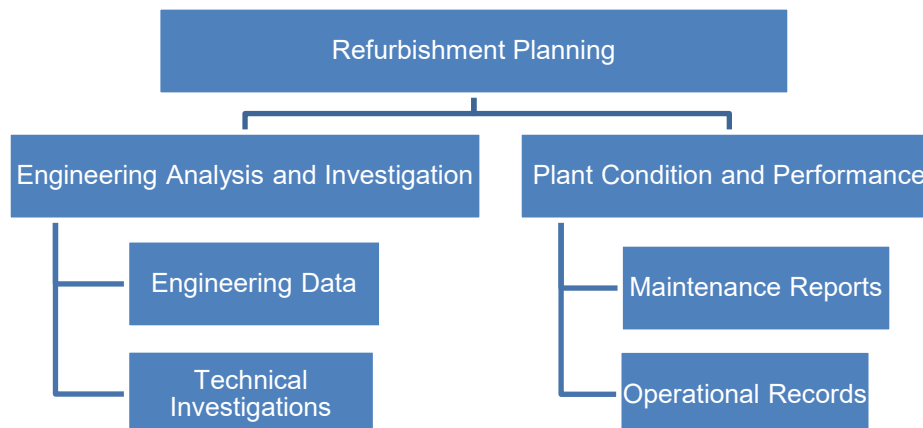
Operational Refurbishment work will be clearly defined in terms of scope, cost, timing and implementation responsibilities. Because it has a fixed scope and timing, all refurbishment is done as an OR type project in SAP (Operational Refurbishment).

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## 2.2 Planning Process

Operational Refurbishment planning is an ongoing and iterative process where needs are coordinated within and between asset areas. A plan to address operational refurbishment needs is prepared annually and reviewed on a monthly basis.

Refurbishment planning is based on a number of inputs, including analysis of maintenance records, operational performance, engineering details, component investigations and other relevant data to develop a holistic view of the condition of the asset. The model below demonstrates how these inputs contribute to the identification of refurbishment requirements.



More detailed descriptions of the matters considered in each of these areas are included below.

Preventive work which is more extensive in nature than that normally performed as part of ongoing maintenance can arise from any of these areas and in accordance with Powerlink financial practices would be carried out as Operational Refurbishment.

### **Maintenance Reports**

Powerlink implements a program of preventive and corrective maintenance, from which reports are derived regarding defects or the abnormal condition of plant and equipment. In line with normal work management processes, these reports shall be documented in SAP in the form of defect notifications, work orders and measurement documents.

The reports are based on data contained within SAP, in conjunction with information from field maintenance personnel, to derive an overall evaluation of maintenance history for plant and equipment. This process gives rise to preventive activities for the assets and, where more extensive than normal preventive or corrective maintenance (that meets the labour threshold requirement), will be undertaken as Operational Refurbishment.

### **Operational Records**

Powerlink maintains a range of systems for monitoring the operational performance of plant and equipment. An example of this includes the Forced Outage Database (FOD) that records forced outages of the high voltage transmission network. This database is supported by a business process that seeks to establish the root cause of each event, and where this is attributed to the condition or performance of plant or equipment (and meets the labour threshold requirements) corrective activities may be undertaken as Operational Refurbishment.

Data collected from other real time monitoring systems, including the Energy Management System (EMS) historical alarm records, on-line plant monitoring systems and operation wide area network

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(OpsWAN) are also used to inform and evaluate plant and equipment performance. Operational Refurbishment activities may arise from this analysis.

### ***Engineering Data***

Engineering data provides information relating to the designed performance of the asset. This could include structural, electrical, layout and configuration design information. For some plant and equipment types, relevant engineering data will provide an assessment of material performance in the service environment, design vulnerabilities and assumptions, historical performance of similar assets and industry experience.

### ***Technical Investigations***

Specific issues with plant condition or performance are on occasion referred for further technical investigation. This occurs when the scope of work required to respond to the issue is unclear or requires evaluation due to a number of options being available.

## **2.3 Prioritisation Process**

A standardised, risk-based methodology is used to prioritise Operational Refurbishment projects. The methodology ranks each project based on an assessment of the value of risk being mitigated or benefit being realised by completing each project. The process is used as an input into deciding the timing and order of projects where funding, resources or access constrain delivery.

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### 3. Distribution list

<b>Divisional Distribution</b>	<b>Contact details</b>
Delivery and Technical Solutions	General Manager Infrastructure Delivery General Manager Design Solutions General Manager Community and Delivery Services
Finance and Governance	General Manager Finance and Governance General Manager Governance and Business Services
Operations and Service Delivery	Executive General Manager General Manager Field Delivery General Manager Service and Supply Partners General Manager Network Operations General Manager Technical and Network Solutions
People and Corporate Services	General Manager Communications General Manager Health, Safety and Environment
Strategy & Business Development	General Manager Network Regulation General Manger Portfolio Management General Manager Strategy
<b>Group/Team Distribution</b>	<b>Contact details</b>
Technical and Network Solutions / Technical Services	All team
Technical and Network Solutions / Operational Technology Services	All team
Network Operations / Network Performance	All team
Network Portfolio / Portfolio Planning and Optimisation	All team
Network Portfolio / Network and Alternate Solutions	All team
Network Portfolio / Administration Team	All team