# IT Plan
# 2023-27
September 2020 (Draft)

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## 1 Executive Summary

This IT Plan summarises Powerlink's Information Technology (IT) intentions for the coming regulatory period 2023-27.

Powerlink recognises the key contribution IT makes in enabling effective business operations in delivery of electricity transmission services to our customers. The IT roadmap investments for the coming period seek to sustain the IT environment established over the current and previous periods through the prudent application of industry recognised asset lifecycle management principles. Our plan is guided by the following IT strategic themes. We will:

1. Manage total cost of IT operations through efficient work practices, sustainable systems and use of commercial services
2. Focus IT delivery for better customer outcomes
3. Rationalise systems for supportability, sustainability and productivity improvement, when prudent to do so
4. Mitigate cybersecurity threats through proactive management and controls
5. Progressively transition to commodity cloud hosted services and emerging technologies where efficient and secure
6. Leverage data for business efficiency, risk mitigation and effective network asset utilisation

Through the current regulatory period, we are delivering upon the IT program described in our previous Revenue Proposal. We have also expedited several key initiatives to ensure the long term sustainability and supportability of our systems. Key amongst these is our transition of our Enterprise Resource Planning (ERP) systems from the legacy SAP ECC6 platform to the most recent S/4 HANA solution.

Over the coming period, our IT works program comprises a combination of sustainment investments across the application portfolio as well as recurrent investments in various cyclic asset lifecycle management renewals, updates and upgrades. Our most significant capital investments in the coming period are:

- ERP Enterprise Asset Management, Supply Chain, Works Management and Payroll Management Renewal
- Network Design Management Renewal
- Corporate Stakeholder Management and Document Management Renewal
- IT Infrastructure, Endpoint Devices and Cybersecurity Appliance Renewal

With the continued industry shift towards cloud based solutions, we will maintain the efficiency of Powerlink's IT operations. Any increased operating costs associated with as-a-service subscription licensing and cybersecurity defence will be offset and absorbed through the broader efficiency in IT service delivery.

# 2 Purpose and scope of this document

## 2.1 Purpose

This document summarises the Powerlink Information Technology (IT) strategic plan for the period FY22/23 to FY26/27 (referred to herein 2023-27). It supports the Revenue Proposal (RP) to the Australian Energy Regulator (AER) through provision of information including:

- IT strategic directions and themes for the coming period;
- IT planning approach, asset lifecycle management, governance and delivery methods;
- Delivery performance for IT investment programs for the current period; and
- IT program forecast, including the planned investment roadmap, planning segments, description of key initiatives and forecast capital expenditure.

## 2.2 Scope

Within Powerlink, IT encompasses the provision of systems and support across the following planning segments.

| Powerlink IT Planning Segment | Scope |
|---|---|
| ERP, EAM & Work Management | • Asset Management<br>• Work Program & Project Management<br>• Field Delivery Management<br>• Inspections & Field Data Capture<br>• Finance & Accounting<br>• Human Resource (HR) & Payroll<br>• Environment, Health & Safety (EHS)<br>• Procurement & Contract Management<br>• Logistics & Warehouse Management<br>• Laboratory |
| Network & Market Management | • Portfolio Development<br>• Grid Analysis & Planning<br>• Design & Engineering Tools<br>• Drawing Management<br>• Metering & Network Billing Calculation<br>• Pricing<br>• Market Data Management |
| Information Analytics & Insights | • Data Warehousing, Business Intelligence, Reporting & Analytics |
| Corporate Systems | • Corporate Emergency Coordination<br>• Travel Management<br>• Geographic Information System (GIS) & Mapping<br>• Facilities & Site Access Management<br>• Legal Support<br>• Fleet Management<br>• Risk & Governance Management<br>• Stakeholder & Customer Relationship Management<br>• Electronic Document & Records Management (EDRM) |
| Technology Applications | • Service Management<br>• Office Applications<br>• Technology Architecture & Design<br>• Technology Delivery and Maintenance Tools<br>• Technology Operations & Performance Management Tools<br>• Collaboration, Knowledge Management & Sharing |
| Cybersecurity | • Security Management Tools<br>• Identity & Access Management |
| Endpoint Devices | • Laptops, Desktops, Telephony & Mobile Devices<br>• Meeting Room & Conferencing Devices |
| IT Infrastructure | • Servers, Storage and Corporate Networking Infrastructure<br>• Virtualisation, Databases and Operating Systems |
| Minor Works | • Minor uncategorised updates and upgrades |

*Figure 1: Powerlink IT Planning Segments*

Sections 6.1 of this document describes our planned IT investment program within the above listed planning segments.

These segments have changed since our Revenue Proposal for the current regulatory period. Figure 2 (below) provides a mapping of these segments against those described within the last Revenue Proposal.

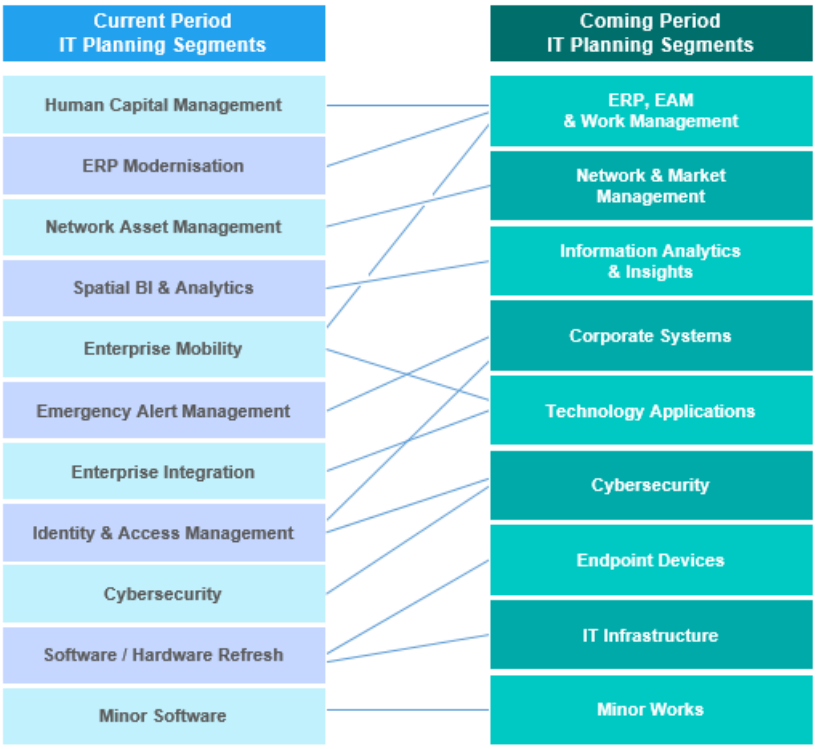



*Figure 2: IT Planning Segment Mapping*

# 3 IT Strategy Direction

Powerlink's IT Strategic Themes support our Mission, Vision and Key Business Drivers through to 2027 as identified in our Revenue Proposal (RP).

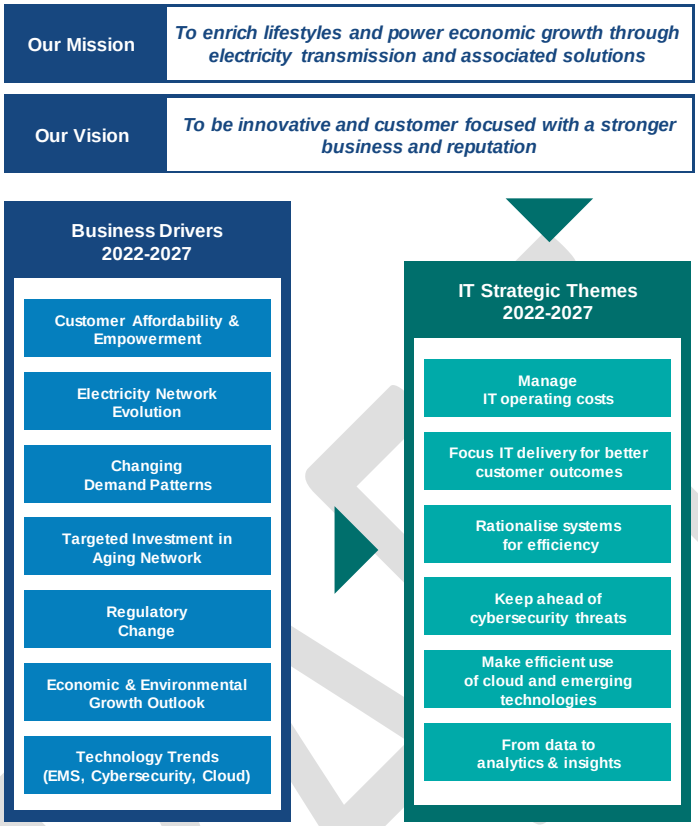



*Figure 3: IT Strategic Themes*

Each of the above listed IT Strategic Themes is described in the sections below.

## 3.1 Manage IT operating costs

***"Manage total cost of IT operations through efficient work practices, sustainable systems and use of commercial services"***

We will manage the cost of our IT operations consistent with best practice IT service management principles, including;

- the effective and efficient use of "as a service" and "managed service" alternatives;
- review of licence maintenance and support agreements;
- review of commercial telecommunications services; and
- continuous improvement in contract and vendor management practices.

Consistent with our other IT strategic themes (3.2 to 3.6 below), our focus on IT operating costs mitigates the price impact of IT on our end customer. We are also taking the opportunity, where prudent, to rationalise our systems for optimal efficiency, leveraging advancements in cloud and data analytics. We are further maintaining a cybersecurity risk posture consistent with market and community expectations.

### 3.2 Focus IT delivery for better customer outcomes

***"Leverage the opportunities for IT enabled improvement while also managing cost"***

Powerlink exists to support our end-customers, the Queensland electricity consumer, and we recognise the important part that IT plays in our delivery of electricity transmission services.

The opportunity and impacts of IT services on our customers are material. Through efficient IT operations and program delivery, costs are minimised for our customers. Also, through IT enabled automation, productivity tools, process improvement and decision support, Powerlink's core energy delivery services continually improve for safety, risk mitigation, efficiency and capital investment effectiveness.

The customer is therefore our central focus in IT delivery, with a prudent investment program, continuous improvement, robust cybersecurity and effective cost management.

Recent experiences with COVID-19 have also highlighted the importance of agility and flexibility in IT service delivery, ensuring the seamless continuity of Powerlink's business operations for our customers.

### 3.3 Rationalise systems for efficiency

***"Rationalise systems for supportability, sustainability and productivity improvement"***

Like most organisations of our scale, Powerlink operates a wide variety of systems, software and tools which have evolved and been maintained across multiple decades. In that time, the world's IT landscape has changed dramatically. Similarly, advancements in electricity and commercial business systems have also evolved and matured.

As described in section 3 of this paper, we employ structured asset lifecycle management processes to cyclically maintain, upgrade and renew our applications. However, we also recognise the opportunity this renewal brings to rationalise our software base for improved efficiency and long term serviceability.

New systems are typically more capable than the ones they replace. Therefore, as it becomes essential to upgrade or replace our systems for sustainability, these renewals will also be used to revisit our operational processes, enabling improvements in business productivity and network asset utilisation.

### 3.4 Keep ahead of cybersecurity threats

***"Mitigate cybersecurity threats through proactive management and controls"***

The range and sophistication of cyber attacks on our systems and environments grows each year. In acknowledgement of this ever growing risk, the Australian Cyber Security Centre (ACSC) and Australian energy industry participants have developed the Australian Energy Sector Cyber Security Framework (AESCSF). Through this framework, the industry can assess, inform and prioritise investments to maintain a suitable cybersecurity posture.

Powerlink continues to work closely with the AEMO-established Cyber Security Industry Working Group (CSIWG) to ensure that both our IT and our Operational Technology (OT) remain secure, consistent with community expectations and in alignment with current and likely future market obligations.

We will also target our investments in cybersecurity to prudently balance risk mitigation effectiveness and cost efficiency

### 3.5 Make efficient use of cloud and emerging technologies

***"Progressively transition to commodity cloud hosted services and other emerging technologies where efficient and secure"***

Powerlink makes use of commercial market services of all forms, with consideration of available service levels, security and cost. The IT market for cloud "as a service" solutions has expanded markedly in recent years. This broad category of services includes:

- Infrastructure as a Service (IaaS) providing commercial data centres, server hosting, telecommunications and data storage;
- Platform as a Service (PaaS) providing operational grade platforms including virtualised server capacity and databases; and
- Software as a Service (SaaS) which includes externally hosted "single tenant" and "multi-tenant" software applications, as well as "evergreen" internally hosted applications where software updates are regularly applied to maintain software currency.

Over the coming period, we will continue to make prudent use of all the above cloud "as a service" offerings where justified on a total cost of ownership basis and with due assessment of suitability, risk and security. We will also continue to monitor and assess the maturing of other emerging technologies for use where economically and technically prudent.

### 3.6 From data to analytics and insights

***"Leverage data for business efficiency, risk mitigation and effective network asset utilisation"***

In all large organisations, the scale of captured data is continuing to grow. Such large data volumes can become a burden to manage, maintain and share. This information can however serve the business, providing knowledge on an as-needed basis which informs efficient decision making as well as consistent, credible operational and statutory reporting.

Powerlink has already taken strides in harnessing our information holdings through our corporate data warehouse and analytical tooling. We are now continuing that process of improvement with our data strategy which focuses on:

- Creating a data culture to deliver higher stakeholder and customer value;
- Developing a cohesive view of data and information across the organisation;
- Effective data governance and data lifecycle management;
- Data accessibility and trust to drive innovation; and
- Fact-based decisions driving better business and customer outcomes.

# 4 IT Program Planning, Governance and Delivery

Powerlink applies sound management processes for the cyclic planning, delivery and governance of the IT investment program.

Investments in both applications and infrastructure are planned according to industry typical IT asset lifecycle management practices. Investments are then defined, prioritised and delivered through the company's IT Governance and Program Delivery Lifecycle.

## 4.1 IT Asset Lifecycle Management

For planning purposes, Powerlink's IT architecture classifies assets as "Infrastructure" or "Applications" within the segments described in section 2.2. Sections 4.1.1 and 4.1.2 (below) describe Powerlink's practices for management of Infrastructure and Application assets respectively.

### 4.1.1 Infrastructure Asset Lifecycle Management Guidelines

Powerlink's IT Infrastructure includes multiple classes of technology which are maintained and renewed based on cyclic asset lifecycle management principles.

This approach ensures that our technology remains serviceable, supportable and secure. Where relevant, support services may be provided by the equipment vendor or third party suppliers, either under warranty or through extended service agreements. Cyclic asset lifecycle management also ensures the technology remains sustainable through the provision and application of vendor patching to mitigate cybersecurity risks and to maintain compatibility with hosted applications.

Table 1 (below) summarises Powerlink's IT Infrastructure classes and the corresponding asset lifecycle management practice.

| Asset Category | Asset Class | Asset Lifecycle Management Guideline | Forecast Replacement Age |
|---|---|---|---|
| **Endpoint Devices** | Laptop (Standard) | 4 year warranty / maintenance agreement. Thereafter, devices are replaced through a cyclic renewal program or on failure. | 4 years |
| | Laptop (Performance) | 3 year warranty / maintenance agreement. Thereafter, devices are replaced through a cyclic renewal program or on failure. | 3 years |
| | High-End Workstation | 4 year warranty / maintenance agreement. Thereafter, devices are replaced through a cyclic renewal program or on failure. | 4 years |
| | Printer | Managed service | SLA |
| | Desk Phone | VOIP handsets | 5 years |
| | Mobile Phone | Leased device and data plan | 2 years |
| **Collaboration Technology** | Video Conferencing Units | Devices are replaced through a cyclic renewal program or on failure | 5 years |
| | Meeting Room Displays | Devices are replaced through a cyclic renewal program or on failure | 5 years |
| **Server Technology** | Rackmount Server | Devices are replaced with virtualised server infrastructure (where possible) upon identified obsolescence following extended warranty period which is typically 5 years | 5 years |
| | Blade Server | Devices are replaced upon identified obsolescence following extended warranty period which is typically 5 years | 5 years |
| | Blade Server Enclosure | Devices are replaced upon identified obsolescence | 10 years |

| Asset Category | Asset Class | Asset Lifecycle Management Guideline | Forecast Replacement Age |
|---|---|---|---|
| **High Capacity Storage Facilities** | High performance solid state storage (Tier 1) | Devices are replaced following warranty expiry | 5 years |
| | SAN storage array (Tier 2+) | Devices are replaced following warranty expiry | 5 years |
| | High speed database appliances | Devices are replaced following warranty expiry | 5 years |
| | Backup facilities | Devices are replaced following warranty expiry | 5 years |
| | | Backup appliances on-premises are replaced following warranty expiry. | 5 years |
| **Infrastructure Operating Software** | Database management systems | Software is periodically upgraded to vendor supported levels to ensure availability of patching, security updates and compatibility with corporate applications. | 4 years |
| | Server operating systems | | |
| | Server virtualisation software | | |
| | Application virtualisation software | | |
| | IT monitoring systems | | |
| **Corporate Networking Infrastructure** | LAN devices | Devices are replaced in line with vendor “end of support” / “end of life” designations, to ensure vendor support is available (i.e. availability of active patching and security updates). | 5 years |
| | Data Centre, WAN And Perimeter Devices | Devices are replaced in line with vendor “end of support” / “end of life” designations, to ensure vendor support is available (i.e. availability of active patching and security updates). | 5 years |

*Table 1: Infrastructure Asset Lifecycle Management Guidelines*

### 4.1.2 Application Asset Lifecycle Management Guidelines

Powerlink’s applications are also maintained for supportability, sustainability and security consistent with application asset lifecycle management principles aligned with the “PACE” model developed by global research and advisory firm Gartner.

Under the Gartner PACE model, applications are classified as either Systems of Record, Systems of Differentiation or Systems of Innovation with considerations of:

- The nature of business processes supported by the application;
- The pace of change in both the business areas and technology domain;
- The strategic focus for the business area;
- The nature of stakeholder ownership; and
- Risk and funding models.

Consistent with these various considerations, the PACE model identifies typical expected application service lives and the corresponding prudent planning horizons.

Figure 4 (over page) summarises the Gartner PACE model and overlays Powerlink’s asset lifecycle management planning guidelines for each application category.

| | Attributes | Systems of Record | Systems of Differentiation | Systems of Innovation |
|---|---|---|---|---|
| **Gartner PACE Model** (Source – Gartner) | **Driving Force** | **Common Ideas** | **Better Ideas** | **New Ideas** |
| | **Business Processes** | Well-understood, integrated and commoditised, interdependent, stable | Well-understood, highly configurable and customisable; autonomous | Unique, not well-understood, experimental, ambiguous, dynamic and ad hoc |
| | **Pace of Change** | Slow, infrequent, incremental, changes every 6 to 12 months | Moderate, more frequent, configurability is key. Changes every 6 months. | Rapid, frequent and ad hoc; "throwaway" customisation; changes weekly, sometimes daily |
| | **Strategic Focus** | Standardisation; wide deployment; operational efficiency | Agility / flexibility; competitive differentiation | Disruptive thinking; alternative business models; market leadership |
| | **Stakeholders / Ownership** | High business executive engagement between business and IT strategy; low end-user engagement; formal handover from business to IT | High business executive engagement but driver by lines of business; moderate end-user engagement; business engaging on hot spots and IT filling the gaps | Moderate business executive engagement, some sponsored and under-the-radar, tactical; high end-user engagement, often business users or even circumventing IT |
| | **Funding** | Mix of capex and opex; corporate or divisional funding annual budget | Mix of capex and opex; corporate IT budget or departmental expense budget; discretionary | Mainly opex; departmental expense budget; innovation fund |
| | **Risk** | Minimum | Medium | High |
| | **Lifetime** *How long it usually stays in layer* | 5 to 10 years or longer | 2 to 5 years | 3 to 12 months |
| | **Planning Horizon** *How long you describe the plan in application strategy* | More than 7 years | 1 to 2 years | As long as 6 months |
| **Powerlink** | **Asset Lifecycle Management Planning Guidelines** | Structured minor releases<br>Upgrade each 3 to 5 years<br>Replace at 10 to 15 years | Upgrade each 2 to 3 years<br>Replace at 6 to 8 years | Typically not upgraded unless provided as evergreen or cloud |

*Figure 4: Powerlink Application of Gartner PACE Model*

Based on the above classification scheme, Powerlink's key applications are grouped within the categories of "Systems of Record" and "Systems of Differentiation" as indicated in Figure 5 over page. As indicated above, "Systems of Innovation" are short-cycle investments not typically treated as capital investments or which otherwise fall within the concept of minor uncategorised works.

| IT Planning Segment | Systems of Record | Systems of Differentiation |
|---|---|---|
| ERP, EAM & Work Management | • Enterprise resource Planning, Asset & Works Management Solutions<br>• HR & Expenses Solutions<br>• Program & Project Management<br>• HSE Management System<br>• Various other in-house and minor tools | • Learning Management System<br>• Roster Management Solution<br>• Lab Information Management<br>• Various other in-house and minor tools |
| Network & Market Management | • Portfolio Risk System<br>• Network Planning Systems<br>• Drawing Management System<br>• Network Billing, Finance Modelling, Asset value allocation | • Power system analysis<br>• CAD & Drafting, Building Information Modelling, & various other design / engineering tools |
| Information Analytics & Insights | • Database System<br>• Business Warehouse | • Data Visualisation, BI Reporting & Analytics<br>• Data blending, ETL & Persistence systems<br>• Data Governance |
| Corporate Systems | • Stakeholder Management System<br>• Document Management System<br>• Building Management System<br>• GIS & Mapping Management<br>• Fleet Vehicle Management | • Site Access Management<br>• Risk Analysis<br>• GIS Mapping tools & Analysis<br>• Corporate Emergency Coordination<br>• Visitor Management System |
| Technology Applications | • IT Service & Asset Management solution<br>• Application Licensing Management | • Productivity & Collaboration Suite<br>• Application mobility system<br>• Enterprise Architecture Solution<br>• Business Process Management<br>• Various other tools and services |
| Cybersecurity, Endpoint Devices, IT Infrastructure, Minor Works | N/A | |

*Figure 5: Asset Lifecycle Management Categorisation of Powerlink Key Applications*

### 4.2 Program Planning and Delivery Framework

Powerlink maintains a forward view of the IT works program that tracks delivery progress for active projects and the portfolio outlook for several years ahead. On a rolling basis we review the portfolio outlook with considerations of:

- Required asset lifecycle management investments to maintain, upgrade and renew existing applications or infrastructure for sustainability, supportability and security (as per section 4.1 above). Where asset lifecycle management investments are required, Powerlink takes the opportunity to rationalise systems and infrastructure where prudent and cost effective. Such asset renewals are also leveraged to enable business productivity and operational effectiveness improvement. This is typically achievable as “new systems are more capable than old systems” with the added capability enabling business process improvement.
- Upcoming compliance events requiring Powerlink to modify our systems or processes to continue meeting our legislative and regulatory obligations.
- Other business strategic requirements, such as data or system changes to support amended work practices or assessed risks.
- Opportunities for IT enabled business improvement. Such investments acknowledge the capacity of IT to enable operational efficiency or to improve asset utilisation through work process automation and greater information analysis and insights.

Powerlink's cyclic framework for program planning and delivery is depicted in Figure 6 below.

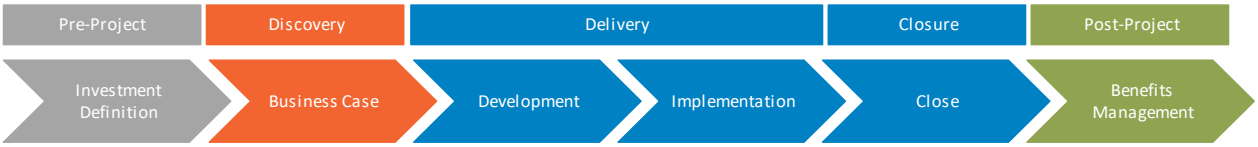



*Figure 6: Powerlink Program Planning & Delivery Framework*

Each of the stages within the framework is described below.

### 4.2.1 Investment Definition


**Objective**

To confirm the business need, providing sufficient information for project planning.

**Key activities and objectives**

Undertake initiative definition to describe:

- The initiative objective and background
- Proposed scope
- Strategy and architectural alignment
- Expected outcomes, benefits and business value
- Known risks and constraints
- Stakeholder impact
- Indicative timeframe, cost and resources
- Cybersecurity risk profile and assessment

**Governance**

Review: Business IT management
Approval: Executive Manager within financial delegations

### 4.2.2 Business Case


**Objective**

Detail the requirements, costs and benefits, and where relevant engage the market, to provide the Business Case for Project Board and Financial Delegate consideration of the cost/value.

**Key activities and objectives**

- Identify stakeholders, project team and project board
- Define business requirements, current and future state, business impact assessment
- Conduct cost / benefits analysis
- Analyse risk and map out value and benefit
- Determine the cybersecurity risk profile
- Identify the procurement approach/plan
- Conduct market scan (if required)

- Understand project warranty & exit criteria with IT service owner
- Perform options analysis (base case, recommended option, alternative options)
- Define conceptual architecture
- Finalise market engagement / procurement plan
- Undertake procurement to inform finalisation of business case

**Governance**

Review: Project Board
Approval: Executive Manager / Chief Executive within financial delegations

### 4.2.3 Development


**Objective**

Finalise business and technical requirements; design and test the solution and undertake detailed planning for implementation.

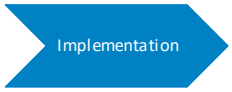
**Key activities and objectives**

- Complete stage planning, quality management plan and stakeholder plan
- Develop communications and change artefacts
- Develop training strategy and plan
- Finalise requirements and traceability
- Develop solution architecture and reassess security
- Develop detailed design and test plans
- Test plan, test summary and sign-off
- Build solution in “Dev/Test”
- Conduct testing and signoff
- Build production environment
- Complete service management plan and release for change assessment board (CAB) review
- Finalise service management plan and as-built assessment
- Update project benefits plan

**Governance**

Review: Project Board
Approval: Executive Manager / Chief Executive where required

### 4.2.4 Implementation




**Objective**

Confirm detailed plans for deployment and organisational change; deploy and support the solution; decommission where applicable.

**Key activities and objectives**

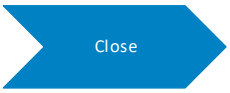
- Complete deployment planning, including outage plan and rollback strategy
- Conduct Training & Change Management activities, including readiness assessments
- Go-live / readiness decision

- Deploy solution and post-production activities
- Coordinate formal acceptance and operational handover
- Decommission (if applicable)
- Post go-live solution support
- Complete project handover checklist

**Governance**

Review: Project Board
Approval: Executive Manager / Chief Executive where required

### 4.2.5 Close




**Objective**

Complete final administrative tasks, formally close project and conduct a review.

**Key activities and objectives**

- Check financials and confirm payments, invoices and warranty claims are finalised
- Conduct post implementation review and update the portfolio lessons learned register
- Complete project closure reporting and perform capitalisation(s) where required

**Governance**

Review: Project Board
Approval: Project Executive

### 4.2.6 Benefits Management


**Objective**

Powerlink's approach to benefits delivery has developed and improved through 2019-2020 in collaboration with our Customer Panel. The process spans from benefits identification through to post-project realisation and review. This process is therefore embedded across the stages of our Program Planning and Delivery Framework.

The final stage of the framework, known as "Benefits Management" focuses on the realisation of the benefits identified and refined through the Investment Definition, Business Case, Development and Implementation stages.

**Key activities and objectives**

- Review open project benefits arising from in the project closure report
- Provide the post-project budget adjustment schedule
- Perform post-project budget adjustment
- Report portfolio benefit status on a quarterly basis

**Governance**

Powerlink Executive Committee

### 4.3 Cost Forecasting and Estimation

Powerlink forecasts the costs of its forward IT investment program through a combination of practices appropriate to each type of investment.

- IT infrastructure investment costs are estimated through forecasting of the IT fleet assets due for renewal each financial year consistent with Powerlink's Infrastructure Asset Lifecycle Management Guidelines (see section 4.1.1).
- Significant IT application investments planned for the coming period are supported by investment cases. Each investment case is informed through scope identification and options analysis, with cost estimates developed through a blend of techniques including:
  - Experience of past equivalent investments;
  - Knowledge of component costs through market approach, industry research or expert advice;
  - Bottom up estimation of component delivery effort and costs, based on typical unit rates;
  - Top down estimation of outcome delivery, including use of parametric estimation techniques and expert experience.
- Other recurrent investments in minor updates, upgrades or compliance changes are estimated consistent with historic trend.

# 5 Current Period IT Performance

## 5.1 Current Period IT Capital Expenditure and Delivery Performance

Figure 7 and Table 2 below detail the actual and forecast IT capital expenditure outcomes for the curren regulatory period.

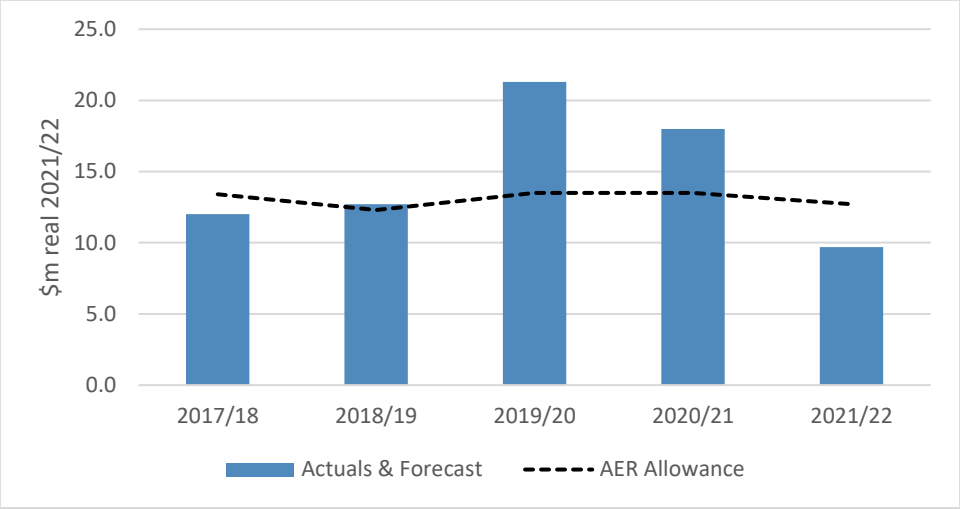



*Figure 7 Current Period IT Capital Expenditure Summary*

| $m real, 2021/22 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | Total |
|---|---|---|---|---|---|---|
| AER Allowance | 13.4 | 12.3 | 13.5 | 13.5 | 12.7 | **65.4** |
| Actuals & Forecast | 12.0 | 12.7 | 21.3 | 18.0 | 9.7 | **73.6** |

*Table 2 Current Period IT Capital Expenditure Summary*

We are currently three years into the five year regulatory period. In the first two years of the period, we tracked closely to the forecast capital expenditure profile described in the last Revenue Proposal. In the third and fourth years (i.e. FY19/20 and FY20/21) our capital expenditure is higher than forecast, but this is partially offset by a lower forecast for the final year (FY21/22).

Overall, our IT capital expenditure for the current regulatory period is forecast to be approximately $8M higher than the allowance for the period (FY21/22 $Real). The additional capital expenditure in the period has been endorsed by Powerlink's investment governance body and supports increased investment being undertaken as follows:

1. We have brought forward investment to upgrade our SAP system, bringing it into line with the newest "S/4 HANA" technology-set for long term sustainability and security of this core business platform.
2. We are investing in a Geographic Information System (GIS) spatial viewer platform in support of Powerlink's core network operational program known as Next Generation Network Operations (NGNO).

   NGNO is an Operational Technology (OT) program currently underway, to renew Powerlink's aging Energy Management System (EMS) prior to the near-term end of software support for the product. Through the planning stages of NGNO it was ascertained that Powerlink's lack of modern GIS capability would be an impediment to effective deployment of the new EMS solution.

As described in section 6.1, our planned capital expenditure for the coming regulatory period is approximately $7M lower than the current period allowance (FY21/22 $Real), which is consistent with bringing forward the above identified investments.

Powerlink has progressed effectively in delivery against the IT works program described in the last Revenue Proposal. A brief overview of our current period program delivery is provided below.

| Program | 2017-22 Revenue Proposal Description | Current Period Delivery Summary |
|---|---|---|
| **Human Capital Management** | • Deliver an end-to-end (integrated) Human Capital Management solution<br>• Provide employees with a self-service portal to complete HR related tasks<br>• In scope: Strategic and operational resource management, employee performance management, organisational inductions, employee's remuneration, leave and benefits reporting.<br>• Out of scope: Payroll | This program is underway with an implementation of SAP SuccessFactors to replace a range of disparate systems and provide integrated HCM capability.<br>Employee and manager self-service capabilities have been deployed. The current focus is now on the Learning Management System (LMS) and recruitment capability, with the LMS forecast to complete in FY20/21. |
| **Network Asset Management** | • Modernise and consolidate the solutions and technologies which support Powerlink's HV asset data and HV asset management functions<br>• Implement Master Data Management capability<br>• Integration across asset management solutions including SAP ERP<br>• Potential systems scope: HVI, OMS,FOD, NPR, Switching sheet program | A number of initiatives have progressed within this program area:<br>• Work has completed on integrating SAP asset data to improve data quality in the assessment of asset condition.<br>• Work is progressing on systems consolidation to improve and modernise the determination of asset health indices.<br>• Renewal of the network portfolio risk assessment capability (C55) is also underway. |
| **Enterprise Integration** | • Implement technologies required to support enterprise integration (system to system data sharing and process transactions) capabilities including, but not limited to: application integration, workflow, automation and management, mobile integration, enterprise portals and business to business (B2B) integration. | This program has commenced with work focussing on integration standards, interim and end state architectures, in order to support inflight and future project activity.<br>The program is now progressing the delivery of foundation capability to support priority initiatives in the broader IT program. |
| **Enterprise Mobility** | • Deliver an enterprise mobility platform that extends the type of work that employees can perform in the execution of their accountabilities, irrespective of their work location or device they use.<br>• The mobility platform will integrate Powerlink's information, core applications and processes so non-office based employees can access functionality and information comparable to their office based counterparts. | This program is underway and delivering foundation capability to support a seamless user experience across Powerlink endpoint devices.<br>VPN access and single sign-on have been deployed with unified communications (UC) and videoconferencing (VC) capability now in progress.<br>MS Teams has also been deployed for corporate collaboration and communication, which has proven highly effective through the response to COVID-19. |
| **Emergency Alert Management** | • Replace Powerlink's existing disaster / emergency communication solution with a modern, real time collaboration platform and alerting solution that enables rapid communication between employees, partners and stakeholders in the event of | The first phase of the initiative to refresh the communication solution is underway. |

| Program | 2017-22 Revenue Proposal Description | Current Period Delivery Summary |
|---|---|---|
| | an emergency across a wide range of modern communication technologies. | |
| **Cybersecurity, Identity & Access Management** | • Implement technologies and tools to prevent the loss of data and/or transmission services through breaches of network security.<br>• Enable compliance with best practice standards for security management and control (ISO 27001).<br>• Implement technologies to ensure only authorised users (internal and external to Powerlink) have approved access to information and systems in accordance with corporate and regulatory stands and policies.<br>• Modernise technologies to standardise and automate the administration of user authentication, access rights, access restrictions, account profiles, passwords across multiple applications or systems. | An Information Security Management Program (ISMP) is underway to uplift cybersecurity capabilities and to mitigate risk.<br>Current period improvements include:<br>• Application whitelisting to ensure only authorised applications can be installed on PCs and servers.<br>• Privileged Access Management (PAM) to minimise accidental or intentional access restricted data/devices.<br>• Data Loss Prevention (DLP).<br>• Cybersecurity control improvements aligned with the Australian Energy Sector Cyber Security Framework (AESCSF). |
| **Spatial BI and Analytics** | • Uplift Powerlink's business intelligence (BI) and spatial capability to enable the spatial presentation of corporate information such as Finance and Asset Management, to be integrated with other data. That is, it will be possible to overlay operational information over maps to identify possible trends, to analyse the effects of certain decisions or events, or to evaluate the performance of a given scenario. | An overarching data strategy has been deployed to guide the forward program of work.<br>The next phase will see the consolidation of existing data warehouses and visualisation of data through GIS spatial viewing capability. |
| **ERP Modernisation** | • Deliver improvements and configuration changes to the existing ERP system and the processes supported by it, such as asset management, logistics, human resource management, finance, investment and project management to enable the realisation of end-to-end business efficiencies. | The ERP program has completed its discovery phase and is currently in delivery, transitioning the aged SAP ECC6 software to S/4 HANA.<br>This includes Procurement, Contract Management, Incident Management and Health Safety & Environment. |
| **Software / Hardware Refresh** | • Maintain Powerlink's existing corporate IT assets (hardware and software) to ensure they are reliable and managed cost effectively. | Ongoing across the period |
| **Minor Software** | • Minor software to provide specific business capability to manage business line requirements outside of core programs identified.<br>• Upgrade and integrate disparate as required. | Ongoing across the period |

*Table 2 Current Period IT Program Status*

# 6 Coming Period Forecast

## 6.1 IT Capital Expenditure Forecast

Figure 8 and Table 4 below summarise the IT capital expenditure forecast for the coming period in comparison with the current period.

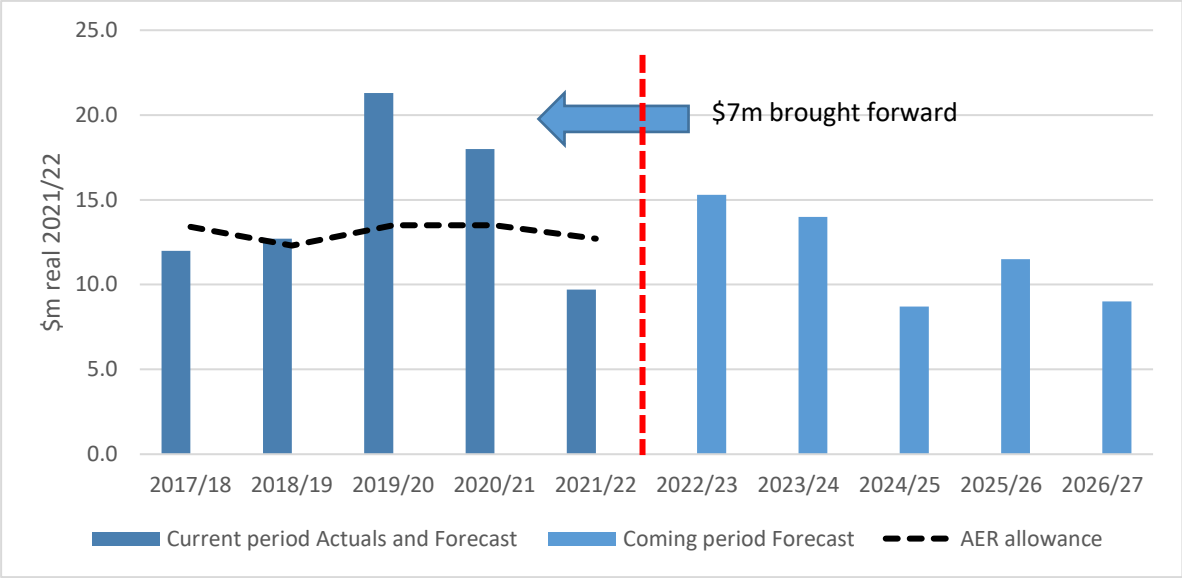



*Figure 8 IT Program Expenditure Forecast*

| $m real, 2021/22 | Current period Actuals & Forecast | | | | | | Coming period Forecast | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | **Total** | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | **Total** |
| IT Capex | 12.0 | 12.7 | 21.3 | 18.0 | 9.7 | **73.6** | 15.3 | 14.0 | 8.7 | 11.5 | 9.0 | **58.5** |

*Table 4 IT Program Expenditure Forecast*

The IT capex forecast of $58.5M (FY21/22 $Real) for the coming regulatory period is approximately $7M lower than the IT capital allowance for the current regulatory period ($65.4M). This reduction recognises that approximately $7M of intended 2023-27 expenditure has been brought forward into the current period as described in section 5.1.

### 6.2 IT Program Roadmap

Figure 9 below depicts the IT program roadmap for the coming regulatory period. The figure also indicates key current and planned initiatives remaining in the current period (FY20/21 and FY21/22).

Within the nine planning segments, investments are colour coded as “Compliance & Risk”, “Maintain Capability”, “New Capability” and “Recurrent”. Each non-recurrent investment proposed for the coming period is numbered with an investment case reference code of “IT01” to “IT07”. Preliminary investment case documents have been prepared for each of these proposed investments.

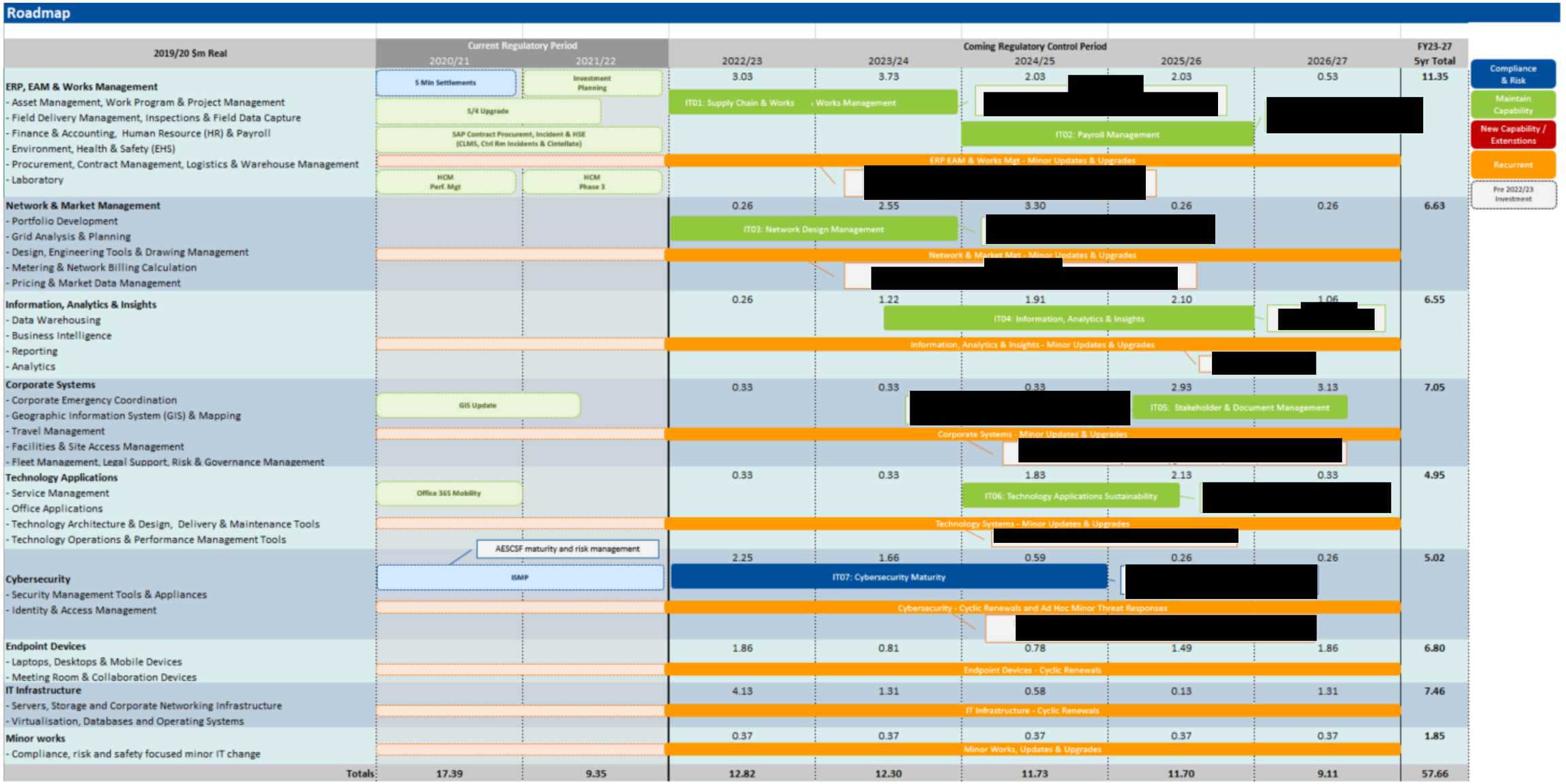



*Figure 7: IT Program Roadmap*

### 6.3 IT Program Summaries

This section summarises the functional scope of each planning segment, the forecast opening position of our systems and capability by the start of the coming regulatory period (i.e. July 2022) and the planned program investments for the period.

#### 6.3.1 ERP, EAM and Works Management Program Segment

**Scope**

This program segment comprises IT systems and capability supporting core business functions including:

- Asset Management
- Work Program and Project Management
- Field Delivery Management
- Inspections and Field Data Capture
- Finance and Accounting
- Expense Management
- Human Resource (HR) and Payroll
- Learning Management
- Environment, Health and Safety Management (EHS)
- Procurement and Contract Management
- Logistics and Warehouse Management
- Laboratory

These business functions are enabled through the SAP suite of enterprise systems, along with several niche vendor and in-house applications. Together, these solutions support Powerlink's core back office, asset and works management processes and practices.

**Opening Position**

Prior to the start of the coming regulatory period, we will have transitioned much of our existing SAP business functionality from the legacy ECC6 platform to the current S/4 HANA generation software, together with SAP SuccessFactors and Concur. This includes transition of the company's core Finance, HR and Asset Management functionality, as well as Contracts Management.

This move will ensure the long term serviceability and security of core business functions following the end of support for SAP ECC6, which is forecast to occur in the coming period.

Other systems and capabilities will mostly still exist in their current configurations.

**Coming Period Investments**

Table 3 below summarises the planned investments within this program segment in the coming regulatory period.

| Investment | Description | Forecast[1] |
|---|---|---|
| **IT01: Supply Chain & Works Management** | This investment will complete the transition from the existing SAP ECC6 platform across to SAP S/4 HANA for Supply Chain and Logistics Management functions (including Warehouse Management). In addition, we will renew our Portfolio and Project Management and Field Services capability for sustainability and integration with the S/4 HANA platform. | $5.7M |

[1] All figures are provided in FY2019/20 $Real.

| Investment | Description | Forecast[1] |
|---|---|---|
| **IT02: Payroll Renewal** | For long term sustainability and efficiency of our Payroll Management processes and systems, we will renew our payroll processing, with close integration to our S/4 HANA ERP and SuccessFactors HR Management solution.<br>This system renewal program will upgrade or replace our existing payroll solution, including time & attendance management, award interpretation, payroll processing and adjustment management. | $3.0M |
| **Minor Updates and Upgrades** | Consistent with cyclic asset lifecycle management practices, minor recurrent updates and upgrades will be undertaken on applications within this segment to remediate defects and to maintain supportability and security.<br>Key applications forecast to require update and/or upgrades within the coming period include:<br>• LIMS - Oil Laboratory software<br>• Safety Management System<br>• Asbestos and Environment databases (may likely require migration or replatforming)<br>• SAP configuration releases | $0.53M p.a. |

*Table 3. IT Roadmap Investments - ERP, EAM and Works Management Segment*

### 6.3.2 Network and Market Management Program Segment

**Scope**

This program segment comprises IT systems and capability supporting core business functions including:

- Portfolio Development
- Grid Analysis and Planning
- Network Design and Engineering Tools
- Drawing Management
- Market Data Management
- Metering and Network Bill Calculation
- Pricing

The business functions within this segment are enabled through several core systems, augmented with a broad range of engineering tools and several in-house systems.

**Opening Position**

Through the remaining two years of the current regulatory period, our focus within the Network and Market Management program segment is on sustainment of existing platforms and planning for initiative IT03 Network Design Management.

**Coming Period Investments**

Table 4 below summarises the planned investments within this program segment in the coming regulatory period.

| Investment | Description | Forecast |
|---|---|---|
| **IT03: Network Design Management** | Powerlink uses a range of systems and tools to undertake design and secure management of design drawings for its power and communications networks, with the resultant information and supporting systems critical to the business's downstream construction, commissioning, operating and maintenance processes.<br>This investment will renew Powerlink's network design and drawing management capability consistent with established asset lifecycle management principles. The renewal investment will also be leveraged as an opportunity to optimise Powerlink's disparate systems and revisit operational business processes as an enabler of productivity improvement. The proposed investment will address the following business drivers:<br>• Requirement for renewal of aging IT systems capability for sustainability, supportability and security;<br>• Opportunity to leverage the renewal for improved network design, consistent with contemporary "digital engineering" principles;<br>• Opportunity to leverage the renewal for improved network information and drawing management; and<br>• Alignment with the Queensland Government Building Information Modelling (BIM).<br>Benefits to be enabled through this initiative include:<br>• Sustainability of Powerlink's core network design and drawing management functions, underpinned by efficient, reliable and supportable systems;<br>• Removal of manual process steps and interventions;<br>• Enabling application of appropriate meta-data to support content searching;<br>• Enabling consistent application of design standards and business rules;<br>• Integration with field devices, including design changes (mark-ups) / approvals; and<br>• Improved drawing management version control to ensure transmittals provide accurate network information to field service staff. | $5.33M |
| **Minor Updates and Upgrades** | Consistent with cyclic asset lifecycle management practices, minor recurrent updates and upgrades will be undertaken on applications within this segment to remediate defects and to maintain supportability and security.<br>Key applications forecast to require update and/or upgrades within the coming period include:<br>• Metering and Meter Data Management<br>• Portfolio Risk System<br>• Network Model Management systems<br>• Other Engineering Tools | $0.26M p.a. |

*Table 4. IT Roadmap Initiatives – Network & Market Management Segment*

### 6.3.3 Information, Analytics and Insights Program Segment

**Scope**

This program segment comprises IT systems and capability supporting a breadth of business functions including:

- Data Warehousing
- Business Intelligence
- Reporting
- Analytics

**Opening Position**

Through the remaining two years of the current regulatory period, we are preparing for the coming period with the rollout of our corporate data strategy focussed on leveraging our existing information stores with improved data governance enabling greater data quality.

**Coming Period Investments**

Table 5 below summarises the planned investments within this program segment in the coming regulatory period.

| Investment | Description | Forecast |
|---|---|---|
| **IT04: Information, Analytics & Insights** | Existing Business Intelligence (BI) and data warehouse tools will be rationalised and renewed for ongoing sustainability, supportability and security. Through the investment, the opportunity will be taken to incorporate current and emerging BI capabilities into the core IT solutions to manage IT operational costs and to support the broader application portfolio rationalisation.<br>This investment will deliver on the following objectives:<br>• Ensure the ongoing supportability and sustainability of the core systems enabling Powerlink's BI suite.<br>• Support efficiencies and information accuracy / integrity through automation of data collection from information sources and network assets.<br>Benefits to be enabled through this investment include:<br>• Increased automation of data collection and removal of manual data transformation processes.<br>• Provision of asset performance and condition data through the leveraging of system capabilities delivered by the Next Generation Network Operations initiative (e.g. Energy Management System).<br>• Opportunity to enable strategic investment and maintenance regimes through improved analysis of asset condition data and integration with geospatial data through leveraging the S/4 HANA ERP platform.<br>• Tool consolidation through the retirement of current BI and warehouse toolsets where the capabilities from a specific toolset can prudently be met by S/4 HANA, SAP Analytics Cloud or other existing tools.<br>• Enablement of near-real time reporting through the replacement of the current SAP Business Warehouse with S/4 HANA. | $3.91M |

| Investment | Description | Forecast |
|---|---|---|
| **Minor Updates and Upgrades** | Consistent with cyclic asset lifecycle management practices, minor recurrent updates and upgrades will be undertaken on applications within this segment to remediate defects and to maintain supportability and security.<br>Key applications forecast to require update and/or upgrades within the coming period include:<br>• SAP Analytics Cloud<br>• SAP Business Objects<br>• Extract Transform Load (ETL) Tools<br>Various other Data Intelligence Applications.<br>We also support community "open data" access to spatial network data layers and information. | $0.53M p.a. |

*Table 5. IT Roadmap Investments – Information, Analytics and Insights Segment*

### 6.3.4 Corporate Systems Program Segment

**Scope**

This program segment comprises IT systems and capability supporting a variety of business functions including:

- Corporate Emergency Event Coordination
- Travel Management
- Geographic Information System (GIS) and Mapping
- Facilities and Site Access Management
- Legal Support
- Fleet Management
- Risk and Governance Management
- Stakeholder and Customer Relationship Management
- Electronic Document and Records Management (EDRM)

The business functions within this segment are enabled through several core systems and cloud services.

**Opening Position**

Through the remaining two years of the current regulatory period, our focus is on deployment of a GIS spatial viewer tool for integration with the Powerlink Next Generation Network Operations (NGNO) solution. We will also sustain our other existing corporate systems and capability.

**Coming Period Investments**

Table 6 below summarises the planned investments within this program segment in the coming regulatory period.

| Investment | Description | Forecast |
|---|---|---|
| **IT05: Corporate Systems** | This investment supports the need to renew Powerlink's legacy Stakeholder Management and Document Management capability and processes.<br>The proposed investment will address the following business drivers:<br>• Requirement for renewal of aging IT systems capability for sustainability, supportability and security<br>• Opportunity to leverage the renewal for improved stakeholder | $5.4M |

| Investment | Description | Forecast |
|---|---|---|
| | management consistent with contemporary principles<br>• Opportunity to leverage the renewal for improved document and records management<br>Benefits to be enabled through this initiative include:<br>• Powerlink's core document management and stakeholder management functions and processes will be underpinned by efficient, reliable and supportable systems.<br>• The implementation of contemporary capability is anticipated to support process improvement efficiencies through:<br>○ Removal of manual process steps and interventions;<br>○ Integration with field devices, including document and stakeholder information, safety documentation; and<br>○ Improved document and stakeholder information version control to ensure Powerlink provides accurate information to field service staff and contractors. | |
| **Minor Updates and Upgrades** | Consistent with cyclic asset lifecycle management practices, minor recurrent updates and upgrades will be undertaken on applications within this segment to remediate defects and to maintain supportability and security.<br>Key applications forecast to require update and/or upgrades within the coming period include:<br>• Corporate Risk Management system<br>• Fleet Management tools<br>• Legal Support software and applications<br>• Travel and Expense Management<br>• GIS, Spatial Viewer and Cadastre Management<br>• GIS Mapping and Analysis<br>• GIS Spatial Database, Mapping Software | $0.33M p.a. |

*Table 6. IT Roadmap Investments - Corporate Systems Segment*

### 6.3.5 Technology Applications Program Segment

**Scope**

This program segment comprises IT systems and capability supporting business functions including:

- Service Management
- Office Applications
- Technology Architecture and Design
- Technology Delivery and Maintenance Tools
- Technology Operations and Performance Management Tools

The business functions within this segment are enabled through several core systems, augmented with a broad range of IT support tools and in-house applications.

**Opening Position**

Through the remaining two years of the current regulatory period, our primary focus within this planning segment is on the transition from Microsoft Office 2016 to Office 365. We are otherwise continuing to support and sustain our existing capability.

**Coming Period Investments**

Table 7 below summarises the planned investments within this program segment in the coming regulatory period.

| Investment | Description | Forecast |
|---|---|---|
| **IT06: Technical Applications Sustainability** | Powerlink's IT services are provisioned with an underpinning technology application layer comprising numerous enterprise level management applications. They allow the ability to respond to service requests, proactively maintain and monitor the technology fleet, applications and hardware.<br>A variety of current technology layer systems and tools will reach end-of-life over the coming regulatory period. This investment case supports the renewal of this capability.<br>We will build on the Office 365 transition, upgrading and/or migrating our legacy technical platforms for sustainability, leveraging cloud, as-a-service or other hybrid system configurations where efficient.<br>The proposed investment is required to address the following drivers:<br>• Ensure the ongoing accessibility, supportability and security of underpinning applications for Powerlink's IT services.<br>• Ensure IT management solutions remain contemporary in terms of usability and functionality to meet the needs of the business.<br>Benefits to be enabled through this investment include:<br>• Powerlink's core IT management functions and processes will be underpinned by efficient, reliable and supportable systems.<br>• Process improvement efficiencies enabling consistent application of technology design standards and business rules, with easier integration and collaboration with cloud services and third parties. | $3.3M |
| **Minor Updates and Upgrades** | Consistent with cyclic asset lifecycle management practices, minor recurrent updates and upgrades will be undertaken on applications within this segment to remediate defects and to maintain supportability and security.<br>Key applications forecast to require update and/or upgrades within the coming period include:<br>• Application and Desktop Virtualisation<br>• Enterprise Architecture Application<br>• Service Management<br>• Various other IT support, development and maintenance tools | $0. 33M p.a. |

*Table 7. IT Roadmap Investments – Technology Applications Segment*

### 6.3.6 Cybersecurity Program Segment

**Scope**

This program segment comprises IT systems, tools, appliances and procedures to maintain Powerlink's cybersecurity defences and to mitigate identified threats and risk.

Assets and capabilities within this segment include:

- Identity and Access Management (IAM)
- Email Security and Filtering
- Anti-Malware
- Intrusion Detection
- Endpoint Agent Management and Monitoring
- Inline Network Security
- Cloud Collector and Activity Monitoring
- Data Leakage Prevention
- Various Management Tools, Services and Procedures

**Opening Position**

Through the remaining two years of the current regulatory period, we are continuing to build on our established cybersecurity capacity and maturity consistent with industry expectations aligned with the Australian Energy Sector Cyber Security Framework (AESCSF).

**Coming Period Investments**

Table 8 below summarises the planned investments within this program segment in the coming regulatory period.

| Investment | Description | Forecast |
|---|---|---|
| **IT07: Cybersecurity Maturity** | With the increasing focus on cybersecurity in the National Electricity Market, further investment in this segment is planned, consistent with Powerlink's obligations as a high criticality market participant.<br>It is our intention to build on our existing cybersecurity capability and competence, continuing to mitigate known threats and to further extend our AESCSF maturity where prudent. | $2.63M |
| **Minor Updates and Upgrades** | There are two elements to our recurrent Cybersecurity Minor Updates and Upgrades forecast:<br>1. Cyclic renewal of our existing security hardware, software and appliances<br>2. Ad hoc investment in response to emerging threats | $1.08M over the years FY22/23 - FY23/24 for cyclic renewal<br><br>$0.26M p.a. investment for ad hoc threat response |

*Table 8. IT Roadmap Investments - Cybersecurity Segment*

### 6.3.7 Endpoint Devices and Collaboration Infrastructure Program Segment

**Scope**

This program segment comprises:

- Endpoint devices including:
  - Laptops
  - Workstations
  - Tablets
  - Printers
  - Desk and mobile phones
- Collaboration Infrastructure including:
  - Meeting room monitors and Clickshare streaming units
  - Video conferencing equipment

Endpoint devices and collaboration infrastructure are renewed cyclically based on the IT Infrastructure Asset Lifecycle Management Guidelines described in section 4.1.1. As printers and mobile phones are provided under managed service or leasing arrangements (operating expenditure), they are excluded from the recurrent IT capital expenditure forecast for this segment.

**Coming Period Investments**

Table 9 below summarises the planned investments within this program segment in the coming regulatory period.

| Investment | Description | Forecast |
|---|---|---|
| **Endpoint Devices** | Consistent with the IT Infrastructure Asset Management Guidelines described in section 4.1.1, we replace our Endpoint Devices (including collaboration infrastructure) on a cyclic lifecycle management basis. | $6.8 over 5 years |

*Table 9. Endpoint Devices and Collaboration Infrastructure Segment*

### 6.3.8 IT Infrastructure Program Segment

**Scope**

This program segment comprises:

- Server technology:
  - Rackmount servers
  - Blade servers
  - Server enclosures
- Storage technology:
  - High performance solid state storage (Tier 1)
  - SAN storage arrays (Tier 2+)
  - Database appliances
- Corporate Networking Infrastructure
  - LAN devices
  - Data centre, WAN and Perimeter Devices

IT infrastructure is renewed cyclically based on the IT infrastructure asset lifecycle management guidelines described in section 4.1.1. Infrastructure Asset Lifecycle Management

**Coming Period Investments**

Table 10 below summarises the planned investments within this program segment in the coming regulatory period.

| Investment | Description | Forecast |
|---|---|---|
| **Server Technology** | Consistent with IT Infrastructure Asset Management Guidelines described in section 4.1.1, we replace our assets on a cyclic lifecycle management basis. | $2.09M over 5 years |
| **Storage Technology** | | $2.79M over 5 years |
| **Corporate Networking Infrastructure** | | $2. 58M over 5 years |

*Table 10. Endpoint Devices and Collaboration Infrastructure Segment*

### 6.3.9 Minor Works Program Segment

This program segment forecasts minor annual capital expenditure to enable delivery of small IT changes or releases.

| Investment | Description | Forecast |
|---|---|---|
| **Minor Works** | **Compliance, risk and safety focused minor IT change**<br>Minor unplanned or externally triggered works, such as:<br>• Mandatory business change consequential to safety initiatives;<br>• Mitigation of assessed risks;<br>• Actioning of audit requirements or recommendations;<br>• Compliance with electricity market changes;<br>• Compliance with taxation or other regulatory change; and<br>• Minor initiatives to meet business capacity requirements. | $0. 37M p.a. |

*Table 11. Minor Works Segment*