

ICT Minor Projects

Regulatory Business Case (RBC) 2024-29

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1. Summary

This business case has been prepared to support the 2024-29 Regulatory Proposal. The business case demonstrates that Power and Water has undertaken appropriate analysis of the need and identified a full suite of credible options that will resolve the need, to ensure that Power and Water continues to meet the National Electricity Objectives and manage the network prudently and efficiently.

The proposed expenditure identified in this business case will undergo further assessment and scrutiny through Power and Water’s normal governance processes prior to implementation and delivery.

This business case addresses the need for small, ad hoc ICT projects in response to a combination of internal and external drivers.

1.1 Business need

Based on experience in the current regulatory period,¹ it is likely that throughout the next regulatory period, emerging internal and external drivers, including the requirements of the Northern Territory Government (NTG), customers, regulators, and suppliers will in turn require ‘ad hoc’ ICT investment. The ICT investments are likely to be relatively minor (approximately ██████████ in aggregate) involving one or more of changes to applications, process, or resource modifications.

Due to the dynamic nature of Power and Water’s unique operating environment and relative inexperience with regulatory requirements, business units are likely to determine that for compliance or other reasons, small ICT projects are required.

ICT requires the budget provision to enable the highest priority projects to be delivered without compromising the budget provisions for the nine large ICT projects and the four components of the Operating Model Program (OMP) planned for execution during the next regulatory period.

1.2 Options analysis

The options considered to resolve this need are shown in Table 1

Table 1: Summary of credible options

| Option | Option name | Description | Recommended |
|--------|-------------------------------------|---|-------------|
| 1 | Do not provision for minor projects | No budget allowance for evolving business requirements | No |
| 2 | Provision for minor projects | Establish a minor projects budget to ensure high priority, small, ad hoc projects identified during the next regulatory period can be delivered without compromising the major projects | Yes |

¹ Actual annual expenditure on ad hoc or ‘minor projects’ in the current regulatory period is \$200k

1.3 Recommendation

Option 2- Provision for minor projects is the recommended option at an estimated capital cost of [REDACTED] (real 2021/22) over the 2024-29 regulatory period. It will enable currently unforeseen small ICT projects to progress during the next regulatory period provided they individually satisfy Power and Water’s governance process.

Table 2 shows a summary of the expenditure requirements for the 2024-29 regulatory period.

Table 2: Forecast annual capital and operational expenditure (\$m, real 2021/22)

| Item | FY25 | FY26 | FY27 | FY28 | FY29 | Total |
|-------|------------|------------|------------|------------|------------|------------|
| Capex | [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] |
| Opex | - | - | - | - | - | - |
| Total | [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] |

The forecast expenditure for the next regulatory control period allocated to Standard Control Services as per the CAM is outlined in Table 3.

Table 3: Forecast annual capital and operational expenditure – allocated to SCS (\$m, real 2021/22)

| Item | FY25 | FY26 | FY27 | FY28 | FY29 | Total |
|-------|------------|------------|------------|------------|------------|------------|
| Capex | [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] |
| Opex | - | - | - | - | - | - |
| Total | [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] |

The forecast expenditure for the next regulatory control period allocated to recurrent and non-recurrent categories is outlined in Table 4.

Table 4: Forecast annual capital expenditure – recurrent and non-recurrent

| Item | FY25 | FY26 | FY27 | FY28 | FY29 |
|---------------|------|------|------|------|------|
| Recurrent | 50% | 50% | 50% | 50% | 50% |
| Non-recurrent | 50% | 50% | 50% | 50% | 50% |

2. Identified need

This section provides the background and context to this business case, identifies the issues that are posing increasing risks to Power and Water and its customers, describes the current mitigation program and its delivery status, and provides a risk assessment of the inherent risk if no investment is undertaken.

2.1 Background

During the last regulatory period a number of changes to the business and to market requirements required Power and Water to initiate a number of unplanned ICT projects. The trigger for the additional projects vary and are expected to continue in the next regulatory period. Power and Water's maturing operating model, as well as the transition to the Northern Territory Market Settlement processes may provide the catalyst for new initiatives.

2.2 Historical projects and expenditure

The table below provides examples of ad hoc/minor projects that have been undertaken in the current regulatory period at an average project cost of \$0.3 million.

The majority of the projects were driven by internal requirements, but whether internally or externally driven neither ICT nor the business units anticipated the need for the projects up to a year in advance of the regulatory submission for the 2019-24 regulatory period.

Table 5: Example of Minor Projects undertaken in the current regulatory period (\$k, real 2022)

| Minor Project | Driver | Rationale | Total cost (\$k, real FY22) |
|--|-------------------|--|-----------------------------|
| Upgrade mobile connectivity services (Ben Hammond) | Internal/External | Mobile signal strength impacted incoming and outgoing call to Ben Hammond as a result of 2G retirement | 637 |
| EMS ² end user computing devices | Internal | Replacement of end user computing | 200 |
| Upgrade Ben Hammond Training Facilities | Internal | Upgrade of main Power Services training room | 44 |
| Respond to COVID-19 pandemic | External | Additional end user computing and investment in Virtual Desktop Infrastructure (VDI) | 200 |
| Honeywell upgrade | Internal | Unplanned software upgrade for unsupported physical security Honeywell system | 173 |
| NAVMAN Pilot | Internal | Vehicle Tracking System pilot to improve safety of remote travel and lone service workers | 30 |

² Energy Management System

| | | | |
|-----------------------------------|----------|--|-----|
| Control room hardware display | Internal | Hardware upgrade | 134 |
| Integrated Communications Project | Internal | Replacing obsoleted control room telephony | 161 |
| Government data centre transition | External | Additional budget to connect Data Centre with Hudson Creek to enable disaster recovery | 230 |
| MVRS ³ system upgrade | Internal | Unplanned out of support | 920 |

By way of further explanation of the minor project category, two of the projects in the table above are explained in more detail below:

Integrated Communications Project

The integrated communication project was initiated due to the retirement of the British Telecom ISDN technology. This project ensures that the end user telephony is fit for purpose as well as align with the current SIP technology in order to manage customer, market participant and stakeholder network related calls. This project is on track to be completed in April 2023.

Energy Management End Use Devices

The upgrade of hardware to a supported version of the EMS also necessitated Power Services SCADA end use computing to be upgraded. The project delivered the required build and configured operating systems as well as the delivery and installation of the assets to the required locations, the project was delivered on budget of \$200,000.

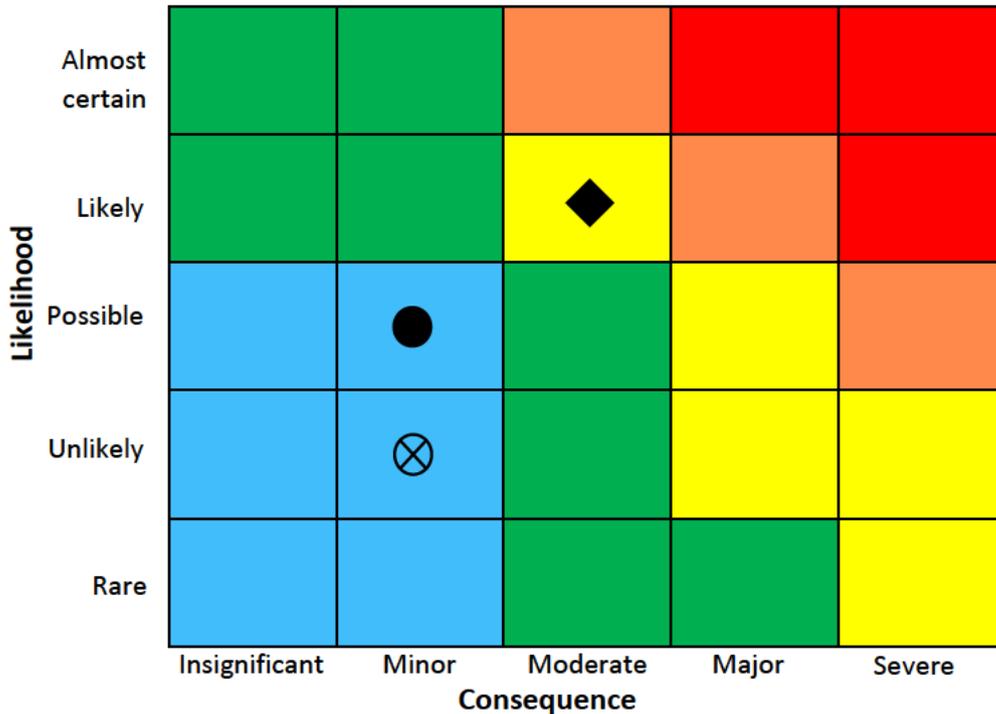
2.3 Risk assessment

The figure below shows the current risk rating, inherent rating in 2029 (if no proactive action is taken), and the residual risk ratings. The basis for the rankings is summarised below.

- **Current Rating** is 'Low': until budget provision is confirmed for the next regulatory period it is 'Possible' that there will be insufficient budget for all the ad hoc, minor (but important) projects to proceed. The consequence today is 'Minor' (but as discussed for the inherent rating, the risk will build over the course of the next regulatory period).
- **Inherent rating** is 'High': this rating is based on no ad hoc minor (but important) projects being undertaken in the next regulatory period because of insufficient budget allocation. Based on previous experience, it is 'Likely' that inaction would lead to a 'Moderate' impact on the business, given that the major projects will address the highest of business risks.
- **Residual rating** is 'Low': the proposed budget is 'Unlikely' to be insufficient for undertaking the higher priority ad hoc minor projects that are reasonably expected to arise during the course of the next regulatory period. The work that is not able to be completed, if any, is likely to have only a 'Minor' impact on business performance overall.

³ Multi-vendor Reading System used for commercial and domestic non smart meter reading

Figure 1: Risk assessment matrix



Legend: ● Current rating ◆ Inherent rating (do nothing) ⊗ Residual rating (project completion)



2.4 Summary

Based on experience in the current regulatory period, it is likely that emerging internal and external drivers, including the requirements of the Northern Territory Government (NTG), customers, regulators, and suppliers will in turn require ‘ad hoc’ ICT investment will continue into the next regulatory period. The ICT investments are likely to be relatively minor involving one or more of changes to applications, process, or resource modifications.

Due to the dynamic nature of Power and Water’s unique operating environment and relative inexperience with regulatory requirements, business units are likely to determine that for compliance or other reasons, small ICT projects are required.

ICT requires separate provision to enable the highest priority projects to be delivered without compromising the large ICT projects and Operating Model Program (OMP) planned for execution during the next regulatory period.

4. Options analysis

This section describes the various options that were analysed to address the increasing risk and identify the recommended option. The options are analysed based on ability to address the identified needs, prudence and efficiency, commercial and technical feasibility, deliverability, benefits and an optimal balance between long term asset risk and short-term asset performance.

4.1 Comparison of credible options

Credible options are identified as options that address the identified need, are technically feasible and can be implemented within the required timeframe. The following options have been identified:

- Option 1 – Do nothing. This option include no budget allowance for evolving business requirements.
- Option 2 – Provision of minor projects. This option proposes to establish a minor projects budget to ensure high priority, small, ad hoc projects identified during the next regulatory period can be delivered without compromising the major projects.

A comparison of the two identified credible options and the issues they address in the identified need is depicted in Table 6.

These options are described and assessed in detail in the sections below.

Table 6 Summary of options analysis outcomes (\$m, real 2022)

| Assessment metrics | Option 1 | Option 2 |
|------------------------------|----------|----------|
| NPV | - | ■ |
| Capex | - | ■ |
| Opex | - | - |
| Meets customer expectations | ○ | ● |
| Aligns with Asset Objectives | ○ | ● |
| Technical Viability | ○ | ◐ |
| Deliverability | ○ | ● |
| Preferred | ✘ | ✓ |
| Ranking | 2 | 1 |

- Fully addresses the issue
 ◐ Adequately addresses the issue
 ◑ Partially addresses the issue
 ○ Does not address the issue

4.1.1 Option 1 – Do not provision for minor projects

In option 1 Power and Water will not include provision of unforeseen projects or unfunded market compliance changes. This option does not align with prudent and efficient services delivery and may result in non-compliance with our obligations.

This option is not recommended.

4.1.2 Option 2 – Provision for Minor Projects

In option 2 ICT will establish provision of [REDACTED] per annum to cover end user computing requirements and minor improvements to customer facing services like the web and or Power and Water application development.

The [REDACTED] p.a. estimate is based on providing 10-week app development totalling [REDACTED] and approximately [REDACTED] in software licencing centralisation per annum represents a substantial reduction from the [REDACTED] p.a. required historically.

This also aligns with the estimated capex included for FY23 and FY24.

This option is recommended.

4.2 Non-credible options

No non-credible options were identified.

5. Recommendation

Option 2 – Provision for Minor Projects is the recommended option at an estimated cost of [REDACTED] (real 2021/22) over the next regulatory period. The scope of work for each project will be developed as the need arises and project approval will be subject to Power and Water’s established expenditure governance process.

The proposed program is consistent with the National Electricity Rules Capital Expenditure Objectives as the expenditure is required to maintain the quality, reliability, and security of supply of standard control services and maintain the safety of the distribution system.

5.1 Strategic alignment

The “Power and Water Corporation Strategic Direction” is to meet the changing needs of the business, our customers and is aligned with the market and future economic conditions of the Northern Territory projected out to 2030. As shown in the table below, this business case is directly linked to two strategic focus areas.

Table 7 Strategic alignment

| | Strategic direction focus area | Strategic direction priority |
|---|--|--|
| 1 | Customer and the community at the centre | Enhance Customer Experience and Engagement |
| 2 | Living within our means | Cost Prudence |

5.2 Dependent projects

No dependent projects have been identified.

5.3 Deliverability

These minor projects will be delivered via a combination of internal and external resources, depending upon the nature of the project. The projects will be individually scoped, resourced, and sequenced with other projects after considering the requirements of the major projects. No delivery risks have been identified.

5.4 Customer considerations

Then minor project budget will allow Power and Water to improve customer facing applications such as the Power and Water App. Power and Water will look to improve this application over the next regulatory period in order to improve customer contact management , outage messaging and other value adding services to improve Power and Waters customer experience.

5.5 Expenditure profile

Table 8 shows a summary of the expenditure requirements for the 2024-29 regulatory period.

Table 8 Forecast annual capital and operational expenditure (\$'000, real 2021/22)

| Item | FY25 | FY26 | FY27 | FY28 | FY29 | Total |
|-------|------|------|------|------|------|-------|
| Capex | █ | █ | █ | █ | █ | █ |
| Opex | - | - | - | - | - | - |
| Total | █ | █ | █ | █ | █ | █ |

The forecast expenditure for the next regulatory control period allocated to Standard Control Services as per the CAM is outlined in Table 3.

Table 9: Forecast annual capital and operational expenditure – allocated to SCS (\$m, real 2021/22)

| Item | FY25 | FY26 | FY27 | FY28 | FY29 | Total |
|-------|------|------|------|------|------|-------|
| Capex | █ | █ | █ | █ | █ | █ |
| Opex | - | - | - | - | - | - |
| Total | █ | █ | █ | █ | █ | █ |

The forecast expenditure for the next regulatory control period allocated to recurrent and non-recurrent categories is outlined in Table 4.

Table 10: Forecast annual capital expenditure – recurrent and non-recurrent

| Item | FY25 | FY26 | FY27 | FY28 | FY29 |
|---------------|------|------|------|------|------|
| Recurrent | 50% | 50% | 50% | 50% | 50% |
| Non-recurrent | 50% | 50% | 50% | 50% | 50% |

5.6 High-level scope

The scope for each project in the Minor Project program will be developed as the need for the project is identified during the course of the next regulatory period.

Power and Water Corporation

55 Mitchell Street, Darwin NT 0800

Phone 1800 245 092

powerwater.com.au

PowerWater 