



# Attachment 2.01

Operating Model Program

31 January 2023

PowerWater

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# Abbreviations

The following table provides a list of abbreviations and acronyms used throughout this document. Defined terms are identified in this document by capitals.

Term	Definition
ASSP	Accelerated Strategic Sourcing Project
CAM	Cost Allocation Methodology
Capex	Capital Expenditure
ELT	Executive Leadership Team
FTE	Full Time Equivalent
ICT	Information and Communications Technology
NPV	Net Present Value
OMP	Operating Model Program
Opex	Operating Expenditure
RFP	Request for Proposal
SaaS	Software as a Service
SCADA	Supervisory Control and Data Acquisition
SCI	Statement of Corporate Intent
SCS	Standard Control Services

# Overview

Following the AER's Final Determination on our 2019-24 regulatory proposal, Power and Water Corporation (Power and Water) commenced a strategic Operating Model Program (OMP). This OMP is charged with delivering uplifted organisational capabilities and efficiencies across people, process, and technology.<sup>1</sup>

The program, which commenced in 2019, has three workstreams:

1. Support Hub Enablement
2. Supply Chain Fundamentals
3. Core Capability Program

We have delivered upgrades to our support and operational hubs, and to our supply chain systems and processes. Building on this foundation, during the next regulatory period (2024-29) our focus will move to the final workstream. The Core Capability Program will automate currently manual processes and will replace or renew legacy systems that are or will soon become technically obsolete. These legacy systems pose increasing business risks and do not provide us the functionality we need to manage our capital expenditure (capex) program, our operating expenditure (opex) requirements, and our regulatory obligations prudently and efficiently.

A central component of the Core Capability Program is the Capability Uplift Project. The Capability Uplift Project is a series of Information and Communications Technology (ICT) system and process upgrades across six projects (see Figure OV.1):

1. Transform Customer Experience
2. Meter to Cash
3. Optimise Service Delivery
4. Standardise Asset Management
5. Physicals to Financials
6. Capital Project Delivery Consolidation

Figure OV.1: Capability Uplift Project outcomes

Capability Uplift Outcomes					
Transform Customer Experience	Meter to Cash	Optimise Service Delivery	Standardise Asset Management	Physicals to Financials	Capital Project Delivery Consolidation
<ul style="list-style-type: none"> <li>Deliver a <b>consistent customer experience</b> across the business with seamless interactions across all channels.</li> <li>Support <b>account management</b>, on-boarding of customers, handle service orders, enquiries and customer feedback.</li> </ul>	<ul style="list-style-type: none"> <li>Deliver <b>compliant and efficient M2C systems, processes and roles</b> in line with AER requirements and to support market operations and reduce revenue leakage.</li> </ul>	<ul style="list-style-type: none"> <li>Support <b>efficient work planning, scheduling, dispatching</b> and work closeout processes.</li> <li>Support <b>resource scheduling and dispatch</b> across internal and contractor workforces, across multiple regions in the NT.</li> </ul>	<ul style="list-style-type: none"> <li>Realise the <b>value from assets</b> by effectively balancing cost, risk and performance.</li> <li>Develop the asset investment plan, balancing competing needs of the network and asset based with constrained resources to <b>optimise the portfolio and investments</b>.</li> </ul>	<ul style="list-style-type: none"> <li>Improve the <b>efficiency of cost allocation, accounting and reporting processes</b> to improve decision making and enhance the connection between assets, work and financials.</li> <li>Improve how <b>accounting and finance</b> functions are managed.</li> </ul>	<ul style="list-style-type: none"> <li>Deliver <b>projects effectively and efficiently</b> from capital project planning, scoping and sourcing, project management and execution.</li> <li>Support <b>consistent project estimation providing traceability</b>, consistency and efficiency of design and estimates for projects.</li> </ul>

<sup>1</sup> While the Operating Model Program commenced after the AER's 2019-24 determination, this absorbed some projects that were included in the ICT capex allowance for this period, and which will largely be delivered in the current period.

The first two of these projects – Transform Customer Experience and Meter to Cash – are currently under way. The Meter to Cash project was approved in December 2021 for implementation during 2023/24. This project will also deliver the majority of outcomes identified under the Transform Customer Experience project.

The program has been staged based on our delivery capability, overall project prioritisation, budget constraints, and business risk. In the next regulatory period, we will complete the remaining capability uplift projects:

- Optimise Service Delivery (including works management and mobility).
- Standardise Asset Management and Capital Project Delivery Consolidation (noting these two have now been combined).
- Physicals to Financials.

Our forecast expenditure (totex) to complete these projects over the period FY24 to FY29 is \$56.2 million (real 2021/22). This includes capex for the next regulatory period FY25 to FY29 of \$37.0 million (in \$2022) comprising Standard Control Services (SCS) capex of \$18.4 million (in \$2022).<sup>2</sup> We will also incur additional opex to deliver these projects of \$15.9 million (in \$2022) over the same period, of which \$7.7 million (in \$2022) is allocated to SCS.

Our business case analysis (see Attachment 8.74) estimates the Capability Uplift Project will deliver a positive net present value (NPV) of +\$4.1 million<sup>3</sup>. The expected benefits will allow us to absorb the additional opex requirement and is fundamental to our 0.5 per cent efficiency dividend proposed for the next period.

Our overall forecast capex and opex forecasts for the next regulatory period are predicated on the operational efficiencies expected to be achieved from this program of work.

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<sup>2</sup> This is the amount of the capex requirement that we have allocated to the regulated SCS requirement. A small proportion is also allocated to ACS.

<sup>3</sup> This figure is in \$2020, consistent with the denomination of costs and benefits in the business case.

# 1. Target operating model

An important precursor to the OMP being delivered today is the target operating model initiative, which commenced in 2018. The findings, costs and expected benefits from the target operating model have since informed the OMP.

## 1.1 Overview of the target operating model

In February 2018, the Executive Leadership Team (ELT) agreed a target operating model for Power and Water, based on a 'federated model'. The target operating model applied to the whole of Power and Water, both regulated and unregulated, power, water and sewerage.

Accenture prepared an operating model blueprint for the business. The target operating model was designed to achieve four key principles:



It provided for five major structural changes:

1. Reduced lines of business.
2. Enhanced lines of business operational capabilities.
3. Creation of guiding, core operations and support platforms.
4. Creation of three hubs – customer experience, core operations and support.
5. Integration of regions and remote operations.

The result was a blueprint for the organisation describing what change was required and why, how new processes will operate, what capabilities were required, and the people required to run it. The target operating model was designed to enable greater asset management discipline to avoid unnecessary cost and to improve works management by consolidating work schedules. It planned to enable greater visibility of assets in the field through more real time monitoring and control, which was to also provide better feedback to customers when faults occur. It planned to enhance the service of centralised functions such as procurement, ICT and regulation.

## 1.2 Costs and benefits of the target operating model

### 1.2.1 Accenture business case

The aim of the target operating model initiative was to unlock efficiencies and enhance the delivery of Power and Water's services. The focus is on breaking down internal barriers that are seen to be limiting performance, removing duplication and red tape, and reorienting the business to focus on the customer.

The target operating model business case, produced by Accenture, outlined investment of \$98 million over a four-year period. If commenced in 2019, then the target operating model was expected to be delivered by 2022/23, with gross pooled benefits of \$166 million and an NPV of \$55 million<sup>4</sup>.

### 1.2.2 Organisational redesign

In January 2019, IG Partners was engaged to provide more detailed organisational designs, including accountability breakdowns and descriptions. IG Partners was also asked to identify resourcing requirements, with a view to managing the number of layers in the organisation as well as spans of control. IG Partners identified the following issues:

- Duplication of both roles and activities in product lines and in the support functions. Unclear interfaces, accountabilities, authority rights and handoffs causing further duplication of roles and activities, increasing the total headcount required to perform various tasks.
- The presence of customer roles across virtually every ELT member's team. This dispersion of resources causes confusion and tension over 'who owns the customer'.
- Team sizing inconsistencies with spans of control across the business ranging from 1 – 20 direct reports. Rightsizing managerial spans of control would improve productivity and efficiency.
- Once aligned to the new structure(s), there are opportunities to achieve process and system efficiencies through:
  - Eliminating duplication of effort between centralised functions and product lines; having the right people in the right roles doing the right work.
  - Consistent business partnering across centralised functions, supporting collaboration across the organisation.
  - Consolidating like-functions, improving how we execute our work through streamlined common processes and activities.

These findings have been factored into design of what we now refer to as the OMP.

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<sup>4</sup> The operating model program encompasses all functions of Power and Water. Unless otherwise stated, costs and benefits referred to in this report are across all business functions. Costs and benefits relating to regulated electricity network services are a subset of these.

## 2. The Operating Model Program

### 2.1 Components of the Operating Model Program

The target operating model is enabled by the OMP, which consists of three streams of work:

1. **Support Hub Enablement** – Support Hub Enablement encompasses several elements; namely the Health, Safety, Environment, Risk and Compliance system to track and manage HSE and risk and compliance obligations. Perhaps most importantly, the workstream will develop and implement a revised business structure and establish a framework to reshape the business to centralise services (thereby reducing duplication of people and processes) and streamline business processes.

The Support Hub Enablement program includes enhancing the operations hub to centralise and upgrade system control and supervisory control and data acquisition (SCADA), and provide additional functionality to SCADA, system management and fault response. Aspects of the work have been suspended pending greater certainty around ownership of System Control in the Northern Territory Electricity Market.

2. **Supply Chain Fundamentals Program** – This work is focussed on standardising and optimising supply chain and inventory management across Power and Water.
3. **Core Capability Program** – This consists of technology and process change projects to allow the business to automate manual processes and replace legacy ICT systems. The program covers six core systems delivered under the Capability Uplift Project:
  - Transform Customer Experience
  - Meter to Cash
  - Optimise Service Delivery (works management including a mobility solution)
  - Standardise Asset Management
  - Physicals to Financials
  - Capital Project Delivery Consolidation

The Core Capability Program also delivers supporting projects:

- Meter to Cash Enablement
- Meter to Cash Revenue Assurance
- Market Interactions Enablement
- Northern Territory Electricity Market Settlements

The three workstreams programs are interdependent, with the realisation of efficiencies dependent on the replacement of ICT systems under the Core Capabilities Program, enabled by the hub enhancements, and smart meter installations. While some benefits will be realised progressively as modules are deployed, the full benefits are only realised through the end-to-end integration of all systems and processes.



The OMP applies across the whole of Power and Water. Some components of the OMP are attributable directly to the regulated electricity distribution services (regulated services), some components are attributable to other Power and Water functions, and others are attributable at a 'corporate operations' level, from which they are allocated proportionately to the regulated services.

The original Accenture business case assumed a four-year program. However, given the extent of systems requiring replacement and the need for careful whole-of-organisational alignment, we consider this compressed time frame poses too great a risk. We have therefore extended the timeframe of the Core Capability Program to limit deployment of major system initiatives typically to one per financial year.<sup>5</sup> Our aim is for the OMP to be fully completed by 2027/28.

## 2.2 Support Hub Enablement

### 2.2.1 Progress to date

The Support Hub Enablement workstream was formed in 2019 to realign the organisational structure to defined accountabilities. The project was designed as a business-as-usual project within the People, Culture and Safety Business Unit, with the approach of aligning people to the Accenture blueprint through a 'lift and shift' process.

Numerous people moves were made between July 2018 and June 2021. In parallel, Power and Water restructured several major components of its business, including:

- Creation of the Core Operations Business Unit.
- Consolidation of Regions and Remote Operations into Power Services, Water Services, Core Operations and Corporate areas.
- Metering Strategy consolidated within Core Operations.
- SCADA and Communications consolidated within Core Operations.
- Strategy & Talent Management was introduced to the People, Culture and Safety Business Unit.
- Safety & Environment consolidated into a single team.
- Regulation consolidated into a single team.
- Water and Remote Developer Services consolidated within Customer, Strategy & Regulation (Power Developer Services yet to be addressed<sup>6</sup>).
- Government Relations function separated from Corporate Affairs.
- Financial Services consolidated centrally.
- Organisational Governance evolved into a dedicated business unit encompassing Risk and Compliance, Legal and Company Secretariat.

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<sup>5</sup> Though due to the significant capability uplift required, both 2018/19 and 2019/20 had two planned major systems initiatives.

<sup>6</sup> While the Developer Services alignment was being undertaken in June 2020, concerns emerged that greater clarity of current and future state processes was required to support future alignments. This was to ensure existing critical processes that deliver services to our customers were not disrupted during the transition. The scope for future alignment activities incorporates this key element, mapping the minimum set of streamlined processes to enable functions to operate as intended according to the operating model design, to enable multi-utility synergies to be realised for impacted sub-functions.

- ICT evolved into a dedicated Business Unit with dedicated resources to IT Response, Cybersecurity and ICT Architecture.

### 2.2.2 Current status

Organisational change is ongoing. The program has recently commenced a project to improve alignment between Power Services and Water Services in relation to works management. Future work, still to be scoped, includes the following functions:



These functions are expected to be scoped, with resulting changes commencing in the current regulatory period (2019-24) and being completed in the next regulatory period (2024-29).

### 2.2.3 Investment costs and benefits

We have invested \$9.5 million in the Support Hub Enablement program over the past four years. Work in this area continues into 2023/24 and will flow into the next regulatory period. The completion of the program will ensure structural alignment is synchronised with capability uplift projects.

The benefits from the Support Hub Enablement project arise through its foundational role for the remainder of the OMP. These programs have already helped Power and Water reduce the overall number of staff required to provide services. These opex efficiencies are captured in our 2021/22 actuals.

## 2.3 Supply Chain Fundamentals

### 2.3.1 Progress to date

The Supply Chain Fundamentals program commenced as a part of the OMP in 2021, leveraging a proposal prepared by Kearney to identify improvements to the procurement and supply chain area. As a part of their work, Kearney evaluated Power and Water's procurement function including historical spend profile, corporate procurement policies/processes, and the team structure.

Concurrently KPMG undertook a procurement process mapping and review exercise. Elements of this work overlapped that of Kearney and supported the structural changes recommended by Kearney.

This work is well underway with two waves of work completed in January 2022. The third wave, and associated contracts for all three waves will be complete by the end of the 2022 financial year.

The Accelerated Strategic Sourcing Project (ASSP), under the auspices of the Supply Chain Fundamentals Program commenced in late July 2021, taking a category management approach to a number of areas of operational spend. The program was divided into three streams of work. Streams one and two are led by Kearney, and stream three is led by PWC Procurement, with coaching and support from Kearney.

The ASSP applied a rigorous strategic sourcing process to the following spend categories, with a total annual spend of approximately \$90 million:

Stream 1: Fuel, chemicals and water, sewerage and mechanical equipment and services

Stream 2: Project management and general engineering services and ICT support services

Stream 3: Electrical parts and consumables, marketing and advertising and meters

### 2.3.2 Investment costs and benefits

We have invested approximately \$5 million over the past four years to realign the supply chain function, review the related governance frameworks and implement new sourcing practices. The ASSP was originally projected to deliver targeted annualised savings of between \$4.7 million and \$6.6 million (totex).

The project concluded in late 2022 with a focus on 3 work streams, comprising 11 categories of contract spend. Over contract terms (2022/23-2025/26), benefits are expected at the lower end of the forecasts in the business case at \$9.1 million.<sup>7</sup> These apply at the enterprise level and primarily relate to capex.

Non-financial benefits from the program include advancement of Power and Water's category framework, improved collaboration for acquisition of goods and services between corporate and operations functions, identification and rectification of specifications, use of standardised contracts across categories and a better understanding of data requirements for future procurements.

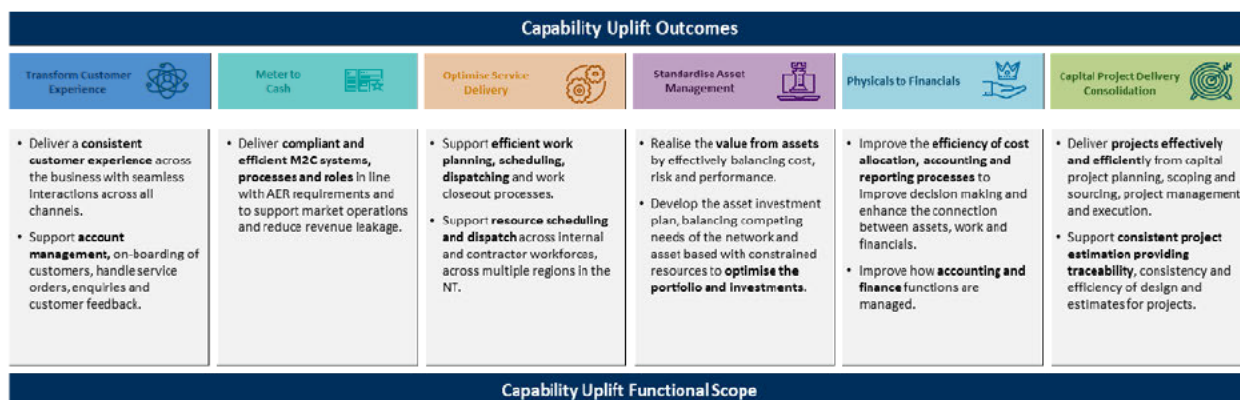
## 2.4 Capability Uplift Project

### 2.4.1 Scope of Capability Uplift Project

The Capability Uplift Project represents the majority of the remaining investment in the OMP. While components of this project have commenced, most investment will occur in the next regulatory period.

The Capability Uplift Project is a series of ICT system and process upgraded designed to deliver six outcomes (see Figure 2.1).

Figure 2.1: Scope of Capability Uplift project



<sup>7</sup> Accelerated Strategic Sourcing Project post-implementation review




### 2.4.3 Current Status and future program

#### Current period delivery

In the current regulatory period, we are expecting to deliver tranche 1 of the Capability Uplift Project, which comprises the following programs of relevance to the regulated services:

- Meter to Cash.
- Transform Customer Experience.

The Meter to Cash project is currently in its core build phase with a go-live scheduled for October 2023. The project depends on industry retailer readiness; therefore we are planning for contingencies in the event retailers are not ready (and noting our compliance mandate of 1 January 2024). The Market Interaction Enablement and Northern Territory Electricity Markets Settlements supporting projects are aligned to Meter to Cash go-live and are progressing to plan. Similarly, the Transform Customer Experience project will go live in 2023/24. Both projects will deliver benefits over the next regulatory period.

#### Program and implications for the next regulatory period

The remainder of the program will be delivered in the next regulatory period, as follows:

- Tranche 2 comprises completion of the Physicals to Financial project in 2025/26. Capital Project Delivery and Asset Management will be commenced in 2024/25 and delivered respectively in 2025/26 and 2026/27.
- Tranche 3 comprises the Service Delivery project and will commence in 2026/27 and will be completed in 2027/28.

### 2.4.4 Investment cost

The original total cost (capex and opex) for the Capability Uplift Project as per the August 2019 Business Needs Identification was \$94.1 million +/- 35%. The full scope was proposed to be delivered over a 3.5-year period.

The Capability Uplift Project will be phased through to 2027/28 and at a total cost of around \$110.4 million. The individual projects and their costings are shown in Table 2.1.

Table 2.1: CUP investment cost (totex, \$million real 2020)

Program / Project	Current RCP (\$62.44m)					Next RCP (\$48m)					Total
	19/20	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	
Meter to Cash	2.58	1.42	8.32	24.71	17.61						54.64 <sup>1</sup>
Physical to Financials	1.70	1.10			3.00	6.00	3.00				14.80 <sup>2</sup>
Service Delivery and Works Management								4.00	3.00		7.00
Asset Management & Capital Project Delivery						11.50	16.00	4.50			32.00
Transform Customer Experience Solution <sup>3</sup>				0.50	1.50						2.00
<b>Total</b>	<b>4.28</b>	<b>2.52</b>	<b>8.32</b>	<b>25.21</b>	<b>22.11</b>	<b>17.50</b>	<b>19.00</b>	<b>8.50</b>	<b>3.00</b>		<b>110.44</b>

Notes:

- (1) Includes \$4.5 million in contingency and circa \$4 million in pre-project spend.
- (2) Includes circa \$2.8 million in pre-project spend.
- (3) Majority of Transform Customer Experience solution is delivered as part of Meter to Cash with remainder to be brought into scope and delivered in parallel.

#### 2.4.5 Benefit realisation

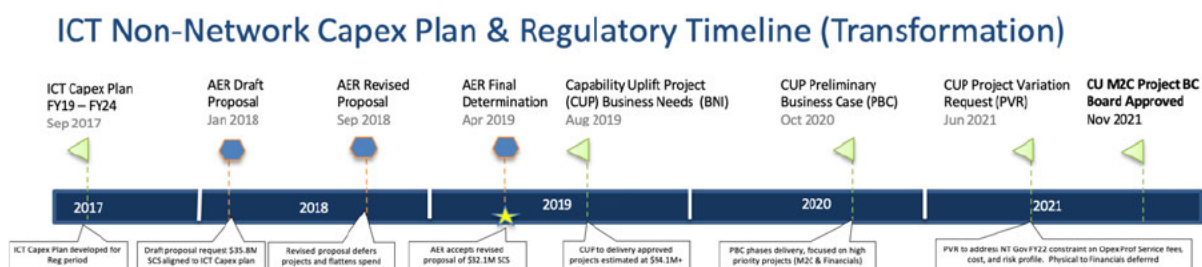




approved by the AER, although the forecasts were significantly underestimated. The reset also enabled Power and Water to remain within its AER non-network capital allowance for the OMP projects.

Figure 2.2 shows the evolution of the program.

Figure 2.2: Timeline of regulatory determination and evolution of Capability Uplift Project changes



## 2.5.2 Current Capability Uplift Project tranches

The table below shows the expenditure allowances and estimates associated with the ICT OMP changes, and the current timetable for the respective modules. This should be read in conjunction our ICT strategy included as Attachment 8.65 to our Regulatory Proposal.

Table 2.3: ICT Non-Network Capex Change Journey

	ICT Remediate the Core		Transformation Program				
Stage	AER Draft	AER Final	CUP BNI \$94.1M TOTEX	CUP PBC \$61.7M TOTEX	M2C BC \$59.6M TOTEX	Reg PBC - 2429 \$48M TOTEX	
Forecast Capex	\$66.8M \$35.8M SCS	\$59.4M \$32.1M SCS	\$94.1M \$50.8M SCS	\$44.7M 24.1M SCS	\$40.0M \$21.6M SCS	\$33.6M \$17.13M SCS <sup>1</sup>	
Reg Allow [SCS]	N/A	\$32.1M	\$19.8M	\$19.8M	\$19.8M	TBC	
Key Projects Benefits Period <sup>2</sup>				Tranche 1 (FY19 – FY24)	Tranche 1 <sup>3</sup> (FY19 – FY24)	Tranche 2 (FY24-FY27)	Tranche 3 (FY27-FY28)
Meter to Cash	✓	✓	✓	✓	CU M2C BC		
Market Interaction Enablement	✓	✓	✓	✓	CU MIE BC		
Cust Experience	✓	✓	✓	✓	CU M2C BC + PVR for Portal		
Phys to Finance	✓	✓	✓	✓	Deferred T2	✓	
Asset Mgmt & Capital Project Delivery	✓	✓	✓	Deferred T2	Deferred T2	✓	
Service Delivery	✓	✓	✓	Deferred T2	Deferred T2	Deferred to T3	✓

Notes:

- (1) SCS value consists of allocation to the regulated services and then further breakdown between SCS and ACS. This cost was based on a slightly different allocation to SCS from what is now proposed and was in \$2020. It should be noted that dollar figures in this table are in different denominations, reflecting different times at which they were proposed or determined, and should therefore be treated as indicative only.
- (2) Initiatives in Tranches have overlaps in fiscal years.
- (3) Customer Experience Part 2 (portal) in Tranche 1 will be brought into scope of meter to cash via a project variation request.

## 3. Forecast costs and net benefits

### 3.1 Cost factor assumptions

#### 3.1.1 Cost allocation

The forecast expenditure requirement for the next regulatory period is only for the outstanding elements of the Capability Uplift Project. We have applied our Cost Allocation Methodology (CAM) to determine proportionate shares of capex and opex to the regulated services, as shown in Table 3.1.

Table 3.1: Operating Model Program cost allocation matrix

	Power Services direct	Core Operations	Core Operations % to PS	Net allocation (including CO)	SCS %	Overall allocation to Regulated services
Capex allocation - SCS	45.99%	32.66%	16.32%	62.31%	79.9%	49.78%
Capex allocation - ACS	45.99%	32.66%	16.32%	62.31%	3.44%	2.14%
Opex allocation - SCS	44.77%	31.99%	16.00%	60.77%	79.9%	48.56%
Opex allocation - ACS	44.77%	31.99%	16.00%	60.77%	3.44%	2.09%

As the benefits from the program are almost entirely opex, we have also used the CAM opex allocations above to attribute benefits to SCS.

#### 3.1.2 Capital component of cost

There is a significant opex component to the Capability Uplift Project, with the systems components being oriented towards cloud solutions where possible. From our analysis, we estimate 70 per cent of the total expenditure estimate will be capitalised, while 30 per cent is represented by opex.

### 3.2 Proposed SCS capex allowance for the next regulatory period

Table 3.2 shows the net capex requirement for the Capability Uplift Project for the next period. This is based on the required totex for the Capability Uplift Project for these years, factored to derive the capex component and to allow for proportionate allocation to the regulated services, in accordance with the CAM.





significant industry transition occurring and which is requiring additional FTEs and additional expenditure. For example, a shift in NT Government policy in 2020 saw the introduction of a 50 per cent renewable energy target to be delivered by 2030. The consequential work that flowed from that decision, along with the regulatory changes that saw Power and Water enter the NT National Electricity Market, led to the addition of an increase in headcount. To date, the benefits of the OMP have been more than offset by additional costs imposed on our business, including as a part of the industry transition including government policy changes to increase renewable energy penetration.

We are committed to achieving productivity improvements implied by the OMP. We are currently undertaking an internal benefits realisation program in order to assign benefit realisation responsibilities and targets and to be able to monitor progress towards achievement of those targets.

In proposing an annual productivity improvement parameter in our opex forecast, we have taken account of the anticipated realisation of net benefits from the Capability Uplift Project. Except to the extent allowed for through the impact on opex from growth trending and step changes, we plan to otherwise absorb industry transition-related additional opex while still achieving aggregate opex-related productivity improvements.

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