# Statement of Corporate Intent 2007 - 2008



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# **Glossary**

ABDP Amadeus Basin – Darwin Pipeline

BGP Bonaparte Gas Pipeline, to be constructed between the Eni's gas plant at Wadeye and the

ABDP near Adelaide River

BOO Build own operate

busbar An electrical conductor in a switchyard or substation, usually common to

a number of circuits

CCTV Closed circuit television

CPI Consumer Price Index

credible contingency An outage of a system component (e.g. a generator or overhead transmission line)

considered as part of the planning process as it is relatively likely to occur

CSO Community Service Obligation

EBA Enterprise Bargaining Agreement

EBIT Earnings Before Interest and Tax

EBITDA Earnings Before Interest Tax Depreciation and Amortisation

Eni Australia Ltd, a subsidiary of Eni S.P.A., an energy company listed in

Milan and New York

Frame 6 General Electric Frame 6 gas turbine, five of which are installed at

Channel Island Power Station

Gifted Assets Assets which Power and Water receives from parties connecting to the system

GJ Gigajoules or 1,000,000,000 joules

GOC Act Government Owned Corporations Act

GW Gigawatt – 1,000 megawatts

GWh A gigawatt-hour, the electrical energy resulting from a steady gigawatt use or

production over one hour

IES Indigenous Essential Services Pty Ltd

IT Information Technology

Joules The SI unit of energy, used here to describe gas consumption

kV Kilovolt – 1,000 volts

MRET Mandated Renewable Energy Targets, established under the

Renewable Energy (Electricity) Act

MW Megawatt – 1,000,000 watts

MWh A megawatt-hour, the electrical energy resulting from a steady megawatt use or

production over one hour

n-1 criterion A deterministic planning or operational standard. A system of n components can provide

appropriate quality service following the most onerous credible contingency

n-2 criterion A deterministic planning or operational standard. A system of n components can provide

appropriate quality service following the two most onerous credible contingencies

Network Planning Criteria A set of planning criteria for the power network established by Power and Water under

its Network Access Code as required by Electricity Networks (Third Party Access) Act

NPAT Net Profit After Tax

PJ Petajoules or 1,000 terrajoules

Power and Water Power and Water Corporation

REC Renewable Energy Certificate, established under the Renewable Energy (Electricity) Act

R&M Repairs and Maintenance

SCADA System Control and Data Acquisition

SCI Statement of Corporate Intent

SI The International System of Units (abbreviated from the French

Le Système international d'unités)

T1 customer — Tranche 1 electricity contestable customer — those who consume more than

4 GWh per annum

T2 customer — Tranche 2 electricity contestable customer — those who consume more than

3 GWh per annum

Ta customer — Tranche 3 electricity contestable customer — those who consume more than

2 GWh per annum

T4 customer — Tranche 4 electricity contestable customer — those who consume more than

750 MWh per annum

Taurus Solar Taurus 60 gas turbine, an example of which is currently located at

Ron Goodin Power Station

Titan Solar Titan 130 gas turbine, an example of which is currently located at

Ron Goodin Power Station

TJ Terrajoules or 1,000 gigajoules

Utilities Commission The Utilities Commission of the Northern Territory established by Part 2 of

the Utilities Commission Act

Volt The SI unit of electrical potential difference

Watt The SI unit of electrical power

Zone substation A major substation where a number of transformers are located and from

which a number of distribution feeders originate

#### 1 Introduction

The Power and Water Corporation (Power and Water) is a Northern Territory Government Owned Corporation under the *Government Owned Corporations Act 2001* (GOC Act).

The Board of Directors is responsible to the Shareholding Minister for Power and Water's operation and financial performance, and must agree a Statement of Corporate Intent (SCI) each year.

This SCI provides information for the three financial years starting 1 July 2007, including Power and Water's strategies, investment plans and performance targets.

# **Objectives**

In accordance with the GOC Act, Power and Water's objectives are:

- to operate at least as efficiently as any comparable business
- to maximise the sustainable return to the Territory on its investment in the Corporation.

Power and Water's Values guide employees as they work towards these objectives.

# Scope and nature of activities

Power and Water's mission is to deliver power, water and sewerage services to the people of the Northern Territory in a competitive, efficient and reliable manner, and to meet its mandated environmental obligations.

Services are either regulated or open to competition:

- Electricity network services are regulated by the Utilities Commission
- Electricity generation services are open to competition
- Water and Sewerage services are provided under monopoly licences
- Retail services to some larger customers are open to competition (known as contestable customers)
- Retail services to other customers are regulated by the Government

Power and Water purchases gas supplies for electricity generation fuel through its wholly owned subsidiary, Gasgo Pty Ltd. Power and Water holds a 2.5% interest in NT Gas Pty Ltd, the lessee/operator of the Amadeus Basin to Darwin gas pipeline (ABDP), and 2.5% of the units in the Amadeus Gas Trust, through its wholly owned subsidiary, Darnor Pty Ltd. These arrangements are likely to be wound up once the lease on the pipeline expires in June 2011.

Once new supply becomes available, Power and Water may resell some gas where it is economical to do so and the gas is surplus to Power and Water's long term requirements.

Power and Water supports the provision of electricity, water and sewerage services in remote Territory communities through its wholly owned subsidiary business, Indigenous Essential Services Pty Ltd (IES). IES is a not-for-profit company.

#### Values

#### Safety is Paramount

We will protect the safety of our people, customers and the community. 'Zero Harm' is our safety goal.

#### Our People

We value our people and will encourage them to achieve their full potential. We recognise that we will need to embrace change as an organisation.

#### Growth

We will grow the Corporation's business by fostering an efficient, performance-driven culture.

#### Our Customers

We will strive for total customer satisfaction with our services.

#### Integrity

We will be honest, consistent and fair in all of our dealings with customers, suppliers and our people.

#### The Natural Environment

We will protect the natural environment by at least meeting mandated environmental obligations and seeking ways to minimise our environmental footprint.

# 2 Strategies

Power and Water's 14 strategic goals are consistent with its statutory objectives and mission. Strategies have been developed to achieve these goals and address the specific challenges facing Power and Water.

Each major Business Unit within Power and Water has developed detailed business plans to implement these strategies and to improve their operations. However, for the sake of brevity, this section details only key strategic actions.

# Improve organisational capability

A major focus for Power and Water will be to improve its organisational capability. Power and Water is one of the most complex utilities in Australia, given the diverse services it provides over a large area and in many locations. This gives rise to a need for:

- senior managers and staff who can manage the complexity of providing these various services, taking into account ringfencing arrangements
- highly specialised technical experts for each service.

Recent developments have highlighted the need for improved capability in Power and Water's business functions. A new planning and analysis function will be established with, among other things, responsibility for the preparation of the SCI. This renewed focus on business planning and analysis should aid the business through improved medium to long term planning. It should also help address stakeholder satisfaction with the quality of strategic plans and financial projections.

Similarly, a stronger economic regulation function is being established. This will help negotiate revenues for independently regulated business units, facilitate successful implementation of new regulatory arrangements and develop effective relationships with regulators.

This SCI describes a number of challenges facing Power and Water, including major project and investment delivery. Success will depend critically on motivating and recruiting specialised, skilled personnel. However, major changes are required to significantly improve Power and Water's ability to recruit, motivate and retain suitable staff. While the Northern Territory economy has enjoyed the sustained worldwide demand for natural resources and energy, this impacts on the cost and availability of staff. Power and Water must compete for staff in this environment.

Historically, this has been particularly difficult in relation to senior positions, although there has been some progress. Power and Water intends to develop innovative solutions to build on this progress.

In common with other utilities, Power and Water has an aging workforce, in particular among its skilled tradespeople. As far as possible, Power and Water's preference is to develop its own apprentices, rather than import trained employees from interstate. This is reflected in the program of increasing apprentice numbers, for example, working with the Northern Land Council to attract Indigenous final year high school students to become apprentices.

Power and Water has historically high vacancy rates. To address this, it is acting to recruit, retain and motivate skilled staff. If Power and Water cannot achieve this, among other things, it would be unlikely to achieve the capital expenditure program and other targets set out in this SCI.

# Strategic Goals

#### **Customers and Community**

- Customer Management:
   To ensure that our customers are satisfied with the products, pricing and service provided by the Corporation.
- Being Socially Responsible:
   To meet our social responsibilities to the communities in which we operate.

#### **Our Staff**

- Safety Management:
   To consistently achieve
   'Zero Harm' targets for safety.
- 4. Employee Development: To improve the satisfaction level, skills, motivation and performance of all employees.
- Leadership Development: To develop a high achieving management team.
- 6. Cultural Change: To move to a high performance culture.

#### The Business

- 7. Capital Asset Management: To optimise the cash committed to capital and operational expenditure by gaining a risk/consequence based understanding of the underlying capital needs of the business and subsequent impact on maintenance expenditure.
- 8. Financial Management:
  To operate all financial aspects
  of the Corporation in an efficient
  and timely manner.
- Business Development:
   To actively seek ways to minimise risk and to provide growth opportunities for the Corporation.
- 10. Productivity Improvement:
  To improve returns to the
  Shareholder, and outcomes
  for customers by continuously
  pursuing opportunities
  for efficiency.

#### Securing fuel supplies

Fuel purchases make up over half of Power and Water's operating costs. The financial projections in this SCI assume that strong energy demand growth will continue and there will be some fall-off in gas supplies from the Palm Valley and Mereenie gas fields before Blacktip gas becomes available. While this would not threaten reliable electricity supplies, it would increase costs, potentially substantially. As such, Power and Water will pursue options to help secure alternative bridging gas supplies.

However, none of these options are under Power and Water's control and they have therefore not been included as base case SCI assumptions. Given development leadtimes, they are unlikely to assist with Power and Water's gas needs much before the end of calendar year 2007. These arrangements would also help mitigate any unforeseen delay in the Blacktip gas supply or pipeline.

# Improving generation efficiency and greenhouse intensity

Power and Water will continue the rationalisation and update of its generation portfolio. Chapter 7 describes the Board approved n-2 planning criterion and planned initiatives to diversify the Katherine-Darwin supply from Channel Island Power Station with a second major supply from Weddell.

Power and Water will also develop detailed engineering plans to install a combined cycle unit at Weddell (Unit 3) using heat from the exhausts of Units 1 and 2. The addition of a planned combined cycle unit will considerably increase generation efficiency, with consequential environmental and cost benefits. Depending on load factor, the addition of a third unit will improve Weddell's station efficiency from approximately 34% to 45%.¹ This represents a significant improvement on existing plant. For example, a Channel Island Frame 6 unit achieves about 27% efficiency.² During 2007-2008, Weddell Unit 3's in-service date will be optimised taking into account its improved efficiency, electricity demand, realistic capital costs and consequent borrowings based on the detailed engineering plans. Depending on the outcome, it may well be installed earlier than the 2011-2012 date proposed in this SCI.

Power and Water will continue to monitor prospects for emissions trading. Power and Water's investment analysis prudently assumes that some form of emissions trading will be mandated. Emissions trading schemes stimulate investment in high efficiency plant, faster retirement of inefficient plant and significant end-use efficiency improvements. In part, this would justify the investment in Weddell's higher efficiency plant. Further, a higher permit price would favour early commissioning of the Weddell combined cycle unit. Power and Water will also develop plans to improve the overall efficiency of Alice Springs generation.

Power and Water will also develop more effective asset management processes to improve the reliability of its existing generating plant. This will be assisted by the Asset Management Systems Project, but is largely concerned with cultural change. Progress in this area also depends critically on Power and Water's ability to attract and retain suitably experienced staff.

11. Environmental Management: To be seen as a leader in environmental management and compliance in the Territory.

#### Accountability

- 12. Stakeholder Management: To build a high level of trust with stakeholders.
- 13. Crisis Management: To respond gracefully to any reasonably foreseeable crisis.
- 14. Performance Measurement:
  To ensure timely compliance
  with all statutory reporting
  obligations, and to provide
  meaningful information to
  all stakeholders.

<sup>1</sup> Both efficiencies are expressed as high heating value (HHV) at 85% capacity factor.

<sup>2</sup> High heating value at full load. Efficiency would be reduced further if a lower capacity factor were used.

# Managing exposure to Mandated Renewable Energy Targets

Under the Australian Government's Renewable Energy (Electricity) Act 2000, Mandated Renewable Energy Targets (MRETs) have been established for wholesalers on grids exceeding 100MW.

In the Northern Territory, only the Darwin-Katherine system is greater than 100MW. For this system, the target ramps up from 1,962 MWh in 2001 to approximately 61,500 MWh of renewable energy in 2010. It remains at that level until 2020.

The market device used to acquit the liability is the Renewable Energy Certificate (REC), which is the equivalent of one MWh. The actual target is refined at the end of the year depending on the actual sales on the grid.

Power and Water has managed its Renewable Energy program so that the MRET has been satisfied in each of the six years to date. A principle source of RECs has been from solar hot water systems where the customer has sold the associated RECs to Power and Water, offsetting some of the price of the unit. Other sources of RECs include the solar power stations and the landfill gas generator in Darwin.

As the MRET increases steadily towards the 61,500 REC target in three years time, sustained effort will be required to ensure that the target is met each year. Current indications are that the targets are achievable, but market factors (such as a slump in housing activity) could have an impact. At present, Power and Water has a moderate buffer in terms of a modest stock of RECs "in the bank" to cover for any sudden or unforeseen change in the market place. If this source were to be insufficient, other prospective sources include:

- Further use of biodistillate
- Further solar dish concentrator stations
- Wind generation at Tennant Creek
- The SOLAR CITIES project in Alice Springs.

Power and Water's preference is to source RECs from Territory projects but this will also depend on prevailing market prices.

# Refocus Power and Water's network asset management

Power and Water develops its power system in line with its published Network Planning Criteria. The Criteria require that risk analysis should be used to determine the optimum investment solution for each identified need. However, they allow considerable discretion. This has resulted in n-1 capability in some parts of the network but lower levels elsewhere. In 2007-2008, Power and Water will review the Network Planning Criteria to provide

greater prescription.<sup>4</sup> It is expected that this will result in a higher level of service to customers. It will also provide greater reassurance to the shareholder, regulators and wider community that there is a consistent, transparent and rigorous process for power network investment. At the same time, it will be possible to compare Territory criteria with those used in the National Electricity Market.

Capital investment plans already partially reflect a phased adoption of more prescriptive network planning standards.

Power and Water will refocus its network maintenance activities to exceed the power network reliability measures provided in Chapter 6. The current targets are based on those approved by the Utilities Commission. Power and Water considers it likely that the targets will be tightened and is working to meet that expectation. Further, underlying long term trends show decreasing reliability and this must be addressed. This will involve extensive training, new technology, realising the benefits of Triple Certification and new apprentice, graduate and trainee programs. While these activities will increase costs in the near term, they will allow better management of the risks to security and reliability of supply.

As an example, Power and Water recently reviewed its vegetation management programme following roughly a doubling in tree related faults. A new vegetation management tender has been let and reductions in tree related faults are expected.

# **Asset Management Systems Project**

Starting in 2006-2007 and finishing by 2010,
Power and Water will carry out a major project to
improve its asset management systems and procedures.
Current systems and procedures provide insufficient
information for cost effective life cycle asset management,
maintenance management or for reliable reporting to
stakeholders. The project will:

- Develop and maintain a corporate asset management framework
- Implement an IT system based on an asset register with a well developed hierarchy that facilitates reporting and data management across the whole business
- Improve business processes and staff skills
- Improve data quality through data cleansing and the asset validation project.

The project is intended to address systems, policies, culture and procedures. The approved expenditure is \$14.4 million, with \$13.0 million in this SCI. Among other things, it will improve the quality of Power and Water's financial and regulatory reporting. Power and Water intends to engage stakeholders in the implementation of this major initiative.

<sup>3</sup> Further information is provided in Chapter 7.

<sup>4</sup> Under the Network Access Code, Power and Water must consult with the Regulator and affected persons on material changes to the Network Planning Criteria.

# **Improving safety**

Power and Water no longer expects to meet its target for lost time injuries in 2006-2007<sup>5</sup>. This is disappointing given the recent certification for its Occupational Health and Safety systems. It points to cultural causes. Power and Water is examining the underlying factors to develop a program to improve safety performance, the Task Based Risk Assessment training initiative. This will be a behaviour-based approach to safety where individuals are empowered to take control of their own safety.

Power and Water remains committed to achieving its long term Zero Harm objective to improve the safety of its staff and the public.

# Improving service efficiency in Indigenous communities

While a not-for-profit activity, Power and Water dedicates substantial resources to serving Indigenous communities, benefiting from skills transfers, other synergies and engagement with the wider community.

Forecast growth in electricity demand suggests the need for a fundamental change in approach to electricity generation/supply infrastructure and fuel sources. Demand management and resource conservation programmes for both electricity and water are considered essential to minimise supply side investment and deliver agreed service levels in the context of any wider government investment programmes. Work will progress on an Energy Source Strategy (Indigenous Communities) to take advantage of gas as a lower cost fuel source, increase use of renewable energy and improve efficiencies through the establishment of regional grids connecting stand-alone power stations.

Power and Water is aiming to bring drinking water quality in-line with the 2004 Australian Drinking Water Guidelines by 2010-2011 in the Indigenous communities where the water supply facilities are managed by the Corporation. This will be achieved though the continued implementation of the *Framework for the Management of Drinking Water Quality*, investment in water supply infrastructure and addition or improvement of water treatment systems. The Strategy will also include the implementation of the Drinking Water Operational and Verification Monitoring Program 2006-2009 approved by the Chief Health Officer in 2006 and the establishment of Water Safety Plans for each community.

Power and Water will seek improved revenue collection through activities such as improved metering and debt collection. These increased revenues will be directed to additional service provision.

# Improving financial performance

This Chapter has described a number of strategies to improve Power and Water's financial performance, including development of gas supply options and new generation investment to improve efficiency and reliability.

# 3 Major assumptions

This Chapter describes the most significant assumptions used in the preparation of the financial projections provided with this SCI. The information discussed in this section and the financial projections are unconsolidated, that is, excluding subsidiaries Indigenous Essential Services Pty Ltd, Darnor Pty Ltd and Gasgo Pty Ltd.

# **Demand growth**

#### Electricity

Underlying electricity demand growth is based on the extrapolation of historic trends. The following table shows how the 2007-08 electricity demand forecasts have been calculated.

2007	2007-2008 DEMAND FORECAST						
Description	All Energy Consumption (GWh)		Consumption		Dem	erine/ win)	
2006-07 Base		1,627		244			
Organic growth	+ 1.6%	26	+ 2.5%	6			
Specific large customers growth		90		10			
2007-08 Forecast Total	+ 7.1%	1,743	+ 6.6%	260			

Demand growth in following years is 1.6% per annum for energy consumption and 2.5% for peak demand. The following years exclude specific growth for large customers. Past experience indicates that such growth is very difficult to predict with any degree of precision. Energy consumption is used to estimate fuel requirements and to calculate the 'per unit' component of tariff revenue projections, levied on a KwH basis. Peak demand forecasts drive capital investment as described in Chapter 7.

Increases in customer numbers are based on forecast population growth.<sup>6</sup> Customer number forecasts are used for projections of fixed daily charge revenue, levied on a per customer basis.

#### Water demand

Water demand forecasts are based on the extrapolation of historic information. They are used to forecast water revenue.

2007-2008 DEMAND FORECAST				
Description All Water Consumption				
2006-07 Base		47,712		
Organic growth	+1.5%	711		
2007-08 Forecast Total	48,423			

Demand growth in following years is 1.5% per annum for water consumption. The baseline forecasts do not account for any prospective developments or one-off impacts.

As with electricity above, increases in customer numbers are based on forecast population growth.

#### Remote operations demand

Electricity demand for remote communities is assumed to grow by 6.5% per annum consistent with the load growth between 6% and 8% over the past five years. This estimate is conservative and assumes the development of a demand management programme for electricity over the period. Significantly increased housing and other investment in some communities will result in a step change increase in electricity demand above the assumed 6.5%.

# Revenue projections

Revenue projections provided in this SCI are based on the approved tariff price path for water, sewerage, trade waste, electricity franchise and electricity Tranche 4 customers. Tariffs will increase by 4.4% from 1st July 2007. Projections of increases for future years have been based on the current estimate of CPI for those years of 2.5%. In practice, increases from 1st July 2008 and from 1st July 2009 will be based on the actual Consumer Price Index (CPI) as reported by the Australian Bureau of Statistics for the relevant year.

The electricity tariff increases relate only to Franchise and T4 customers. T1-3 contestable customers are subject to negotiated contracts. Within this Statement, T1-3 tariffs have been adjusted by existing contract indexation factors.

Power and Water has compared its tariffs to those in other jurisdictions. This information is provided in the Appendix.

Revenues for the sale of goods and services are projected to increase steadily over the period, reflecting demand growth and the impact of the price path for water, sewerage, trade waste, franchise and T4 electricity customer prices. The following table shows the resulting revenues for Power and Water.

PROJECTED REVENUES (POWER AND WATER CORPORATION UNCONSOLIDATED)								
(\$M) 2006-07 2007-08 2008-09 2009-10 Forecast Budget Projection Projection								
Electricity	243.7	262.6	274.8	285.9				
Water	42.0	41.9	43.3	45.0				
Sewerage	23.9	24.8	25.7	26.7				

Community Service Obligation (CSO) funding included in this SCI is as advised by Government, and reflects declining T4 CSO funding as included in the approved tariffs.

COMMUNITY SERVICE OBLIGATIONS								
(\$M)	2006-07 Forecast	2007-08 Budget	2008-09 Projection	2009-10 Projection				
CSO funding	55.4	55.4	55.2	54.9				

Following on from the recent Government decision on undergrounding, Power and Water will recognise grant funding of \$6.0 million (received in 2006-2007) as revenue in 2007-2008. In 2008-2009, a further \$3.0 million of grant funding will be recognised as revenue. Power and Water will then contribute \$2.4 million in 2006-2007 and \$1.2 million in 2007-2008 of its funds to provide for the undergrounding capital expenditure described in Chapter 7.

All other revenue items are projected to increase in line with CPI over the life of the SCI.

# **Operating costs**

The budget for 2007-2008 operating costs is based on detailed cost estimates. Operating costs in the outer years are projected to increase by CPI, except for energy, wages, repairs and maintenance (R&M), training and professional fees.

OPERATING ASSUMPTIONS (POWER AND WATER CORPORATION UNCONSOLIDATED)						
2007-08 2008-09 2009-10 Budget Projection Projection						
CPI	4.4%	2.5%*	2.5%*			
Wages		4.5%	4.5%			

Assumed CPI in later years for these projections. In practice, increases will reflect actual CPI for the relevant year.

Wages are assumed to grow by 3% per annum, as per the Northern Territory Public Sector Wages Policy, with an additional factor of 1.5% applied to reflect average progression within salary bands. However, a new Enterprise Bargaining Agreement (EBA) will be negotiated in 2007-2008.

#### **Fuel supplies**

The distillate price for 2007-08 has been based on recent levels and then indexed at CPI for the outer years.

The financial projections in this SCI are based on a reasonable view of the risks to the Amadeus fields

and their historical performance. Power and Water has calculated annual quantities from a detailed analysis of daily use, assuming the complete "gas system" is in service.

The SCI assumes that the Blacktip gas supply and pipeline will be fully operational by 1st January 2009. The use of distillate to replace gasfield shortfalls or maintain gas pipeline pressure will no longer be required once Blacktip is in service.

Overall energy costs are summarised in the table below.

SUMMARY OF TOTAL ENERGY COSTS (POWER AND WATER CORPORATION UNCONSOLIDATED)							
(\$M)	2006-07 Budget	2007-08 Budget	2008-09 Projection	2009-10 Projection			
Total energy costs	178.8	196.6	207.0	216.6			

The costs associated with the existing lease of Amadeus Basin Darwin Pipeline (ABDP) continue until the contract expires on 17th June 2011.

Consequently, there is a temporary spike in haulage costs for 2009-2010 and 2010-2011 as Bonaparte Gas Pipeline (BGP) arrangements commence in parallel with the final years of the ABDP lease. Thereafter, haulage costs are expected to decline with new arrangements for the ABDP.

#### Repairs and maintenance expenditure

The following table provides a breakdown of R&M expenditure by year.

2007-2008 SCI REPAIRS & MAINTENANCE (POWER AND WATER CORPORATION UNCONSOLIDATED)								
\$M	2006-07 Forecast	2007-08 Budget	2008-09 Projection	2009-10 Projection				
Total	42.9	46.7	45.5	43.4				

Projected R&M for 2007-2008 is 18% more than the 2006-2007 projection from last year's SCI. A number of factors have increased costs. Power and Water is undertaking a number of major generation overhauls.

#### **Borrowing**

New loans are assumed to be interest only, with rates fixed for the full term of the loan.

### **Accounting policies**

In preparing this SCI, Power and Water has used the accounting policies described in the Power and Water 2006 Annual Report.

# **4 Financial projections**

This Chapter comments on the resulting projections of Power and Water's financial performance and fiscal position.

Key financial results for the period of this Statement are summarised in the table below. The results discussed in this section are unconsolidated, that is, excluding subsidiaries Indigenous Essential Services Pty Ltd, Darnor Pty Ltd and Gasgo Pty Ltd.

Performance benchmarks agreed between the Shareholding Minister and the Board are detailed in Chapter 6. Benchmarks for returns on investment reflect the impact of the approved tariff plan and CSO funding on profits. In approving these tariff plans and CSO funding, the Government has opted to earn a lower return on its investment in Power and Water.

Net Profit After Tax (NPAT) is projected to be a loss of \$58.0 million for 2006-2007. This is largely attributable to an impairment write-down resulting from the application of Accounting Standard AASB136: Impairment of Assets. Water and sewerage assets are forecast to be written down by \$77.1 million and \$55.3 million respectively at 30th June 2007. The write-down reflects new information gathered since 30th June 2006, when the Corporation was satisfied that the impairment to its water and sewerage assets required a write-down of \$31.0 million, based on its projections at that time. In particular, this SCI forecasts significantly more operating and capital expenditure compared to previous years. The financial information in this SCI has been subject to rigorous testing and so the Corporation has concluded that a write-down of this magnitude will be necessary at 30th June 2007.

These results are summarised in the table below:

SUMMARY OF FINANCIAL RESULTS (POWER AND WATER CORPORATION UNCONSOLIDATED)							
2006-07 2006-07 2007-08 2008-09 2009-10 Budget Forecast Budget Projection Projection							
Total Revenue (\$M)	459.4	476.1	491.3	499.3	512.7		
Operating Costs (\$M)	336.2	353.7	384.4	394.3	406.3		
NPAT (\$M)	33.5	-58.0	21.9	14.3	10.7		
Capital Investment (\$M)	87.1	99.1	152.9	118.6	99.9		
Loan draw downs (\$M)	47.0	47.0	97.0	86.0	58.0		
Cash at bank (\$M)	13.8	21.5	16.7	16.4	16.8		
Gearing Ratio	34%	36%	43%	47%	49%		
Leverage Ratio	68%	82%	97%	107%	115%		

# 5 Risks

# Strategic risks

#### **Fuel supplies**

Quantities of higher priced gas and distillate are highly sensitive to assumptions about the remaining Amadeus Basin gas production. The decline of these fields is subject to significant geological uncertainty.

Given fuel's contribution to Power and Water's operating costs, the financial implications are significant and outcomes may therefore vary considerably from the projections in this SCI. While there is no reason to expect it, there is also potential for a delay to the Blacktip supply.

#### Investment plans

This SCI proposes a significant capital investment program. There are risks associated with the increased scale of the program and the achievement of specific projects within time and cost.

#### **Asset Management Project**

The capital expenditure budget in the SCI includes provision for the replacement of the Asset Management System commencing in 2006-2007. The assumption to date has been that the full amount can be capitalised. However, recent reviews of the new Australian Equivalents to International Accounting Standards and analysis of the likely makeup of the expenditure indicates that a portion may have to be treated as an operational cost. Power and Water Corporation is currently seeking specialist advice on this issue. The profit results shown in this current SCI would be negatively impacted by any portion not capitalised.

#### Remote operations

The development of this SCI is progressing in parallel with negotiations between the Northern Territory and Australian Governments over a special funding package for Indigenous Communities and Town Camps. It is too early to clarify the exact impact on Power and Water's projections but this is expected to be included in the 2008-2009 SCI.

Local Government reforms, scheduled for implementation by June 2008, are intended to establish nine Shire and four Municipal councils, covering the whole of the Northern Territory. This change is expected to impact significantly on the Essential Services Operator contract arrangements for the delivery of utility services.

# Risk management

Aside from the strategic risks described above, Power and Water has a rigorous risk management process to identify and address risks. A comprehensive risk register has been compiled detailing the following 16 key corporate risks:

- 1. Public health
- 2. Safety
- 3. Environment
- 4. Gas supply management
- . Fraud
- 6. Compliance
- 7. Failure to supply core services
- 8. Inadequate mix of staff skills
- 9. Industrial action
- 10. Regulation and competition
- 11. Contract management
- 12. Communication and shareholder management
- 13. Long-term asset planning and maintenance
- 14. Asset and plant information
- 15. Credit risk
- 16. Information technology and communications

A number of the strategies for minimising the material risks faced by the Corporation are included in the section outlining corporate strategies as well as mentioned in individual sections throughout this SCI. In addition, the Board, through its Audit and Risk Management Committee, examine in detail two of the key corporate risks at each meeting. This includes the current status of the risk, risk mitigation actions and strategies. Key risks are also examined and subject to external audit in relation to the certification activities for ISO9001 (Quality Management Systems), ISO14001 (Environmental Management Systems) and AS4801 (Occupational Health and Safety Management).

The Board reviews on an annual basis the currency of the risk register and receives updates on the status of the key risk areas from management.

<sup>\*</sup> Actual increases will reflect actual CPI increases for the previous year.

# **6 Targets**



Power and Water has developed an initial framework of measures and targets against which its performance can be judged, illustrated in the table below. In 2007-2008, further work will be carried out, in consultation with the Shareholding Minister, to refine and focus the framework further.

Power and Water's performance framework focuses on three areas:

- Measures and targets to assess its performance in meeting the mission set out in Chapter 2, broadly the delivery of power, water and sewerage services in the Northern Territory. These targets are not well developed at this stage. Power and Water has agreed that it will develop more robust targets with Government input in 2007-2008
- Measures and targets to assess the extent and sustainability of the return Power and Water delivers to the Territory, in line with its objective under the GOC Act. Targets for maximising returns have been set in the context of Government approved tariffs and CSO funding

Measures and targets to compare Power and Water's efficiency to comparable businesses, in line with its objective under the GOC Act. The inherent complexity of Power and Water's business and its Territorian characteristics mean that there is no single, directly comparable business. As such, Power and Water will use industry specific indicators, with commentary on intrinsic differences.

# Mission delivery measures and targets

The targets presented here equal or exceed the relevant Initial Minimum Standards approved by the Utilities Commission in July 2006.<sup>7</sup>

#### **Customer Service**

The following targets have been adopted for customer service.

CUS	CUSTOMER SERVICE TARGETS				
Measure	Target				
Customer Satisfaction Index	80% of customers rate their overall satisfaction with Power and Water services as good or better				
Connection to existing electricity supply properties in an urban centre	98% of customers connected within 24hrs				
New subdivisions in major urban areas	98% of customers connected to an electricity supply within five working days of receipt and verification of certificate of compliance from the contractor				
New subdivisions in major urban areas where minor extensions or augmentation is required	90% of customers connected to an electricity supply within 18 weeks				
Average call response time	80% of calls to the Customer Service Call Centre answered within 20 seconds				

<sup>7</sup> Initial Minimum Standards were approved by the Utilities Commission for more measures than included here. The range of measures included in the SCI will also be considered over the next year.

#### **Supply Reliability**

The following supply reliability targets for electricity, water and sewerage are based on normal operating conditions that do not include extraordinary situations and circumstances such as extreme weather or other major incidents that affect the delivery of services.

**Power Networks** 

Apart from 2006-2007, Network targets differ from last year's SCI, in that they have been aligned with

the Minimum Standards (based on 1999-2000 actual performance) approved by the Utilities Commission in July 2006. Those Minimum Standards have been approved for use until 30 June 2009. Power and Water will work with Government in 2007-2008 to develop appropriate targets for service delivery. These targets are expected to be more challenging than the Initial Minimum Standard and would form the basis for proposals to the Utilities Commission for Minimum Standards from 2009.

NETWORK SUPPLY RELIABILITY								
Measure	2005-06 Actual	2006-07 Target	2007-08 Target	2008-09 Target	2009-10 Target			
Networks Frequency Interruptions (SAIFI)  Average number of times customer supply is interrupted per annum								
Darwin	4.7	3.6	4.2	4.2	4.2			
Katherine	5.9	7.0	9.6	9.6	9.6			
Tennant Creek	2.2	3.4	9.8	9.8	9.8			
Alice Springs	2.4	2.0	2.9	2.9	2.9			
Network Duration Interruption (SA Average outage time in minutes e		expect to be off	supply per annum	1				
Darwin	231	177	220	220	220			
Katherine	271	241	401	401	401			
Tennant Creek		97	411	411	411			
Alice Springs	107	80	108	108	108			

# Water/Sewerage Networks

WATER AND SEWERAGE SUPPLY RELIABILITY					
Measure	2005-06 Actual	2006-07 Target	2007-08 Target	2008-09 Target	2009-10 Target
Water Interruptions Average outage duration in hours					
Darwin (Unplanned)	0.8	1.5	1.5	1.5	1.5
Darwin (Planned)	1.5	2.5	2.5	2.5	2.5
Alice Springs (Unplanned)	1.7	2.0	2.0	2.0	2.0
Alice Springs (Planned)	3.0	2.5	2.5	2.5	2.5
Sewerage Interruptions Average outage duration in hours					
Darwin (Unplanned)	1.5	3.0	3.0	3.0	3.0
Alice Springs (Unplanned)	1.8	3.0	3.0	3.0	3.0

#### **Greenhouse Gas Emissions Targets**

Power and Water's targets for emission levels for 2007-2008 are:

- Channel Island Power Station 640 kilograms of CO<sub>2</sub> per MWh generated at 80% Load Factor
- Ron Goodin Power Station 690 kilograms of CO<sub>2</sub> per MWh generated at 85% of Full Load.

These targets are based on historical performance.

#### **Staff Indices**

The primary target for safety is lost time accidents. The lost time injury frequency rate allows comparison with other organisations. The average lost time injury frequency rate for Australian electricity companies in 2005-2006 was 3.

STAFF RELATED TARGETS						
Measure	2005-06 Actual	2006-07 Actual	2007-08 Target	2008-09 Target	2009-10 Target	
Lost time injuries	16	11	8	6	4	
Lost Time Injury Frequency Rate <sup>8</sup>	11	8	5	4	3	
Staff Satisfaction Index <sup>9</sup> (rating satisfaction 5/10 or better)	71%	74%	75%	75%	75%	

# Sustainable return measures and targets

The measures and targets provided in the following table are intended to provide insight as to the overall returns provided to the Northern Territory (EBITDA, dividend and return on assets) and their sustainability (Capital investment, gearing ratio and loan draw downs).

The targets in this table are based directly on the financial projections presented earlier. For the next SCI, discussions will be held with Government to establish the optimum longer term level for these measures. Benchmarks for returns on investment will be constrained by the impact of the approved tariff plan and CSO funding on profits, at least until 2011-2012.

SUSTAINABLE RETURN TARGETS (POWER AND WATER CORPORATION UNCONSOLIDATED)					
	2006-07 Forecast	2007-08	2008-09	2009-10	
Return on Assets	-5.6%	5.5%	4.6%	4.3%	
Return on Equity	-9.8%	3.8%	2.5%	1.8%	
Capital Expenditure (\$M)	99.1	152.9	118.6	99.9	
Current Ratio	116%	104%	121%	129%	
Leverage	81.5%	96.9%	107.3%	114.9%	
Gearing	36.0%	43.0%	46.9%	49.0%	
Interest Cover	-2.4	2.1	1.6	1.4	
Cash flow from Operating Activities (\$M)	60.5	54.7	45.9	54.4	
New Borrowings (\$M)	47.0	97.0	86.0	58.0	

# Operating efficiency measures and targets

The measures in the table will provide an indication of Power and Water's operating efficiency in 2007-2008.

OPERATING EFFICIENCY TARGETS (POWER AND WATER CORPORATION UNCONSOLIDATED)						
2006-07 2007-08 2008-09 200 Forecast						
Adjusted EBITDA <sup>10</sup> (\$M)	42.8	29.1	32.6	36.8		
Total Controllable costs (\$M)	132.0	141.0	141.8	146.4		
Cost Efficiency <sup>11</sup>	112.1%	107.6%	108.3%	109.1%		
Efficient R&M¹²	4.8%	5.0%	4.5%	4.0%		
Debtor Management <sup>13</sup>	39.7	38.2	38.1	37.8		
Bad Debts Written Off	0.56%	0.50%	0.49%	0.48%		

- 8 LTIs per million hours worked.
- 9 Measured on a calendar year basis. 2006 result released in April 2007.
- ${\tt 11} \ \ ({\tt Revenue CSOs gifted \ assets cap \ contributions}) / operating \ costs.$
- 12 R&M/Average Written Down Value plant, property & equipment.
- 13 Debtor days.

# **7** Capital investment

This section outlines Power and Water's capital investment plans. The section provides detail on Power and Water's main investment drivers and some of the larger investments.

2007-2008 SCI CAPITAL INVESTMENT PLAN (POWER AND WATER CORPORATION UNCONSOLIDATED)					
\$M	2006-07	2007-08	2008-09	2009-10	
Total	99.1	152.9	118.6	99.9	

This is a substantially increased program compared to previous years. It is based on an objective assessment of the organisation's need for capital investment over the next three years and its ability to deliver that investment. A Board Committee is being established to provide oversight on the planning, execution and successful achievement of the program.

Depending on their stage of development, capital project costs are based on tender prices, budget estimates from suppliers, consultants and Power and Water budget estimates. Tender prices and budget estimates will largely reflect the inflationary pressures from the natural resources sector. Outer year capital projections may face additional inflationary pressure associated with continued growth in the resources sector.

#### Generation

The Power and Water Board has adopted the n-2 criterion for generation planning.<sup>14</sup> This reflects the nature and age of its existing portfolio and good utility practice for island electricity systems.

The following table illustrates major generation investment to meet the n-2 criterion, based on the peak demand forecasts described in Chapter 4. When compared to previous plans, the construction of Weddell Unit 2 has been brought forward from 2010-2011 to 2008-2009 to cover older, potentially unreliable generators, increasing expenditure in 2007-2008 and 2008-2009. It also increases the overall efficiency of Power and Water's generation portfolio, with both commercial and environmental benefits.

PLANNED GENERATION INVESTMENT					
UNIT	YEAR	SIZE			
Weddell 1	2007-2008	39MW			
Weddell 2 2008-2009		39MW			
Weddell 3	2011-2012	~30MW			
Katherine Set 4	2009-2010	Up to 10MW			
New Alice Springs 1 2008-2009		8MW			
New Alice Springs 2	2010-2011	8MW			

The planned investment in Unit 4 at Katherine is driven by the need to meet local load. Operationally, this covers for the loss of the single circuit Katherine-Darwin transmission line.

The capital expenditure plans in this SCI include a new site for Alice Springs generation at Brewer Estate. The Brewer Site has been selected as it complies with the Alice Springs Planning Scheme, does not constrain future development of Alice Springs or the power station and does not pose any potential risk to the Roe Creek borefield. Next steps are to resolve network infrastructure, associated native title, environmental, heritage and gas supply issues. Once the Brewer site has been established, the Ron Goodin Titan and Taurus will be relocated there.

The Utilities Commission's Power System Review<sup>15</sup> includes peak demand forecasts that, in some cases, are higher than Power and Water's forecasts. That said, even the Utilities Commission's high growth forecasts would result in the same generation investment outcomes for the SCI period.<sup>16</sup> This is illustrated for the Katherine/Darwin network in the figure.

The drop in n-2 capacity in 2009-2010 reflects the reassessment of over-load capability at Channel Island Power Station<sup>17</sup> (15MW) and maintaining only one generator at Berrimah Power Station (the other is to be 'moth-balled') to provide fast-start capability (15MW).

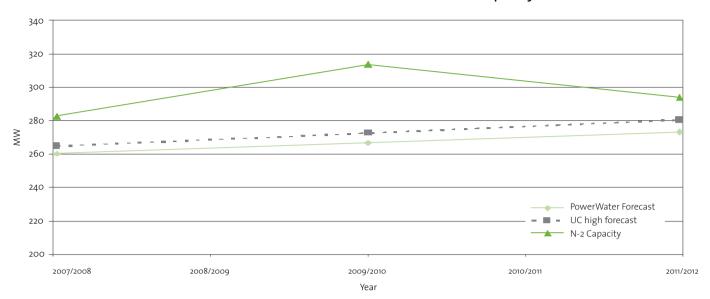
<sup>14</sup> That is, forecast peak demand can be met with the two largest generation units out of service. The same criterion is used in the Utilities Commission's Annual Power System Review to assess system adequacy, along with the less onerous n-1 criterion (where peak demand can be met with the largest unit out of service).

<sup>15</sup> Annual Power System Review, Utilities Commission, December 2006.

<sup>16</sup> Both Power and Water's and the Utilities Commission's forecasts would result in quicker investment in Alice Springs. However, the need to carry out network development to support the new site delays the achievement of the n-2 standard for one year.

<sup>17</sup> Three sets at Channel Island use ice cooling to achieve overload capability.

# Darwin/Katherine Demand and Generation Capacity



#### Power and Water's networks

As discussed previously, Power and Water intends to move towards more prescriptive network planning criteria. The Power Networks' investment plan reflects the phased implementation of this approach, taking into account available resources and the priority of each new facility. This means that, for this SCI, the power networks' capital expenditure program is relatively insensitive to demand growth. Once the prescriptive planning criteria have been met for the existing system, new investment will largely be driven by demand.

2007-2008 includes two major investments to support the new generators described above – development of a switchyard at Weddell, an associated new transmission line from Weddell and a transmission line from Brewer to Alice Springs. The plan also includes work to improve diversity at the Channel Island Power Station switchyard.

Aside from these, major projects commencing in 2007-2008 are the Archer Zone substation, East Arm Zone substation and the provision of a power supply to the Darwin waterfront project. The latest estimates are based on tender experience with the Frances Bay zone substation and reflect increasing international prices for copper.

The Darwin waterfront works are recoverable from the developer. East Arm is required to meet customer growth.

The plan also includes investment to improve network reliability. This includes expenditure to replace aging Oil Circuit Breakers and to replace obsolete protection systems. The priorities for these programs are designed to improve customer service on the network performance indicators in Chapter 6.

Government has recently approved grant funding to complete further stages of the Undergrounding Power project, resulting in capital expenditure \$8.4 million in 2007-2008 and \$4.2 million in 2008-2009, in addition to the previously approved \$6.0 million in 2006-2007.

This will allow the completion of:

- Nightcliff undergrounding by June 2007
- Rapid Creek undergrounding by December 2008.

#### Water/wastewater

Power and Water plans to raise the Darwin River Dam by 1.3 metres to provide additional capacity to the region by 2009-2010. Extensive environmental assessments and cultural and heritage surveys will be required. Once filled, an additional 9,000 ML of water per annum will be available, augmenting existing capacity by just under 20%.

To provide further capacity and to maintain diversity of supply to Darwin, Power and Water has also applied to extend its draw from the Howard East borefield by 3,000ML per annum or by 6%.

Investigations and development of proposals for the upgrade of the Katherine Effluent Disposal System have commenced. Upgrade is required over the SCI period under new discharge licence requirements established under the Waste Management and Pollution Control and Water Acts. This upgrade is anticipated to cost several million dollars.

The Darwin Sewerage Strategy includes the following projects:

- upgrade of the Frances Bay pumps to enable them to cope with sewerage diverted from other catchments in 2007-2008
- duplication and extension of the East Point outfall to enable it to cope with sewerage diverted from Larrakeyah. The extension of the outfall will require marine engineering works and these have a high risk of cost overrun.
- closure of the Larrakeyah outfall by 2010-2011
- The upgrade of the Ludmilla Wastewater Treatment Plant by 2011-2012

The sewer relining project continues over the SCI period. The current program relines just under a kilometre per year. A strategic review of the current relining program (which has been in operation for the last five years) will be carried out in 2007-2008. This will be based on extensive CCTV surveys of relined and untreated sewers. It may identify revised expenditure over the SCI period and beyond.

Initial funding of \$5.0 million for the Borroloola Sewerage System project has been received from the Government, with earliest estimated completion by November 2008.

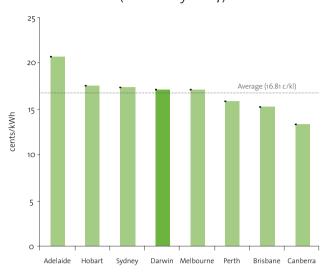
# Other major expenditure

As forecast in the 2006-2007 SCI, Power and Water will complete the second stage of the Ben Hammond redevelopment in 2007-2008. Providing modern, safe working conditions is an important component of Power and Water's strategy to recruit and retain high quality staff. While the works to date have improved some of the facilities at Ben Hammond, many remain in an unacceptable and potentially unsafe condition. Asbestos removal is required and temporary accommodation is currently used for many staff.

The investment in new asset management systems is included in the capital investment program. The need for this investment is described in Chapter 3.

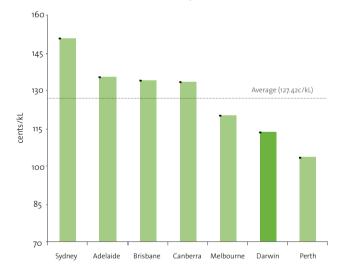
# **Appendix: Comparison of Australian utility tariffs**

# **Residential Electricity Tariff Comparison** (as at 1 July 2007)



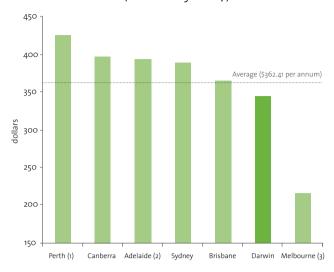
- Tariff comparisons are based on average annual consumption of 5,000kWh, with the exception of Hobart and Canberra being based on an average consumption of 7,500 kWh per annum (ESAA average)
- Tariffs include a variable consumption charge and fixed daily charge component
- Darwin tariffs are as at 1st July 2007 and include the approved 4.4% CPI increase
- Interstate tariffs are as at 1st January 2007 given the uncertainity surrounding tariff increases in other jurisdictions.

# Residential Water Tariff Comparison (as at 1 July 2007)



- Tariff comparisons are based on average annual consumption of 266kL (WSAAfacts 2005)
- Tariffs include a variable consumption charge and fixed daily charge component
- Darwin tariffs are as at 1st July 2007 and include the approved 4.4% CPI increase
- Interstate tariffs are as at 1st January 2007 given the uncertainity surrounding tariff increases in other jurisdictions
- Due to varying stages of water restrictions interstate consumption for the purposes of this comparision is based on WSAA facts 2005. Consumption may vary on a state by state basis from this derived average as a result of state by state water restriction policies.

# Average Annual Residential Sewerage Bill (as at 1 July 2007)



- Darwin tariffs are as at 1st July 2007 and include the approved 4.4% CPI increase
- Interstate tariffs are as at 1st January 2007 given the uncertainity surrounding tariff increases in other jurisdictions
- (1) Sewerage rates are calculated based on the Gross Rental Value (GRV) of the property. The rateable value is derived from the GRV (gross rental value, or estimated gross annual rent) determined by the Office of the Valuer General. For the purposes of this comparison the GRV was calulated based on the median sewerage charge avaliable from Water Corporation's web site at http://www.watercorporation.com.au/A/ accounts\_rates\_metro\_res.cfm
- (2) Sewerage rates are calculated as a percentage of capital value of the property or the declared minimum rate, whichever is greater. The capital value of the property or the declared minimum rate, is based on the median price of established house transfers published by the ABS 6416.
- (3) A sewerage disposal charge is calculated based on water usage.

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