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Scope and Purpose of the Annual Report The Annual Report is written to provide information to CS Energy Limited's (CS Energy's) stakeholders including Ministerial shareholders, customers, community, partners, unions, industry, employees, suppliers, environmental groups and the media. The report is also available on-line at (www.csenergy.com.au).

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## THE CALLIDE OXYFUEL PROJECT GAINED MAJOR FUNDING SUPPORT FOR DEMONSTRATING



Image Inside the furnace of unit four at Callide A Power Station, which will be retrofitted with oxyfuel technology.

# 2006 2007 IN PERSPECTIVE

s ENERGY IS A QUEENSLAND GOVERNMENT OWNED electricity generator with more than 550 employees, four power stations and a generating capacity of 3,210 megawatts. It meets approximately 30 per cent of Queensland's electricity demand and uses a fuel mix of coal, natural gas, coal seam methane and landfill gas.

This year CS Energy improved its performance in its priority areas of safety, reliability and environmental responsibility. The Company also made strong progress towards meeting longterm strategic goals for growing its portfolio and diversifying fuel sources.

This annual report is the third to outline progress against the Company's 10-year plan and covers the 2006/2007 financial year.

#### PEOPLE

- Recruited and established the operational team for Kogan Creek Power Station.
- Rolled out the second phase of the Company's leadership development program to managers and supervisors at all sites.
- Introduced high visibility and flame retardant clothing at all sites to increase staff and contractor safety.
- Appointed Bill Andrew as General Manager of Organisation Development.
- Developed industry first post-graduate qualifications in power generation in partnership with other generators and three universities.

## **OPERATIONS**

- Progressed the \$1.2 billion, 750 megawatt Kogan Creek Power Project to almost 99 per cent completion and commenced commissioning activities.
- Achieved four years without a lost time injury at Mica Creek Power Station on 3 January 2007.
- Received a \$50 million funding offer for the Callide Oxyfuel Project from the Federal Government's Low Emissions Technology Demonstration Fund.

- Signed an \$11 million gas farm-in deal with Australian energy company Metgasco to establish 2P gas reserves at their fields in northern New South Wales.
- Recorded a 13.7 per cent increase in reliability at Callide C Power Station.
- Implemented major water-saving measures at Swanbank Power Station that resulted in a 45 per cent reduction in town water use and significant raw water savings.
- Successfully demolished the old Swanbank A Power Station's three, 122 metre high concrete chimneys and progressed the overall demolition project to near completion.

#### FINANCE

- Returned a \$43 million net profit after tax for 2006/2007.
- Generated 13,996 gigawatt hours of electricity and achieved record electricity sales of \$616.3 million.
- Created \$34.3 million in revenue from Gas Electricity Certificates from the Company's gas-fired plant.
- Spent \$17.6 million on overhauls of existing assets.

4.6	5.1	3.36
2004/05	2005/06	2006/07
Employee	numbers	
461	530	559
2004/05	2005/06	2006/07
	2005/06 principles trai 460	
Leadershij 22	o principles tra	ining
Leadershij 22 2004/05	principles trai	ining 66 2006/07
Leadershij 22 2004/05	<b>460</b> 2005/06	ining 66 2006/07

Total ener		
12,494	13,110	13,996
2004/05	2005/06	2006/07
Reliability		
94.74	93.4	95.5
2004/05 <b>Greenhous</b>	93.4 2005/06 e intensity per it out tCO,e/GV	2006/07
2004/05 <b>Greenhous</b>	2005/06 e intensity per	2006/07
<sup>2004/05</sup> Greenhous energy ser	2005/06 <b>e intensity per</b> <b>it out</b> tCO <sub>2</sub> e/GV	2006/07 /h
2004/05 Greenhous energy ser 855	2005/06 e intensity per it out tCO <sub>2</sub> e/GV 851	2006/07 /h <b>829</b>
Cootic Co	2005/06 e intensity per it out tCO <sub>2</sub> e/GV 851	2006/07 /h 2006/07
Cootic Co	2005/06 e intensity per at out tCO <sub>2</sub> e/GV <u>851</u> 2005/06	2006/07 /h 2006/07

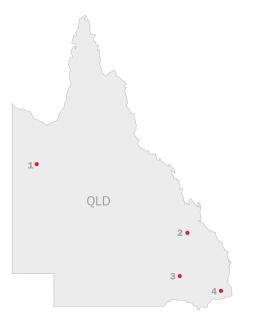
40,630	56,468	43,300
2004/05	2005/06	2006/07
Return on	productive as	sets %
5.2	7.3	3.7
2004/05	2005/06	2006/07
Qid averag 28.99	e pool price \$ 28.12	
		5/MWh <b>52.14</b> 2006/07
28.99	28.12	52.14

# ABOUT CS ENERGY

S ENERGY'S MISSION IS TO develop the Company into a large, low cost, multi-fuel generator, operating across the National Electricity Market. Our long-term vision is to be the leading generator in the Australian energy market. To achieve this, we are developing the skills of our people, providing the technology and systems to support their work and fostering a corporate environment with six key values: safety, commercial approach, environmental responsibility, teamwork and mutual trust, innovation and creativity, and integrity.



- 1 Mica Creek Power Station, Mount Isa
- 2 Callide Power Station, Biloela
- 3 Kogan Creek Power Station, Chinchilla
- 4 Swanbank Power Station, Ipswich



## CURRENT OPERATIONS (AT 30 JUNE 2007)

Plant	Fuel	Total capacity	CS Energy owned
		(IMW)	capacity (MW)
In Operation			
Swanbank			
Swanbank B	Coal-fired	480	480
Swanbank E	Gas-fired <sup>1</sup>	385	385
Callide			
Callide A <sup>2</sup>	Coal-fired	120	120
Callide B	Coal-fired	700	700
Callide C	Coal-fired	900	450
Mica Creek			
Mica Creek A (Units 1,2,3,4)	Gas-fired	132	132
Mica Creek A (Units 5,6,7)	Gas-fired <sup>1</sup>	103	103
Mica Creek B	Gas-fired	35	35
Mica Creek C	Gas-fired <sup>1</sup>	55	55
Under Construction			
Kogan Creek Power Project			
Kogan Creek <sup>3</sup>	Coal-fired	750	750
Total capacity		3,660	3,210

1 Combined cycle

2 Callide A is in storage for future use in the Callide Oxyfuel Project

3 Kogan Creek Power Project is commissioning and due for commercial handover in late 2007

General Manager Organisation Development, Bill Andrew, is one of almost 20 mentors who ensure graduates such as Melissa Evans have job diversity and skills development opportunities.

# **BUSINESS STRATEGY**

S ENERGY HAS A 10-YEAR plan to achieve its mission of being a significant, multi-fuelled electricity generator in the National Electricity Market by 2014. Each year, the Company sets targets that support the strategies in this plan and measures progress against them.



 Key

 □/ Targets 2006/07
 □/ Outcomes 2006/07
 □/ Plans 2007/08

# THE BUSINESS IS **PEOPLE...**

SAFETY	T / Develop safety action plans for all sites, rollout high visibility and flame retardant clothing to operations sites, introduce Chairman's reward program for safety milestones and start random drug and alcohol testing at all sites.
	Safety plans in place at all sites, commenced rollout of high visibility and flame retardant clothing, developed safety reward program concept and extended consultation on drug and alcohol program.
	P / Finish rollout of high visibility and flame retardant clothing, complete drug and alcohol program development, introduce fatigue management plan, rollout out consistent confined space procedure at all sites and implement safety awards.
STRUCTURE	Consolidate performance review system, introduce document management system, final- ise procurement review and implement changes, and conduct ongoing improvements to ensure the structure supports the organisation.
	Enhanced performance review system, completed first phase of document management system, finalised procurement review, conducted review of support services and built Portfolio Services team.
	P ∕ Establish Portfolio Services as a separate division and implement outcomes of support services review.
LEADERSHIP	Induct new staff in Leadership Principles, conduct second round of training for leaders and audit program effectiveness.
	O Delivered Leadership Principles training for all new staff, introduced Leadership in Practice training for site management and designed audit process.
	$\mathbb{P}_{\nearrow}$ Evaluate the leadership program implementation, respond to audit findings and develop the next phase.
TRAINING	I Complete operator and frontline management training programs for Kogan Creek and other site staff.
	• Forty-six Kogan Creek and other site staff graduated from frontline management and operator training programs, and developed and launched joint power generation skills program.
	Conduct second intake of frontline management training for supervisors, and review technical training across the Company.



# **BUSINESS STRATEGY**



# ....SECURING FOUNDATIONS...

MAINTENANCE	T Complete scoping work for Callide B mid-life refit, apply asset management framework to Kogan Creek and operational sites, and complete building Portfolio Services team.
	O / Identified priority refurbishments at Callide B and scheduled into upcoming overhauls, completed Kogan Creek Asset Management Strategy and Portfolio Services team in place.
	P / Conduct overhauls at Callide B, Swanbank E and Mica Creek; implement Kogan Creek Asset Management Strategy.
AVAILABILITY	<ul> <li>Achieve Business Plan availability targets, including improved availability from Callide C.</li> <li>Improved Callide C availability of 94.4 per cent and decreased generation at Swanbank B due to water restrictions.</li> </ul>
	P / Continue high availability of Callide C, receive recycled water at Swanbank and achieve planned availability from Kogan Creek in first year of operation.
FUEL MANAGEMENT	T / Finish building New Business team, progress Kogan Creek Mine and continue to secure competitively priced gas.
	Finalised New Business team, commenced operations at Kogan Creek Mine and signed Metgasco gas farm-in deal.
	P / Fund further gas appraisal work at Metgasco's field to secure 2P reserves and investigate other potential coal and gas supplies.
WATER	□ Commission Kogan Creek as an air-cooled unit and prepare Swanbank to receive re- cycled water.
	O Kogan Creek commissioning commenced, substantial water efficiency improvements at Swanbank and preparations made to use recycled water.
	P / Incorporate air cooling in new and existing projects where feasible and use recycled water at Swanbank.
	<b>Image (above)</b> A rigger inside the Swanbank B2 A coal mill during a major overhaul.
	<b>Image (above right)</b> Contractor Craig Cudahy ties control cables on the inline rising coal conveyor at Kogan Creek Power Station.

4

# **BUSINESS STRATEGY**



# ...FOR GENERATIONS TO COME.

FINANCIAL STRENGTH	<ul> <li>Examine finance options to support future projects.</li> <li>Put additional finance facilities in place to meet volatile market conditions.</li> <li>Continue to examine finance options to continue portfolio development.</li> </ul>
ENVIRONMENT	Pending Low Emissions Technology Demonstration Fund (LETDF) funding, execute joint venture agreement between Callide Oxyfuel Project partners and complete detailed design to enable construction in April 2007; arrange external audits of Callide and Mica Creek power stations to maintain ISO 14001 certification.
	Secured LETDF and coal industry funding for Callide Oxyfuel Project, conducted plant condition assessment of Callide A, continued design work and moved construction date to early 2008; Callide and Mica Creek recertified to ISO 14001 standards.
	P / Execute joint venture agreement between Callide Oxyfuel Project partners, commence con- struction, finalise geosequestration site; and maintain ISO 14001 certification at all sites.
COMMUNITY	<ul> <li>Maintain communication channels with the community on power station operations and new projects such as Callide Oxyfuel Project, Swanbank A demolition and Kogan Creek.</li> <li>Initiated Callide Oxyfuel Project newsletter, increased community information on Swanbank water use and sponsored <i>Moving Opera!</i> workshops in Biloela and Chinchilla.</li> </ul>
	P Manage Kogan Creek's transition from construction to operations, communicate and consult on new and existing projects and develop a staff Workplace Giving program.
GROWTH	<ul> <li>Complete joint feasibility study with Australian Gas Light Company into expansion of Mica Creek Power Station.</li> <li>Developed preliminary plant options for Mica Creek expansion and held commercial discussions with customers.</li> </ul>
	<ul> <li>Secure sufficient power purchase agreements and competitively priced gas to progress Mica Creek expansion and review market conditions for expansion at Swanbank and Kogan Creek.</li> </ul>
	Key □/ Targets 2006/07 Outcomes 2006/07 ₽/ Plans 2007/08

# CHAIRMAN'S REVIEW

T THE END OF THIS year CS Energy celebrated its first 10 years of operation and it has been instructive that, when we sat down to consider the Company's performance over the last year, we put 2006/2007 within this 10 year perspective.

Image (right) Stephen Lonie, Chairman.

Back on 1 July 1997, CS Energy commenced its new life with coalfired plants at Swanbank A and B and Callide A and B. Ten years on, CS Energy's portfolio has changed significantly, noting:

- The closure of the old Swanbank A and Callide A plants,
- The development of the new, supercritical coalfired Callide C, in a joint venture with the private sector,
- The current development of Australia's largest coal-fired, air-cooled power station at Kogan Creek, near Chinchilla,
- The development of Swanbank E—one of Australia's newest gas-fired power stations, combined with the underpinning of the development of the coal seam industry in Queensland, and
- The acquisition and subsequent expansion of the Mica Creek Power Station at Mount Isa.

It has been a significant programme and it is important that the people who have contributed so much to CS Energy over the period are recognised.

The challenges this year The challenges that the Company faced this year were significant, with the key issues being:

- The long-running drought in south-east Queensland, which resulted in CS Energy reducing generation at its Swanbank B Power Station near Ipswich in the winter of 2007. At a national level, the dry weather, and corresponding shortage of water for power generation across much of eastern Australia, drove wholesale electricity market prices up.
- Power generators were also in the spotlight through public debate about climate change, particularly after the Queensland Government released its new climate change strategy.

CS Energy, as a Queensland Government owned corporation, has anticipated the need for clean coal technology through its Callide Oxyfuel Project. CS Energy, and its project partners, progressed this clean coal project

> significantly in the last year, and, in October 2006, welcomed a funding offer of \$50 million from the Federal Government's Low Emissions Technology Demonstration Fund.

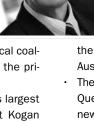
> • The need to secure long-term economic supplies of coal and gas fuel has continued to be a major challenge for the Company, evidenced through

the recent upward trend in gas prices in the Australian market.

The commencement of full retail contestability in Queensland from 1 July 2007, which will bring new challenges as the Company strives to compete against vertically integrated participants that own retail and generation assets.

How the Company performed CS Energy delivered some significant outcomes for its stakeholders in 2006/2007:

- The Company's lowest lost time injury frequency rate in more than five years—which is 3.36 for all sites.
- Record generation and strong reliability, which, coupled with the volatile market conditions, enabled CS Energy to achieve record electricity sales of \$616.3 million in 2006/2007.
- The Company's overall profit of \$43 million, which was lower than its 2005/2006 result due to accounting adjustments for derivative contracts entered into in previous years.
- Construction of the \$1.2 billion Kogan Creek Power Project entered its peak phase and, by year-end, the plant was producing electricity into the national grid. The plant will transition to commercial operations in time for the summer of 2007/2008.



# CHAIRMAN'S REVIEW

CS Energy also progressed specific initiatives to secure the Company's longer term future, including:

- The continuing focus on the performance of the Company's plant portfolio through the development of its Portfolio Services expertise and the management of a comprehensive and ongoing plant maintenance regime.
- The recent gas farm-in agreement with Metgasco, to support CS Energy's fuel diversifica-
- tion strategy and expansion plans, in particular, the Swanbank F project planned for the old Swanbank A site.
- The upcoming major refit of Callide B Power Station, which will ensure one of the Company's most reliable stations is able to continue to perform satisfactorily for the remainder of its extended economic life.
- The pursuit of the redevelopment of the Mica Creek Power Station, with planning now well advanced for progressively replacing older units on site with newer, more efficient gasfired plant, dependent upon customer support.

**People** In May 2007, former CS Energy Chief Executive, Mark Chatfield, resigned after making a voluntary disclosure to the Board about the acquisition of shares. Following his resignation, on the advice of the Board, the Company's shareholding Ministers appointed Tony Andersen, General Manager Major Projects as Acting Chief Executive. I would like to acknowledge Tony's important contribution in the months since. Recruitment of a permanent Chief Executive is currently underway. Any organisation is only as good as its people and it remains a significant challenge for CS Energy to be an employer of choice and many initiatives being implemented by the Company are manifestations of this important focus, including:

- Improved trainee, apprentice and graduate training programs; and
- Ongoing leadership and management development programs, particularly supporting front-

Ra Mitchell DR

line supervisors, as part of a process to enable these key people to implement the Company's safety, operations and maintenance plans.

**Conclusion** We can draw a close to year 10 of CS Energy's short history by concluding that life is no different for CS Energy today.

The Company still seeks to be one of Australia's leading generators and, as such, will continue to identify the key issues on the horizon and address them—to ensure that it delivers reliable electricity generation safely, at a high level of efficiency.

I would like to close by acknowledging the efforts of the many dedicated people

that make CS Energy work, including staff and my fellow Directors, and to acknowledge the continuing support that the Company enjoys from its shareholding Ministers.

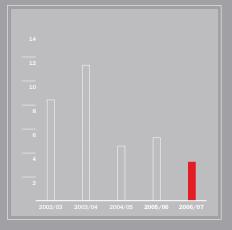
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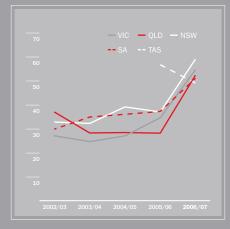
Stephen Lonie Chairman





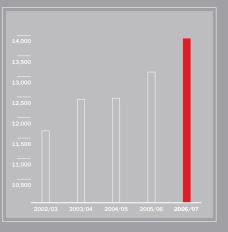
# CHIEF EXECUTIVE'S REVIEW



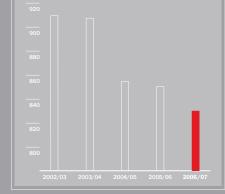


Lost time injury frequency rat

Time weighted average pool price by region (\$/MWh

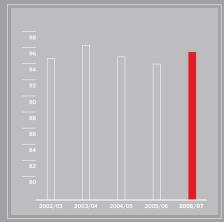


Energy sent out (GWh)



Greenhouse intensity per energy sent out (tC0,e/GWh)





Reliability (%) For all CS Energy plant



# CHIEF EXECUTIVE'S REVIEW

TRONG PROGRESS IN SAFETY, RELIABILITY and growth defined the 2006/2007 financial year for CS Energy. The significantly improved performance of the 900 megawatt Callide C Power Station, together with the continuing reliability of Mica

Creek and Swanbank, helped deliver a reliability rate of 95.5 per cent for the portfolio-our best performance in three years.

The number of lost time injuries to staff and contractors decreased by six compared to the previous year, resulting in an overall lost time injury frequency rate (LTIFR) of 3.36. While

this LTIFR is the lowest in more than five years, CS Energy considers any injury unacceptable and remains committed to achieving a workplace free of injury. Mica Creek Power Station led the way for safety, achieving four years without a lost time injury, an outstanding result. The highest number of LTIs was at the Kogan Creek Power Project site and, while a decrease on last year, it was still an issue we actively managed with the principal contractors.

The drought in south-east Queensland brought challenges and benefits. For much of the year, Swanbank Power Station, near Ipswich, implemented a major program of water efficiency improvements, which resulted in a 45 per cent reduction in town water usage and substantial raw water savings. The onset of level 5 water restrictions in April 2007 resulted in a 25 per cent reduction in Swanbank's raw water allocation until 1 September 2007, when recycled water will be delivered to the site.

To achieve the necessary reduction in water use between April 2007 and September 2007, Swanbank reduced generation at the older coalfired Swanbank B and rescheduled its overhauls. The newer, more water efficient Swanbank E gasfired combined cycle plant operated as normal. The drought forced several of CS Energy's competitors in Queensland and interstate to also reduce generation, creating volatile market conditions and higher pool and contract prices.

CS Energy delivered another solid profit; \$43 million for the year, which is down on last year's result due to accounting adjustments. The dry-cooled Kogan Creek Power Station will commence commercial operations in 2007/2008, providing Queensland with a



large, drought proof generator close to the southeast corner.

CS Energy and InterGen transitioned to more streamlined operating structures to support the jointly owned Callide C station. This new structure

> has the Callide Power Station Site Manager reporting directly to the joint venture owners, reflecting the owners' confidence in CS Energy as the operator of the plant.

> Like most employers, CS Energy is faced with the challenge of maintaining a skilled workforce in a competitive and expanding market.

With more than 60 per cent of our staff in remote areas, where the resources sector has major operations, attraction and retention remains a priority. CS Energy is meeting this challenge by providing leadership and skills development opportunities for its people, with an increasing focus on succession planning.

I would like to thank the executive and all staff for their efforts during the year. 2007/2008 promises to be a milestone year for the Company. On 1 July 2007, CS Energy celebrated the tenth anniversary of its formation. Many of our staff have been with the Company throughout the last decade and we held events at all sites to celebrate the meritorious achievements of our first 10 years.

Kogan Creek joins our growing portfolio in 2007/2008. The Company will also begin the first stage of a major upgrade of the 20-year-old Callide B Power Station. A busy overhaul schedule is in place to support the ongoing reliability of our fleet of 20 generators. Finally, the Callide Oxyfuel Project will move to the construction phase in 2008, making it the most advanced clean coal project in the country. CS Energy continues to grow under our 'generations ahead' banner and I am honoured to help steer the Company, with a very competent executive group, until a permanent Chief Executive is appointed.

Undersen.

**Tony Andersen** Acting Chief Executive



Image (left) Tony Andersen Acting Chief Executive.

# FINANCIAL PERFORMANCE

## PROGRESS AND LOOKING FORWARD

## 2006/2007

- Recorded a net profit of \$43 million.
- Achieved record electricity sales of \$616.3 million.

## 2007/2008

- Commence commercial operations of Kogan Creek Power Station in the national electricity market.
- Integrate Collinsville Power Purchase Agreement into CS Energy's portfolio following August 2007 transfer.

#### CORPORATE PERFORMANCE

CS Energy recorded a profit of \$43 million in the 2006/2007 year. Although the reported profit is down on the previous year, underlying profit from operations (before accounting adjustments associated with the financial instruments accounting standard) actually rose significantly from \$56 million to \$110 million.

The main driver of this improvement in underlying profit was the higher electricity pool prices in the second half of the financial year. The introduction of water restrictions in south-east Queensland in April 2007 resulted in reduced generation at CS Energy's Swanbank B Power Station, as well as some competitors' plants.

This improved result was also reflected in the strong operating cashflow for the year with cash generated from operations rising from \$208.3 million to \$253.6 million. CS Energy used this

operating cashflow to fund capital investment in the new Kogan Creek Power Station, which is currently undergoing commissioning and is expected to make a strong contribution to CS Energy's financial results in 2007/2008.

CS Energy achieved record generation of almost 14,000 gigawatt hours from its portfolio of plant across Queensland. A major component of this generation was the significantly improved reliability of Callide C, up 13.7 per cent on the previous year. In combination with the high pool prices, this generation output resulted in record electricity sales of \$616.3 million.

**Outlook** The continuing water shortage in Queensland is likely to be the most significant factor in CS Energy's financial outlook for 2007/2008. The air-cooled Kogan Creek Power Station will

		2006/07	2005/06	2004/05	2003/04	2002/03
PAT	\$000	43,300	56,468	40,680	30,397	39,716
ROPA	%	3.7	7.3	5.2	5.3	6.8
Gearing	%	<b>69.3</b> <sup>1</sup>	39.3	40.9	30.6	52.7
Assets	\$M	3,262	2,121	1,734	1,620	1,610
TWA pool price	\$/MWh	52.14	28.12	28.99	28.19	37.54
Green energy products	\$000	34,266	23,024	11,133	1,799	(
Total electricity sales	\$000	616,349	505,131	456,229	444,314	460,428
Costs (excl interest)	\$000	562,648	434,011	398,529	394,860	380,536
Dividends payable	\$000	34,640	40,170	29,151	28,877	37,730
Capital investment in						
power stations	\$000	373,163	490,795	248,696	46,655	61,813

## FINANCIAL HIGHLIGHTS

1 Gearing for 2006/2007 adjusted for the impact of mark to market on financial instruments is 51.8%.

# FINANCIAL PERFORMANCE

commence commercial operations during the year and will be a key asset in the Company's portfolio. The delivery of recycled water to Swanbank Power Station in September 2007 will further support the Company's ability to operate in a water-constrained environment.

As a result of a decision by the Queensland Government, the Collinsville Power Purchase Agreement (formerly held by the State owned entity,

Enertrade) and associated arrangements were transferred to CS Energy in August 2007. While these arrangements could have a negative impact on cashflow, balance sheet strength, and possibly future earnings, CS Energy will be seeking to integrate Collinsville into its broader portfolio, to minimise these negative impacts as far as possible.

## MARKET PERFORMANCE

CS Energy receives its revenue from selling elec-

tricity into the National Electricity Market (NEM) and to off-grid customers. The Company's NEM-connected power stations are Swanbank and Callide and the new Kogan Creek, which is being commissioned. Mica Creek Power Station, near Mount Isa, is the main source of electricity for the remote north west Queensland region.

## Performance in NEM

CS Energy earns its revenue though selling electricity into the NEM through the spot market, where prices are calculated every five minutes and settled half hourly, and trading in the contract market where it enters into contracts that lock in a firm price for electricity.

In the spot market, 2006/2007 began with continuing low NEM pool prices reflecting high plant availability. Demand over the traditional summer peak period was steady, but did not reach the highs

of previous years due to milder summer weather.

Pool prices increased considerably from April 2007 when the drought in eastern Australia prompted the introduction of Level 5 Water Restrictions in south-east Queensland. Swanbank B Power Station reduced its generation and rescheduled overhauls to help conserve water and comply with the new restrictions.

The drought resulted in some competitors,

• CS ENERGY • OTHERS

including Tarong Energy and some interstate generators, also reducing their generation and the resulting decline in supply placed upward pressure on prices.

The 2006/2007 time weighted average pool price in the Queensland region of \$52.14/MWhr was almost double the 2005/2006 average of \$28.12/MWhr. The connection of Swanbank

Recycled Water Project in September 2007 is expected to reduce pressure on Wivenhoe Dam and

aid in ensuring the station's summer availability. • CS ENERGY • OTHERS

A similar pattern occurred in the contract market during the year. In mid 2006, market prices were depressed as a result of a mild winter and ample plant availability. As the drought continued into early 2007, and water shortages began to impact on generation across the NEM, forward contract prices rose to unprecedented lev-

els, reflecting uncertainty in water supply and the probability of the drought continuing.

The period from early 2007 onwards also saw significant increases in trading on the futures and brokers' markets, which further impacted on volatility and price uncertainty. As the contracts relate to supply in the long-term, the impact of this activity will be more apparent on CS Energy's future financial position than in the year just completed.

During the year, CS Energy entered into several

to the Western Corridor

Figure (left) CS Energy provided

Figure (left)

percentage of

2006/2007.

Queensland coal-fired power generation in

over half of the gasfired power generation in Queensland during 2006/2007.





# FINANCIAL PERFORMANCE

Image (right) CS Energy's Market Trading team achieved record electricity sales of \$616.3 million in 2006/2007.



new and innovative contracts and provided products that aided in ensuring sound and reliable commercial outcomes. These included new cap and option products and the successful issuing and finalisation of a derivative contracting tender, which realised a better than market value outcome for CS Energy.

With almost a quarter of its portfolio gas-fired, CS Energy continued to support the Queensland Government's 13 per cent Gas Scheme. The scheme requires retailers to source at least 13 per cent of their electricity from gas-fired generation and has resulted in a supplementary revenue source for CS Energy. This revenue is expected to increase following the Queensland Government's announcement in June 2007 that it would increase the gas-fired target to 18 per cent by 2020.

In the lead up to the introduction of full retail contestability on 1 July 2007, CS Energy held discussions with several new entrants to the retail electricity market about potential contract sales in the new financial year.

**Outlook** In the absence of significant and sustained rainfall, the current market prices are likely to continue in 2007/2008. The delivery of recycled water to Swanbank in September 2007 will aid in ensuring its continued availability over the summer peak demand period.

Kogan Creek Power Station commissioning commenced in the first quarter of 2007 and is expected to start commercial operations in time for the 2007/2008 summer, which will further assist in meeting demand. The commissioning of this station is significant in the current water constrained environment as it is dry-cooled, resulting in 90 per cent less water use than a conventional wet-cooled station of similar capacity.

The introduction of full retail contestability in July 2007 has resulted in increased contract discussions with new retail entrants.

**Off-grid activities** Mica Creek Power Station had a 99.2 percent reliability for 2006/2007 and continued to perform to meet its customer obligations throughout the year.

Looking ahead, CS Energy expects to continue to work with existing and new customers to meet potential new load requirements through new contractual arrangements and the planned redevelopment of Mica Creek Power Station. For more information on the Mica Creek Renewal Project, please turn to page 22 of this report.



# **OPERATIONS**

## PROGRESS AND LOOKING FORWARD

## 2006/2007

- · Mica Creek Power Station achieved four years without a lost time injury.
- Swanbank Power Station implemented water efficiency improvements and prepared to receive recycled water.
- Callide C recorded a 13.7 per cent increase in reliability compared to 2005/2006.

## 2007/2008

- · Begin using recycled water at Swanbank Power Station.
- · Conduct first refurbishments in Callide B mid-life refit program.
- · Commence commercial operations at Kogan Creek Power Station.

## SWANBANK POWER STATION

Swanbank Power Station made a strong contribution to CS Energy's generation output in 2006/2007, despite worsening drought conditions in south-east Queensland. Located near Ipswich, the Swanbank site comprises the 480 megawatt coal-fired B station, built in the early 1970s, and the 385 MW gas-fired E station opened in 2002.

During the year Swanbank made major water efficiency improvements at B and E stations to help conserve this increasingly scarce resource and comply with local and State Government requirements. This involved installing more water efficient technology, greater reuse of onsite water and, when necessary, reducing generation.

At Swanbank B, ash-quenching sprays were converted from town water to recirculated water, saving up to 200 kilolitres per day. At E station, 50 kL/day was saved after steam turbine drain valves were replaced and the heat recovery steam generator water sampling points were changed from continuous to controlled blowdown. Swanbank also began recycling the water used in its chemical analysis 'wet racks' rooms, which saved up to 26 kL/day.

As a major user of Ipswich town water, Swanbank was required to submit a draft Water Efficiency Management Plan to Ipswich Water by April 2007 outlining how it would reduce its usage by 25 per cent. Swanbank achieved this target three months early and has since made further cuts, reducing its overall town water consumption by 45 per cent.

Swanbank also sources raw water from Wivenhoe Dam and the Warrill Scheme. In late 2006, Swanbank began increasing the number of times raw water was recycled through its cooling water system, which saved up to two megalitres per day. With the introduction of Level 5 Water Restrictions in April 2007, the Queensland Water Commission reduced Swanbank's allocation from Wivenhoe Dam by 25 per cent from 10 April to 1 September 2007. From 1 September 2007, Swanbank is due to receive recycled water from the Western Corridor Recycled Water Project.

To achieve the necessary reduction in water use, Swanbank struck a balance between reducing generation, while still continuing to support electricity system demand in southeast Queensland. Swanbank B operated at reduced capacity for part of the 2007 winter and scheduled two overhauls from 28 April–1 June 2007(B1) and 16 July–17 August 2007(B2). These overhauls included further work to improve B station's water efficiency. The restrictions had no impact on Swanbank E as it is a newer, more water efficient plant. There were no job losses as a result of the water restrictions.

As a water conservation measure, Swanbank applied to the Environmental Protection Agency for amendments to its discharge limits during the drought period. If approved, this will result in a

# SWANBANK POWER STATION RESCHEDULED OVERHAULS TO REDUCE GENERATION AND



small increase in the concentration of discharge to Bundamba Creek but will not adversely impact on the downstream environment.

While the drought conditions resulted in Swanbank B recording an availability rate of 90.06 per cent for the year, it still achieved a strong reliability figure of 97.5 per cent. Swanbank E stepped up its output to maintain a steady supply to south-east Queensland and recorded a reliability rate of 96 per cent.

There was only one lost time injury at Swanbank during the year, which was a reduction of two from 2005/2006 and a solid result considering the busy overhaul program. An increased focus on plant walk-throughs to check for hazards and completing Job Safety Environment Analysis risk assessments helped achieve this improvement.

Swanbank was one of several Ipswich businesses nominated for the Community Citizen of the Year Award at the Ipswich Business Awards in July 2006. For more information on the station's community relations program, please see page 35 of this report.

**Outlook** After completing the B2 overhaul in mid-August 2007, the Swanbank team will turn their attention to an outage at E station. The site will also make final preparations to receive recycled water in its onsite storage, Swanbank Lake, from September 2007.

## CALLIDE POWER STATION

Callide Power Station enjoyed a year of high generation output in 2006/2007, with no major overhaul work and improved reliability at Callide C. This strong performance was timely, as Swanbank B Power Station's generation was constrained in the second half of the year by the drought in south east Queensland.

The Callide site has a capacity of 1,720 megawatts and comprises three power stations of varying ages and capacity. Built in the mid 1960s and refurbished in the late 1990s, the 120 MW Callide A is in storage for future use in the Callide Oxyfuel Project (see page 26 of this report). Callide B was commissioned in 1988 and has a total capacity of 700 MW and the supercritical, 900 MW Callide C was commissioned in 2001. CS Energy has 100 per cent ownership of A and B stations and owns C station in a 50/50 joint venture with InterGen Australia.

Callide C's reliability improved significantly in 2006/2007 following improvements to furnace cleaning and ash handling equipment in overhauls the previous year. C station's reliability for the year was 94.4 per cent—an increase of 13.7 per cent from 2005/2006. Unit C3 in particular performed well, passing 100 days of continuous operation in late June 2007. The modifications to unit C3's submerged chain conveyor (SCC) to reduce ash spillage contributed to this improved performance and similar modifications are planned for unit C4's SCC in May 2008.

B station ran solidly for much of the year, but agerelated issues such as boiler tube repairs resulted in its lower reliability of 90.5 per cent. A mid-life review of Callide B was initiated in 2005/2006 and the first refurbishments are scheduled for an overhaul of B1 in October 2007. The works include replacing the boiler waterwall, installing new air heater baskets and a generator rewind. The midlife refit will continue with outages in 2008 and 2010 to install a new control system and carry out other improvements. The refurbishments will ensure B station runs reliably for the remainder of its economic life.

CS Energy's joint work with Sigma Energy Solutions on cooling water system modifications at B station garnered the companies an Australian Engineering Excellence Award in November 2006. The modifications were made using Sigma's patented CondenserBoost and resulted in significant plant efficiency improvements. CondenserBoost works by diverting cooling water back into the condenser, maximising heat transfer and recycling water.

In safety, Callide had one staff lost time injury (LTI) during the year and celebrated 1,000 days without an LTI to contractors. It was also the first CS Energy site to introduce the SAFEmap Behaviour Based Safety Training, which aims to improve participants' risk identification and response skills.

The station moved closer to having all units operating on dense phase ashing, with commissioning of the system on B station showing promising results. There have been some technical issues with the full implementation of the system, however Callide is committed to dense phase ashing as it uses less water and increases the site's ash storage capacity. Image (far left) Welding superheater pipes in Swanbank's B2 boiler.



## **OPERATIONS**

Callide hosts up to eight apprentices and trainees each year, and in May 2007 former staff member Tinita Wilson won the Trainee of the Year category at the Gladstone district finals of the Queensland Training Awards. The award recognised Tinita's achievements while completing a Frontline Management Traineeship at Callide.

CS Energy and InterGen transitioned to new reporting structures under the operations and maintenance contract for the jointly owned C station. The new structure removes a level of hierarchy, resulting in the Callide Power Station Site Manager reporting directly to the joint venture owners, reflecting the owners' confidence in CS Energy as the operator of the plant. also made the Mica Creek team determined to set a new LTI free record.

Mica Creek managed six overhauls during the year, as well as several unscheduled plant outages that occurred during the summer high load period. The operation and maintenance team's quick response to the forced outages contributed to the station's strong reliability figure for the year.

The 2006/2007 overhaul program began in August 2006 with a combustor inspection of C1, which ran well apart from some unscheduled cable repairs that delayed its return to service until early September. A concurrent overhaul of C2 included modifications to install an improved bearing design on the high pressure turbine.

A generator rewind of B1 was completed in

Image (right) Boiler engineer James Dring inspects a section of the new Callide B1 waterwall, which will be installed in October 2007. Outlook Maintenance priorities for Callide in 2007/2008 are the B1 overhaul in October 2007, modifying the C4 submerged chain conveyor in May 2008 and preparing for a two-month outage of B2 in late 2008. Callide will also aim to have both stations operating reliably on dense phase ashing and continue its commitment to reliable and safe generation.

## MICA CREEK POWER STATION

Mica Creek Power Station recorded a system reliability figure of 99.2 per cent for 2006/2007, which was an excellent result considering the age of some units and technical issues managed during the year. Comprising 10 units built between the 1960s and late 1990s, Mica Creek is gas-fired and has a total capacity of 325 megawatts. It is an off-grid station that supplies power to north west Queensland's mining industry and communities in the region, including Mount Isa and Cloncurry.

The highlight of the year was Mica Creek reaching four years without a lost time injury (LTI) on 3 January 2007. This result was unprecedented in CS Energy and achieved during a busy overhaul program that brought many contractors to site. An effective safety induction program and regular training for staff were key factors in this result. A minor LTI in March 2007 ended the record run, but



October 2006 following the resolution of technical issues that had delayed the unit's return to service. The unit was brought back online in early November after repairs to its exciter. During this period, summer load requirements and the temporary unavailability of other units resulted in occasional load curtailment of large customers. Mica Creek worked with its large industrial

customers to manage demand, to ensure there was no impact on supply to Mount Isa residents.

A hot gas path inspection of A6 was successfully completed in December and Mica Creek ran reliably over the next several months. An electrical failure on A7's generator circuit breaker in February 2007 caused some short-term load curtailment to customers while the unit was unavailable and similar symptoms were found on one of the A6 breakers. Final overhauls for the year were a hot gas path inspection of A7 in March and overhauls of A1 and A2 in May and June respectively.

In August 2006, Mica Creek Power Station passed an external audit of its compliance with the ISO 14001 International Environment Management Systems standard. The station also completed improvements to the bulk acid handling system that were initiated the year before to improve safety, minimise handling, and reduce spillage risks.



# **OPERATIONS**

Other environmental work included a cleanup and rehabilitation of part of the site, which resulted in a huge visual improvement, with many hundreds of tonnes of surplus, redundant, and scrap materials removed and mostly recycled.

Mica Creek's location in one of the most remote areas of Queensland makes attracting and retaining skilled staff an increasing challenge. In response, the station has adopted a strong training culture for apprentices and trainees and sponsored community events, such as the Mount Isa Business Awards, to increase

its profile as an employer. For the second year, Mica Creek won the Large Host Trainer of the Year Award at the Mount Isa Group Apprenticeship Training and Employment Awards.

CS Energy is planning to expand Mica Creek by up to 50 megawatts to meet future demand and retire the oldest units. During the year discussions were held with existing and potential customers of Mica Creek to secure power purchase agreements to underwrite the expansion. For more information on the Mica Creek Renewal Project, please see pages 22 and 29 of this report.

#### Outlook There will be con-

tinued emphasis on attraction of new employees as well as retention of existing personnel through various initiatives.

Overhauls for the coming year include a major inspection of unit A3 as well as a hot gas path inspection of C1. Additionally, there will be combustor inspections of A6 and A7 and a minor inspection of unit C2 in conjunction with C1's overhaul.

Site improvements will continue with the completion of the integrated control and monitoring system upgrade, installation of the new raw water tank and unit condition monitoring.

#### KOGAN CREEK POWER STATION

In parallel with the construction activity at Kogan Creek Power Station (please see page 24), the team that will work at the completed station underwent an intensive training and induction program. CS Energy recruited 38 staff for the Kogan Creek team, including eight internal appointments and four from other Queensland power stations.

In June 2006, 17 staff commenced a 12month intensive operator training program to provide them with the skills to operate and



maintain the new technology at Kogan Creek. The training complemented participants' engineering or trade skills and by June 2007 all had completed their Workplace Health and Safety Boiler and Turbine tickets.

Following the finalisation of the Kogan Creek Enterprise Bargaining Agreement, the team moved out to site in October 2006. This involved relocating staff and their families to the nearby town of Chinchilla and supporting them as they settled into a new community.

As construction contractors Siemens Hitachi ramped up commissioning in 2007, CS Energy staff worked alongside them in an observer

capacity as part of their plant familiarisation. In June 2007, CS Energy staff transferred to a shift roster in preparation for the transition to commercial operation in 2007/2008.

**Outlook** In early 2007/2008, the Kogan Creek team will finalise safety and security plans for the site in readiness for commercial operation. Their priority for the remainder of the year will be achieving maximum reliability from the plant and preparing for the first 8,000 hours overhaul in August 2008.



Image (left) Valve maintenance on the A5 cooling tower at Mica Creek Power Station.

#### ENVIRONMENTAL PERFORMANCE

CS Energy is committed to responsible environmental management. The Company's Environment Policy guides all environmental decision-making and work practices. All sites have an Environmental Management System in place, certified to the international standard ISO 14001, and their environmental performance is monitored using these systems.

Environmental management at CS Energy is integrated with health and safety across common areas to promote an overall culture of corporate accountability. Regular training, briefings,

Figure (right) CS Energy's water

use intensity in 2006/2007 was 1.9 megalitres per gigawatt hour of energy sent out. This was an 8.2 per cent decrease on the previous year and largely achieved through a water efficiency program at Swanbank and increasing generation at the Company's most water efficients. staff newsletters and internal events such as environment improvement competitions all contribute to increased staff awareness of the environment and their responsibilities.

Performance External audits of Mica Creek and Callide Power Stations in 2006/2007 resulted in their certification to meet the revised ISO 14001 standard. Swanbank Power Station and the

Brisbane corporate office had their certifications upgraded following audits the year before.

CS Energy uses the Energy Supply Association of Australia's Code of Environmental Practice for rating its environmental performance. Each year CS Energy's performance is measured against the Code and benchmarked against other Australian generators. In 2006/2007, CS Energy scored 4.4 out of 5. As Kogan Creek Power Station neared completion during the year, the environment team continued to develop the site's procedures for commercial operation. An Integrated Environmental Management System (IEMS) was submitted to the Environmental Protection Agency in February.

CS Energy implemented an improved Environmental Issues Register (EIR) at all sites, to support the revised ISO 14001 standard. The EIR now demonstrates a clearer link between environmental legal requirements and the assessment of significant environmental aspects of CS Energy's activities.

> Emissions In 2006/2007, CS Energy celebrated 10 years of membership in the Federal Government's Greenhouse Challenge Program for reducing greenhouse emissions. Over the last decade, CS Energy has decreased its greenhouse intensity by 17.8 per cent through actions such as:

> • increasing the proportion of gas-fired generation in its

portfolio and using combined cycle configuration in these plants

- decommissioning older less efficient plant such as Swanbank A
- using landfill gas to supplement one unit at Swanbank B, and
- refurbishing cooling towers at all sites.

Table (right)
CS Energy's
environmental
performance summary
– two-year comparison

Inputs/Outputs		2005/2006	2006/2007	% change
Total energy sent out	GWh	13,110	13,996	6.76
Gas and renewables used	LT	31,454	37,885	20.45
Gas and renewables generation	%	25.6	29.3	3.71
Renewable generation sent out	GWh	30.0	31.5	5.12
Greenhouse gas intensity per				
energy sent out	tonnes CO2e/GWh	851	829	-2.60
Nater consumption ML Ash sold tonnes		28,117	27,796	-1.149
		98.943	81,548	-17.58



# **OPERATIONS**

CS Energy's greenhouse intensity for 2006/2007 was 829 tonnes of carbon dioxide per gigawatt hour of energy sent out. Details of other emissions from CS Energy sites are published through the National Pollutant Inventory.

The Callide Oxyfuel Project aims to demonstrate low emission coal-fired electricity generation at CS Energy's Callide A Power Station. This project progressed significantly during the year and is outlined in more detail on page 26 of this report.

The ReOrganic Project involves the coalfired Swanbank B using landfill gas piped from the neighbouring Thiess Services Landfill as

a supplementary fuel. In 2006/2007, Swanbank B generated 31.5 gigawatt hours of renewable energy sent out.

Water Each CS Energy site has water management strategies in place to maximise efficiency of use of this key input to power generation. Highlights in 2006/2007 included:

- Swanbank introduced water efficiency improvements that resulted in a 45 per cent reduction in its town water use and substantial savings in raw water sourced from Wivenhoe Dam. (See page 13 for more detail)
- Kogan Creek completed construction of its air-cooled condenser for dry cooling, which will result in 90 per cent less water use than a conventional wet-cooled power station.
- Callide reduced its use of raw water for general hosing down of plant and equipment by reusing wastewater recovered from site storages.
- Mica Creek cycles its cooling water up to 12 times through the power station to ensure maximum use of this valuable resource. Since 2004 the station has also provided all of its effluent water for reuse by nearby Xstrata mining operations, with a total of 438 megalitres supplied in 2006/2007.

**Outlook** Efficient water use will remain a priority in 2007/2008. Preparations will continue for the supply of recycled water to Swanbank site from the Western Corridor Recycled Water Project and the environmental monitoring, approvals and review processes which will accompany this significant milestone. Consolidation of the environmental management of Kogan Creek Power Station as a CS Energy greenfield operating site will also be a priority.

#### PORTFOLIO SERVICES

Portfolio Services coordinates the long-term asset

management of CS Energy's portfolio of plant and assists sites with plant performance issues as they arise. Based in Brisbane, the team has expertise in engineering, environment, chemistry, and asset and overhaul management and works in partnership with technical staff at all sites.

Overhaul Process 2006/ 2007 saw the rollout of a new Overhaul Process across the portfolio. This process places more emphasis on the planning and scheduling of overhauls to achieve business results in the execution. Although the program is in its infancy, it is already improving

the overhaul process and the links between CS Energy and contractors providing services.

As part of the Strategic Sourcing project, four major overhaul providers were contracted on fiveyear agreements. The contracts are based on Australian Standards and will provide CS Energy with consistency and stability for overhauls for the next five years. For more information on the Strategic Sourcing project, see page 21 of this report.

#### Image (left)

Specialist Bob Hazard inspects a new water efficient drain valve at Swanbank B, one of almost 100 installed on the plant during the year. The new equipment was part of a major water efficiency program at the site, which resulted in B station operating at half its target town water consumption level.



## **OPERATIONS**

#### Image (right)

Senior electrical engineer Peter Hoerlein assesses plans for the upgrade of the Callide B control system, which is part of a major refurbishment of the 20-year-old station.



**Callide B Refurbishment** In 2006/2007 Portfolio Services continued scoping a major refurbishment of Callide B near Biloela, which was commissioned in 1988 and comprises two 350 MW coal-fired units. Callide B has been one of CS Energy's most reliable assets, but after almost 20 years of baseload operation is showing signs of age. The refurbishments will be scheduled in overhauls from 2007 to 2010 and will ensure the station runs reliably for the remainder of its life.

The priority plant refurbishments identified to date are the boiler waterwall, air heaters, digital control system and generators. The B1 waterwall and air heaters will be replaced during an overhaul in October 2007. Commencing in October 2008, an overhaul of B2 will include a generator rewind and the first stage of installing a new control system. In 2010, an overhaul of B1 will include the second stage of the control system installation and waterwall, air heater and generator refurbishments.

In 2007/2008, Portfolio Services will prioritise the remaining refurbishments required at Callide B and schedule them into the overhauls mentioned above.

Kogan Creek Asset Management Strategy In preparation for Kogan Creek Power Station commencing commercial operations in 2007/2008, Portfolio Services developed an asset management strategy for the plant. The strategy outlines how CS Energy will operate and maintain Kogan Creek to ensure it runs reliably and economically and includes condition monitoring, preventative maintenance and overhaul plans. National Electricity Rules Compliance Following changes to the National Electricity Rules, CS Energy was required to re-register the technical performance standards for each of its generators with the National Electricity Market Management Company (NEMMCO). The National Electricity Rules govern the operation of the National Electricity Market, which NEMMCO operates and administers.

CS Energy submitted its case for re-registration to NEMMCO in February 2007. Following reregistration, CS Energy will implement a compliancemonitoring programme under the Rules, which will be monitored by NEMMCO.

**Outlook** In 2007/2008, Portfolio Services will coordinate the first stage of refurbishments at Callide B, provide technical assistance to other sites on overhauls and implement plans to comply with the revised National Electricity Rules.

Contracting with the four major overhaul contractors provides the platform to further develop and roll out the Overhaul Process to achieve longterm results. In 2008 and beyond, CS Energy will be using the skills and knowledge base of its contractors to assist in internal and external benchmarking, and ensure best practice in overhaul execution.

#### **OPERATIONS SUPPORT**

Operations Support ensures adequate systems and processes are in place to assist CS Energy in meeting its business objectives. Its primary focus is the operations, maintenance and reporting systems at the Company's power stations and the people who use them.



Information Management Following a review of CS Energy's performance reporting system in 2005/2006, Operations Support finalised the specifications for a new system that better supports decision making at all organisational levels. The aim is to deliver a system that provides more meaningful information on how the Company's plant, people and business are performing. CS Energy's Business Process Support team will develop the system and implementation is scheduled for 2007/2008.

Operations Support also identified a need to improve reporting on plant and safety incidents. In response, the Incident Management Database was revamped to record more detailed information on incidents such as near misses, injuries and unplanned outages. New incident categories of environment and security were also added to the system, which is integrated into SAP. The new system is now in use and will enable CS Energy to track trends, develop responses and monitor improvements.

Training and Development In 2006/2007, Operations Support rolled out two training programs to address skills gaps amongst existing and new operations staff. Both programs involved engaging a registered training provider to tailor nationally recognised qualifications to meet the Company's requirements.

The first program was a Supervisor Development Program to provide operations and maintenance supervisors with foundation skills in frontline management. The training was developed after receiving feedback that many CS Energy supervisors had excellent technical skills but felt they needed more guidance on managing their teams. Twenty-two operations and maintenance supervisors completed the 12-month course and graduated with a Certificate IV in Business (Frontline Management) in June 2007.

An operator training program was developed to train Kogan Creek staff in the new technology at the station and provide interested staff at other sites with the opportunity to build their skills. The 12-month training program involved classroom and on-the-job training and by year-end, 17 Kogan Creek and four Callide staff attained their Workplace Health and Safety Boiler and Turbine tickets. At the completion of the next stage of the course, the participants will graduate with a Certificate IV in Power Generation.

For information on other training and development activities at CS Energy, please refer to page 33 of this report.

**Outlook** In 2007/2008, Operations Support will implement the new performance reporting system, coordinate new intakes of the supervisor development and operator training programs, and manage the continuous improvement process across the Company's operations and maintenance systems.

#### STRATEGIC SOURCING

In 2006/2007, CS Energy continued a Strategic Sourcing Project to review the Company's purchasing spend. The project was initiated in a response to the tightening contract labour market and aimed to deliver long-term security and cost savings to the Company.

In August 2006, CS Energy began inviting tenders for 80 per cent of its materials and services requirements. Suppliers were asked to submit proposals for five-year contracts that delivered cost savings and benefits over time. At 30 June 2007, CS Energy had negotiated new contracts for 40 per cent of its requirements in both services and materials, with Australian Standards Contracts used as the base documents. Some of the most significant contracts were for overhaul services at CS Energy's power stations.

Given the size of the Strategic Sourcing Project, CS Energy engaged the Queensland Audit Office (QAO) to review the probity of the project and its process for evaluating and selecting suppliers. The QAO found all processes were fair and equitable and that all participants had been treated equally.

The Strategic Sourcing team also developed improvements to the day-to-day contract management processes at corporate office and sites to ensure CS Energy obtained maximum value for its purchasing spend. These include quarterly meetings with suppliers and regular performance evaluations.

**Outlook** In 2007/2008, Strategic Sourcing will finalise contracts for materials and supplementary labour. The team will also implement process improvements for contract management.

# PROGRESS AND LOOKING FORWARD

## 2006/2007

- Metgasco commenced test drilling near Casino following a gas farm-in deal with CS Energy.
- Held commercial discussions with customers and investigated gas supplies to support the Mica Creek Power Station expansion.

## 2007/2008

- Fund further appraisal work at Metgasco's PEL 16 near Casino, to prove 2P gas reserves.
- Secure sufficient power purchase agreements and competitively priced gas to move the Mica Creek expansion forward.

The New BUSINESS TEAM WORKS to secure CS Energy's long-term competitiveness through business development, resources (fuel and water) acquisition and related functions. Priorities for 2006/2007 were identifying new sources of gas supply, progressing the Mica Creek Casino. Reserves of 1,123 (3P) had already been established in the tenement and, in January 2007, test drilling began as part of the CS Energy-Metgasco joint venture. Ten core wells have been drilled to date in the farm-in area, with promising results. Work will continue in 2007/2008 with a pilot

Image (right) Operators extract coal seam core samples at Metgasco's field in northern New South Wales as part of the CS Energy funded appraisal program. Renewal Project, assessing other potential generation developments and finalising arrangements for receiving recycled water at Swanbank Power Station.

Metgasco farm-in deal CS Energy signed a gas farm-in agreement worth \$11 million with Australian energy company Metgasco in December 2006. The goal of the farm-in is to establish

540 petajoules(PJ) in 2P gas reserves (proven and probable) at Metgasco's coal seam methane fields in northern New South Wales. If sufficient reserves are established, 18 PJ per year will be supplied to CS Energy's Swanbank Power Station near Ipswich.

Under the farm-in agreement, CS Energy will spend the \$11 million in two stages, to earn an initial 15 per cent interest in the coal seam gas rights to three blocks in the tenement PEL 16, near



 in 2007/2008 with a pilot appraisal program targeting selected coal seams.

Once the 2P reserves have been established, which is expected by July 2008, CS Energy intends to invest a further \$94.5 million in developing the gas field and will earn an additional 35 per cent of the farm-in area. Metgasco will continue to be the operator of the field and is also the lead developer of the proposed pipeline to

deliver gas to Ipswich by 2010/2011.

The volume of gas potentially supplied through the Metgasco agreement would be enough to add an additional gas-fired plant to the Swanbank site. Feasibility planning for a second large gas turbine at Swanbank continued during 2006/2007 and progress is outlined on page 29 of this report.

Mica Creek Renewal Project Developing a viable renewal and expansion plan for Mica Creek Power



## NEW BUSINESS



Image (left) CS Energy plans to progressively replace older units at Mica Creek Power Station in northwest Queensland.

Station near Mount Isa was one of CS Energy's highest priorities in 2006/2007. The gas-fired power station has a capacity of 325 MW and provides electricity to the region's mining industry as well as Mount Isa, Cloncurry and surrounding communities. In May 2006, CS Energy signed a joint development agreement with Australian Gas Light Company (AGL) to investigate upgrading Mica Creek. CS Energy plans to replace older plant and also expand the station's capacity.

During the year CS Energy held commercial discussions with existing and new customers to secure sufficient power purchase agreements (PPAs) to progress the expansion. As Mica Creek is not connected to the national grid, CS Energy requires an appropriate level of customer support before it orders and constructs new plant. The Company also explored options for competitively priced gas supplies to support the expansion project.

CS Energy's Major Projects team commenced front end engineering and design of suitable plant in 2006/2007 to ensure it was ready when the customer base for the project is finalised. The Company hopes to secure sufficient PPAs by the first quarter of 2007/2008 to enable it to call for tenders for the supply of plant. For more information on design work for the Mica Creek Renewal Project, please see page 29 of this report.

Ash Reuse Opportunities CS Energy continued to progress options for the reuse of ash produced at its coal-fired Swanbank B and Callide B and C power stations. The Company worked with Cement Australia on the potential use of Swanbank ash dam material as a fill in construction projects at the Port of Brisbane. Cement Australia carried out compaction trials of the Swanbank ash during the year that confirmed its suitability for use as a landfill. Arrangements were also made to supply Swanbank ash to Transpacific for use in composting products.

Contracts are in place with Cement Australia, Global Cement and Renewed Resources for the beneficial reuse of Callide B and C ash.

**Recycled Water at Swanbank** While Swanbank Power Station staff made technical preparations to receive recycled water, the New Business team negotiated the arrangements under which it would it be supplied. The Western Corridor Recycled Water Project is scheduled to deliver recycled water to Swanbank Lake from 1 September 2007. The recycled water will supplement Swanbank's other water supplies, which have been affected by prolonged drought. For more information on the technical preparations at Swanbank, refer to page 13 of this report.

**Outlook** On completion of the gas appraisal program at Casino next year, CS Energy will decide by July 2008 whether to move to full development of the field.

In 2007/2008, New Business will also assess other gas farm-in arrangements, new generation developments and new coal resources for existing and new generation developments.

# MAJOR PROJECTS

## PROGRESS AND LOOKING FORWARD

## 2006/2007

- Kogan Creek Power Project 98.9 per cent complete and in final commissioning mode.
- Callide Oxyfuel Project received funding offer of \$50 million from the Low Emissions Technology Demonstration Fund.
- Swanbank A's concrete chimneys successfully demolished.

## 2007/2008

- Complete Kogan Creek Power Project commissioning activities and start commercial operations.
- Commence construction at Callide A for the Callide Oxyfuel Project and select final geosequestration site.

#### KOGAN CREEK POWER PROJECT

At 30 June 2007, the Kogan Creek Power Project was 98.9 per cent complete and in the final months of commissioning. The site workforce peaked in

Image (right) A total of \$340 million was spent on construction activity at Kogan Creek Power Project in 2006/2007. October 2006 at 974 and 3.8 million hours had been worked since construction began in September 2004. A consortium of Siemens Hitachi is constructing the power station on behalf of CS Energy, and Golding Contractors is developing the adjacent coal deposit as an open cut mine.

The power station has the largest single boiler, turbine and generator unit in

Australia and will produce enough electricity to power one million homes.

Kogan Creek Power Station The final major components of the power station were installed early in the year, starting with the 320 tonne generator stator in July 2006 and the high pressure and low pressure turbines the next month. The steelwork on the boilerhouse was completed in the same period and hydrostatic testing successfully conducted. Steelwork on the turbine house and air-cooled condensers was completed by August 2006 and work began on installing the electronic control and management system for the

power station.

Commissioning began in

late 2006, early milestones

being the first firing of the

boiler on oil in December

to test the main burner and

igniters, and steam blow-

through in March 2007 to

clean and test the boiler and

steam piping leading to the

turbine. Kogan Creek Mine

began delivering coal to the

power station in April and the boiler was fired on coal in the



same month.

On 12 May 2007, Kogan Creek achieved synchronisation with the national grid, which marked the first time the power station produced electricity into the grid. Technicians then gradually increased Kogan Creek's generation until it reached its full load of 750 MW for the first time on 22 June.

Kogan Creek Mine CS Energy purchased the Kogan Creek coal deposit as part of its strategy



## MAJOR PROJECTS

of acquiring low-cost fuel sources. The Kogan Creek Mine will deliver approximately 2.8 million tonnes of coal to the power station per year via a four kilometre overland conveyor. The high quality of the Kogan coal will eliminate the need for pretreatment such as washing, further conserving valuable local water supplies.

In early 2006/2007, the remainder of the overburden and coal mining fleet was delivered to the mine. First coal was uncovered in December 2006 and the mine became operational in April 2007 when coal was delivered to the power station for the first time via the overland conveyor. By June 2007,

43 staff were working at the mine and it was finalising its long-term operational pattern in readiness for the power station commencing commercial operations. At the end of the period, coal from the M seam. the shallowest seam of the three to be mined, had been removed and transported to the power station. Construction of the station stockpile had commenced.

Safety Kogan Creek's safety improved in 2006/2007 compared to the previous year, however CS Energy continued to closely monitor standards and procedures on-site. There were seven lost time injuries (LTIs),

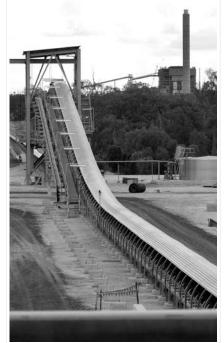
which was a decrease of two on the previous year's figure. The project team proactively managed safety with Siemens Hitachi to ensure there was adequate training and supervision of site workers. The frequency of LTIs decreased from January 2007 onwards, with the majority occurring during the peak construction period in late 2006.

Environment Kogan Creek Power Station's advanced design incorporates dry cooling technology, which will result in 90 per cent less water use than conventional wet-cooled power stations.

This reduction allows the plant to source water from bores, ensuring the valuable water in the Condamine River is available for other users.

Kogan Creek also features supercritical steam technology to achieve maximum thermal efficiency and one of the lowest environmental emissions for a power station of its type.

Community During the year CS Energy continued its community activities, such as the Chinchilla Community Benefits Trust and sponsoring the biennial Chinchilla Melon Festival. For information, please refer to page 35 of this report.



Transition to operation CS Energy recruited 38 staff to operate and maintain the power station when it is completed. In October 2006 this team moved out to site to commence training, operational planning and plant familiarisation activities. For more information on the Kogan Operations team, please see page 17 of this report.

Image (left) The four kilometre

overland convevor

connecting Kogar Creek Power Station

and its mine was

completed during the year.

Outlook In the lead-up to commercial operations, technicians will conduct final commissioning tests to ensure the power station runs reliably and efficiently. The station will also be fine-tuned to set the optimum operating

conditions for making the most efficient use of inputs such as coal and water, and to ensure it operates within its environmental limits.

The Kogan Creek Mine will ramp up its output and finalise its long-term operational pattern. The power station will continue to produce electricity as part of commissioning activities. The project's commercial handover date has shifted beyond September 2007 following delays during construction due to a shortage of skilled workers and commissioning issues with water treatment and coal handling plant.



#### CALLIDE OXYFUEL PROJECT

The Callide Oxyfuel Project progressed significantly in 2006/2007 to become one of the most advanced clean-coal projects in Australia. It aims to demonstrate a combination of oxyfiring technology and carbon capture and storage to reduce greenhouse emissions from coal-fired electricity generation.

CS Energy has partnered with eight industry and research organisations on the \$180 million project. They are: JCOAL, JPower, IHI, the Australian Coal Association, Xstrata Coal, Schlumberger, the CO2CRC and the CRC for Coal in Sustainable

Image (right) Callide A Power Station, where CS Energy and its project partners will demonstrate oxy-firing technology. Development.

The project involves retrofitting a boiler at CS Energy's Callide A Power Station with oxy-firing technology so it can burn coal in a mixture of oxygen and recirculated flue gas. This will create a highly concentrated stream of carbon dioxide suitable for storage underground using geosequestration.

The Callide Oxyfuel Project will be the first to retrofit oxy-firing technology to an existing power station. CS Energy believes that creating a clean coal solution that can be retrofitted to current plant will minimise the leadtime for future application by industry.

**Demonstration funding** In October 2006 the project secured a conditional funding commitment of \$50 million from the Australian Government's Low Emissions Technology Demonstration Fund (LETDF). The funding enabled the project to move ahead with plans for demonstrating oxyfuel technology at Callide A.

Following this milestone, the project team negotiated a funding deed with the government's AusIndustry agency, which is due to be finalised in early 2007/2008. Once the deed is finalised, the project will execute a joint venture agreement with the partner organisations.



Technical highlights As Callide A has been in storage since January 2002, a plant condition assessment was undertaken in November 2006 as part of the front-end engineering and design for the project. On site for the inspection were more than 30 personnel from CS Energy, project partner IHI and contractors Clyde Babcock Hitachi, Siemens, Energen and Austpower.

The condition assessment found no unforeseen issues with the plant and confirmed the key areas needing refurbishments were the control system and air heaters. In the same period, the project

> completed an initial design review to clarify how new plant components will be incorporated at site and to develop the necessary risk management strategies for the project.

> In January 2007, CS Energy participated in the second Oxyfuel Combustion Workshop of the International Energy Agency's Greenhouse Gas Research and Development Programme. In March 2007, CS Energy convened a workshop with its Callide Oxyfuel Project partners to identify the priority geological areas west of Callide suitable for further investigation for CO<sub>2</sub> storage. The partners also agreed on the criteria for selecting the final storage

site to be used in the demonstration project.

In June 2007, a geotechnical investigation was conducted to test the characteristics of soil where the oxygen plant,  $CO_2$  processing unit and storage tank will be constructed at Callide A. Bore holes will be drilled into the underlying rock in early 2008 as part of this geotechnical analysis and the results used to finalise the design for the piled foundations.

Other highlights for the year included the completion of an Environmental Impact Assessment for the oxy-firing component of the project and the publication of the project feasibility report.



## MAJOR PROJECTS



Terutoshi Uchida from Callide Oxyfuel Project partner IHI Corporation inspects the unit 4 boiler drum during a

condition assessment of Callide A in November 2006.

Image (left)

**Outlook** Priorities for 2007/2008 are finalising front end engineering design, commencing construction at Callide A and selecting a suitable site for geological storage of  $CO_2$ . The project also plans to finalise the funding agreement with AusIndustry and the joint venture agreements. First electricity generation from the oxyfuel process at Callide A is scheduled for 2010 and transport and geological storage of  $CO_2$  planned for later that year.

#### OTHER RESEARCH AND DEVELOPMENT

CS Energy also continued to support other research and development programs that focus on more effective coal utilisation and improvement in power generation technology. These programs include work by the Cooperative Research Centre for Coal in Sustainable Development (CCSD), the Ash Development Association of Australia (ADAA), and the United States based Electric Power Research Institute (EPRI).

**Coal Utilisation** The CCSD concluded the sixth year of its seven-year program to enhance the efficiency and environmental and economic performance of Australian coals used for power generation, and to facilitate the development of lower emission technologies. In addition to the Callide Oxyfuel Project feasibility study carried out through this program, CS Energy also played a key role in technical assessments of other clean coal technologies, including co-firing of coal and biomass. Biomass is a renewable energy source. Examples of biomass are organic matter such as sawmill or garden waste, and co-firing these materials with coal can reduce greenhouse and other emissions. During the year

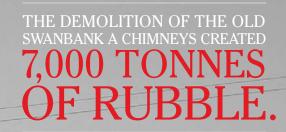
CCSD progressed a handbook on biomass co-firing, which will be published in 2008.

CS Energy also continued to work with CCSD and the ADAA on fly ash reuse opportunities. Fly ash comprises up to 90 per cent of ash produced at a typical coal-fired power station and reuse opportunities can include concrete additives, backfill and soil conditioners. In 2006/2007, CS Energy played an active role in the preparation of a CCSD/ ADAA handbook on coal combustion products, to be published in early 2008.

Improving power plant performance CS Energy's ongoing membership of EPRI has provided the Company with access to industry best practice, training and research input opportunities aimed at enhancing the performance of coal and gas powered generation plant. As part of its membership, CS Energy has sponsored research programs that are of most relevance to its portfolio. In 2006/ 2007, CS Energy supported EPRI research into improving plant performance in steam turbines, generators and balance of plant; heat recovery steam generators; boiler and turbine steam and cycle chemistry; and fossil plant maintenance.

In addition, CS Energy sought EPRI expertise on plant issues such as asset management, generator stator cooling corrosion, thermal fatigue corrosion and supercritical boilers. EPRI also ran training workshops for CS Energy staff on steam turbine overhauls, condenser tube management and flow accelerated corrosion.

**Outlook** CS Energy will continue supporting these priority research areas in 2007/2008.



#### SWANBANK A DEMOLITION

As 2006/2007 drew to a close, the project to demolish the 40-year-old Swanbank A Power Station was nearing completion. All remaining buildings and items of plant had been removed from site, and site crews were in the final stages of foundation removal.

Swanbank A was a 408 megawatt coal-fired power station built in 1966. CS Energy engaged Trio Industries to demolish Swanbank A following the station's closure. Site works began in May 2005 and by 1 July 2006 the project was just passing its halfway point and entering its most challenging phase.

Chimneys demolished The spectacular demolition of Swanbank A's three 122 metre high concrete chimneys in August 2006 was the culmination of months of planning. The chimneys' size and location, adjacent to the operational Swanbank B Power Station and transmission substations, made their demolition a highly complex exercise. Trio Industries, specialist sub-contractor Precision Demolition and staff from Swanbank and Powerlink worked together to ensure the demolition occurred safely and had no unintended side effects on Swanbank B or the transmission network.

At 9.20am on 19 August, the three massive chimneys fell in a 'controlled collapse' after explosives were detonated at the base of each of the structures. This method controlled the direction the chimneys fell to ensure they landed on the safest ground position possible. Many staff and local residents gathered on high points around lpswich to watch the historic moment and a one kilometre 'exclusion zone' was established around the station to ensure their safety. Once the chimneys were on the ground, site crews hosed down the area to control dust and began the three-month job of clearing the 7,000 tonnes of chimney rubble.

**Other highlights** Remaining sections of Swanbank A removed during the year included the generator stators, boilers, cooling towers, turbine building, auxiliary bay building, boilerhouse, and undergound pipes, drains, pits and foundations. The demolition of the 150 metre long and 30m high turbine building and the adjacent auxiliary bay building in

late 2006 were the most significant milestones apart from the chimney drop.

After peaking at a site workforce of 50 in 2005/2006, the number of workers in 2006/2007 averaged 14. Site safety continued to be a priority due to the scale of the demolition job. All plant was dismantled and disposed of according to regulatory requirements and the site recorded zero lost time injuries for the year.

**Outlook** The Swanbank A Demolition Project is expected to be completed in the first quarter of 2007/2008.

#### NEW PROJECTS

During 2006/2007, CS Energy continued frontend engineering and design and environmental impact assessments for potential developments at three of its sites:

Kogan Creek Expansion Exploratory drilling of the Kogan Creek coal resource confirmed there is sufficient economic fuel for a second generating unit on the site. Design concepts currently include stateof-the-art high efficiency steam cycle technology, dry-cooling and carbon-capture readiness.

Swanbank Expansion The site of the recently demolished Swanbank A station has been earmarked for redevelopment with modern gas-fired combined cycle plant of between 400 and 500 MW capacity. This location has many advantages, including proximity to the major load centre, and much of the necessary supporting infrastructure already exists.

Mica Creek Renewal The ageing boilers and steam turbines, which were installed during the 1960s, are planned to be progressively replaced with high efficiency gas-fired combined cycle plant. The first stage would result in a net increase of approximately 50 MW to the station's total installed capacity, to cater for expected growth in regional demand.

**Outlook** Work on the timing and technical and economic feasibility of these projects will continue in 2007/2008. All of the proposed projects will be subject to shareholding Ministers' approval.



Image (far left) Swanbank A's chimneys were safely demolished in August 2006 with no unintended effects on Swanbank B or the transmission system.

## PROGRESS AND LOOKING FORWARD

## 2006/2007

- · Introduced high visibility and flame retardant clothing at all sites.
- Recruited and relocated the operational team for Kogan Creek Power Station.
- Developed post-graduate qualifications in power generation in partnership with other generators and three universities.

## 2007/2008

- Introduce health and safety management system at Kogan Creek Power Station.
- Step up CS Energy's training program to target priority skills areas and aid in attracting and retaining staff.

## SAFETY

CS Energy's approach to health and safety is to create a culture of responsibility amongst staff, contractors and visitors. The Company's aim is to achieve a workplace free of occupational injury and illness.

Health and Safety System CS Energy's Occupational Health and Safety Management System provides a uniform approach to safety at all sites and is designed to encourage continuous improvement. The system includes corporate policies, procedures, audits and health and safety manuals.

A key element of the system is the Permit to Work Manual, which is used to coordinate and control the isolation of energised plant at all power stations. Regular site inspections, job observations and toolbox talks encourage staff to take responsibility for health and safety in their area.

The Safe Move awareness program is used to increase staff awareness and understanding of CS Energy's safety policies and procedures. Safe Move promotes the most basic principle of safety—to get people to think before acting.

CS Energy's health and safety system also applies to contractors. Contractors must be properly inducted for the site they are working on, develop overhaul specific health and safety plans, meet certification requirements and complete all relevant job safety analysis documentation. Safety Performance The safety highlight for the year was Mica Creek Power Station achieving four years without a lost time injury (LTI) to staff or contractors on 3 January 2007—an unprecedented achievement within CS Energy. In April 2007 Callide Power Station also celebrated 1,000 days without an LTI to its contractors.

Across the Company, there were 10 LTIs in 2006/2007 and the corresponding Lost Time Injury Frequency Rate was 3.36. These figures include staff and contractors at CS Energy's three operational power stations, the Kogan Creek Power Project construction site and the Swanbank A demolition site. None of the LTIs occurred during an overhaul and the overall total is a decrease of six on the previous year. However, any lost time injury is a concern and CS Energy will continue working towards zero LTIs.

CS Energy and supplier ContainerWorks gained a Highly Commended Award at the National Safety Council of Australia Awards of Excellence in November 2006 in the category of Best Solution to a Specific Workplace Risk. CS Energy and ContainerWorks designed an emergency escape hatch that can be easily and cheaply installed in shipping containers, removing the risk of workers being accidentally locked inside.





Image (left) Mica Creek Power Station integrated the 'Permit to Work' lock system with SAP in 2007. Health & Safety Advisor Ross McDermott checks a permit during a

recent overhaul.

CS Energy has carried out a quarterly Safety Leadership Survey since 2005/2006 to report staff views of the safety focus of their manager. The survey is anonymous and is based on the principle that leaders set the example for safety in the workplace. Survey results from 2006/2007 showed an increase in staff approval ratings of the safety performance of their supervisor.

The Incident Management Database was revised during the year to improve reporting on safety and other incidents. The improvements include more detail about incidents, which will enable CS Energy to better identify trends, develop responses and monitor improvements.

High Visibility Clothing Following trials of high visibility and flame retardant clothing in 2005/2006, CS Energy began rolling out the clothing to sites in May 2007. The clothing will reduce electrical and visibility risks and complete with changes to the *Electrical Safety Act 2002*. The rollout to staff will be completed in September 2007 and contractors will be required to wear the high visibility clothing from January 2008.

Training Regular training forms an important part of CS Energy's approach to workplace health and safety. SAFEmap Behaviour Based Safety Training was delivered at Callide and Mica Creek power stations during the year to complement the Safe Move awareness program. The training improved employees' ability to identify and assess risks and take appropriate action. CS Energy reviewed its electrical safety training during the year to achieve a more consistent approach at all sites in compliance with the Electrical Safety Act. The review identified areas where skills development is needed and training will be rolled out in 2007/2008.

Other safety training carried out in 2006/ 2007 included:

- pandemic response training
- Workplace Health and Safety Officer training for Superintendents and Supervisors at sites
- · food safety training in site canteens
- defensive driver training for staff who regularly travel to sites, and
- crisis response simulations.

Fit for Duty As part of its Fit for Duty Policy, CS Energy began consulting with staff and unions on a proposal to introduce drug and alcohol testing at all sites. Random drug and alcohol testing has become mandatory in the mining industry in Queensland and CS Energy researched other companies' testing approaches when developing a draft policy and procedure. Drug and alcohol testing will support the Fit for Duty Policy by helping ensure employees do not pose an unacceptable risk to the safety of themselves or others, or plant and equipment. In 2007/2008 CS Energy plans to complete consultations on the draft policy and procedure, implement education workshops to staff and run a three-month introductory testing phase.

A Fatigue Management Procedure was also developed during the year and training developed to help staff and contractors better manage their fatigue levels, particularly during overhauls and shiftwork.

**Employee Health and Wellbeing CS Energy offers** a range of programs to promote a healthy lifestyle and support the physical and mental wellbeing of its employees. An Employee Assistance Program has been in place for over five years to offer all staff free

access to an independent, qualified counsellor.

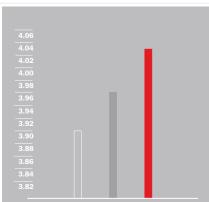
Pre-employment medicals are conducted on all new power station staff and have proven successful in identifying current and developing health problems and managing them into the future. Each site is also provided with funding to implement additional health and safety programs. In 2006/2007 these included fire extinguisher training for staff family members at Mica Creek, a women's health information session at Callide, a staff gym at Swanbank and free health assessments for staff over 50 across the Company.

## Workers' Compensation and

Rehabilitation An extensive rehabilitation program is offered on a case-by-case basis to injured em-

ployees. The Rehabilitation Policy and Procedure is linked to the Employee Assistance Program, which is available to all employees. Claims for compensation totalled \$15,885 in 2006/2007, which represented an 84 per cent reduction compared to the average annual payments for the previous four years. This improvement reflects a decrease in injuries and the impact of a concerted

effort to forge closer links with injured staff and their medical practitioners to achieve a smoother transition back to work.



Outlook In 2007/2008, the Safety team will:

- revise its Asbestos Management Plan to match the new Australian Standard
- rollout a consistent Confined Space Procedure at all sites
  - finalise the Chairman's Safety Awards Program
  - wrap up consultations on the draft policy and procedure for random drug and alcohol testing
  - continue training in electrical safety, the SAFEmap risk management approach to safety, pandemic response and fatigue management, and
  - update safety induction materials at all sites.

#### HUMAN RESOURCES

As Queensland's largest electricity generator, CS Energy employs around 560 people across five sites—Swanbank. Callide, Mica Creek and Kogan Creek power stations and Brisbane corporate office.

The workforce profile covers a broad range of occupations and professions including engineering,

> technical and trades, contract administration, project management, workplace health and safety, finance, information technology, procurement and human resources.

> Meeting the Skills Challenge Like most employers, CS Energy is faced with the challenge of maintaining a skilled workforce against a very competitive and expanding market. With

more than 60 per cent of our staff in remote areas where the resources sector has major operations, attraction and retention is a priority. Although staff turnover has decreased and remains well below the national average of almost

Results from the Safety Leadership Survey, which involves staff rating their supervisor's safety performance out of five.

Figure (right)

Figure (right) CS Energy injury

causes (including

lost time injuries. injuries and medical

treatments) for

2006/2007

13 per cent, CS Energy maintains a multi-faceted approach to staff retention.

The Company recognises that employee loyalty and commitment remains a key aspect of workforce stability. Throughout the year the leadership development program continued as the cornerstone of CS Energy's overall employee development framework. Combined with a review of recruitment strategies and implementation of initiatives to encourage people to live and work in remote areas, CS Energy continued to build on its base of highly skilled and versatile employees an essential component for achieving its vision

of growing its share of the national electricity market.

The second phase of the leadership development program was rolled out to all supervisors and managers during the year. This stage, known as 'Leadership in Practice', provided a platform for participants to focus on and resolve issues in the workforce that impeded growth and engagement. From each workshop, action plans were developed, along with a shared philosophy of continuous improvement and empowerment.

People Systems Over the last two years, CS Energy has implemented a consistent and integrated performance

review program across the organisation. The system linked with each staff member's Role Purpose Statement and was designed to focus on the leadership principles of giving employees room to grow and recognising contribution. Performance Management training was rolled out to assist managers and supervisors in actively managing performance. In mid-2006 the move to the new version of SAP allowed the review process to be conducted on-line. Later in 2007, online functionality will be extended to include Role Purpose Statements, to ensure that they remain a readily accessible and active component of the work environment.

In late 2006 a comprehensive 'Functional Review' was undertaken to critically assess the delivery and focus of internal support services. A key recommendation was to capitalise on the diverse skills and depth of experience that resided within CS Energy's power stations. Although the functional review concentrated on the support services of IT, Finance, Human Resources and Procurement, it was recognised that the whole of portfolio approach that had worked effectively in the delivery of engineering services could be a



model for delivery of non-core services to power station operations. The review was finalised in early 2007 and its recommendations are being implemented gradually across all sites. Through the participation of internal specialists, CS Energy will see more streamlined structures, systems and processes.

Training and Development In keeping with commitments to build industry specific skills, CS Energy joined forces with Tarong Energy, Stanwell Corporation and three Queensland universities to develop a postgraduate program for engineers and para-professionals. Launched in early 2007, the

Power Generation Skills Development Program is offered through the University of Queensland, Central Queensland University and Queensland University of Technology. The program is designed to target priority skills areas, provide industry with an increased pool of staff and give participants professional development opportunities. Nine CS Energy staff completed the first semester of the program.

The Company's continuing sponsorship of the Queensland Electricity Transmission and Distribution Bursary Scheme helped support the next



Image (left)

Callide Human Resources team members Rebecca Purgar (left) and Owen Lawrence workshop the training program for Business Administration trainees Sara Saunders, who is one of 47 graduates, apprentices and trainees across CS Energy. generation of engineers. The program provides financial assistance and vacation employment to students undertaking engineering degrees in areas relevant to the power industry.

In response to a need to continuously up-skill employees, CS Energy engaged training providers to develop and deliver two tailored training programs for operators and supervisors. Twentytwo staff completed the first stage of an operatortraining course, attaining their Workplace Health

and Safety Boiler and Turbine tickets. At the completion of the next stage they will graduate with a Certificate IV in Power Generation. The second program was a 12month Supervisor Development program, which saw 22 staff graduate with a Certificate IV in Business (Frontline Management). New intakes of both programs are planned for 2007/2008.

CS Energy also conducted

training for specific safety priorities, which are outlined on page 31 of this report.

program currently includes nine staff who are employed across the Company's five sites in the fields of engineering, health and safety, finance, human resources, environment, and information technology. CS Energy also has an active apprentice and trainee program.

Twelve graduates and fourth year apprentices completed a five-day Outward Bound Program in October 2006 to develop their leadership, teamwork and problem-solving skills. The program

> was initiated to build the capabilities of the next generation of CS Energy leaders and strengthen participants' transition from training or study to the workplace. A further 12 graduates and apprentices will participate in the program in August 2007.

> Industrial relations review An external review of CS Energy's industrial relations processes was conducted

> review made a number of

recommendations regarding

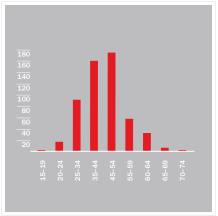
by PriceWaterhouseCoopers in December 2006 at the request of the shareholding Ministers. The

Figure (right) The age profile of CS Energy's workforce for 2006/2007.

Succession and Career Planning With 18.3 per cent of its workforce aged 55 years and above, succession planning remains an essential component of CS Energy's long-term competitiveness. During the year the Company developed a policy for ensuring a succession plan was in place for critical roles in the business. The 'Manager-One-Removed' process was

also refined, to give staff twice-yearly sessions with their manager's supervisor to discuss their career paths. It is planned to rollout a number of supporting aspects of these two systems in the latter part of 2007.

CS Energy revised its graduate program and the role of mentors to ensure the Company was providing graduates with job diversity and skills development opportunities. The graduate



the documentation and operation of IR practices and these are being progressively actioned under the oversight of the Board. Progress against the

action plan is reported monthly to the full Board and to shareholding Ministers on a quarterly basis.

Kogan Creek Team Final-

ised In 2006/2007, the Human Resources team finished recruiting the operational team for the new Kogan Creek Power Station. This involved a major project to relocate and house the 38 employees and their families to the nearby town of Chinchilla and surrounding areas on the western Darling Downs. Also finalised during the year was the Kogan Creek Enterprise Bargaining Agreement intended to support the flexibility



The occupational profile of CS Energy's workforce for 2006/2007.

Figure (right)

and multi-skilling necessary to support the new technology of Australia's newest and most complex single unit station.

**Outlook** In 2007/2008, the five-year Equal Opportunity plan expires and Human Resources will complete another. The plan will complement many of the philosophies inherent in the leadership development program. Work will also continue on further attraction and retention initiatives and plan for enterprise bargaining agreement negotiations at several sites.

Another focus area will be the implementation of the Functional Review outcomes and a long term strategic workforce planning framework intended to position CS Energy for future proposed capital investment and expansion.

#### COMMUNICATION

With more than 550 staff spread across five Queensland locations, effective internal communication is essential to CS Energy's success as a business. The Company also places a high priority on building strong relationships in the communities that host its operations—Ipswich, Chinchilla, Biloela, Mount Isa and Brisbane.

Employee Relations CS Energy uses a variety of media to communicate with its staff. A bimonthly newsletter, quarterly briefings and email updates from the Chief Executive keep staff informed of significant news, the Company's performance and future direction. These tools are complemented by regular site, team and work group meetings.

Fundraising activities are an important part of CS Energy's employee relations strategy, as they foster greater staff interaction and links with the community. The Company targets cancer charities in particular as several CS Energy staff have a family member or friend who has been affected by the disease. In late 2006, staff raised \$3,700 for research into prostate cancer and male depression by participating in the 'Movember'



program. Swanbank Power Station raised more than \$1,800 for Leukaemia research through the World's Greatest Shave in March 2007.

**Community Relations** CS Energy focuses on faceto-face communication with its neighbours at operating sites. At Swanbank, the Community Reference Group (CRG) operated jointly with Thiess Services entered its seventh year. Its regular meetings provide a vital link between the operations of CS Energy and Thiess Services and local residents, as increasing population pressure is placed on the region. The group's newsletter, *Swanbank Talk*, is distributed to 8,000 local residents in conjunction with biannual public meetings.

This model was replicated at Chinchilla, where a CRG was established to facilitate two-way communication with residents affected by the Kogan Creek Power Station. With construction drawing to a close, the shape and focus of this group is expected to change during 2007/2008.

At Callide, briefings are held twice a year to update residents and businesses on activity at the power station. Work at the station can involve the influx of over 200 extra people in Biloela for periods of up to six weeks, so it is important that

> local businesses are aware of the station's timetable. This year, a complementary process was set up between CS Energy and other large businesses to coordinate activities that may place pressure on local services like accommodation.

> In Mount Isa, station staff and businesses stay in touch through organisations like the Mount Isa Chamber of Commerce. Although a small

economic presence in this community, Mica Creek Power Station is a major sponsor of the Mount Isa Business Awards and several other local events.

Partnerships CS Energy's business philosophy encourages investment in the local economies that support its operations. Our community investments also reflect this philosophy, with resources focused on projects in Biloela, Chinchilla, Ipswich and Mount Isa. Image (left) CS Energy staff raised \$3,700 for the national 'November' campaign to raise money for research into prostate cancer and male depression.



Image (right) Approximately 50 Kogan Creek and Brisbane staff participated in the CS Energy sponsored Chinchilla Melon Festival



One of CS Energy's flagship partnerships is the *Moving Opera!* program, delivered in conjunction with Opera Queensland. This five-day, intensive performance workshop was originally offered only to schools in the Brisbane area prepared to pay for the program. Through its partnership with CS Energy, Opera Queensland is able to offer the program, free of charge, to students in regional communities.

During 2006/2007, the program travelled to Biloela and Chinchilla. Students from the Biloela workshop visited Callide Power Station to perform for staff, many of whom were related to the students, and take a tour of the power station.

The program culminates in a fundraising concert by workshop participants and the Opera Queensland performers. An enthusiastic welcome from the community of Chinchilla resulted in the best fundraising effort in the history of the program.

CS Energy, Siemens and Hitachi joined forces in February 2007 as major sponsors of the Chinchilla Melon Festival. The biennial festival makes a major contribution to the local economy and this year's festival was the largest ever, attracting visitors from across the globe and coverage on Channel Nine's *Getaway* program.

As a major contributor to local economies across Queensland, CS Energy supports Chamber of Commerce Business Awards in Mount Isa, Ipswich and Chinchilla.

Water was topical in south-east Queensland, reflected in a partnership between Swanbank Power Station and the Boonah Arts Collective to deliver a water-themed Boonah Arts Festival in August. A water symposium accompanying the festival gave CS Energy a valuable opportunity to engage with its neighbours on water issues during the current drought.

The Swanbank CRG and staff from both Swanbank Power Station and Thiess Services Swanbank Landfill celebrated Clean Up Australia Day on 4 March 2007 with a working bee on Swanbank Road and around Swanbank Lake.

Power station staff at all sites continue to embrace local causes. In Mount Isa, staff provided financial and in-kind support to a community child care centre set up to meet increased demand in the area as the mining boom brings more families to the region.

The station also extended its long-term relationship with the Laura Johnson Home for the Aged by donating office equipment to assist the administration team at the not-for-profit facility.

Callide Power Station continued its support for education in the region by contributing to the establishment of Biloela State High School as a technology hub school for the region. The hub, with advanced design and manufacturing capabilities, was established to enable students to design, construct and race their own F1 model cars. The program also helped Callide forge links between its engineers and the school.



# CORPORATE GOVERNANCE

## PROGRESS AND LOOKING FORWARD

## 2006/2007

- · Implemented recommendations of Board Evaluation Review.
- Established a self-insurance company to manage the risks of the insurance market.

## 2007/2008

- · Conduct first compliance and operations audit of Kogan Creek Power Station.
- Evaluate the Strategic Sourcing project as part of CS Energy's commitment to continuous improvement.

## CORPORATE GOVERNANCE FRAMEWORK

CS Energy was established in 1997 under the *Government Owned Corporations Act* 1993 (GOC Act) and is incorporated as a public company, subject to Corporations Law. Shares in CS Energy are held by two State Government Ministers on behalf of the people of Queensland. At 30 June 2007 these Ministers were:

- Deputy Premier, Treasurer and Minister for Infrastructure, Anna Bligh MP, and
- Minister for Mines and Energy, Geoff Wilson MP.
   Prior to amendments to the GOC Act in March

2007, shares were also held by three non-voting shareholding Ministers. These shareholdings were subsequently transferred to Minister Bligh.

CS Energy has a corporate governance framework to ensure it maintains the highest standards of ethics, efficiency and commercial performance. Central to this framework is a Corporate Governance Charter that reflects the objectives of good corporate governance in the ASX Corporate Governance Council's Principles of Good Corporate Governance and Best Practice Recommendations. Responsibility for ensuring the company practises good corporate governance rests with its Board.

#### THE BOARD

CS Energy's Board comprises seven, independent, non-executive directors appointed by the Governor in Council under the GOC Act. The Board is responsible for setting strategic direction, reviewing and approving plans by the Executive Management Team, monitoring corporate performance, managing risk and upholding the Company's Code of Conduct.

A key responsibility of the Board is reporting to shareholding Ministers on CS Energy's performance against the objectives set out in its annual Statement of Corporate Intent (SCI).

The Board meets monthly, and more frequently as required, to oversee CS Energy's operations.

## BOARD COMMITTEES

The Board has established four committees to assist with the management of particular business areas and provide a forum for Directors and the Executive Management Team to discuss more complex business issues. All four committees report to the Board.

Audit Committee The Audit Committee assists the Board in overseeing the reliability and integrity of CS Energy's financial reporting practices, accounting policies, auditing and external reporting. The committee provides advice to the Board on financial statements, financial systems integrity and business risks. It also helps ensure CS Energy complies with all applicable laws, regulations and Company policies and that an adequate internal control system is in place for areas such as business risk and safeguarding of assets.



BOARD MEETING AND BOARD COMMITTEE
MEETING ATTENDANCES FOR 2006/2007

Name	Board	Audit	Board Risk	Major Capital and Technical	Staff and Remuneration
	<b>11</b> Meetings	4 Meetings	4 Meetings	11 Meetings	5 Meetings
Stephen Lonie	11	4	4	11	5
Tim Crommelin	9	n/a	3	n/a	n/a
Julie Leaver	11	4	4	n/a	n/a
Bob Henricks	11	n/a	4	11	n/a
Tony White	10	n/a	4	10	5
Sarah Israel	11	4	4	n/a	n/a
Mark Bucknall	11	n/a	4	n/a	5

#### Image (right) Pipe and cable installation work at the 90 metre level of the 160m high Kogan Creek Power Station chimney.

The committee oversees development of the Internal Audit Plan and the results of internal audit activities and recommendations. It is also the primary point of reference for CS Energy's external auditor, the Auditor General of Queensland. The committee accepts reports from the Queensland Audit Office and oversees progress on implementing recommendations flowing from reports.

The committee meets quarterly and its members are Julie Leaver (Chair), Stephen Lonie and Sarah Israel.

Highlights for 2006/2007 included reviews of internal control frameworks, plant control system security, the Strategic Sourcing Project, plant maintenance, and year-end accounting issues.

**Board Risk Committee** As risk management is a core responsibility of CS Energy's Board, the Company has a dedicated Board Risk Committee. The committee oversees the Company's risk management system and ensures compliance with its policies, procedures and legal obligations. The Board Risk Committee meets quarterly, comprises all Directors and is chaired by Timothy Crommelin.

Highlights for 2006/2007 included reviews of pandemic response readiness, crisis and emergency planning, the Insurance Placement Strategy, Callide C joint venture governance arrangements, and key risks for the organisation.

Major Capital and Technical Committee As a company with a significant capital development program, the Major Capital and Technical Committee plays an important role in overseeing major projects. The committee meets monthly to review progress

on projects and provide technical and commercial advice. Its members are Stephen Lonie (Chair), Bob Henricks and Tony White.

The major focus of the Committee for the past 12 months was overseeing construction of Kogan Creek Power Station. Other highlights for 2006/2007 were:

- · resolution of technical issues at Callide C
- demolition of the old Swanbank A Power Station
- planning for a second unit at Kogan Creek
- overseeing the Callide Oxyfuel Project, and
- considering expansion options for Mica Creek.

Staff and Remuneration Committee The Staff and Remuneration Committee provides advice on remuneration policies and practices. It makes recommendations to the Board on negotiation parameters for enterprise bargaining agreements as well as remuneration packages and other terms of employment for the Executive Management Team. The committee ensures employees are fairly remunerated for their work and that the Company acts in the best interests of shareholders on remuneration matters. Each year, the committee reviews executive remuneration against agreed performance measures.

The Staff and Remuneration Committee meets quarterly and its members are Tony White (Chair), Stephen Lonie and Mark Bucknall.

Highlights for 2006/2007 included:

- the annual salary review and performance payments for employees on Alternative Individual Agreements
- the appointment of the General Manager Organisation Development



THE MAJOR CAPITAL AND TECHNICAL COMMITTEE OVERSAW CONSTRUCTION

**FROGRESS AT KOGAN CREEK POWER STATION** 

- a review of progress on the Leadership Development Program
- renegotiation of the Corporate Office Certified Agreement, and
- establishment of the Kogan Creek Power Station Enterprise Bargaining Agreement.

#### EXECUTIVE MANAGEMENT TEAM

The Board appoints CS Energy's Chief Executive and other members of its Executive Management Team after receiving prior written approval from shareholding Ministers. The Chief Executive is accountable to the Board, and is responsible for managing the performance of CS Energy's business and the Executive Management Team.

**Resignation of Chief Executive** On 11 May 2007, Mark Chatfield resigned as Chief Executive of CS Energy. The resignation occurred after Mr Chatfield made a voluntary disclosure to the Board about the acquisition of shares. As the shareholding represented a potential breach of the Company's Code of Conduct, the Board had the matter investigated independently and sought legal advice.

To ensure procedural fairness, the Board offered Mr Chatfield the opportunity to respond to the investigation findings. Before responding, Mr Chatfield elected to resign with immediate effect. He subsequently refuted that he had breached the Company's Code of Conduct in his response to the Board.

CS Energy remains committed to the highest standards of corporate governance. Following the resignation of Mr Chatfield, Tony Andersen, General Manager Major Projects, was appointed as Acting Chief Executive. Mr Andersen is a highly respected executive with more than 30 years of experience in the energy sector, and has worked in management at Tarong, Callide, Swanbank and Queensland's hydro power stations.

#### REPORTING

CS Energy's Board regularly reports to its shareholding Ministers to ensure they are informed about the operations, performance and financial position of the Company. CS Energy produces four documents to report on its performance:

· A Corporate Plan that outlines key strategies

and objectives for the next five years and their performance indicators.

- A Statement of Corporate Intent (SCI) outlining CS Energy's goals and objectives for the next financial year.
- Quarterly Reports of the Company's progress meeting SCI targets and measures.
- An Annual Report on CS Energy's performance for each financial year.
- · Other periodic reports as required.

#### PERFORMANCE

The performance of the Board is periodically evaluated at a formal workshop facilitated by an independent corporate governance specialist. In 2006/2007, CS Energy implemented the recommendations of a Board Performance Review finalised at the start of the financial year. The review found CS Energy's corporate governance processes were sound and suggested improvements to executive succession planning, key stakeholder communication processes and Director professional development.

#### RISK AND ASSURANCE

CS Energy's Board has ultimate responsibility for managing risks for the Company and ensuring it complies with relevant laws, regulations and policies. CS Energy employs an internal Risk and Assurance function to oversee this activity and report to the Board and management. The Risk and Assurance Team reviews the Company's activities, information and records to ensure that:

- · financial and operational information is reliable
- compliance with laws, regulations, policies and procedures occurs
- business risks are identified and appropriate management plans are adopted, and
- procedures are in place to safeguard assets and revenue, and ensure effective use of resources.

CS Energy's risk management framework is designed to ensure potential financial, operational and other risks are identified, assessed, monitored and reported to the Board.

The Board Risk Committee oversees CS Energy's risk management framework and its responsibilities are outlined earlier in this section. The Board's responsibilities in this area are facilitated by the work of two management committees that report to the Board Risk Committee:

- Risk CoordinatÑn Committee: meets on a quarterly basis to coordinate responses to market and operational risks as they arise.
- Market Risk Management Committee: monitors market risk on a monthly basis and recommends appropriate systems and controls.

CS Energy's Risk Management Policy provides guidance for the Board and staff on the Company's risk management approach.

Highlights for 2006/2007:

- Ernst and Young conducted an independent probity audit of CS Energy's corporate governance processes, which were found to be sound. These external probity audits are conducted annually.
- PriceWaterhouseCoopers reviewed CS Energy's corporate governance systems and found the Company's corporate governance framework was strong.
- Establishment of a self-insurance company to manage the risks of the insurance market.

#### ETHICAL AND RESPONSIBLE BEHAVIOUR

CS Energy conducts all business activities with integrity, honesty and compliance with relevant laws and standards. The Board and staff must act in accordance with the CS Energy Code of Conduct, which outlines the Company's principles for conducting its business in an ethical and responsible manner. The Board has also adopted the Directors' Code of Conduct from the Articles of Association of the Australian Institute of Company Directors.

To ensure compliance and prevent conflicts of interest, CS Energy has a number of other policies and procedures including a Share Trading Procedure, Compliance Policy and a Procedure for Pecuniary Interest, Conflict of Interests and Protected Disclosures.

The Share Trading Procedure provides guidance on the legal requirements of the *Corporations Act* 2001 with respect to inside information and insider trading. The policy requires officers and directors to not engage in share trading transactions with companies with whom CS Energy has a contractual relationship and where the officer could be in possession of price-sensitive information or be placed in a position of a conflict of interest.

CS Energy has a standing item on the agenda of

the monthly Board meetings to report any conflicts by the Board or executive management. The Board and senior executives are also required to make annual declarations of companies in which they hold shares, or relationships that have the potential to lead to a conflict of interest. CS Energy commissions an external, independent check of these declarations against publicly available databases.

CS Energy encourages Directors and staff to report any conduct they observe that they believe is a potential breach of Company policies or external regulations or laws. The CS Energy Procedure for Pecuniary Interest, Conflict of Interests and Protected Disclosures outlines the process for responding to these disclosures and confidentiality provisions for the individual making the disclosure.

As a Government Owned Corporation, CS Energy has an obligation to comply with the requirements of the *Freedom of Information Act* 1992 (the FOI Act). CS Energy is exempted under the FOI Act from disclosing documents relating to its commercial activities or its community service obligations under the GOC Act.

#### INFORMATION AND ADVICE

Directors can seek independent professional advice on matters before the Board after receiving approval from the Chair. CS Energy bears the cost of this external advice. Directors can also seek relevant information from CS Energy employees, subject to approval from the Chief Executive and attendance by a member of the Executive Management Team.

#### REMUNERATION

Directors are remunerated at a level determined by the Governor in Council and reimbursed for reasonable expenses incurred while conducting business on behalf of CS Energy.

The Board, in consultation with shareholding Ministers, approves the remuneration levels for the Chief Executive and other members of the Executive Management Team.

Details of remuneration paid to Directors and Executive Management Team members during the year appear in Note 31 of the Financial Statements.

## DIRECTIONS AND NOTIFICATIONS

CS Energy received no directions from its shareholding Ministers during the year.



THE CS ENERGY BOARD DRIVES PROGRESS AGAINST THE COMPANY'S GROWTH STRATEGY.

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# DIRECTORS' PROFILES

#### STEPHEN LONIE B Com, MBA, CA, ASIA, FIMCA, FAICD

**Chairman** Director since 1999 Stephen Lonie is an independent management consultant and company director, following over 30 years experience with the major accounting and consultancy firm KPMG.

He is currently Managing Director of public company Village Life Ltd. Mr Lonie resigned as a non-executive Director of Charter Pacific Limited and Voxson Limited in October 2006. He chairs CS Energy's Major Capital and Technical Committee and is a member of the CS Energy Audit Committee, Staff and Remuneration Committee and Board Risk Committee.

#### TIMOTHY CROMMELIN B Com, ASIA, FAICD

**Deputy Chairman** Director since 1997 Tim Crommelin is Chairman Stockbroking of ABN Amro Morgans Limited, a Member Corporation of the Australian Stock Exchange. Mr Crommelin brings more than 35 years experience in investment, marketing, stockbroking and capital raising to the Board. He holds a commerce degree from the University of Queensland.

His directorships include Australian National University Superannuation Investment Fund, Australian Cancer Research Foundation, Brisbane Grammar School, Abney Hotels Limited and the Queensland Museum Foundation.

Mr Crommelin is a member of the Senate, University of Queensland, and chairs CS Energy's Board Risk Committee.

#### MARK BUCKNALL LLB, BA, MAICD

**Director** since 2005 Mark Bucknall is the managing partner of his own legal practice. He came to CS Energy from the Energex Retail Board, where he chaired the Audit Committee and the joint Energex Remuneration Committee. He also served as inaugural chair of the South-East Queensland Regional Electricity Council.

Mr Bucknall's other board appointments include a directorship of Queensland Cruising Yacht Holdings and membership of the Council of the Brisbane North Institute of TAFE. Awarded a Commonwealth sports achievement award for services to Australian Football, he is an active community member and contributes professional support to community legal centres and sporting organisations.

Mr Bucknall is a member of CS Energy's Staff and Remuneration Committee and Board Risk Committee.

# BOB HENRICKS Queensland Certificate of Competency as Electrical Mechanic (Electrician)

**Director** since 1999 Bob Henricks brings more than 40 years of experience to the CS Energy Board. Mr Henricks has served on the board of AUSTA Electric and chairs the Electricity Supply Industry Superannuation Fund, and two other superannuation funds. He is also chair of Meanderham Pty Ltd, Electro Group Training Qld Ltd and Electro Group Apprentices Qld Pty Ltd.

Mr Henricks is a director of Qld Private Capital Group Pty Ltd. He chairs the Queensland Electrotechnology Industry Training Council, is past State Secretary and National President of the Electrical Trades Union and is also a member of the (Australian Government) Central Trades Committee. Mr Henricks, who took his apprenticeship at 15, is still a licensed electrician. He is a member of CS Energy's Major Capital and Technical Committee and Board Risk Committee.

#### SARAH ISRAEL B Bus, FCPA, FAICD

**Director** since 2005 Sarah Israel has extensive experience in project finance, investment banking and regional development and currently has consulting roles in finance projects in Australia and internationally. Her experience also includes time in the mining and minerals processing and oil and gas industries.

Ms Israel is a Director of Queensland Sugar Limited (QSL), Australian Biodiesel Group and ESI Superannuation. She is Chair of the Audit Committees of QSL, ESI Super and Australian Biodiesel. She was previously a director of the Queensland Electricity Transmission Corporation (Powerlink). Ms Israel is a member of CS Energy's Audit Committee and Board Risk Committee.

#### JULIE LEAVER B Com, FCPA, MAICD

**Director** since 1999 Julie Leaver has held senior financial roles in the telecommunications and mining industries with companies listed on the Australian and New York stock exchanges. During her 10 years with Telstra Corporation, Ms Leaver was responsible for preparing the Group's financial statements, annual reports and US prospectus. She was the Telstra Group coordinator of the US prospectus for T2, the second tranche of the sale of the Federal Government's interest in Telstra.

Ms Leaver's experience also extends to 15 years with the former Mount Isa Mines Group (MIM), membership of the Australian Accounting Standards Board and project management and corporate governance roles. Ms Leaver chairs CS Energy's Audit Committee and is a member of the Board Risk Committee.

#### TONY WHITE Dip Mech Eng, FIE Aust, Aus IMM, FAIM

**Director** since 1999 Tony White is a technical consultant for Itochu Australia Ltd and a Director of Community and Corporate Financial Services Pty Ltd and the Queensland Coal and Oil Shale Superannuation Fund.

He is also Chairman of Copperform Holdings Pty Ltd and was Chairman of CS Energy subsidiary Sigma Process Solutions until its acquisition by Alstom Power Australia in 2003. Mr White has extensive experience in the resources sector, having previously been Executive General Manager, Coal, Copper and Metals Processing with the former MIM Group, where he was able to combine his engineering experience with business development and financial management.

Mr White chairs CS Energy's Staff and Remuneration Committee and is a member of the Major Capital and Technical Committee and Board Risk Committee.

#### Image (left)

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CS Energy Board members (clockwise from front) Stephen Lonie (Chair), Julie Leaver, Timothy Crommelin, Tony White, Sarah Israel, Mark Bucknall and Bob Henricks.

# EXECUTIVE MANAGEMENT TEAM PROFILES



#### TONY ANDERSEN BE, MIE (Aust)

Acting Chief Executive and General Manager Major Projects Mr Andersen has more than 30 years experience in the energy sector. He has worked in management at Tarong, Callide, Swanbank and Queensland's hydro power stations. He was appointed as Acting Chief Executive of CS Energy on 24 May 2007.

In his permanent role as General Manager Major Projects, Mr Andersen is responsible for the development of major projects, including Kogan Creek Power Project, the Callide Oxyfuel Project and the Swanbank A Demolition Project. He is also a director of Callide Energy Pty Ltd, Callide Power Management Pty Ltd and Kogan Creek Power Project Pty Ltd.

#### RICHARD BOYS BCom, MBA, FCIS

Chief Financial Officer Mr Boys has more than 20 years experience in business management and administration in the resources and energy sectors.

As Chief Finance Officer, Mr Boys is responsible for finance, information technology and business systems. He is also a director of various CS Energy subsidiary companies associated with Mica Creek Power Station, Callide Power Project, Kogan Creek Power Project and Swanbank E Project.

#### CHRIS TURNBULL B Bus MAICD

General Manager Corporate Services and Company Secretary Mr Turnbull has worked in the energy industry in the areas of business management and administration for more than 25 years. He is Deputy Chair of the Electricity Credit Union and a member of that Board's Audit, Risk, and Staff and Remuneration committees.

Mr Turnbull is also Company Secretary for the CS Energy group of companies. As General Manager Corporate Services, he is responsible for market operations, internal audit, legal and corporate administration.

#### PAUL HYSLOP MBA, BE (Hons), BA, Grad Dip (Applied Finance)

General Manager New Business Mr Hyslop gained over 16 years experience in the power industry working in the areas of system operation, marketing and trading, and business development at companies such as Hydro Tasmania, Snowy Hydro and Edison Mission Energy. More recently he worked for economics firm ACIL Tasman where he consulted to the electricity and gas industries.

As General Manager New Business, Mr Hyslop is accountable for the development of new business, including conceptualisation and feasibility of new projects and the acquisition and management of fuel and water.

#### BILL ANDREW BA

General Manager Organisation Development Mr Andrew has more than 20 years experience in organisational and individual development, change management and strategic planning. He has worked with a range of public and private sector companies throughout Australia and New Zealand in a consulting capacity, including BHP Billiton, Brisbane City Council, Bougainville Copper and Tarong North. Most recently, he was based in Canberra as General Manager Organisation Development, CSIRO Sustainable Ecosystems.

In his role at CS Energy, Mr Andrew is accountable for the human resources, industrial relations, occupational health and safety, and marketing and communication functions and has a wider role in organisation change and development.

