

# POWERING THE NATION

SINGAPORE POWER  
ANNUAL REPORT 2012

# **POWERING THE NATION**

Energy is critical to the growth of the nation – in Singapore, Australia and wherever our presence is established. With a highly skilled workforce that embraces exciting challenges, and leading-edge technology that reaps efficiency and innovation, Singapore Power ensures energy is delivered reliably and cost-effectively, and is accessible to all. For our customers and the community, our partners and staff, our work contributes to a strong and vibrant economy, keeps businesses and industries humming and sustains quality of life for families.



From left: **Yeo Kheng San**, Principal Engineer, Network Management  
**Bay Suay Yang**, Technical Manager, Systems on Silicon Manufacturing Co.





# BUILDING **TRUST**

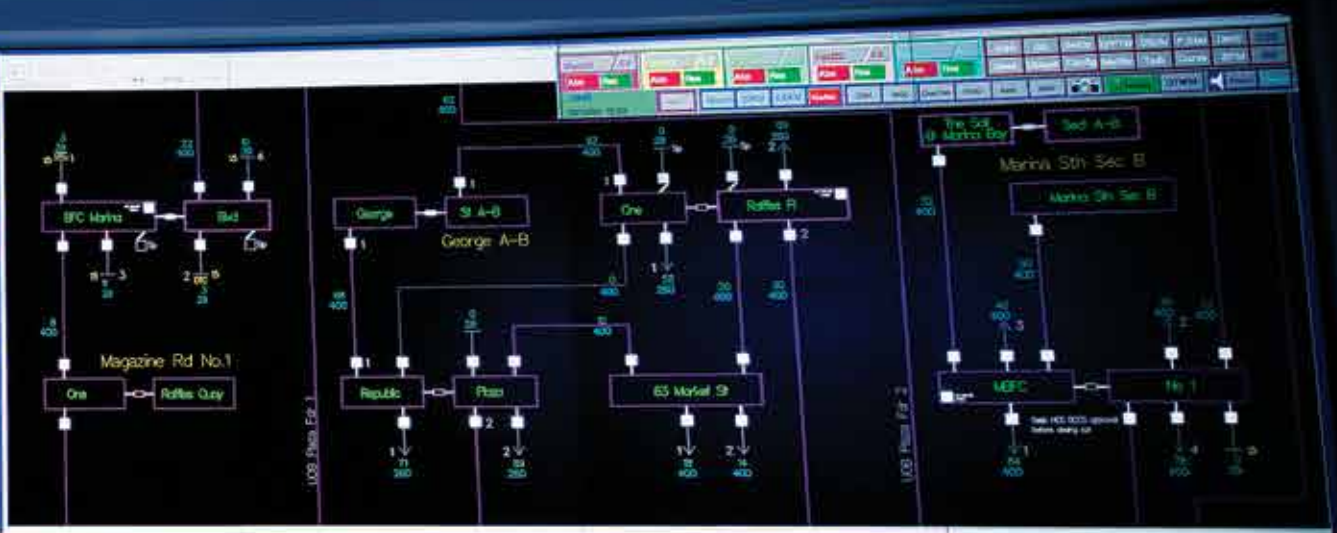
We make power accessible wherever and whenever it is needed, for the nation's progress and a better tomorrow for our community. Our customers, partners and employees count on us to make a valuable impact through all our responsibilities.





# HARNESSING TECHNOLOGY

We harness leading-edge technology to deliver world-class performance and customer experience. We are committed to developing next-generation power solutions to meet present and future needs.





From left: **Leong Wai Yee**, Engineer, SP Engineering Board / **Woon Thian Han, Henrick**, Engineer  
**Lee Say Teck, Cedric**, Principal Engineer, Network Management  
**Nur Hafiza Binte Mohd Zulkifli**, Engineer / **Yong Haur Ming**, Engineer  
**Tang Shing Him**, Accountant, Finance



# DEVELOPING TALENT

Designing and running the complexity of the nation's power infrastructure and service takes a passionate and dedicated workforce. We value diversity of talent and nurture our people by developing expertise and rewarding good performance.



## OUR MISSION

We provide reliable and efficient energy utility services to enhance the economy and the quality of life.

## OUR VALUES

### **COMMITMENT**

We commit to creating value for our customers, our people, and our shareholders. We uphold the highest standards of service and performance.

### **INTEGRITY**

We act with honesty.  
We practise the highest ethical standards.

### **PASSION**

We take pride and ownership in what we do.

### **TEAMWORK**

We support, respect and trust each other.  
We continually learn, and share ideas and knowledge.

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## SAFETY IS OUR WAY OF LIFE

### **SAFETY PLEDGE**

Safety is our highest priority  
Every life is precious  
Every accident is avoidable  
We uphold safe practices and strive for zero accident

# THE SINGAPORE POWER GROUP

Singapore Power (SP) Limited is a leading energy utility company in Asia Pacific. It owns and operates electricity and gas transmission and distribution businesses in Singapore and Australia. The SP Group is wholly owned by Temasek Holdings (Private) Limited. Over a million industrial, commercial and residential customers in Singapore benefit from SP's world-class transmission, distribution and market support services. The SP networks in Singapore are amongst the most reliable and cost-effective worldwide. In Australia, the SP Group serves 2.8 million consumers through wholly owned SPIAA, a diversified energy utility company and 51%-owned SP AusNet, which is publicly listed on the Australian and Singapore Stock Exchanges. As one of Singapore's largest corporations, SP recorded revenue of S\$9.0 billion and assets of S\$34.5 billion in FY 12/13.

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# DEVELOP AND SUSAIN



## FROM THE CHAIRMAN

Singapore Power continues to focus on providing reliable and quality utility services to customers both in Singapore and Australia, while contributing to the development of the two nations.

Singapore Power continues to focus on providing reliable and quality utility services to customers both in Singapore and Australia, while contributing to the development of the two nations. More than four million electricity and gas customers depend on us to deliver energy to them reliably, cost-effectively and safely at all times. This is certainly a monumental task and is made possible with the support and dedicated effort as well as expertise of all our staff, and our business partners.

### FINANCIAL PERFORMANCE

Group net profit, excluding exceptional items, for the financial year ended 31 March 2013 was S\$878 million, compared to S\$930 million in the previous year. The decrease was due to the final adjustments to the qualifying revenue for the regulatory period from 1 April 2008 to 31 March 2013, and the weaker Australian dollar.

Total assets grew by S\$2.1 billion to S\$34.5 billion during the year as the Group continues to invest in electricity and gas networks in Singapore and Australia.

### ENHANCING OPERATIONAL EXCELLENCE

At SP, we focus our efforts on ensuring that our strategies and operations not only drive our business but also enhance quality of life. Mindful that the best of strategies would be meaningless with flawed execution, we remain committed in enhancing our operational excellence.

For FY12/13, the Singapore electricity network continued to perform well within set targets. The System Average Interruption Duration Index (SAIDI) was 0.42 minute per customer per year, while the

System Average Interruption Frequency Index (SAIFI) was 0.0087 interruptions per customer per year. Said another way, the average electricity customer would experience an interruption only once in 115 years.

Gas network performance was also well within regulatory targets, with SAIDI and SAIFI scores of 0.174 minute and 0.0026 interruption per customer per year respectively.

While upholding high network performance standards, grid charges for electricity have come down over the years due to increased efficiencies and better technology applications. In fact, average grid charge has reduced 30% over the past 10 years from 4.30 cents/kWh to 3.06 cents/kWh.

During the year, SP continued to upgrade and expand its infrastructure to meet Singapore's growing demand for electricity.

Several transmission projects were completed and commissioned. These include:

- Marina South 230kV substation, mainly to serve future developments at Marina South. This is Singapore's first 230/22kV substation, minimising the land area needed for substation buildings.
- Seletar Aerospace Park 66kV substation to serve the upcoming aerospace hub and Seletar Airport.
- Two 66kV cable circuits to power up the LNG terminal on Jurong Island. The terminal will diversify Singapore's energy resources and meet future energy needs.
- Two 66kV cable circuits to power up the Tuas Spring desalination plant. The plant is Singapore's latest water supply infrastructure project and will further enhance water supply security.



The transmission projects in progress include the 400kV substation at Rangoon Road to meet growing demand and strengthen the network in central Singapore.

PowerGas extended the natural gas network by 29km and the town gas network by 85km to reach more residential estates and commercial premises.

Construction of the 18.5km North-South and the 16.5km East-West transmission cable tunnels is progressing well towards completion by 2018. The six main contract packages for the project were awarded in September 2012, and work started in December that year. Most of the 18 shaft sites would have the construction of the upper shafts completed by September 2013.

In Australia, Jemena's electricity network achieved its best year for network reliability in 2012. The network experienced an average of 50.2 unplanned minutes off supply in 2012, a 9 per cent improvement on 2011, and well below the Australian Energy Regulator's target. SP AusNet also improved supply reliability, reducing the time that customers were without electricity by 13.7 per cent and gas by 11.7 per cent.

SP AusNet invested \$881.4 million over the past year in capital expenditure to strengthen and expand its network. There were 11,485 new electricity customers and 13,825 new gas customers connected over the year.

Leveraging advanced technology, we were able to power the nation while actively engaged in research and development to improve energy efficiency as well as develop sustainable solutions for the power network of the future. Key initiatives include enterprise asset management, data analytics, mobile applications, smart grid, micro-grids and distributed generation and energy storage.

## SERVICE EXCELLENCE

SP continued to engage business customers through its Power Quality Interest Groups knowledge sharing sessions, workshops and site visits. We strive to improve customer experience by enhancing our services and operations, and raise productivity through technology and innovations to mitigate cost pressures. These help us to efficiently manage 1.4 million bills and 75,000 phone calls monthly, as well as the 3.3 million electricity, water and gas meters read every two months.

Among the new initiatives are a smartphone app for customers to submit their own meter readings for greater billing accuracy and convenience. The customer service web portal now has more features that cater to the rising and evolving needs of customers.

Our service ratings affirm the efforts to design and plan strategies that bring value to our customers. In the biennial Customer Satisfaction Survey 2012 which covered 1,209 respondents, SP Services topped customer ratings ahead of major statutory boards and service organisations in Singapore. SP Services was honoured as one of the finalists at the Singapore Service Excellence Medallion 2012 Awards for its customer-focused culture and practices.

## COMMITMENT TO SAFETY

For FY12/13, our lost time injury frequency rate was 1.1, lower than the national average of 1.7. Our lost time injury severity rate was 14.9, significantly lower than the national average of 88.

An SP Group Safety Review Committee (GSRC) was formed during the year to conduct an extensive review of safety practices across SP's subsidiaries, learn from external best safety practitioners, and propose recommendations to enhance safety further.



## FROM THE CHAIRMAN

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In Australia, Jemena achieved an improvement in significant injury frequency rate (SIFR), from 12.1 at the end of FY12 to 9.3 at the end of FY13. Key initiatives include a five-year health and safety strategic plan and appointment of a critical coach for health and safety culture improvements.

SP AusNet achieved a 31 per cent improvement in recordable injury frequency rate compared to the previous year, underpinned by its 'MissionZero' safety strategy.

### INVESTING IN OUR PEOPLE

We recognise that a strong, dynamic and forward looking workforce is paramount in order to carry out our role successfully, while continuing to advance and innovate for the future. It is important for our people to buy into our vision, have a deep sense of ownership and pride, and to be equipped with the knowledge, tools and support to succeed in their careers.

In FY12/13, we launched a 5-year Human Resource Masterplan to tackle strategic priorities in attracting and retaining talent. This includes an enhanced performance management framework with a strong emphasis on staff development with structured goals-setting. We also continue to invest in enhancing people management, technical and soft skills competencies for staff through various learning programmes.

SP continued to partner the Union of Power & Gas Employees (UPAGE) to reach out to and equip staff with the necessary skills for bigger job responsibilities and better pay.

We have also established the SP Engineering Board (SPEB) in April 2013 to uphold the SP Group's leadership in network engineering and meet the Group's mission to deliver energy solutions

reliably and efficiently. The SPEB will help identify, retain and build up engineering capabilities and technical competencies to meet future operational requirements.

In Australia, Jemena launched two new talent management systems during the year – ETWeb and *illuminate*. ETWeb is an online employee performance management system that aims to enhance the accountability and transparency of employee performance and development information. *illuminate* on the other hand is a company recognition programme to reward employee excellence.

SP AusNet developed a three-year talent roadmap to attract, develop and retain employees with crucial leadership and technical skills.

A quarterly Talent and Diversity Forum attended by general managers was established to lead diversity improvement across the organisation, develop people capabilities and provide governance for talent, succession and performance management processes.

Zinfra Group collaborated with Engineers Australia on a professional development programme to raise industry standards. Engineers Australia will provide professional development support, assessment and accreditation services for Zinfra Group engineers and engineering officers.

### CARING FOR THE COMMUNITY

As a responsible citizen, we seek to make a positive impact through meaningful contributions to the underprivileged, caring for the environment and improving consumer awareness on energy matters.

Our SP Heartware Fund which supports some 2,100 needy elderly under the Home Help Service programmes has raised more than \$7 million since its inception. For FY12/13, we raised over \$1 million for

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this Fund. Our staff donated \$19,800 to this Fund and \$36,900 to the ComChest SHARE programme. SP matched these contributions dollar-for-dollar. We also contributed close to \$500,000 to various charity organisations and causes. The elderly have been our beneficiary group of focus as they have helped our nation prosper and we want to help them journey through their golden years with respect and dignity.

In Australia, Jemena employees raised over A\$60,000 for charities, including the Salvation Army, Parramatta Mission and the Children's Hospital at Westmead. Zinfra Group's employees contributed to a variety of charity initiatives throughout the year while SP AusNet's Community Development Fund collaborated with local councils to offer grants to local non-profit community organisations.

### SECURING FUTURE GROWTH

Australia forms a critical part of SP's growth strategy, and will remain firmly so.

Currently, Singapore Power International Pte Ltd (SPI) owns SPI (Australia) Assets Pte Ltd (SPIAA), which operates under the Jemena brand, and 51 per cent of SP AusNet. To enhance investment value and position for future strategic growth, SPI entered into an agreement with State Grid International Development Ltd (SGID) in May 2013 for SGID to purchase a 60 per cent shareholding in SPIAA and a 19.9 per cent interest in SP AusNet.

SGID is a subsidiary of State Grid Corporation of China (SGCC), the world's largest utility, with core businesses in the construction and operation of electricity grids and provision of electricity supply services, and will bring on board its extensive operational experience to add value to the joint venture.

The partnership also demonstrates the confidence of SP and SGCC in the long term growth potential of SPIAA and SP AusNet, as well as the energy infrastructure environment in Australia.

Colleagues in Singapore and Australia will build on their established relationships, and find valuable new insights with SGCC's partnership, as we embark on this next exciting phase of growth to enhance the value of our Australia businesses even further.

### IN APPRECIATION

I would like to express my appreciation to the Board of Directors, Management and staff, UPAGE and unions representing employees in Australia for their immense contributions to another good year for SP.

I would also like to place on record my sincere appreciation to my predecessor Mr Ng Kee Choe for his invaluable contributions during his tenure in SP, and welcome on board Mr Ong Yew Huat who was appointed to the Board on 8 February 2013.

Together with all our stakeholders, we look forward to continued growth, creating solutions for future generations and achieving greater success for the economies and communities in which we operate.



**MOHD HASSAN MARICAN**

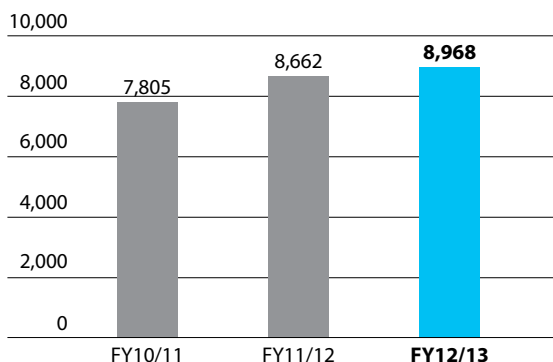
Chairman

1 October 2013

# FINANCIAL HIGHLIGHTS

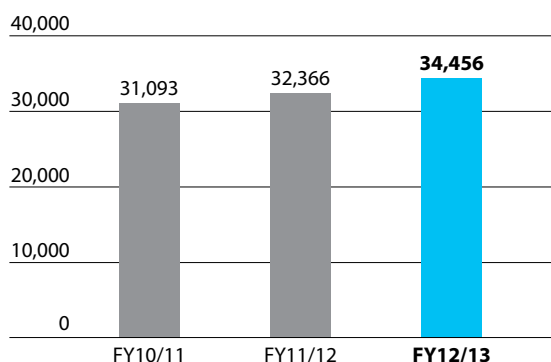
## OPERATING REVENUE

(\$million)



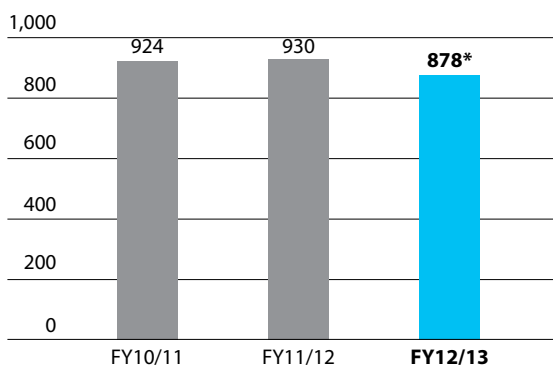
## TOTAL ASSETS

(\$million)



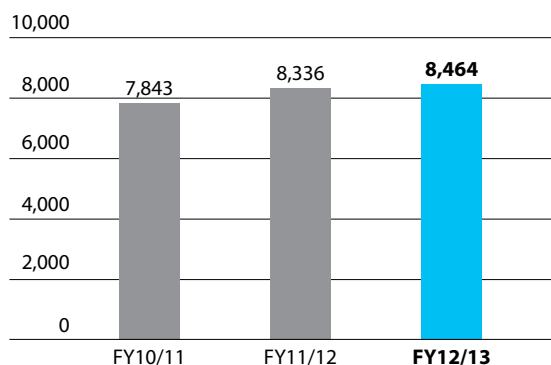
## NET PROFIT AFTER TAX

(\$million)



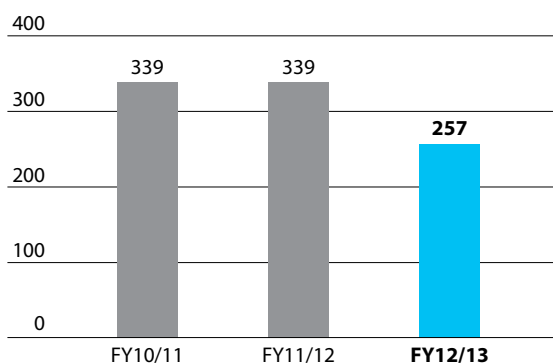
## SHAREHOLDERS' EQUITY

(\$million)



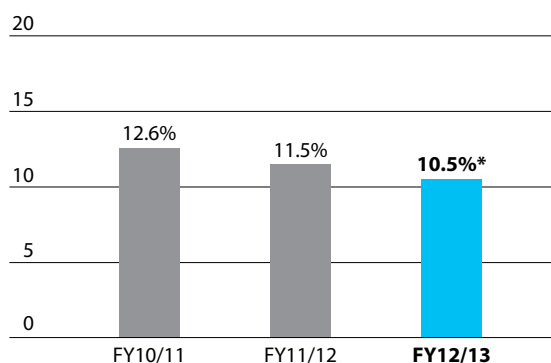
## ECONOMIC VALUE ADDED (EVA)

(\$million)



## RETURN ON EQUITY

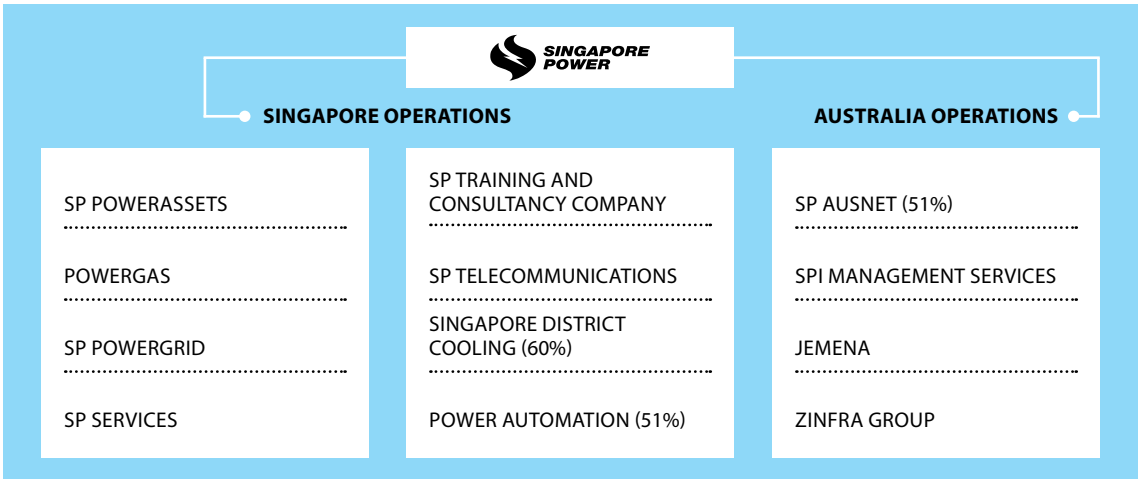
(%)



\* Exclude exceptional items on impairment



# GROUP STRUCTURE



## SINGAPORE OPERATIONS

We own and operate the Singapore electricity and gas transmission and distribution networks. We also service consumers for their utility needs, through providing meter reading, billing, and customer service support.

**SP PowerAssets** owns the electricity transmission and distribution assets, while **PowerGas** owns the gas transmission and distribution assets.

**SP PowerGrid** manages the electricity and gas transmission and distribution networks owned by SP PowerAssets and PowerGas.

**SP Services** provides market support services to customers for electricity, gas, water and refuse removal, and facilitates electricity retail market competition.

**SP Training and Consultancy Company** provides consultancy and training, leveraging SP's expertise in developing and operating energy utility infrastructure and businesses.

**SP Telecommunications** provides telecommunication infrastructure services.

**Singapore District Cooling** is a joint-venture company providing chilled water services for air-conditioning in buildings.

**Power Automation** is a joint-venture systems integration company providing power system control, smart grid/metering, protection system and substation automation solutions.

## AUSTRALIA OPERATIONS

SP AusNet and Jemena form the two main arms of our business in Australia. Together, their presence spans eastern Australia, and includes electricity and gas transmission and distribution ownership and operation, as well as related services.

**SP AusNet** owns and operates Victoria's electricity transmission network, an electricity distribution network in eastern Victoria, and a gas distribution network in western Victoria.

**SPI Management Services** is the management company operating the business of SP AusNet under a management services agreement.

**Jemena** owns and operates gas transmission pipelines, gas and electricity distribution networks in New South Wales, Queensland, Victoria and the Australian Capital Territory.

**Zinfra Group** provides engineering, operations, maintenance and construction services to Jemena and external clients.

## BOARD OF DIRECTORS



### **TAN SRI MOHD HASSAN MARICAN**

Tan Sri Mohd Hassan Marican was appointed Director of Singapore Power Ltd in February 2011 and became its Chairman on 30 June 2012.

Tan Sri Hassan is the Chairman of Pavilion Energy Pte Ltd and Deputy Chairman of Sembcorp Marine Ltd; and a Director of Sembcorp Industries Ltd, Regional Economic Development Authority of Sarawak, Sarawak Energy Berhad, Lambert Energy Advisory Ltd, mh Marican Advisory Sdn Bhd and Lan Ting Holdings Pte Ltd. He is also a Senior International Advisor of Temasek International Advisors, a subsidiary of Temasek Holdings.

Tan Sri Hassan was the President & CEO of Malaysia's Petroliaam Nasional (PETRONAS) from 1995 until his retirement in February 2010 and has over 30 years' experience in finance and management.



### **ALAN CHAN HENG LOON**

Mr Alan Chan Heng Loon has been a Director since June 2001. He is also the Chairman of SP PowerAssets Ltd.

Mr Chan is the Chief Executive Officer of Singapore Press Holdings Ltd. He sits on the boards of Singapore Press Holdings Ltd and its subsidiaries, MediaCorp TV Holdings Pte Ltd, MediaCorp Press Ltd and OpenNet Pte Ltd. Mr Chan is the Chairman of the Ministry of Defence – Panel on Safety & Safety Management, a member of the Public Service Commission; and a Director of Business China, Singapore-China Foundation and the Lee Kuan Yew Fund for Bilingualism. He also serves on the boards of the Federation Internationale of Periodics Publishers and World Association of Newspapers – IFRA.

Mr Chan was formerly the Permanent Secretary for the Ministry of Transport. He chaired the Council that reviewed the Code of Corporate Governance in 2012. Mr Chan was awarded the Public Administration Medal (Gold) in 2002 and the Meritorious Service Medal at the 2012 National Day Awards.



### **HO TIAN YEE**

Mr Ho Tian Yee joined the Board in May 2003. He is also a Director of SP AusNet.

Mr Ho is the Managing Director of Pacific Asset Management (S) Pte Ltd. He is appointed as Investment Advisor of Blue Edge Advisors Pte Ltd and holds directorships in publicly-listed companies including DBS Group Holdings Ltd and DBS Bank Ltd. He is also a Director of Fullerton Fund Management Co Ltd and was formerly a Director of Fraser and Neave Ltd and Singapore Exchange Ltd.

Mr Ho was awarded the Public Service Medal in 1997.



### **TAN CHEE MENG**

Mr Tan Chee Meng joined the Board in August 2005. He is also a Director of SPI (Australia) Assets Pty Ltd.

A Senior Counsel, Mr Tan is the Deputy Managing Partner of WongPartnership LLP. Mr Tan sits on the boards of Urban Redevelopment Authority, Jurong Town Corporation, Mapletree Commercial Trust Management Ltd, St Gabriel's Foundation, All Saints Home and WOPA Services Pte Ltd. He is also the Chairman of the School Management Committee of Assumption English School.



### **BOBBY CHIN YOKE CHOONG**

Mr Bobby Chin Yoke Choong joined the Board in January 2006.

He is the Deputy Chairman of NTUC Enterprise Co-operative Ltd and a Director of the Singapore Labour Foundation and NTUC Fairprice Co-operative Ltd. He is also a board member of various listed companies including Oversea-Chinese Banking Corporation Ltd, AV Jennings Ltd, Yeo Hiap Seng Ltd, Ho Bee Land Ltd, Sembcorp Industries Ltd and Singapore Telecommunications Ltd. He was appointed to the Council of Presidential Advisers in January 2010.

Mr Chin was the Managing Partner of KPMG Singapore from 1992 to 2005. He served as Chairman of the Urban Redevelopment Authority from April 2001 to March 2006 and Singapore Totalisator Board from 2006 to 2012.



### **PROFESSOR JEREMY GUY ASHCROFT DAVIS AM**

Professor Jeremy Guy Ashcroft Davis joined the Board in August 2006. He is also a Director of SP AusNet.

Professor Davis is the Chairman of UNSW Professorial Superannuation Pty Ltd and the Deputy Chairman of AMWIN Management Pty Ltd. He is also a Director of CHAMP Ventures Pty Ltd.

He was the former AMP Society Professor at the Australian Graduate School of Management. Professor Davis spent 10 years as a management consultant with the Boston Consulting Group. He was also Chairman of AIDC Ltd and Amdel Holdings Pty Ltd and Director of the Transurban Group.



## BOARD OF DIRECTORS



### **CHOI SHING KWOK**

Mr Choi Shing Kwok joined the Board in August 2006. He is also the Chairman of PowerGas Ltd and a Director of SP PowerAssets Ltd. Mr Choi is the Permanent Secretary of the Ministry of the Environment and Water Resources.

Formerly the Permanent Secretary of the Ministry of Transport, Mr Choi has had a long career in government and was awarded the Meritorious Service Medal in 2000 and the Long Service Award in 2004 by the Government of Singapore. He has also received state awards from foreign governments.

### **OON KUM LOON**

Mrs Oon Kum Loon joined the Board in April 2010. She is also a Director of SP PowerAssets Ltd and PowerGas Ltd.

Mrs Oon serves on the boards of Keppel Corporation Ltd and Keppel Land Ltd.

Mrs Oon has 30 years of extensive experience with DBS Bank Ltd, and held positions including Chief Financial Officer, Managing Director and Head of Group Risk Management.

### **TAN PUAY CHIANG**

Mr Tan Puay Chiang joined the Board in April 2012. He is also a Director of SP Services Ltd.

He is a Board member of Neptune Orient Lines Ltd, Keppel Corporation Ltd, and the Energy Studies Institute at the National University of Singapore.

Mr Tan was Chairman, ExxonMobil (China) Investments Co from 2001 to 2007. During his 37-year career with Mobil and later ExxonMobil, he held extensive executive management roles in Australia, Singapore and the United States.

**ONG YEW HUAT**

Mr Ong Yew Huat joined the Board in February 2013.

He is the Chairman of the National Heritage Board, United Overseas Bank Berhad and Singapore Tyler Print Institute. He also serves on the boards of United Overseas Bank Ltd, and the Singapore Accounting and Corporate Regulatory Authority. He is a member of the Public Accountants Oversight Committee.

Mr Ong retired in December 2012 as the Executive Chairman of Ernst & Young Singapore after serving 33 years with the firm.

He was awarded the Public Service Medal in 2011.

**WONG KIM YIN**

Mr Wong Kim Yin was appointed a Director of Singapore Power Ltd and its Group Chief Executive Officer on 1 January 2012. He is currently the Chairman of SP PowerGrid Ltd and a Director of SP PowerAssets Ltd, PowerGas Ltd and SP Services Ltd. Mr Wong is also the Chairman of SPI Management Services Pty Ltd, SPI (Australia) Assets Pty Ltd and Enterprise Business Services (Australia) Pty Ltd.

Mr Wong is a non-executive director of CITIC Resources Holdings Ltd.

Mr. Wong was formerly Senior Managing Director, Investments at Temasek International (Pte) Ltd, where he had been responsible for investments in various sectors, including the energy, transportation and industrial clusters. He also worked for The AES Corporation, a global power company listed on the New York Stock Exchange.

## SENIOR MANAGEMENT

IN ALPHABETICAL ORDER

### PAUL ADAMS

Managing Director  
Jemena

### AMELIA CHAMPION

Head  
Corporate Affairs

### JEANNE CHENG

Managing Director  
SP Services

### MICHAEL CHIN

Managing Director  
Special Projects  
SP PowerGrid

### CHUAH KEE HENG

Head  
Strategic Development

### NINO FICCA

Managing Director  
SP AusNet

### MADALENE HEE

Head  
Internal Audit

### JIMMY KHOO

Managing Director  
Singapore District Cooling

### PETER LEONG

Managing Director  
SP PowerGrid

### LIM CHOR HOON

Head  
Human Resource

### LIM HOWE RUN

Head  
Regulatory Management

### LIM LAY HONG

Chief Financial Officer

### CHRIS LIM

Managing Director  
SP Training and Consultancy  
Company

### SIM KWONG MIAN

Executive Vice President  
Chairman, SP Engineering Board

### HELEN TAY BEE HOON

General Counsel &  
Company Secretary

### WONG CHIT SIENG

Chief Information Officer

### WONG KIM YIN

Group Chief  
Executive Officer

**SP POWERGRID****ANG SENG KOK**

General Manager  
Network Management

**CHENG SEE TAU**

Deputy Managing  
Director  
Gas

**CHEW MIN LIP**

Deputy Managing  
Director  
Network Management,  
Planning & Strategy

**HAN TEK FONG**

General Manager  
Network Development

**HO YIN SHAN**

Head  
Procurement

**PETER LEONG**

Managing Director

**IRENE LIM**

Head  
Human Resource

**LOONG HUI CHEE**

General Manager  
Finance

**DR YOON KOK THEAN**

General Manager  
Planning & Strategy

**SP SERVICES****JEANNE CHENG**

Managing Director

**LEE CHUI PING**

Director  
Finance & Accounts

**LAWRENCE LEE**

Head  
Operations & Projects

**SHIRLEY TAN LEE CHENG**

Director  
Special Projects

**LYNETTE TAN**

Acting Director  
Customer Relationship  
Management

**SP AUSNET****JOHN AZARIS**

General Manager  
Service Delivery

**NINO FICCA**

Managing Director

**CLAIRE HAMILTON**

General Manager  
Risk and Assurance

**CHAD HYMAS**

General Manager  
Strategy and Business  
Development

**JOHN KELSO**

General Manager  
Select Solutions

**GERALDINE LESLIE**

General Manager  
People and Safety

**ADAM NEWMAN**

Chief Financial Officer

**ALISTAIR PARKER**

General Manager  
Asset Management

**ASH PECK**

General Manager  
Information and  
Communication  
Technology, Market and  
Customer Services

**SUSAN TAYLOR**

General Counsel and  
Company Secretary

**JEMENA****PAUL ADAMS**

Managing Director

**JODIE BLAKE**

Executive  
General Manager  
Human Resources  
& Health, Safety,  
Environment  
And Quality

**CAMERON DORSE**

Executive  
General Manager  
Technology

**STEVEN MACDONALD**

Managing Director  
Zinfra Group

**TINA OOI**

General Counsel and  
Company Secretary

**JOANNE PEARSON**

Chief Financial Officer

**ALF RAPISARDA**

Executive  
General Manager  
Networks And Pipes

**DR SHAUN REARDON**

Executive  
General Manager  
Strategy, Regulation  
And Projects

**JOHN VAN WEEL**

Executive  
General Manager  
Works Delivery



## AWARDS & ACCOLADES

### SINGAPORE

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#### **ISO 9001:2008 Certification for Quality Management System**

**SP PowerGrid** (Distribution Control & Customer Services Section) by Certification International, FY06/07 to present

**SP PowerGrid** (Network Development) (Electricity) by Certification International, FY02/03 to present

**SP PowerGrid** (Network Management) (Electricity) by Certification International, FY02/03 to present

**SP PowerGrid** (Gas Operations) by SGS International Certification Services Singapore Pte Ltd, FY00/01 to present

**SP Services** by BSI Management Systems, FY04/05 to present

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#### **Singapore Quality Class Certification (STAR)**

**SP Services** by SPRING Singapore, 2010 to 2014

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#### **Singapore Service Class Certification**

**SP Services** by SPRING Singapore, 2010 to 2014

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#### **ISO/IEC 17025:2005 in Electrical Testing for Electricity Meters**

**SP PowerGrid** by the Singapore Accreditation Council – Singapore Laboratory Accreditation Scheme, 2000 to present

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#### **ISO/IEC 17025:2005 in Electrical Testing for Current Transformers**

**SP PowerGrid** by the Singapore Accreditation Council – Singapore Laboratory Accreditation Scheme, 2008 to present

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#### **ISO/IEC 17025:2005 in Calibration and Measurement for Gas Flow Meters**

**PowerGas** by the Singapore Accreditation Council – Singapore Laboratory Accreditation Scheme, 2005 to present

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#### **BS OHSAS 18001:2007 Certification for Occupational Health & Safety Management System**

**Singapore District Cooling** by TÜV SÜD PSB Pte Ltd, 2008 to 2014

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**People Developer Standard** by SPRING Singapore  
**Singapore Power**, 2000 to 2013

**SP PowerGrid**, 2005 to 2013

**SP Services**, 2005 to 2015

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#### **Work Life Achiever Award**

**SP Services** by Tripartite Committee on Work-Life Strategy, 2012

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**SAP Outstanding Industry Solution Project Award for MSSL**  
**SP Services** by SAP Singapore, 2012

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#### **Asia-Pacific Transmission Deal of the Year Award for Cable Tunnel project**

**Singapore Power Group** by the Project Finance magazine, 2012

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#### **Minister's Honour Roll (Star)**

**Singapore Power Group** by the Ministry of Home Affairs, 2013 to 2018

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#### **Minister for Defence Award**

**Singapore Power Group** by the Ministry of Defence, 2005 to 2015

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#### **May Day Model Partnership Award**

**Singapore Power Group** by National Trades Union Congress, 2013

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**Singapore H.E.A.L.T.H. Platinum Award**  
**Singapore Power Group**  
by the Health Promotion Board,  
2004 to 2014

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**Special Events Platinum Award**  
**Singapore Power Group** by the  
Community Chest, 2006 to 2013

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**SHARE Corporate Gold Award**  
**Singapore Power Group** by the  
Community Chest, 2003 to 2013

## AUSTRALIA

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**BSI PAS 55 Certification to British Asset Management Specification SP AusNet** by Asset Management Consulting Limited, 2008 to 2013

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**NSW State Awards for Marketing Excellence**  
**Jemena Gas Networks** by the  
NSW Chapter  
of the Australian Marketing  
Institute, 2012

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**Australian Service Excellence Award**  
**Jemena Electricity Networks** by  
the Customer Service Institute  
of Australia, 2012

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**ISO 9001:2008  
Certification for Quality  
Management System**

**ISO 14001:2004  
Certification for Environmental  
Management System**

**4801:2001  
Certification for Occupational  
Health & Safety System**  
**Zinfra Group** by the Office  
of the Federal Safety Commissioner  
for Australian Government,  
2012 – 2015

**GHAZALI BIN EMBI**  
Deputy Director  
Gas Transmission Projects

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Gas transmission pipelines are at the upstream of the power value chain in Singapore. My team and I are responsible for the development of the pipelines and related facilities, from conceptual design to installation. We make sure these projects are delivered on time so that there is continued supply of reliable electricity to the whole of Singapore. Today, imported liquefied natural gas (LNG) arrives in Singapore at a terminal on Jurong Island, and more electricity in Singapore will be generated from natural gas. With the growing demand for LNG, we will continue to develop new facilities to meet future needs.



# CORPORATE GOVERNANCE

REPORT FOR THE PERIOD 1 APRIL 2012 TO 31 MARCH 2013

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## ETHICS & ACCOUNTABILITY

The SP Board is committed to good corporate governance. The Group adheres closely to the principles and guidelines set out in the revised Singapore Code of Corporate Governance 2012 (the Code) for listed companies.

The Company has adopted the Code as its guide for best practice standards and put in place an internal framework to ensure good corporate governance in its business practices and activities. The Whistleblower Policy, implemented since 2005, seeks to strengthen ethical business conduct in the Group.

The Group endeavours to enhance shareholder value by ensuring the highest standards of corporate governance, transparency, accountability and integrity.

## SETTING DIRECTION

The Board provides broad strategic directions for the Group and undertakes key investment and funding decisions. In addition, the Board ensures that Management maintains a robust system of internal controls to protect the Group's assets and reviews the Group's financial performance. The Board meets at least four times a year to review the Group's business performance. Special Board meetings may be convened as and when necessary to consider urgent corporate actions or specific issues of importance. During the financial year, the Board met four times and held a Board Strategic Review in December 2012.

## ACCESS TO INFORMATION

The Board is provided with relevant information prior to Board meetings and on an ongoing basis so as to enable them to make informed decisions to discharge

their duties and responsibilities. Board papers include management financial reports, annual budgets and performance against budget, matters requiring the Board's decision, updates on key outstanding issues and disclosure documents as well as updates on new legislative developments.

The Board has separate and independent access to the Senior Management and the Company Secretaries. Should the Directors, whether as a group or individually, require independent professional advice to carry out their duties, the Company will arrange to appoint, at the Company's expense, professional advisors to render due advice.

Newly-appointed Board Directors attend an orientation programme to familiarise themselves with the Group's business and governance practices.

The Directors may also attend appropriate courses, conferences and seminars so as to be better equipped to effectively discharge their duties as Directors.

## BOARD COMPOSITION

There is a strong element of independence in the Board composition. Other than the Group CEO, all are independent non-executive Directors.

The Nominating Committee reviews the independence of each Director annually and provides its views to the Board for the Board's consideration in accordance with the Code.

The current size of 11 Board members is appropriate for effective decision-making, taking into account the scope and nature of the Group's operations. Collectively, the Directors have a wealth of expertise and experience in the management of business at senior and international levels.

## BOARD COMMITTEES

The SP Board is supported by specialised board committees to facilitate effective supervision of Management. These are the Audit Committee, the Board Risk Management Committee, the Finance Committee, the Nominating Committee and the Staff Development and Compensation Committee.

As and when required for specific projects, special board steering committees and due diligence committees are formed to provide support and guidance to Management.

SP AusNet, as a publicly-listed stapled entity on the Australian Securities Exchange and the Singapore Exchange Securities Trading Limited, has established its own Audit and Risk Management Committee, Nomination Committee, Remuneration Committee and Compliance Committee to ensure a high standard of corporate governance.

## AUDIT COMMITTEE

During the financial year, the Audit Committee (AC) comprises four non-executive Directors, all of whom are independent Directors as defined in the Code. The Board is of the view that the AC has recent and relevant accounting or related financial management expertise and experience to discharge its responsibilities.

The main function of the AC is to assist the Board in discharging its statutory and oversight responsibilities relating to the financial reporting and audit processes, the systems of internal controls and the process of monitoring compliance within applicable laws, regulations and codes of conduct.

The AC is responsible for the following:

- Review and approval of the audit plans of external and internal auditors;
- Review of the adequacy of the internal audit function;
- Review of the financial accounts of the Group and the Company;
- Review of the independence and objectivity of the external auditors; and
- Nomination of external auditors for re-appointment.

The AC holds at least three meetings a year.

## BOARD RISK MANAGEMENT COMMITTEE

The Board Risk Management Committee (BRMC) comprises six Directors, five of whom are independent non-executive Directors. The BRMC assists the Board in fulfilling its oversight responsibilities by reviewing:

The type and level of business risks that the Company, its subsidiaries and associated companies undertake on an integrated basis to achieve their business strategy; and the policies, procedures and methodologies for identifying, assessing, quantifying (where appropriate), monitoring and managing risks.

The BRMC is supported by the Group Risk Management Office in its risk governance responsibilities. While the BRMC oversees the SP Group's risk management framework and policies, the risk ownership remains with the business groups.

The BRMC meets at least three times a year.



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### **FINANCE COMMITTEE**

The Finance Committee (FC) comprises four Directors, three of whom are independent Directors.

The responsibilities of the FC are to consider and endorse, for the Board's approval, SP's annual operating and capital expenditure budgets, and business and financing plans; and approve or endorse SP's borrowing and financing-related matters.

The FC holds at least two meetings a year.

### **NOMINATING COMMITTEE**

The Nominating Committee (NC) comprises four Directors, all of whom are independent Directors. The NC is responsible for formulating policies and guidelines on matters relating to Board appointments, re-appointments, retirement and rotation of Directors. The Directors' performance, contribution and independence are taken into consideration in the NC's review and assessment.

The NC, in consultation with the Chairman of the Board, considers and makes recommendations to the Board concerning the appropriate size and needs of the Board. New Directors are appointed by the Board after the NC has endorsed their appointment. New Directors must submit themselves for re-election at the next Annual General Meeting (AGM) of the Company pursuant to the Articles of Association of the Company. The Articles of Association of the Company also require not less than one-third of Directors to retire by rotation at every AGM.

The NC meets at least twice a year.

### **STAFF DEVELOPMENT AND COMPENSATION COMMITTEE**

The Staff Development and Compensation Committee (SDCC) comprises four Directors, all of whom are independent Directors. The SDCC oversees the remuneration of the Group Chief Executive Officer and senior executives. The SDCC establishes and maintains an appropriate and competitive level of remuneration to attract, retain and motivate senior executives to manage the Group successfully.

No Director is involved, or has participated, in any proceedings with respect to his or her own remuneration.

The SDCC meets at least twice a year.

### **COMMUNICATION WITH SHAREHOLDER**

The Company values communication and ensures that timely and adequate disclosures of material information on the Company are made available to its shareholder. It holds regular dialogue and liaison sessions with the shareholder.

# CORPORATE GOVERNANCE

REPORT FOR THE PERIOD 1 APRIL 2012 TO 31 MARCH 2013

## COMPOSITION OF BOARD AND BOARD COMMITTEES

Board Members	Audit Committee	Board Risk Management Committee	Finance Committee	Nominating Committee	Staff
					Development & Compensation Committee
Tan Sri Mohd Hassan Marican, Chairman	–	–	Chairman	Member	Chairman
Mr Alan Chan Heng Loon	–	–	–	Chairman	Member
Mr Ho Tian Yee	–	Chairman	Member	–	–
Mr Tan Chee Meng	Member	Member	–	–	–
Mr Bobby Chin Yoke Choong <sup>1</sup>	–	–	–	Member	Member
Prof Jeremy Guy Ashcroft Davis	Member	Member	–	–	–
Mr Choi Shing Kwok	Member	–	–	Member	–
Mrs Oon Kum Loon <sup>2</sup>	–	Member	Member	–	Member
Mr Tan Puay Chiang <sup>3</sup>	–	Member	–	–	–
Mr Ong Yew Huat <sup>4</sup>	Chairman	–	–	–	–
Mr Wong Kim Yin*	–	Ex-officio	Ex-officio	–	–

<sup>1</sup> Mr Bobby Chin Yoke Choong stepped down as Chairman and a member of AC on 23 Aug 2013.

<sup>2</sup> Mrs Oon Kum Loon was appointed a member of FC on 1 Oct 2012.

<sup>3</sup> Mr Tan Puay Chiang was appointed a member of BRMC on 1 Oct 2012.

<sup>4</sup> Mr Ong Yew Huat was appointed Director of the Board on 8 Feb 2013. He was appointed a member and Chairman of AC on 1 May 2013 and 23 Aug 2013 respectively.

As at 1 Sept 2013

\* Non-independent

## RISK MANAGEMENT

The SP Group's guiding principle is that every employee is a risk manager in his area of work. Risk issues are identified and necessary actions taken. Key risk issues are monitored closely and highlighted to the various subsidiaries' Risk Management Committees and the BRMC (where appropriate).

We sustain a culture of risk awareness amongst staff with initiatives including staff education through induction courses and workshops, publishing risk-related articles in company periodicals, and

regular interaction between risk management teams and risk owners.

### KEY RISK MANAGEMENT INITIATIVES IN FY12/13

- Revision of Fraud Risk Management Framework
- Independent risk oversight of North-South and East-West cable tunnel projects
- Spearheading of Group Safety Review Committee
- Review of procurement practices
- Review of Group insurance

## SAFETY

This year marks the dawn of a renewed and enhanced focus on safety in the Group, with the Board and Management reaffirming that safety is the Group's top priority.

The Group Safety Review Committee (GSRC) was formed to:

- Review benchmarks internally – conducting an

extensive review of safety practices across SP's subsidiaries to share ideas;

- Learn from external best safety practitioners – understanding their safety management frameworks for adaptation; and
- Propose recommendations to further enhance safety.

**YONG CHEE MENG**  
Principal Engineer  
Network Development

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We take pride in powering two of Singapore's icons in its emerging city centre. The Marina substation supplies power to the Marina Bay financial district as well as Gardens by the Bay, amidst the tourism and hospitality facilities there. The commercial and residential buildings in this area are switched on 24/7, so our work is on round the clock. Each successfully commissioned project adds to the reliability of the whole network. With Singapore set for much more development, we look forward to more opportunities to grow the network.



**OVER**

**AND**

**BEY**



**ND**



## ELECTRICITY AND GAS NETWORKS

We are responsible for power all over the nation. Our leading-edge technology and dedicated expertise enable us to meet the needs of over 1.3 million industrial, commercial and residential customers in Singapore. The SP networks in Singapore are amongst the most reliable and cost-effective worldwide.

SP continuously upgrades and expands its infrastructure to meet Singapore's growing demand for electricity and gas. We actively engage in research and development of grid technologies to improve reliability and energy efficiency and develop sustainable solutions for our future.

SP, through its subsidiary SP PowerAssets, owns and operates electricity transmission and distribution businesses in Singapore. SP's electricity assets comprise advanced and robust 400kV, 230kV and 66kV transmission networks and 22kV, 6.6kV and 400V distribution networks.

Through its subsidiary PowerGas, SP plays a pivotal role in Singapore's energy market. The company is the sole licensed gas transporter and system operator, transporting both natural gas and town gas through its network of 3,200km of underground gas pipelines. We operate two onshore natural gas receiving facilities and a gas holder station.

### NETWORK PERFORMANCE

In FY12/13, SP continued to develop and improve its processes and operations to deliver network performance that meets and surpasses global benchmarks.

The Singapore electricity network continued to perform well for the year. The System Average Interruption Duration Index (SAIDI) remains low, at 0.42 minute per customer per year, while the System Average Interruption Frequency Index (SAIFI) was 0.0087 interruptions per customer per year.

Gas network performance was well within regulatory targets, with SAIDI and SAIFI scores of

0.174 minute and 0.0026 interruption per customer per year respectively.

### INFRASTRUCTURE DEVELOPMENT

#### ELECTRICITY NETWORKS

To meet Singapore's growing demand for electricity and support the expected increase in generation capacities, SP leverages cutting edge technology and invests in network infrastructure to support key industries and economic and social development.

In FY12/13, we completed several projects and have also embarked on new projects which serve key installations and industries across different parts of Singapore:

#### In the East:

- **Changi East 230kV substation**  
Scheduled for completion in 2015, the project will support residential, commercial and industrial developments in Changi East and Changi South areas. It will also support key infrastructure like the Changi General Hospital and the upcoming Singapore University of Technology & Design.
- **22kV distribution network project**  
Completed in December 2012, this key 22kV distribution network project was for the supply connection to the Singapore Sports Hub located at Stadium Road.



Condition monitoring detects and removes incipient faults to help avert network failure.

### In Central Singapore:

- Targeted for completion in end 2013, the Rangoon 400kV substation will cater to the anticipated power demand growth and strengthen the network in central Singapore.

### In the West:

- The development of Tembusu 230kV and 400kV West Jurong Island substations are in progress. Scheduled for completion in 2014 and 2019 respectively, the two substation projects are poised to enhance network reliability and cater for future growth and development on Jurong Island. The 400kV substation will also cater to the rapid growth of South West Singapore, including Jurong Island and Tuas areas.
- Two 66kV cable circuits were installed and commissioned in July 2012 to power up the LNG terminal on Jurong Island. The facility will help diversify and meet Singapore's growing energy demand, and stimulate the development of a robust gas market and promote industrial growth.
- Two 66kV cable circuits were installed and commissioned in March 2013 to power up the Tuaspring desalination plant at Tuas South Ave 3. The plant is Singapore's latest water supply infrastructure project and will further enhance Singapore's water supply security.
- A 22kV distribution network project was completed in West Park Biz Central for multi stack-up factory/

warehouse complex. The uniquely designed 22kV substation was first commissioned in January 2011, allowing equipment to be progressively installed based on the customer's growth needs. As at March 2013, all six 22kV substations and their associated transformers were installed in accordance to customer's requirements.

### In the South:

- The Marina South 230kV substation, commissioned in June 2012, will continue to strengthen the supply to the Marina Bay area including the future downtown at Marina South.

This is the first 230/22kV substation in Singapore. It has a designed capacity of 300MVA. The new supply mode – by directly transforming power at 230kV to distribution voltage level at 22kV without the intermediate 66kV system – is a highly efficient way of transporting power to high load-density developments.

### In the North:

- Seletar Aerospace Park 66kV substation was built mainly to serve the aerospace industries, Seletar Airport and industrial and commercial developments at Seletar Aerospace Park. Commissioned in December 2012, this substation has a designed capacity of 150MVA. Key aerospace facilities include Rolls-Royce's regional training centre and plant for assembly and testing of aircraft engines, Eurocopter's training centre and maintenance and repair of helicopters, and Pratt & Whitney's R&D services and parts supplies.

**KOH KENG BOON**  
Principal Engineer  
Special Projects

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It is an honour and challenge for us to construct the North-South and East-West transmission cable tunnels, which will house future power lines for our future generations. Various professionals – engineers, quantity surveyors, geologists, project managers, and public relations officers – work together to make this a success. We harness advanced technology to improve performance. The Instrumentation Data Monitoring System allows us to monitor real-time geographical conditions during construction, while RFID tags are employed to enhance security and safety across all 18 work sites. We ensure the highest safety standards by embracing best practices in everything we do – because safety is always our priority.



## ELECTRICITY AND GAS NETWORKS

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### NORTH-SOUTH AND EAST-WEST TRANSMISSION CABLE TUNNELS

Construction of the 18.5km North-South and the 16.5km East-West transmission cable tunnels is progressing well. When completed, they will provide secure corridors for faster and more efficient transmission cable installation. They will enable the timely and orderly replacement of 230kV circuits and installation of 400kV circuits.

The six main contract packages for the construction of the North-South and East-West cable tunnels totalling 35km were awarded in September 2012.

By September 2013, construction of the upper shafts under Phase 2 development would have been completed in most of the 18 shaft sites – representing completion of a third of a six-phase process.

The East-West and North-South transmission cable tunnels are expected to be completed in the second quarters of 2017 and 2018 respectively.

### JURONG ISLAND – PIONEER TRANSMISSION CABLE TUNNEL

By 2019, transmission load in south-western Singapore is expected to increase by 62.5%. To manage this increase in load, there is a need for the expansion of the transmission cable network in the region including Jurong Island and Tuas areas.

A new undersea tunnel from Jurong Island to Pioneer Road will be constructed to provide the cable corridor for future bulk power transmission from Jurong Island to mainland Singapore. This sustains power reliability and achieves space efficiency. The contract was awarded to Penta-Ocean Construction in October 2013 and work commenced in November 2013.

The Jurong Island-Pioneer Cable Tunnel, approximately 5.2km long, will cross under the West Jurong Channel. The tunnel will have an internal diameter of 6 metres to accommodate extra high voltage cable circuits. It will include the construction of equipment and ventilation buildings and cable access/exit shafts at various intervals along the tunnel route, including engineering works. The tunnel is expected to be in the range of 45 metres to 80 metres deep and will be constructed through Jurong sedimentary formation.

Preliminary and detailed soil investigation works were carried out, which include topographical survey; marine hydrographical and geophysical survey; and onshore and offshore ground investigation works and horizontal borehole drilling across the West Jurong Channel.

The consultancy contract was awarded to AECOM Singapore Pte Ltd in December 2012. The Jurong Island-Pioneer tunnel is planned in conjunction with the 400kV West Jurong Island substation and will accommodate up to 10 circuits from Jurong Island to the mainland. The project is scheduled for completion by 2018.

The tunnel projects harness the use of advanced technology for better project management. One such technology is the Instrumentation Data Monitoring System (IDMS) which integrates all instrumentation and monitoring data from various sources into a single web-based platform using the Geographical Information System. The IDMS monitors both real-time and manual readings such that ground settlements, movements and vibrations caused by various underground tunnelling construction activities are closely monitored and instantaneously detected and relayed via the IDMS to the control centre. This ensures

## ELECTRICITY AND GAS NETWORKS

full understanding of the impact on nearby buildings, structures and utilities above and underground.

Another breakthrough technology is Radio Frequency Identification for the dual purposes of controlling security access to work sites and monitoring workers' safety inside the tunnel when it is being constructed at a depth of 60m underground.

RFID tags monitor employees as they enter and exit sections of the tunnel. Duty managers are then able to monitor and locate the people in any section of the tunnel at any given time. In times of emergency and evacuation, RFID is effective in establishing the location of staff within the tunnel.

### GAS NETWORKS

SP extended the natural gas network by 29km and the town gas network by 85km to reach more customers in residential estates and commercial premises.

As at March 2013, about 21 km of transmission pipelines have been laid this year in Jurong Island and Tuas South area, and for the connection of the LNG Terminal to new transmission customers. Another 8 km of LNG distribution pipelines were laid in the Tuas South area to extend the existing natural gas network.

The town gas network was extended to serve residential customers in various HDB estates in Serangoon, Choa Chu Kang, Marina, Yishun, Punggol, Buangkok and Toa Payoh. Another 20km of town gas trunk and feeder gas pipelines will be laid in the next two years to serve new HDB estates.

### SURVEY AND RENEWAL OF GAS PIPELINES

SP completed coating defect and close interval

potential surveys of 72km of natural gas transmission pipelines and verified that all coatings were in good condition. It continued its five-year accelerated gas mains renewal programme to replace old cast/ductile iron gas pipelines. This year, approximately 27km of the gas mains were replaced with polyethylene pipes.

### GAS MARKET

SP has been operating the Gas Transportation IT System Solution (GTSS) which manages the transportation of natural gas in accordance with the Gas Network Code (GNC). During the year, SP PowerGrid achieved all the GTSS performance standards prescribed under GNC. As at March 2013, 21 GNC modifications approved by EMA had been implemented.

### LNG

Central to the Government's strategy to diversify the sources of gas supply to Singapore is the development of the LNG Terminal on Jurong Island. PowerGas worked closely with the Energy Market Authority (EMA) and Singapore Liquefied Natural Gas Corporation Pte Ltd to connect the LNG Terminal to the existing transmission networks.

The first phase of the project, which was completed ahead of schedule in March 2013, involved laying of underground pipelines and construction of gas offtake stations in Jurong Island and Tuas South, and laying a submarine pipeline across the West Jurong Channel. It enabled the timely injection of regasified LNG into the transmission network for the commercial operation of the LNG terminal in May 2013, a significant milestone in Singapore's energy sector.



## ENHANCING CAPABILITIES



The Tuas South offtake station is one of the key facilities that connect the LNG Terminal to the gas transmission network in Singapore.

### SP ENGINEERING BOARD

The SP Engineering Board was established during the year to uphold SP Group's leadership in network engineering, to meet the Group's mission to deliver energy solutions reliably and efficiently. One of the initiatives include establishing a Knowledge Management framework to preserve institutional knowledge within the organisation, leading to operational continuity and quality performance. Under the framework, reviews and enhancement of electricity and gas transmission and distribution practices and asset utilisation will also be covered.

The Board will also develop the expertise of the engineering/technical workforce through establishing a technical competency framework to articulate the core skills and know-how required to perform key job roles effectively.

### CONDITION MONITORING

During the year, SP continued to strengthen its network performance by further extending its online monitoring capabilities. In FY 12/13, 19 Extra High Voltage transmission substations have been installed with online partial discharge (PD) monitoring systems while 24 transmission transformers and shunt reactors were installed with online Dissolved Gas Analysis (DGA) monitoring systems.

### POTENTIAL FAILURES AVOIDED

- 42 incidents of potential network failure were avoided through SP's concerted efforts in condition monitoring this year.

- Two potential cases of failure on 22kV and 6.6kV cables were prevented by the Oscillating Wave Test System (OWTS). From January 2006 to March 2013, the OWTS has prevented 141 cases of potential cable failure.

### ONLINE PD MONITORING PILOT PROJECT

A pilot project to use High Frequency Current Transformer (HFCT) for online PD monitoring of 230kV transformers and shunt reactors was installed at the Kallang Basin substation. The installed HFCT PDM system has advanced intelligent systems to enable the separation of weak PD signals from background noise.

### PROGRESS OF GAS INSULATED SWITCHGEAR (GIS) PARTIAL DISCHARGE MONITORING (PDM) RETROFITTING PROJECT

Transmission Gas Insulated Switchgear (GIS) are among the most valuable assets in SPPA. Failure of GIS will lead to catastrophic impact to Singapore's industries. Leveraging advanced technology, such as Partial Discharge Testing and Monitoring, we achieved improved supply reliability and performance of critical power transmission assets.

Online Partial Discharge Monitoring (PDM) System on transmission GIS is part of SP's ongoing initiative to achieve early detection of GIS insulation defects to avert potential equipment failure, thus improving network reliability and security. The PDM system has effectively detected partial discharge activities on the newly commissioned 230kV/400kV GIS and existing 230kV/400kV GIS.

## **NG BANG KOK**

### **Principal Technical Officer Network Management**

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Transformers in substations help to step-down voltage for distribution to homes and offices. Our role is to ensure the smooth running of the 400kV and 230kV transformers. We plan, operate and maintain the reliability of the transformers, reactors and tertiary switchgears in the transmission network. We also respond to power outages and technical problems promptly so that electricity can be restored swiftly and efficiently. Since joining SP (when it was part of the Public Utilities Board) in 1985 as a technician, I have advanced to my present role as a Principal Technical Officer and taken on greater responsibilities. I now mentor younger staff and am happy to share my experiences and knowledge with them.



## ENHANCING CAPABILITIES

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All 400kV GIS in 400kV substations and 16 230kV GIS substations are equipped with the online PDM system. Work is in progress for another two 230kV substations.

### **MAJOR GAS INSULATED SWITCHGEARS (GIS) MAINTENANCE PROJECT**

In our continued effort in maintaining reliable power supply, comprehensive maintenance was carried out on the GIS system reaching its mid-life, to ensure that it is in good working condition. Two 230kV substations were completed this year and work is in progress on another four 230kV substations.

### **WIRELESS SCADA FOR 6.6KV NETWORK**

To further improve supply restoration time and network performance, wireless remote monitoring and control capabilities were implemented at the 6.6kV substations. One thousand 6.6kV substations have been completed and the remaining 400 substations, in the commercial and residential areas, will be progressively equipped with wireless remote monitoring and control capabilities in the next two financial years.

### **SECURITY ENHANCEMENTS FOR 22KV SCADA SYSTEM**

During the year, security review was carried out on the 22kV SCADA system. External consultants were engaged to carry out the vulnerability assessment and penetration test for the 22kV SCADA system. After the review, additional measures were implemented to mitigate the risk of possible unauthorised access to the system and address the constant evolving cyber security threats. The physical security within the SCADA rooms was further enhanced with the installation of additional advanced hardware.

### **ENHANCEMENT OF DIRECT CURRENT SYSTEM FOR TRANSMISSION REMOTE TERMINAL UNITS (RTUS)**

A reliable 110V DC power supply for the RTUs is crucial to enable supply restoration remotely during a power outage. A fast-track project was initiated to install DC-DC convertors at all the 120 transmission substations to enhance RTU's operation reliability. This project has been completed one year ahead of schedule.

## ENHANCING CAPABILITIES

SP leverages advanced technology to enable leading network performance and reliability standards. In September 2012, our Geographic Information System (GIS), a 10-year-old mapping system for supporting the electricity and gas networks, was replaced by a single application with greater functional capabilities to enhance work efficiency.

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### **PROTECTION SYSTEM RETROFITTING/ ENHANCEMENT PROJECTS**

The 66kV second main protection system programme installs another protection unit for critical legacy 66kV feeder circuits which have only one electro-mechanical main protection. The second main protection will greatly enhance the dependability and reliability of these legacy circuits. Twenty-four circuits were completed this year.

To improve the reliability of the 22kV network, Pilot Wire Supervision relays were progressively installed at both ends of existing and new 22kV feeder circuits. The relays will detect open circuits in the pilot cable which can result in power outage. This year, 400 relays were commissioned in existing 22kV substations and another 250 relays were commissioned in new 22kV substations.

### **GEOGRAPHIC INFORMATION SYSTEM (GIS)**

SP leverages advanced technology to enable leading network performance and reliability standards. In September 2012, our Geographic Information System (GIS), a 10-year-old mapping system for supporting the electricity and gas networks, was replaced by a single application with greater functional capabilities to enhance work efficiency. The new application uses more advanced technology and provides greater functional capabilities to enable enhanced effectiveness and efficiency in the office and the field.

The GIS, which stores digital copies of maps and underlying cables and gas pipes, is heavily used to support SPPG's critical business operations from planning and project construction to network maintenance and extensions. Replacing it with a single application combines two legacy systems for electricity and gas mapping information into one. The benefits include lower costs and sharing common landbase data for data consistency and quality.



A man with short dark hair, wearing a dark blue button-down shirt, is smiling and looking towards the camera. He is standing at a drafting table, which is tilted upwards. On the table, there is a large map or technical drawing with various colored lines and markings. He is holding a black pen in his right hand, positioned over the map. The background is slightly blurred, showing what appears to be an office or workshop environment with shelves and equipment.

## **FONG YI KIT**

Executive Engineer  
Planning & Strategy

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We help map Singapore's energy network 10 years into the future. We need to forecast, identify, assess and initiate projects. Our aim: a reliable, robust network configuration. We anticipate and mitigate potential problems during project implementation or equipment maintenance, to ensure SP remains a world-class utility. In the near term, my focus is meeting the growing energy needs of Singapore's western region. We work closely with government agencies, numerous foreign investors and other stakeholders. We design cable routes and substation sites, and develop cost-effective strategies and project plans to realise a secure network at the lowest cost.

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In anticipation of increasingly sophisticated energy demands, SP has been actively engaged in research and development on Smart Grid technologies to improve energy efficiency and develop sustainable solutions for the electricity network. The following projects are being carried out in collaboration with industry partners.

- **INTELLIGENT ENERGY SYSTEM (IES)**  
SP's collaboration with EMA culminated in the completion of the IES pilot project which developed and tested new smart grid technologies and solutions to help customers better manage their energy usage.
- **CYBER SECURITY AND SECURE INTELLIGENT ELECTRONICS DEVICES FOR ELECTRIC VEHICLE (EV) ECOSYSTEM IN THE SMART GRID**  
SP partnered A\*Star's Institute for Infocomm Research (I<sup>2</sup>R) to develop a prototype that addresses potential cyber security issues of integrating EV charging infrastructure. In addition,

the prototype had demonstrated the capability to control the EV's charging current according to loading profile of distribution networks. Such a solution could potentially reduce the impact of large-scale EV penetration to grid in future.

- **FAULT CURRENT LIMITER**  
SP completed this Fault Current Limiter (FCL) collaboration project during the year with Experimental Power Grid Centre (EPGC). This gives SP the capability to assess the application of FCL in the distribution network – to limit and manage localised fault levels within the network.
- **INTEGRATED GRID ELECTRO-MOBILITY**  
SP is working with TUM CREATE to simulate the impact of large scale EV penetration to the grid and the user behaviour of an EV fleet. Study on the network capacity was completed in August 2013 while that on the user behaviour of EV fleet is in progress and is targeted to be completed by April 2014.





The substation inspection mobile app allows inspectors to carry out their work more efficiently.

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- **DISTRIBUTED INTELLIGENT PARTIAL DISCHARGE SENSING (DIPDS) SYSTEM**

SP participated in this innovative project to develop an advanced and cost-effective partial discharge sensing technology for smart grid application. A prototype of Distributed Intelligent Partial Discharge Sensing (DIPDS) system has been developed.

- **SUBSTATION INSPECTION MOBILITY**

SP embarked on the substation inspection mobility project as part of the enterprise mobility development. A proof-of-concept prototype has been completed for field evaluation.

- **TV WHITE SPACE (TVWS) MESH**

This joint project with I<sup>2</sup>R will enable SP to tap on TV White Space (ie. unused broadcast frequency bands with premium wireless broadband capabilities) to carry out condition monitoring of substations efficiently and collect valuable data that will enhance the reliability of our grid networks.

- **SMART GRID TECHNOLOGY GRANT CALL**

SP, in collaboration with the National University of Singapore, Nanyang Technological University, I<sup>2</sup>R, Solar Energy Research Institute of Singapore and Singapore Polytechnic, participated in EMA's Smart Grid Technology Grant Call exercise. SP will participate in five smart grid projects with a total funding of \$7.36m. The projects will develop smart grid technologies in the areas of grid analytics, sensors and energy management.

**SUZANNE VO**  
Contracts Manager  
Jemena Gas Networks (Australia)

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My team and I help facilitate retailers' and customers' access to Jemena's gas network by providing guidance on the required procedures. We find solutions, agreeable to all parties, over issues such as land access arrangements affecting high pressure pipelines. We also help install new service offerings such as a gas data access service directly from Jemena, that allows customers to see their daily gas consumption. Sometimes, new laws require changes in areas such as technical installation requirements for gas meters. We help our customers find ways to minimise the cost of the projects and quickly connect to our gas network.



## SINGAPORE DISTRICT COOLING



SDC operates a multi-plant network, harnessing greater benefits in efficiencies and additional redundancies from the chilled water network.

Singapore District Cooling (SDC) is a joint venture of SP (60%) with Dalkia, a global leader in energy services. SDC owns and operates the district cooling system at Marina Bay Business District. It produces chilled water for air-conditioning, as well as hot water, for commercial buildings and the integrated resort in Marina Bay. This centralised production generates energy efficiencies for customers.

To meet the increasing demand from new customers, a plant expansion project to add another 60MWr capacity to the Marina Bay area has been completed. The combined chilled water production capacity of 217MWr will make SDC one of the largest providers of district cooling services in the region. Working with a technology partner, SDC has also installed one of the largest energy efficient dual-evaporator chillers in the world.

With the additional capacity, SDC is expected to avoid 23,000 tonnes of CO<sub>2</sub> emissions annually, thus contributing to sustainable development in Singapore.

The concept of the multi-plant network has been further enhanced with a commercial agreement to connect four in-building chillers from a customer in the Central Business District into the SDC network for full integrated operations. This would provide the customer with energy efficiencies, reliability and full operational and maintenance support, while providing the cooling network with a satellite plant.

Continued operational focus and innovative design have enabled improved control schemes for the network, enabling a high energy usage index and a supply availability index of more than 99.99%, both of which far exceeded regulated reliability requirements.

## AUSTRALIA OPERATIONS

SP serves 2.8 million customers in Australia through energy utility companies Jemena and SP AusNet, which is listed on the Australia and Singapore Stock Exchanges.

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### JEMENA

#### SECURE POWER

Jemena emphasises efficient operations, a strong health and safety culture, and the ability of its people to embrace change with professionalism and enthusiasm.

Following approval by the SPIAA board, a new Business Plan was launched on 28 March 2013. As part of this five-year plan (FY14-18), a new vision was established: To be recognised as a world-class owner and manager of energy delivery assets. The year also saw the implementation of the “Establish, Lead, Extend” strategy framework.

#### RECORD HIGH NETWORK RELIABILITY

The Jemena Electricity Network achieved its best year on record for network reliability in 2012. The network experienced an average of 50.2 unplanned minutes off supply in 2012, a 9% improvement on the 2011 result, and well under the Australian Energy Regulator’s target.

#### STRONG SAFETY AND ENVIRONMENTAL PERFORMANCE

Jemena continued to improve safety performance, in line with its objective of embedding a world-class safety culture. Jemena achieved an improvement in significant injury frequency rate (SIFR), from 12.1 at the end of FY12 to 9.3 at the end of FY13.

Key initiatives include the development of the HSE Leadership programme (part of the Supervisor Development Programme), the establishment of a five-year health and safety strategic plan and the appointment of a critical coach in relation to health and safety cultural improvements. As part of Jemena’s commitment to holistic employee care and early intervention, an on-site physiotherapy programme has also been implemented.

Jemena maintained its strong commitment to the environment during the year, registering no major environmental incidents and meeting environmental incident frequency rate targets for all assets. Jemena also commenced a review and restructuring of its environmental management system.



Jemena's new Electricity Outlook portal has proved a success, with positive feedback received from customers.

### **SERVICE AND OPERATIONAL ENHANCEMENTS**

Jemena launched its Electricity Outlook web portal in June 2012, further building on the capabilities of its Advanced Metering Infrastructure (AMI) technology, which continues to be installed throughout the Jemena Electricity Network.

The new online tool allows customers to view and manage their electricity usage, set electricity saving targets and compare retailer pricing using their own load profiles at no additional charge.

Customer service has also been significantly enhanced by the introduction of systems and processes in support of the National Energy Customer Framework for the Jemena Gas Network and Jemena Electricity Network. They include dedicated service teams and new customer interaction facilities.

In FY2013, SPIAA simplified its operating structure by the creation of Zinfra Group as the entity through which it would deliver infrastructure services to other utilities, while retaining Jemena as the entity which manages and operates those assets which it owns. The new structure commenced operation on 2 July 2012.

The new operating model lays the foundation for Jemena and Zinfra Group to focus on developing their respective competencies, and also simplifies Jemena's company structure and processes.

A revamped Enterprise Resource Planning system was launched in FY2013, with the Jemena SAP (JSAP) project going live on 4 April 2012. The JSAP project improved Jemena's financial reporting capability and reduced risk, due to the consolidation of two unsupported SAP platforms and the introduction of stronger financial controls.

The JSAP system was further developed to reflect the process simplifications facilitated by the separation of Jemena and Zinfra Group, with the JSAP1.2 Project going live on 1 April 2013.



## AUSTRALIA OPERATIONS



A Zinfra Group operator checking the pressure control valve at a gas distribution station in the MultiNet Gas network.

### ZINFRA GROUP

#### POWER FOR THE NEXT FIVE YEARS

The Zinfra Group five-year strategy was launched in late 2012. The strategy is to create an industry-leading contracting services business that meets or exceeds the expectations of clients and shareholders. The strategy has a focus on creating a sustainable business model in a competitive contracting environment with a focus on six strategic value drivers:

- Improving safety performance
- Reducing overheads
- Improving work and management processes
- Managing risk
- Implementing cost-effective systems and infrastructure, and
- Achieving growth in targeted revenue sectors

#### HSEQ CERTIFICATION ACHIEVED

In 2012, Zinfra Group achieved certification for compliance of their HSEQ Business Management System. Certification was achieved for AS/NZS4801:2001 (Occupational Health & Safety), AS/NZS ISO 9001:2008 (Quality) and AS/NZS ISO 14001: 2004 (Environment). The achievement acknowledges that the Zinfra Group system has been effectively implemented, and its commitment to manage and enhance the health, safety, quality and environmental performance of the business.

Zinfra Group's initial year of operation produced a significant number of projects to develop the business. These include:

#### MULTINET GAS OPERATIONAL AND MANAGEMENT SERVICES AGREEMENT

The five-year Multinet Gas Operational and Management Services Agreement (OMSA) was signed in early 2013. Under the agreement, ZNX Network Services will be the service provider to the Northern region of the Multinet Gas network.

#### SP AUSNET PANEL POSITION WIN

In 2013, Zinfra Southern Contracting was awarded one of three panel positions for Project Alpha with SP AusNet.

The A\$60M three-year project involves distribution line maintenance work across Eastern and Central Victoria. This upgrade is part of the work being undertaken by SP AusNet following the Bushfire Royal Commission recommendations.

#### FORTESCUE METALS GROUP – SOLOMON MINE PROJECT

Zinfra Group was contracted to provide the power transmission and distribution to the Fortescue Metals Group for its Solomon iron ore mine in the Pilbara desert, Western Australia. The A\$40M project saw the construction of high-voltage overhead and underground transmission lines as well as three substations.

#### ZONE SUBSTATIONS PROJECTS

Zinfra Group has established a significant presence in the Australian market for the delivery of substations projects. In FY2013, Zinfra secured or delivered over A\$100M worth of contracts for zone substations in Queensland, New South Wales, Victoria, Tasmania and Western Australia.





The safety cross is a proud display of SP AusNet's outstanding safety performance.

## SP AUSNET

### INVESTING IN RELIABLE POWER

SP AusNet is committed to delivering over 1.3 million customers with an efficient, reliable and safe supply of electricity and gas. Over the past year, SP AusNet invested A\$881.4 million in capital expenditure to maintain, strengthen and expand networks that deliver electricity and gas from power stations to households and businesses.

On the electricity networks, this included upgrading zone substations and terminal stations, as well as connecting Australia's largest wind farm to the National Electricity Market.

Distribution assets were upgraded to improve the safe and reliable supply of electricity to around 800 residents and businesses around Seaspray and Longford in East Victoria.

SP AusNet also rebuilt the Brooklyn Terminal Station, which has helped distribute electricity to Melbourne's western suburbs for more than 40 years. The upgraded infrastructure provides improved operational flexibility, voltage control and power flow.

Within the gas network, 126 km of low-pressure mains nearing their life cycle end were replaced with high pressure mains. This included a \$2 million project to replace almost 15 km of underground cast-iron low-pressure gas mains with modern, polypropylene high-pressure mains in Castlemaine, to further improve reliable delivery to residents.

SP AusNet's electricity and gas distribution networks saw growth over the past year, to meet strong expansion in customer numbers in growth

corridors. There were 11,485 new electricity customers connected over the year, while 121 km of new gas mains were commissioned and 13,825 new gas customers connected.

Supply reliability has also improved, reducing the time customers were without electricity by 13.7 per cent and gas by 11.7 per cent.

### COMMITMENT TO SAFETY

In the last 12 months, SP AusNet has made significant improvements to safety performance, underpinned by its missionZero safety strategy.

MissionZero has increased safety awareness throughout the business, and SP AusNet is proud to have achieved a 31 per cent improvement in its Recordable Injury Frequency Rate as at 31 March 2013 against the last financial year. This result was achieved through a range of initiatives, including the one-day safety training completed by 1,615 employees (97%), as well as maintaining a focus on line management accountability for safety and setting clear safety expectations for staff.

## **D K ARUMUGAM**

Technician  
Metering Data Management

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My job gets down to 'the last mile' of power supply – meter reading. With Singapore moving towards full retail contestability, all consumers will eventually be equipped with smart meters that can be read remotely. We help ensure timely collection of metering data for contestable consumers so that they are billed on actual consumption. We also go onsite to help resolve technical issues. With advancements in technology such as the Wireless Workforce Management System, we are able to download and submit the data from wherever we are, anytime. This allows us to work faster and more efficiently.



**PASSION**  **N**  
**AND**  
**PRIDE**

## SERVICE EXCELLENCE

We strive to provide quality service to our customers. Our people hone their skills and expertise through diverse experiences and take pride in the high standards and outcomes they achieve.

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In FY 12/13 we focused on enhancing our service delivery to customers by establishing efficient processes and practices and boosting our information technology system to consolidate all business systems on a common platform.

Customers applying for a commercial account no longer need to visit SP Services' Customer Service Centres. They can do so conveniently online. Apart from the time and effort saved, there are also multiple modes of payment for the convenience of customers.

SP implemented a smartphone app for iOS and Android systems from February 2013, to further encourage customers to submit their own meter readings, in addition to the current multiple channels available for submission. This will enable customers to receive bills based on actual readings instead of estimates.

Customers can now view their last 13 months' power consumption and bills online through our enhanced Utilities Portal. This ongoing project will also allow customers to update their contact information and apply for instalment payment plans. The automation of several processes will lead to higher productivity and improved service.

SP's e-billing system – which aims to improve productivity and customer service while promoting an eco-friendly environment – is being increasingly adopted by our customers. This year saw a 65% increase in e-bill subscribers to more than 268,000 with 22,000 of them opted to stop receiving hardcopy bills. This potentially saves almost \$75,000 annually. These customers also receive an email summary of their bills and they can easily log-on to the webpage for more bill details. The email also allows customers to opt out of paper bills.

SP continued to engage customers through interest groups and knowledge sharing sessions. SP shared with customers on good practices in mitigating voltage dips and conducted voltage dip tests on customers' essential equipment. Power quality measurements were conducted on site to assist customers in solving their power quality issues.

SP Services was honoured as one of the finalists at the Singapore Service Excellence Medallion 2012 Awards, for its customer-focused culture. In the biennial Customer Satisfaction Survey 2012 which covered 1,209 respondents, SP Services topped customer ratings ahead of major service providers in Singapore. SP Services'



Customer Care Officers provide quality and friendly service.

convenient one-stop service for all utilities led to customers rating it ahead of overseas utility providers in countries such as Hong Kong, Japan and Australia.

#### **TOWARDS FULL RETAIL CONTESTABILITY**

Singapore's retail electricity market has been liberalised in phases since 2000, with plans to open up the market to full competition to promote efficient supply of competitively priced electricity. The introduction of competition among retailers benefits contestable consumers with improved services, greater efficiency, competitive prices and innovative products.

Today, about 75% of total electricity demand in Singapore has been opened up for competition. Large non-residential consumers with an average monthly electricity consumption of 10,000 kWh or more at a single location can choose to become contestable.

As a step towards full retail contestability, the monthly consumption threshold will be lowered from 10,000 kWh to 8,000 kWh on 1 April 2014, and then to 4,000 kWh on 1 October 2014. This will allow some 70,000 more non-residential consumers to be eligible for retail contestability.

SP has assembled a dedicated cross-subsidiary team to oversee the smooth implementation of increased retail contestability, establishing a holistic IT infrastructure to meet the requirements of a growing customer base of contestable consumers, and supporting the implementation of Advanced Metering Infrastructure (AMI) meters and infrastructure. With AMI, contestable customers will be able to view their usage at half-hour intervals. This allows them to better monitor and manage their energy usage to achieve savings on electricity bills.

The project's core team comprises around 100 staff from various departments which include: SP Services, SP PowerGrid, the IT Department in Singapore; as well as colleagues from Jemena in Australia, together with external project consultants.

To cater to the needs of the growing number of contestable customers, MyPower website ([www.MyPower.com.sg](http://www.MyPower.com.sg)) was launched in March 2013. The portal functions as an information guide on retail contestability, and allows customers to check their eligibility.

## BUILDING OUR TALENT POOL

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### MASTERPLAN FOR HIGH-IMPACT PERFORMANCE

SP seeks out talented and committed people and develops their expertise to manage the complexity of the nation's power needs and building it for long-term sustainability.

In the year, a five-year Human Resource Masterplan was launched, aimed at tackling key strategic priorities in the attraction and retention of diverse talents joining and working in SP. Key initiatives include looking at enhancing the profile of our employment brand and promise, establishing a technical competency framework, and enhancing leadership development with tools such as 360 Feedback.

In January 2013 SP implemented an enhanced performance management framework with a strong emphasis on staff development with structured goals-setting.

SP believes in enhancing the competencies of our people so that they could adapt to industry developments in the dynamic power sector. We invested \$3.1 million in FY12/13 to enhance the people management, and technical and soft skills competencies of staff through various learning programmes. Customised courses were rolled out for all supervisors to pick up techniques and skills to give

feedback to employees during appraisals. As part of our lifelong learning initiative, SP continues to work closely with the Union of Power & Gas Employees (UPAGE) to fully sponsor employees for courses leading to a certificate or diploma in a relevant field. A total of 432 staff have benefited from this since 2002.

During the year, SP partnered UPAGE to reach out to lower-wage earners for in-house training in areas such as electrical principles and installation, operating distribution equipment, and maintenance. Twenty-two staff have benefited from this up-skilling initiative which enhanced their skill sets and prepared them for higher job responsibilities, and they have since progressed to a higher wage bracket.

In Australia Jemena launched two new talent management systems during the year, in line with Jemena's objective to be a high-performing and engaged workplace that attracts, develops and retains industry leaders.

ETWeb is an online employee performance management system that aims to enhance the accountability and transparency of employee performance and development information.



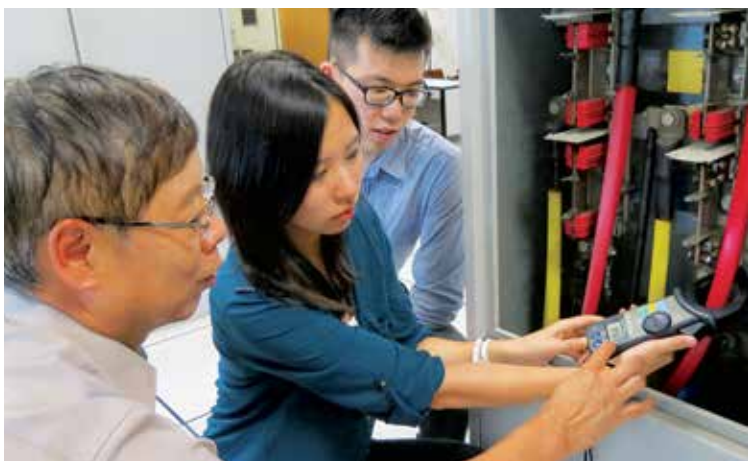


**BENSON CHIA**  
Director  
Human Resource

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At SP, we want the company to be high-performing and globally competitive. My job centres on the most vital and core ingredient – our people. We equip our staff with the necessary skills and knowledge to advance in their careers. We constantly look for diverse talent to join our ranks and take SP to new heights of excellence. We nurture present and future leaders, through specialised programmes that enhance core competencies and seek all-round performance feedback. We help our supervisors to more effectively nurture each team member and bring out the best in them.

## BUILDING OUR TALENT POOL



EDGE recruits undergo a wide spectrum of technical training to gain core knowledge and competencies.

The *illuminate* company recognition programme ensures Jemena attracts and retains the best talent, by acknowledging the efforts of its people and rewarding employee excellence. The programme was developed using feedback from employee climate surveys.

SP AusNet developed a three-year 'Talent Roadmap' to drive SP AusNet's success in attracting, developing and retaining employees with crucial leadership and technical skills. A range of talent and workforce planning activities took place throughout 2012/13 to deliver on this 'Talent Roadmap'. SP AusNet continued its investment in its Skilling for the Future programme, with 31 apprentices and trainees recruited in January 2013.

In 2012, SP AusNet established a quarterly Talent and Diversity Forum attended by General Managers, with the objective of leading diversity improvement across the organisation, developing people capability and providing governance for our talent, succession and performance management processes.

### BUILDING A TALENT PIPELINE

To ensure the professional development of our engineers, we have also been actively recruiting high-calibre fresh graduates to join SP's Engineering Development for Graduates (EDGE) Programme, with the first intake of 30 in July 2013. This is aimed at building a sustainable pipeline of engineering talents achieving Professional Engineer accreditation at the end of the programme. The new hires will go through a structured learning programme to accelerate their technical knowledge. Thereafter, they will be posted to critical operational areas for broader engineering exposure.

In Australia, Zinfra Group signed up for the Professional Development Programme (PDP) with Engineers Australia, signalling their commitment to these critical industry standards. Under this programme, Engineers Australia will provide professional development support, assessment and accreditation services for Zinfra Group engineers and engineering officers.

## DEVELOPING EXPERTISE



A cable-jointing workshop in progress.

SP Training & Consultancy Company (SPTCC) comprises two business units: SP Training Institute (SPTI) is the Singapore training arm, while SP Global Solutions (SPGS) carries out work internationally to promote its training services.

The SPTCC's core focus has been to meet the training needs of SP's staff. Moving forward, SPTCC aims to be a one-stop professional training centre for the power and gas utility sector through supporting the growing demand for, and professional development of competent and skilled engineering and technical personnel.

In the longer term, SPTCC will expand its capabilities to provide technical training to the power and gas utility sector in Singapore and the region.

### SPTI

SPTI conducted over 200 training sessions through more than 70 courses. The courses are developed by SP's team of experienced practitioners and associates, and are specially tailored for those working in the power and gas industries, as well as professional engineers and licensed workers from related industries.

Structured to enhance technical competencies in electricity and gas network operations, business continuity management, safety and power quality, these courses offer participants a comprehensive understanding of the key technical elements governing power and gas industries. Practical training is included to give training participants a hands-on experience in operating the network.

The Institute continues to partner Singapore's Workforce Development Agency (WDA) and the Employment and Employability Institute (e2i) to offer training programmes to improve the skills qualifications of staff, to enhance their employability. SPTCC received a training grant offer of \$1.7 million from WDA for the period 10 October 2012 to 30 September 2014 for SP staff to sign up for Workforce Skills Qualification (WSQ) courses.

SPTI (through SPTCC) is an Approved Training Organisation (ATO) of the WDA, and conducts accredited courses under WDA's WSQ co-funding training scheme. SPTI has conducted eight WSQ courses, mainly technical courses for the energy industry, for 316 participants.

### SPGS

During the year, SPGS completed a key project for Guangdong Power Grid Corporation (part of China Southern Grid Co.). Training programmes were conducted for 132 key management staff in Singapore. SPGS continues to provide training services for China Southern Grid Co. overseas and in Singapore. The SPGS courses are in the areas of power quality management, distribution network planning, and condition monitoring technology and application.

SPGS is developing its ongoing consultancy project with West Bengal State Electricity Distribution Company Ltd, under a three-year agreement that started in January 2011. The consultancy focuses on improving network reliability, and covers aspects such as network distribution planning and condition-based maintenance.



**EMMELINE SIEW**  
Assistant Director  
Billing Services

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I manage and monitor the performance of the billing services branch. We ensure timely, accurate billing to consumers in our role as a Market Support Services Licensee for the electricity market, and also on behalf of other utility service providers. With initiatives such as electronic billing and automation of work processes, we help enhance convenience for customers, productivity for employees and the organisation, and also reduce our carbon footprint. We constantly look for ways to improve the way we work. My team and I also introduced a work-from-home scheme for our employees, enabling them to raise productivity and be able to spend more time with their families.



**HE  RT  
AND  
SOUL**

## COMMUNITY OUTREACH

Our nation-building commitment transcends a full spectrum of sectors. We also reach out to communities in need through donations, fund-raising activities and volunteer efforts.

### SINGAPORE

#### OUR COMMUNITY RESPONSIBILITY

The SP Heartware Fund was launched in 2005 to support the Home Help Service Programmes administered through the Community Chest of Singapore to benefit some 2,100 elderly people and their caregivers. The Fund provides essential services such as meal delivery, personal hygiene, housekeeping, laundry and medical escort service for medical consultations. These services help senior citizens age in place by living independently within their own community. Since the inception of the SP Heartware Fund, more than \$7 million has been raised to benefit needy elderly beneficiaries of seven Home Help Service programmes.

In FY12/13, we raised over \$1 million for the Fund through activities such as the SP Charity Golf and direct mail drives. Charity Golf 2012, held on 5 October 2012, raised over \$367,000. The fund-raising activities were underwritten by SP, with 100 per cent of all funds going to beneficiaries.

This year was a milestone in our support of the Community Chest. We were presented with the 10-year outstanding SHARE award for having received the SHARE Corporate Gold award (for staff strength and participation rate in the SHARE programme) every year since 2003. We also received the Special Events Platinum award for fund-raising through events.

For the year, SP contributed close to \$500,000 to various charity organisations and worthy causes. SP staff donated over \$36,900 as part of the Community Chest SHARE programme and contributed over

\$19,800 towards the SP Heartware Fund. SP also matched every dollar donated by staff through these two channels.

In February 2013, Riders Aid – a community group made up of motorcycle enthusiasts – raised over \$10,600 for the SP Heartware Fund. More than 1,000 bikers took part in the event, graced by Environment & Water Resources Minister Vivian Balakrishnan. Joining them were some 20 senior citizens from Sunshine Welfare Action Mission, who are among the beneficiaries.

Beyond collaborating with our partners to raise funds through events like the Charity Golf, we also encourage our staff to do their part in reaching out to the community through various community outreach initiatives. These initiatives enable us to foster camaraderie among staff and also with our business and community partners.

In 2013, SP partnered the National Parks Board (NParks) to launch Nature Cares, a community engagement programme that connects corporations, beneficiaries of welfare homes and students through nature activities. The pilot programme marks NParks' 50 years of greening Singapore. SP volunteers worked with residents from St John's Home for Elderly Persons and students from Cedar Primary School in nature activities including herb gardening and potting workshops, nature tours and arts and crafts sessions. As an extension of our support to the elderly beneficiaries, a donation of \$5,000 was given to St John's Home to meet the physical needs of the elderly residents. This includes a massage chair, a washing machine and physiotherapy services for a month.





The Nature Cares programme saw SP partnering the elderly and students in a series of nature-based activities.

SP also took part in other community outreach initiatives such as the JP Morgan Run, in aid of Operation Smile, which provides free surgeries to repair facial deformities for children around the globe.

The SP Cable Tunnel Team is a good illustration of collaboration between business partners and the community. The team's joint outreach initiatives with their consultants and contractors focus on specific locations of cable tunnel shafts and regular interaction with people who live and work around our shaft locations. The activities include the Nature Cares programme, Peirce Secondary School's field trips to SP's Energy Efficiency Centre and photography contest, Cable Tunnel Project Exhibition at Admiralty Secondary School, futsal matches with the Singapore Civil Defence Force team at Bishan Fire Station, and providing daily necessities to the Lee Ah Mooi Old Age Home and St Theresa's Home.

## AUSTRALIA

During the year, Jemena employees raised over A\$60,000 for charities, including the Salvation Army, Parramatta Mission and the Children's Hospital at Westmead.

Jemena continued to build relationships with key community service organisations, including Anglicare, the Moreland Energy Foundation, Kildonan Uniting Care and the Sussex Neighbourhood House. Together with these groups and local councils, Jemena ran community workshops and hosted information stalls across its network areas to educate customers about Jemena's role in the community, energy safety and literacy, smart meters and the benefits made

possible by Jemena's industry-leading Electricity Outlook web portal.

Zinfra Group employees contributed to a variety of charity initiatives throughout the year. A highlight was the 'Movember' campaign in November 2012 to raise funds for the research and promotion of men's health issues, specifically prostate cancer and mental health.

SP AusNet's Sponsorship and Donation Fund continued to sustain key sponsorships for the year in business, sport and education. To sustain support for communities impacted by natural disasters, SP AusNet donated A\$10,000 to the Gippsland Emergency Relief Fund (GERF) to assist residents affected by the Alberfeldy bushfires in Gippsland.

Under the Community Development Fund (CDF), SP AusNet collaborated with local councils to offer a A\$20,000 grants pool to non-profit community organisations, for a maximum of A\$3,000 per grant. During the year, two CDF programmes with community organisations in the north and east regions were carried out.

SP AusNet also worked with stakeholders to ensure they are informed about key projects. Activities included hosting several information sessions on the Advanced Metering Infrastructure programme in local communities and community engagement on the Brunswick Terminal Station upgrade.

**JACEY YEH**  
Manager  
Corporate Affairs

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Our people power the nation in more ways than one. Through outreach activities, we also give our time, energy and personal resources to help communities in need. Besides making corporate donations and raising funds together with business partners, we also promote staff volunteerism in areas from community welfare to caring for nature. We want to make a difference in the lives of the underprivileged, especially to benefit the elderly through the SP Heartware Fund. I am proud that SP is an employer that creates opportunities for us to help others in need. The rewards are beyond measure.



**FINANCIAL SUMMARY CONTENTS** SUMMARY DIRECTORS' REPORT **66** INDEPENDENT AUDITORS' REPORT **68** SUMMARY BALANCE SHEETS **69** SUMMARY INCOME STATEMENTS **70** SUMMARY STATEMENTS OF COMPREHENSIVE INCOME **71** SUMMARY STATEMENTS OF CHANGES IN EQUITY **72** SELECTED NOTES TO THE SUMMARY FINANCIAL STATEMENTS **74**

**IMPORTANT NOTE**

The Summary Financial Statements as set out on pages 69 to 76 contains only a summary of the information in the Directors' Report and financial statements of Singapore Power Limited's (the "Company") Annual Report. It does not contain sufficient information to allow for a full understanding of the results and the state of affairs of the Company or of the Company and its subsidiaries (collectively the "Group").

The full Annual Report, including the Independent Auditors' Report on those financial statements and the Directors' Report, can be found on the Group's website [www.singaporepower.com.sg](http://www.singaporepower.com.sg).

**SUMMARY DIRECTORS' REPORT****1 DIRECTORS**

The directors in office at the date of this report are as follows:

Tan Sri Mohd Hassan Marican  
Mr Alan Chan Heng Loon  
Mr Ho Tian Yee  
Mr Tan Chee Meng  
Mr Bobby Chin Yoke Choong  
Prof Jeremy Guy Ashcroft Davis  
Mr Choi Shing Kwok  
Mrs Oon Kum Loon  
Mr Tan Puay Chiang  
Mr Ong Yew Huat *(Appointed on 8 February 2013)*  
Mr Wong Kim Yin

**2 PRINCIPAL ACTIVITIES**

The principal activities of the Company are that of investment holding and provision of management support services. Its subsidiaries are engaged principally in the transmission and distribution of electricity and gas, provision of related consultancy services and investment in related projects.

**3 UNUSUAL ITEMS DURING AND AFTER THE FINANCIAL YEAR**

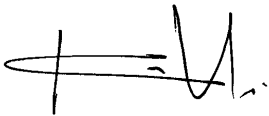
In the opinion of the directors, no item, transaction or event of a material and unusual nature has arisen during the financial year or in the interval between the end of the financial year and the date of this report which would substantially affect the results of the operations of the Group and Company for the financial year in which this report is made, or render any item in the financial statements of the Group and Company for the current financial year misleading, and/or affect the ability of the Group and the Company in meeting the obligations as and when they fall due, except as disclosed in the notes to the full financial statements.

The Summary Financial Statements set out on pages 69 to 76 was approved by the Board of Directors on 30 May 2013 and was signed on its behalf by:



**TAN SRI MOHD HASSAN MARICAN**

*Chairman*



**MR WONG KIM YIN**

*Group Chief Executive Officer/Director*

30 May 2013

**INDEPENDENT AUDITORS' REPORT ON THE SUMMARY FINANCIAL STATEMENTS**

To the member of Singapore Power Limited

The accompanying Summary Financial Statements of Singapore Power Limited (the Company) and its subsidiaries (the Group), set out on pages 69 to 76 which comprise the summary balance sheets of the Group and the Company as at 31 March 2013, the summary income statements, and the summary statement of comprehensive income of the Group and of the Company and summary statement of changes in equity of the Group for the year then ended, and related notes, are prepared and presented based on the audited statutory financial statements of the Company and its subsidiaries for the year then ended. We expressed an unmodified audit opinion on those financial statements in our report dated 30 May 2013.

The Summary Financial Statements do not contain all the disclosures required by the Singapore Financial Reporting Standards applied in the preparation of the audited statutory financial statements of the Company and its subsidiaries. Reading the Summary Financial Statements, therefore, is not a substitute for reading the audited statutory consolidated financial statements of the Company and its subsidiaries.

***Management's responsibility for the Summary Financial Statements***

Management is responsible for the preparation and presentation of the Summary Financial Statements. The Summary Financial Statements are derived from the audited statutory financial statements of the Company and its subsidiaries.

***Auditors' responsibility***

Our responsibility is to express an opinion on the Summary Financial Statements based on our procedures, which were conducted in accordance with Singapore Standard on Auditing 810 *Engagements to Report on Summary Financial Statements*.

***Opinion***

In our opinion, the accompanying Summary Financial Statements are summarised and presented consistently, in all material respects, with the audited statutory financial statements of the Company and its subsidiaries.

**KPMG LLP**

*Public Accountants and  
Certified Public Accountants*

**Singapore**  
30 May 2013



	Group		Company	
	2013 \$ million	2012 \$ million	2013 \$ million	2012 \$ million
<b>Non-current assets</b>				
Property, plant and equipment	25,363.0	24,234.8	25.7	29.7
Intangible assets	3,293.1	3,866.9	6.7	6.3
Subsidiaries	–	–	6,780.8	6,567.9
Associates and joint venture	1,376.1	1,417.3	–	–
Other investments	14.9	11.9	–	359.0
Other non-current assets	695.9	545.3	1.8	21.3
Deferred tax assets	15.7	64.9	–	–
	<b>30,758.7</b>	30,141.1	<b>6,815.0</b>	6,984.2
<b>Current assets</b>				
Inventories	170.8	164.6	–	–
Trade and other receivables	1,651.0	1,471.8	6,502.6	6,071.8
Cash and cash equivalents	1,875.2	588.9	224.3	110.3
	<b>3,697.0</b>	2,225.3	<b>6,726.9</b>	6,182.1
<b>Total assets</b>	<b>34,455.7</b>	32,366.4	<b>13,541.9</b>	13,166.3
<b>Equity</b>				
Share capital	3,911.9	3,911.9	3,911.9	3,911.9
Reserves	(201.7)	(121.8)	–	–
Accumulated profits	4,753.5	4,546.2	5,087.8	4,894.9
<b>Equity attributable to owner of the Company</b>	<b>8,463.7</b>	8,336.3	<b>8,999.7</b>	8,806.8
<b>Non-controlling interests</b>	<b>1,917.5</b>	1,600.3	–	–
<b>Total equity</b>	<b>10,381.2</b>	9,936.6	<b>8,999.7</b>	8,806.8
<b>Non-current liabilities</b>				
Bank loans	2,580.9	3,577.3	–	–
Debt obligations	11,979.1	10,948.6	–	362.1
Other financial liabilities	1,475.1	1,782.6	–	18.4
Other non-current liabilities	980.9	993.1	4.0	3.9
Deferred tax liabilities	1,338.0	1,278.2	1.5	1.7
	<b>18,354.0</b>	18,579.8	<b>5.5</b>	386.1
<b>Current liabilities</b>				
Trade and other payables	2,435.0	2,120.6	4,139.7	3,932.6
Bank loans	630.0	1,191.5	–	–
Debt obligations	2,221.4	313.0	352.9	–
Other financial liabilities	300.4	59.8	32.5	24.7
Current tax payable	133.7	165.1	11.6	16.1
	<b>5,720.5</b>	3,850.0	<b>4,536.7</b>	3,973.4
<b>Total liabilities</b>	<b>24,074.5</b>	22,429.8	<b>4,542.2</b>	4,359.5
<b>Total equity and liabilities</b>	<b>34,455.7</b>	32,366.4	<b>13,541.9</b>	13,166.3

	Group		Company	
	2013 \$ million	2012 \$ million	2013 \$ million	2012 \$ million
Revenue	<b>8,968.0</b>	8,662.3	<b>404.4</b>	453.4
Other income	<b>379.9</b>	426.7	–	–
Expenses				
– Purchased power	<b>(3,598.9)</b>	(3,301.9)	–	–
– Depreciation of property, plant and equipment	<b>(1,045.6)</b>	(1,001.3)	<b>(5.1)</b>	(5.0)
– Amortisation of intangible assets	<b>(110.7)</b>	(96.0)	<b>(1.6)</b>	(1.4)
– Maintenance	<b>(828.1)</b>	(853.0)	<b>(4.5)</b>	(3.7)
– Staff costs	<b>(887.8)</b>	(948.6)	<b>(43.0)</b>	(33.8)
– Property taxes	<b>(188.0)</b>	(200.0)	<b>(0.3)</b>	(0.1)
– Other operating expenses	<b>(366.3)</b>	(384.0)	<b>(14.4)</b>	(18.5)
<b>Operating profit before exceptional items</b>	<b>2,322.5</b>	2,304.2	<b>335.5</b>	390.9
Exceptional items				
– Impairment loss on intangible assets	<b>(426.4)</b>	–	–	–
– Impairment loss on investment in associates and joint venture	<b>(94.7)</b>	–	–	–
<b>Operating profit</b>	<b>1,801.4</b>	2,304.2	<b>335.5</b>	390.9
Finance income	<b>72.8</b>	51.5	<b>24.5</b>	25.6
Finance costs	<b>(1,124.2)</b>	(1,058.4)	<b>(20.7)</b>	(26.5)
Share of loss of associates, net of tax	<b>(3.3)</b>	(14.1)	–	–
Share of profit of joint venture, net of tax	<b>77.0</b>	79.3	–	–
<b>Profit before taxation</b>	<b>823.7</b>	1,362.5	<b>339.3</b>	390.0
Tax (expense)/credit	<b>(273.1)</b>	(253.9)	<b>3.6</b>	(2.2)
<b>Profit for the year</b>	<b>550.6</b>	1,108.6	<b>342.9</b>	387.8
<b>Profit attributable to:</b>				
Owner of the Company	<b>357.3</b>	929.8	<b>342.9</b>	387.8
Non-controlling interests	<b>193.3</b>	178.8	–	–
<b>Profit for the year</b>	<b>550.6</b>	1,108.6	<b>342.9</b>	387.8

	Group		Company	
	2013 \$ million	2012 \$ million	2013 \$ million	2012 \$ million
Profit for the year	<b>550.6</b>	1,108.6	<b>342.9</b>	387.8
<b>Other comprehensive income</b>				
Translation differences relating to financial statements of foreign operations	<b>(100.5)</b>	9.6	-	-
Effective portion of changes in fair value of cash flow hedges, net of tax	<b>(203.9)</b>	(285.1)	-	-
Net change in fair value of cash flow hedges transferred to profit or loss, net of tax	<b>221.9</b>	210.8	-	-
Net change in fair value of cash flow hedges on recognition of the hedged items on balance sheet, net of tax	<b>3.1</b>	11.2	-	-
Actuarial (loss)/gain on defined benefit plans, net of tax	<b>(7.8)</b>	(70.7)	-	-
<b>Other comprehensive income for the year, net of tax</b>	<b>(87.2)</b>	(124.2)	-	-
<b>Total comprehensive income for the year</b>	<b>463.4</b>	984.4	<b>342.9</b>	387.8
<b>Attributable to:</b>				
Owner of the Company	<b>277.4</b>	843.2	<b>342.9</b>	387.8
Non-controlling interests	<b>186.0</b>	141.2	-	-
<b>Total comprehensive income for the year</b>	<b>463.4</b>	984.4	<b>342.9</b>	387.8

## SUMMARY STATEMENTS OF CHANGES IN EQUITY

YEAR ENDED 31 MARCH 2013

Group	Share capital \$ million	Currency translation reserve \$ million	Hedging reserve \$ million	Other reserve \$ million	Accumulated profits \$ million	Total equity attributable to owner of the Company	Non-controlling interests \$ million	Total equity \$ million
						\$ million		
At 1 April 2011	3,911.9	148.4	(128.8)	(54.8)	3,966.4	7,843.1	1,545.0	9,388.1
<b>Total comprehensive income for the year</b>								
Profit for the year	-	-	-	-	929.8	929.8	178.8	1,108.6
<b>Other comprehensive income</b>								
Translation differences relating to financial statements of foreign operations	-	9.4	-	-	-	9.4	0.2	9.6
Effective portion of changes in fair value of cash flow hedges, net of tax	-	-	(196.0)	-	-	(196.0)	(89.1)	(285.1)
Net change in fair value of cash flow hedges transferred to profit or loss, net of tax	-	-	147.7	-	-	147.7	63.1	210.8
Net change in fair value of cash flow hedges on recognition of the hedged items on balance sheet, net of tax	-	-	6.5	-	-	6.5	4.7	11.2
Actuarial loss on defined benefit plans, net of tax	-	-	-	(54.2)	-	(54.2)	(16.5)	(70.7)
<b>Total other comprehensive income</b>	-	9.4	(41.8)	(54.2)	-	(86.6)	(37.6)	(124.2)
Total comprehensive income for the year	-	9.4	(41.8)	(54.2)	929.8	843.2	141.2	984.4
<b>Transactions with owner of the Company, recorded directly in equity</b>								
<b>Contributions by and distribution to owner of the Company</b>								
Dividends declared	-	-	-	-	(350.0)	(350.0)	-	(350.0)
Equity contribution by non-controlling interests	-	-	-	-	-	-	57.9	57.9
Dividends paid to non-controlling interests	-	-	-	-	-	-	(143.8)	(143.8)
<b>Total transactions with owner</b>	-	-	-	-	(350.0)	(350.0)	(85.9)	(435.9)
At 31 March 2012	3,911.9	157.8	(170.6)	(109.0)	4,546.2	8,336.3	1,600.3	9,936.6

Group	Share capital \$ million	Currency translation reserve \$ million	Hedging reserve \$ million	Other reserve \$ million	Accumulated profits \$ million	Total equity attributable to owner of the Company \$ million	Non-controlling interests \$ million	Total equity \$ million
At 1 April 2012	3,911.9	157.8	(170.6)	(109.0)	4,546.2	8,336.3	1,600.3	9,936.6
<b>Total comprehensive income for the year</b>								
Profit for the year	-	-	-	-	357.3	357.3	193.3	550.6
<b>Other comprehensive income</b>								
Translation differences relating to financial statements of foreign operations	-	(84.1)	-	-	-	(84.1)	(16.4)	(100.5)
Effective portion of changes in fair value of cash flow hedges, net of tax	-	-	(148.8)	-	-	(148.8)	(55.1)	(203.9)
Net change in fair value of cash flow hedges transferred to profit or loss, net of tax	-	-	157.0	-	-	157.0	64.9	221.9
Net change in fair value of cash flow hedges on recognition of the hedged items on balance sheet, net of tax	-	-	2.7	-	-	2.7	0.4	3.1
Actuarial loss on defined benefit plans, net of tax	-	-	-	(6.7)	-	(6.7)	(1.1)	(7.8)
Total other comprehensive income	-	(84.1)	10.9	(6.7)	-	(79.9)	(7.3)	(87.2)
Total comprehensive income for the year	-	(84.1)	10.9	(6.7)	357.3	277.4	186.0	463.4
<b>Transactions with owner of the Company, recorded directly in equity</b>								
<b>Contributions by and distribution to owner of the Company</b>								
Dividends declared	-	-	-	-	(150.0)	(150.0)	-	(150.0)
Equity contribution by non-controlling interests	-	-	-	-	-	-	291.4	291.4
Dividends paid to non-controlling interests	-	-	-	-	-	-	(160.2)	(160.2)
<b>Total transactions with owner</b>	-	-	-	-	(150.0)	(150.0)	131.2	(18.8)
At 31 March 2013	3,911.9	73.7	(159.7)	(115.7)	4,753.5	8,463.7	1,917.5	10,381.2

## 1 CHANGES IN ACCOUNTING POLICIES

### *Adoption of new and revised FRSs and Interpretation to FRS*

The Group has adopted all the new and revised FRSs and Interpretation to FRS (INT FRS) that became mandatory from 1 April 2012. The adoption of these new FRSs and INT FRS has no significant impact to the Group.

## 2 CONTINGENT LIABILITIES

### *(a) Australian Taxation Office (ATO) disputes*

#### **(i) Section 163AA impost**

During August 2011, the ATO issued amended assessments to SP AusNet in respect of the 2001 to 2006 income years, disallowing deductions claimed in each of those income years in respect of Section 163AA imposts. Under the amended assessments, the total amount payable is A\$87.7 million (representing A\$54.0 million of primary tax, plus an interest component of A\$33.7 million).

On 7 October 2011, SP AusNet lodged notices of objection with the ATO in relation to the amended assessments issued. The ATO has agreed to a part-payment arrangement, on the basis that the amount due is a disputed tax amount. Under the arrangement, SP AusNet paid A\$30.6 million to the ATO in October 2011. This amount has been recorded as a non-current receivable at the time of payment. A general interest charge continues to accrue in respect of unpaid tax under the payment arrangement, in addition to the total amount disclosed on the amended assessments. As at 31 March 2013, the total amount in dispute for section 163AA imposts, including additional interest on the unpaid portion of the amended adjustments, is A\$97.8 million.

In August 2012, the ATO issued a notice of objection decision to formally disallow the objections lodged by SP AusNet. On 10 October 2012, SP AusNet lodged a notice of appeal and other documents in the Federal Court, appealing the ATO's objection decision.

#### **(ii) Intellectual Property**

During September 2011 and October 2011, the ATO issued amended assessments to SP AusNet in respect of the 2001 to 2010 income years, disallowing deductions claimed in respect of intellectual property in each of those income years. Under the amended assessments, the total amount payable is A\$44.3 million (representing A\$27.4 million of primary tax, plus an interest and administrative penalty component of A\$16.9 million). On 4 November 2011, SP AusNet lodged notices of objection in relation to the amended assessments issued. The ATO has agreed to a part-payment arrangement, with SP AusNet making a payment of A\$17.1 million to the ATO in October 2011. This amount has been recorded as a non-current receivable at the time of payment. As at 31 March 2013, the total amount in dispute for intellectual property deductions, including accrued interest on the unpaid portion of the amended assessments, is A\$49.2 million.

In February 2012, SP AusNet submitted a written notice to the ATO, pursuant to section 14ZYA(2) of the Taxation Administration Act 1953, requiring the ATO to make an objection decision (within 60 days of receipt of the written notice) in relation to the intellectual property objections lodged by SP AusNet. As a result of the ATO not making an objection decision within 60 days, the ATO was deemed to have disallowed the intellectual property objections in April 2012.

On 26 April 2012, SP AusNet lodged a notice of appeal and other documents in the Federal Court, appealing the ATO's objection decision in relation to the intellectual property matter. This matter is currently before the Federal Court.



## 2 CONTINGENT LIABILITIES

### (b) *Victorian February bushfires*

SP AusNet is a defendant in litigation that has been brought in connection with the 7 February 2009 bushfires located at Beechworth, Kilmore East, and Murrindindi, respectively. In all three matters, SP AusNet denies that it was negligent. SP AusNet alleges that its conduct was at all times reasonable, in compliance with technical regulations and reasonable in light of economic regulations applicable to SP AusNet.

On 16 May 2012, the Supreme Court of Victoria formally approved the settlement deed for the Beechworth bushfire class action. The settlement has been reached without admission of liability by SP AusNet or any other party.

The Kilmore East Supreme Court hearing is presently underway, and is likely to continue for several months. SP AusNet is a defendant in this proceeding, along with the State of Victoria (Department of Sustainability and Environment, Country Fire Authority and others) and a contracted asset inspector.

In relation to the Kilmore East matter, it is now agreed by experts representing both SP AusNet and the plaintiff that the initial damage to the conductor, which ultimately led to its failure, was likely caused by lightning, and could not have been detected.

The Murrindindi class action is in very early stages, and it is expected that the trial will not formally commence within the next eighteen months.

SP AusNet has liability insurance which specifically provides cover for bushfire liability. SP AusNet reviews its insurance cover annually and ensures it is commensurate with the scale and size of its operations, the risks assessed to be associated with its operations and with industry standards and practice.

SP AusNet's safety record, network asset management and network maintenance programs are consistent with industry practice, and its bushfire mitigation and vegetation management programs comply with Electricity Safety (Bushfire Mitigation) Regulations. SP AusNet's bushfire mitigation and vegetation management programs are audited annually by Energy Safe Victoria. SP AusNet had a 'zero' bushfire mitigation index throughout the 2008-09 bushfire season.

There are many variables associated with litigation and it is impossible to provide a prior assessment of the ultimate resolution of either the Kilmore East or Murrindindi proceedings. However, SP AusNet will vigorously defend both claims and rejects any assertion of negligence. SP AusNet strongly holds the belief that it has consistently complied with its regulatory obligations, including in the year ended 31 March 2009. It is therefore reasonable to consider that SP AusNet's insurance and, if required, a claim to the regulator for pass-through of residual costs ultimately incurred in relation to these proceedings would be sufficient to cover SP AusNet's liability, if any, associated with the February 2009 bushfires. However, the ultimate resolution of these matters cannot be known with certainty.

### (c) *Rights to future income*

There is a degree of uncertainty associated with the impact of tax consolidation provisions associated with rights to future income which were enacted in June 2012. The effect of these provisions could be a net profit after tax reduction of up to A\$21.1 million. Management will continue to monitor and analyse the position.

**3 SUBSEQUENT EVENTS**

- (a) On 17 May 2013, following approval by the Board, the Company announced that it has reached an agreement with State Grid International Development Limited ("SGID") to divest 60 per cent shareholding in SPIAA and has also entered into a separate agreement for SGID to acquire a 19.9 per cent security holding in SP AusNet at a price of A\$824 million. The divestments are subject to customary conditions, including regulatory approvals. Subsequent to the divestment, the Group will hold 40 per cent shareholding in SPIAA and 31.1 per cent security holding in SP AusNet. The financial impact is dependent on the completion date of the transactions and hence cannot be estimated reliably at the date of these financial statements.
  
- (b) On 25 March 2013, the Group received the regulatory price determinations for SP PowerAssets Ltd, PowerGas Ltd and SP Services Ltd from Energy Market Authority for the regulatory period from 1 April 2013 to 31 March 2018. Certain aspects of the determinations are currently pending appeal.

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