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CEO Message

This edition of our *Bulletin* covers a broad spectrum of activities, which took place over the last two months.

July was a busy month with several events taking place. First, I would like to draw your attention to the article on page 6 on A Very Special Walk, which marks the first charity event where members of the NEMS participated together. Their combined efforts raised over \$15,000 for a worthy cause. We see this as a positive first step for a concerted effort among the electricity industry to jointly support a good cause. Plans are already underway for a meeting to discuss how we might work together in the future.

We took great pleasure hosting our annual EMC Golf Day, bringing together Singapore's electricity industry for the third year running. I would like to thank everyone again for supporting this event, especially our growing number of sponsors.

I am very pleased to announce that we have confirmed some exciting speakers for the inaugural Singapore Electricity Roundtable on 14 and 15 November, including Frederick Baird, Bruce Turner and Geoff Swier, just to name a few. I hope you are as excited as I am about the opportunity to hear these speakers and other practitioners debate regional and global topics arising from our evolving electricity markets. For more details on the event, see below.

On the business front, the Market Surveillance and Compliance Panel (MSCP) and the Dispute Resolution Counsellor (DRC) published their annual reports. The MSCP report concludes that the NEMS functions well within the relevant legislation and market rules, which is testament to our robust market design.

I hope you enjoy reading this edition and that it provides you with some new insights into the recent market developments and activities at EMC.

Allan Dawson
CEO, Energy Market Company

Save the Date

Singapore Electricity Roundtable 2005

Monday, 14 November 2005
Tuesday, 15 November 2005

Grand Hyatt Singapore

Energy Market Company will host the Singapore Electricity Roundtable on 14 and 15 November, featuring some of the leading practitioners and thinkers in the electricity industry. Senior executives and decision makers will debate the opportunities, challenges and issues of key importance to the electricity industry in Asia Pacific and globally.

Day one will see Sohail Hasnie, from the Asian Development Bank, provide insights into regional developments.

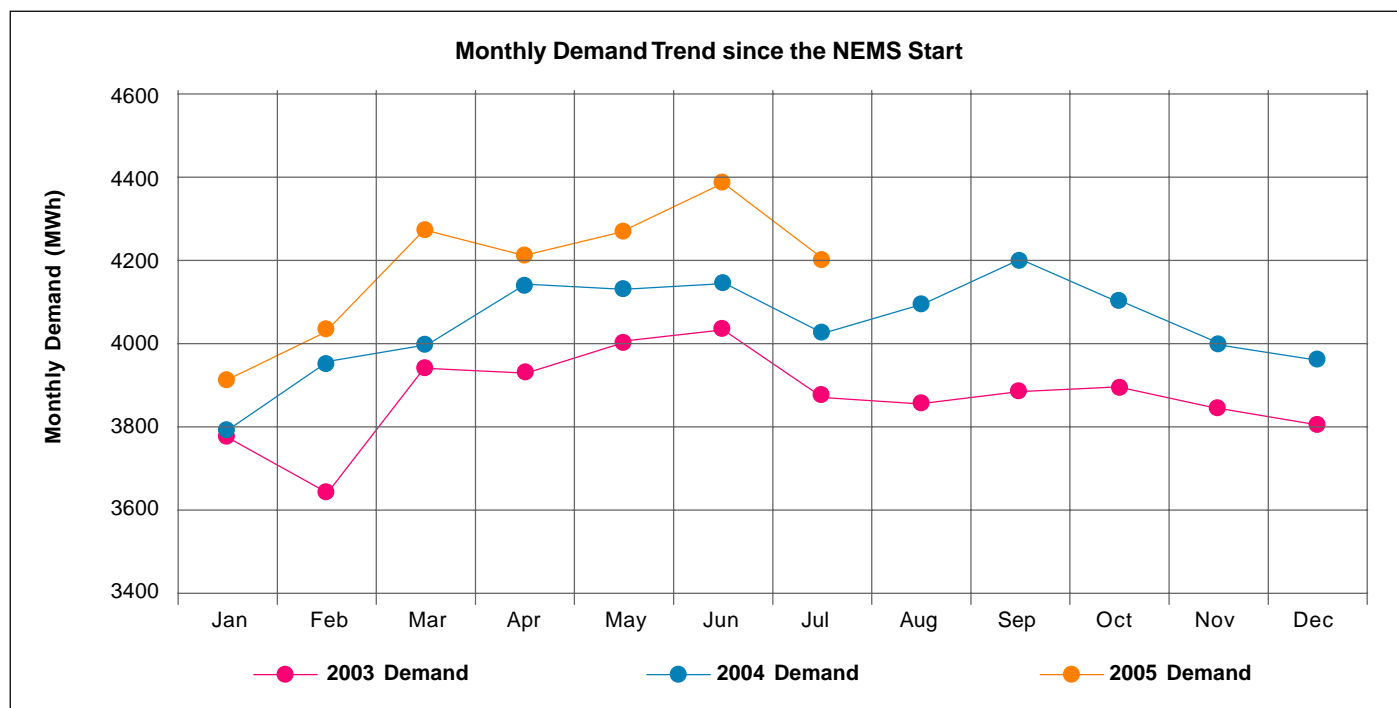
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Weak Demand Helps to Lower Price

Although prices remained above \$100/MWh, the average energy price in July dropped nearly 10 percent, mainly due to weaker demand and improved supply conditions.

Average demand slid 4.2 percent lower compared to June, as Singapore experienced wet weather in July. Historically, as shown in the chart below, July demand has been weaker, due to various factors. The market also finally saw the return of cheaper offers that put downward pressure on prices despite a drop in the average offer availability. Price volatility also fell as the number of plant outages hit its lowest level since the Chinese New Year period.



(continued from page 1)

Save the Date

Many of you still remember Frederick T. Baird, one of the architects of the Singapore electricity market, who will be back to discuss market design. Following him will be an interesting panel discussion with Mr Baird, Roy Adair and Neil McGregor, who will debate the benefits and cost of transparency in electricity markets.

Geoff Swier, a member of Singapore's Electricity System Review Committee and recently appointed to the Australian Energy Regulator, will provide an overview into the

recent regulatory and policy restructuring in Australia and its relevance to Singapore and other markets. The day will end with a dinner for all participants.

Day two will focus on trading and risk management issues. Bruce Turner, now with Electrabel but formerly with SembCorp Cogen, will provide a trader's perspective into risk management.

In the afternoon, two workshops will be offered: *Introduction to Electricity Trading and Risk Management* conducted by Kasper Walet of Maycroft and *Overview of*

How the National Electricity Market of Singapore Operates conducted by EMC.

Our roundtable has evolved from the very successful EMC Speaker Series to cover a broader range of topics arising from the evolving and maturing markets in Asia and across the world. The speakers are all practitioners in the electricity industry and people that we think are worth listening to.

Current information about the programme is available on our website www.emcsg.com and all *EMC Bulletin* recipients will receive full details shortly.



EMC Training Programme – August Course

EMC successfully delivered the second training course *Understanding Electricity Markets* on 16 and 17 August to 20 participants. Our staff conducted seven sessions covering the following topics:

- Understanding Electricity
- Overview of the Electricity Sector
- The NEMS and its Unique Features
- Pricing in Detail
- Settlement
- The Demand Side
- An Overview of Current Electricity Market Design Issues

Further courses are scheduled for:

- 9 to 10 November 2005
- 15 to 16 February 2006
- 18 to 19 May 2006

An additional course will be conducted on 15 to 16 November in conjunction with the Singapore Electricity Roundtable (see details on pages 1 and 2) if we receive sufficient interest.

We advise you to book early to secure your place in the course of your choice and benefit from our early-bird discount.

EMC will conduct an exclusive training course for 20 staff of a market participant in September. Upon request, we can organise these exclusive courses for organisations wishing to enrol large numbers of participants.

Further details on the programme and on how to register are on our website, www.emcsg.com. For enquiries, please e-mail trainingprogramme@emcsg.com or contact Ong Pui Sze at +65 6779 3000.

MSCP and DRC Annual Reports

In July 2005, both the Market Surveillance and Compliance Panel (MSCP) and the Dispute Resolution Counsellor (DRC) issued their annual reports for the period 1 April 2004 to 31 March 2005.

MSCP Annual Report

In the first part of its report, the MSCP shared its observations of several supply, demand and price indices in relation to the wholesale electricity markets of the National Electricity Market of Singapore (NEMS).

The MSCP used the following criteria to gauge market efficiency:

- the degree of market competitiveness;
- whether the markets function properly and
- whether prices eventually converge to marginal costs.

Noting that supply in the wholesale electricity markets remained concentrated, the MSCP commented that efficiency in such a market was not automatically assured and some external discipline by a market regulator was necessary. The MSCP observed that the vesting contracts imposed in January 2004 had been more market friendly than the effective price cap imposed on the whole market in 2003. The MSCP recognised that the question of how much of the wholesale market for energy should be vested remained controversial. The amount of vesting depends on a variety of factors, including the objectives.

In its review of the status of compliance, the MSCP commented that there had not been any major rule breaches during the period.

The MSCP concluded that the wholesale electricity markets of the NEMS continued to function in accordance with the relevant legislation and underlying market rules.

The MSCP is chaired by Joseph Grimberg, Senior Counsel. Its members are Lim Chin, Lee Keh Sai, TPB Menon and David Wong.

DRC Annual Report

In the *DRC Annual Report*, George Lim, the DRC, reported on the continuing efforts with the rule change proposal to create a fair, efficient and cost-effective dispute resolution process. He added that plans were underway for the implementation of the new rules upon their approval. Mr Lim also expressed his willingness to assist industry members with any disputes arising before the new framework was implemented.

Both annual reports are available on the EMC website, www.emcsg.com.



EMC Golf Day – Another Year, Another Success

Balmy sunshine and excellent green conditions blessed the third EMC Golf Day, on 27 July at the Serapong Course, Sentosa Golf Club. Some 70 golfers and a total of 120 dinner guests attended, including various company chairmen, board members, CEOs and other senior management from Singapore's electricity industry.

Recognised as the premier social golf tournament of the industry, we established EMC Golf Day as a networking platform to facilitate exchanges among key industry leaders against a backdrop of friendly competition. This event has certainly helped to foster a spirit of camaraderie.

The inclusion of four of Singapore's top junior lady golfers added a fun twist with a good

cause. We invited these golfers to play with our guests as part of our effort to contribute to the future development of youth sportsmanship. The event provided the talented young sportswomen with an opportunity to mingle with senior corporate leaders. Our guests were, in turn, delighted with the chance to pick up a few tricks from these top golfers.

The young ladies were thanked at the evening reception with EMC's \$2,000 donation to the Singapore Ladies Golf Association (SLGA) for the development of junior golf. Dr Janice Khoo, Vice President of the SLGA, joined us to receive the cheque from Allan Dawson, EMC CEO. An additional \$450 was raised when one of the prize winners auctioned his prize, in a generous gesture to further support junior golf.



(from left) Tan Soo Kiang presents prize to the (right) of Hewlett Packard, with team mates Sim Tung Ho Kok of Tuas Power



(L to R) Deborah Lee, Geraldine Chia, Koh Sock Hwee, Christabel Goh and Janice Khoo receive the cheque from Allan Dawson





winning team, led by Mike Matthews (extreme) and Simon Oliver of Power Systems Consultants and

The event's other sponsors were Hewlett Packard (dinner sponsor for the third year running), Power Systems Consultants, C&E Holidays, Citigroup, DBS Bank, The Empire Hotel and Country Club, Synergy, The China Club, Deloitte & Touche, The Grand Hyatt, Sun Microsystems, The Wellness Lounge, PowerSeraya, SembCorp Utilities, Senoko, Asian Senior Masters, Brewerkz, Ernst &

Young, Gaelic Inns, City Developments, Flutes at the Fort and The Cellar Door.

The culmination of this memorable day was the awarding of the top lucky draw prize, sponsored by C&E Holidays, of a golfing trip to Shenzhen's Mission Hills. It was an appropriate end to an enjoyable day on the greens for members of the electricity market fraternity.



Generous sponsors

This year we presented our new EMC Challenge Trophy to the winning team. This sterling silver trophy is bound to become a coveted prize for future tournaments. Much to the dismay of the players, our Hole-in-One prize of a Harley-Davidson Softail motorcycle, sponsored by Harley-Davidson, went unclaimed.



Unclaimed hole-in-one prize



Top lucky draw prize winner, Lau Gar Ning of Tuas Power





NEMS was one of the most visible industry groups

NEMS Community — Striding Together

The National Electricity Market of Singapore (NEMS) had a highly visible presence at a special event to bring colour into the lives of children with special needs on Saturday, 9 July.

The two-kilometre walk, called A Very Special Walk, was jointly organised by Pathlight School, Rainbow Centre and the Gryphons Alumni to raise funds to support projects that integrate students with autism into mainstream society. The morning event was attended by the Minister for Manpower and Second Minister for Education, Ng Eng Hen.

Initially, we were approached by a market participant to help in the co-ordination of the electricity industry's group participation in the event. Recognising this as an opportunity to display our



EMC provided NEMS wristbands



community spirit, we forged a 150 strong delegation, comprising people from Senoko, PowerSeraya, Tuas Power and EMC and their families.

EMC provided colourful wristbands displaying the group's slogan, Powering the Industry. NEMS walkers donned the bright blue and red bands and carried a colourful NEMS banner along the walk through Marina City Park.

In addition to walkers, the NEMS group also contributed \$15,688 to the fund-raising efforts. Representing the NEMS, Roy Adair, President and CEO of Senoko Power, accepted a memento from the Minister, as a token of appreciation for the industry's efforts.

In his speech, Dr Ng called for Singaporeans to help to provide community care and support to the needy, and to increase educational opportunities for children with special needs.

EMC is proud to have been part of this community effort and hopes to unite the NEMS group for future good causes.

Minister Ng Eng Hen takes a closer look at the NEMS wristband



Market Operation Benchmarking Survey

In response to requests from market participants, we have facilitated an electricity Market Operation Benchmarking Survey (MOBS).

The purpose of the MOBS is to establish a body of reference information that we can use to benchmark our processes and guide the evolution and development of our operations.

We are committed to facilitating the benchmarking survey on an annual basis and intend to evolve the survey to ensure that both its usefulness and its relevance continue to improve over time.

We also prepared a report commenting on the survey results and identifying the areas where:

- the National Electricity Market of Singapore (NEMS) and EMC set best practice;
- the NEMS and EMC should seek improvements, making recommendations on how this should be done and
- further research should be conducted.

The following nine market operators responded to the survey:

- APX B.V. (The Netherlands)
- European Energy Exchange AG (EEX) (Germany)
- ELEXON Ltd (United Kingdom)
- ISA (Colombia)
- Korean Power Exchange (KPX) (South Korea)
- National Electricity Market of Singapore (NEMS) – Energy Market Company (EMC)
- New Zealand Electricity Market (NZEM) – M-co (New Zealand)
- Nord Pool ASA (Norway, Finland, Denmark, Sweden)
- PJM Interconnection (Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia, US)

We have provided industry CEOs with copies of the survey results and our comments. These documents will also be provided to the Rules Change Panel, the Market Surveillance and Compliance Panel and the Market Information Sharing Forum.

Upcoming Conferences with EMC Participation

• Energy Risk Management World Asia 2005 • 5 – 8 September • Singapore

Allan Dawson, CEO, speaks on Day Two on *Electricity Market Deregulation in Singapore*. For more information, visit www.terrapinn.com/2005/erma_sg

• Power-Gen Asia 2005 • 13 – 15 September • Singapore

Allan Dawson, CEO, is a panel speaker on Day Two on *Developments and Opportunities in the NEMS*. For more information, visit www.powergenasia.com

• Singapore Electricity Roundtable • 14 – 15 November • Grand Hyatt Singapore

Organised by EMC, it is attended by leading practitioners and thinkers from the electricity industry in Asia Pacific and globally. For more information see article on pages 1 and 2 and visit www.emcsg.com

• 7th International Power Engineering Conference IPEC 2005 29 November – 2 December • Singapore

EMC is a supporting organisation of this conference, which is of great interest to regional and local players. For more information, visit www.ipec.sg

User Forums

Market Information Sharing Forum (MISF)

The MISF held on 20 July reviewed, in detail, the market performance and incidents, market share and outlook, and reported on the progress of system enhancements.

The next MISF is scheduled for Wednesday, 21 September.

Settlement Initiatives Sharing Forum (SISF)

No settlement forum is currently scheduled.

Market System User Group (MSUG)

The next meeting is scheduled for Thursday, 29 September at 3.30 pm. EMC will share the NEMS system incidents and performance, in addition to providing the latest updates on major projects and initiatives.

Reconciliation of Ancillary Services

In 2004, on behalf of the Power System Operator (PSO), we contracted for black-start ancillary services to ensure the reliability of the NEMS.

	Total Contracted Ancillary Cost for 2004 (incl. 5% GST)	Total Contracted Ancillary Quantity for 2004
Contracted Black-start Services	\$12,165,400.80	68.848MW

In July 2005, EMC performed the annual cost reconciliation of the ancillary services. The total net cost of ancillary services for 2004 is \$10,359,419.20 and the reconciliation reflects a positive variance of \$1,805,981.60 compared to the 2004 contracted cost of \$12,165,400.80. This amounts to a refund of \$0.31/MWh. The variance is due to efficiency gains and was refunded to the market in August through the Monthly Energy Uplift Charge (MEUC).

Send us Comments, Feedback or Questions

The *EMC Bulletin* is written by EMC for you and we are always striving to improve our service. Therefore we are interested in any feedback you might have about specific articles and topics covered or comments and suggestions about other areas you would like to see included.

Please send your comments, feedback or any questions either via e-mail to info@emcsg.com or via fax to +65 6779 3030.

Thank you in advance for your time and effort.

Changes at EMC

Jolene Wong Administrative Assistant, Corporate Services

After being our friendly and competent receptionist for the past three years, Jolene has taken on a new responsibility within EMC. She now supports the Corporate Services Team by handling administrative duties.

Joining

Vanessa Seah Receptionist, Corporate Services

The new face at our reception is Vanessa. She has more than ten years of customer service experience, which she gained in the banking sector.

Leaving

Shashank Swan, of the Market Administration Team, left EMC at the end of August after almost four years with the company. We would like to thank Shashank for his invaluable service and for the contributions he made to EMC and the NEMS. We wish him all the best in his future endeavours.

