

Bulletin 104

May-June 2018

[CEO's Message](#)

[NEMS Charity Outing 2018](#)

[EMC's Business Continuity Preparedness Exercises for FY2017/2018](#)

[Market Update](#)

[Rule Change Update](#)

[New Entrants to the NEMS](#)

[User Forums](#)

[EMC Training Programme](#)

CEO's Message



I am pleased to announce a new key appointment in EMC. Veronica Rodriguez joined the EMC team on 11 June as Senior Vice President, Market Administration.

Prior to joining EMC, Veronica worked for the Australian Energy Market Operator (AEMO) where she led rule change processes for both the electricity and gas markets in Australia. Her experience in AEMO will undoubtedly be invaluable in moving the NEMS forward on issues relating to market design and efficiency. Veronica is excited to work with the Market Administration team and the Rules Change Panel to get the RCP Work Plan 2018/19 off the ground. I look forward to the industry's continued support and partnership in evolving the NEMS.

In relation to the Singapore Electricity Market Rules, the Energy Market Authority (EMA) approved a rule change in June to facilitate the implementation of a registration application fee by EMC on new market participants (MPs) registered in the NEMS. This allows the costs incurred in registering new MPs to be charged directly to the applicants, instead of being spread across the market which was the previous practice.

In May and June this year, the monthly Uniform Singapore Energy Price (USEP) crossed the \$110/MWh mark for the first time since July 2015. During the same period, the NEMS welcomed two new market participants (MPs) – a generator and a retailer – as well as two new intermittent generation source (IGS) facilities which raised the total registered capacity of IGS facilities to almost 38MW.

The industry got together in May for the annual event with Child at Street 11, the NEMS' adopted charity. I am heartened by the continuous strong support from the industry for these annual outings which we have been organising for the Centre's children since 2006.

Finally, I am pleased to note that we completed all our business continuity preparedness (BCP) exercises for the financial year ending June 2018 with no major issues raised. These regular BCP exercises are critical in ensuring that we are ready to respond to system incidents or emergency situations at all times, thereby minimising disruptions to Singapore's wholesale electricity market.

Toh Seong Wah
Chief Executive Officer

NEMS Charity Outing 2018



Clockwise from top:
 Volunteers with the Centre's staff and children at the event
 Children exploring the activity stations
 Volunteers taking care of the children during the outing

On 11 May, 42 volunteers from eight companies spent an enjoyable day with the children from Child at Street 11 at the National Gallery, Singapore. We are heartened to receive strong support from market participants (MPs) for this annual National Electricity Market of Singapore (NEMS) charity event.

Each year, volunteers from various companies in Singapore's power sector come together to bring the children from the Centre for an outing. The event provides an opportunity for the industry to get together for a good cause.

Child at Street 11 is a not-for-profit organisation that looks after the emotional and educational needs of vulnerable children in the Ang Mo Kio area. MPs of the NEMS have been supporting Child at Street 11 since 2006.

EMC's Business Continuity Preparedness Exercises and Plans

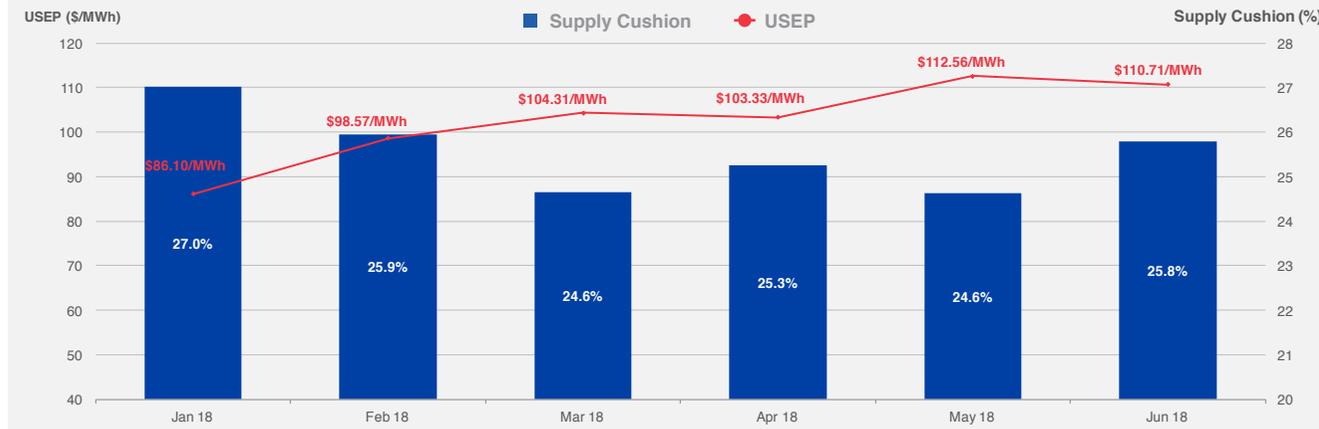
Every year, we conduct a series of business continuity preparedness (BCP) exercises to ensure that we are well prepared should a crisis occur. The following exercises were completed as part of our workplan for the financial year (FY) 2017/2018:

Type of BCP Test	Date	Activity
Disaster Recovery Preparedness Exercises	Exercise 1: June – July 2017 Exercise 2: January – March 2018	<ul style="list-style-type: none"> NEMS system switched over to backup site.
Exercise Epsilon / EMC Call Tree Activation	October 2017	<ul style="list-style-type: none"> All staff activated by phone. Management team and identified personnel reported to office within pre-specified timeframe.
Exercise Jaguar	October 2017	<ul style="list-style-type: none"> Industry-wide BCP exercise.
Exercise Thunderbolt	November 2017	<ul style="list-style-type: none"> All staff evacuated from office to simulate emergency situation.
BCP Site Readiness Test	April 2018	<ul style="list-style-type: none"> Critical teams worked from alternate office site.
Outage of Clearing Bank Test	May 2018	<ul style="list-style-type: none"> Market Operations team worked with Clearing Bank to ensure familiarity on the procedure to handle system outage situation at the bank level.
Home Quarantine Order Exercise	May 2018	<ul style="list-style-type: none"> Critical teams conducted their daily operations from home.
Desktop Scenario Test	June 2018	<ul style="list-style-type: none"> Management team worked on various scenarios to ensure familiarity with emergency crisis and business continuity procedures.

In addition to the above exercises, we conducted a major review of our BCP plans in FY2017/2018 to ensure that they are robust and updated with best practices at all times. As the operator of Singapore's wholesale electricity market (which trades 24 hours a day, 7 days a week), it is critical that EMC is able to recover trading operations quickly should there be an incident or crisis, so as to minimise disruptions to the market.

Market Update

Overview of USEP and Supply Cushion - Jan to Jun 2018



The monthly average Uniform Singapore Energy Price (USEP) rose 8.9 percent in May to reach \$112.56/MWh, which is the highest monthly level so far this year. It retreated 1.6 percent in June but remained above \$110.00/MWh. The drivers behind the high USEP in May and June include an increase in fuel price* as well as the low supply cushion, which stayed below 26.0 percent during these two months.

**The price of high sulphur fuel oil 180 CST (HSFO 180 CST) – which is used as a proxy for fuel price – rose 11.4 percent in May and a further 1.7 percent in June.*

Rule Change Update

Imposition of market participant registration application fee

In the Singapore Wholesale Electricity Market (SWEM), EMC and the Power System Operator's (PSO) administrative costs used to be recovered from market participants (MPs) in the form of variable fees that were calculated based on the amount of energy traded by the MPs.

A review of the cost recovery methodologies was conducted in 2017. One of EMC's recommendations during the review was to introduce a market participant (MP) registration application fee so that the costs incurred in providing the MP registration service would be charged directly to the applicants instead of being spread out across the market. The Rules Change Panel (RCP) supported EMC's recommendation. The Energy Market Authority (EMA) also approved the introduction of the MP registration application fee during its review of EMC's schedule of fees for the new regulatory period beginning 1 April 2018.

To implement the MP registration application fee, a rule change proposal on the relevant modifications to the Market Manual was further supported by the RCP and approved by the EMA in June 2018. The rule change took effect on 1 July 2018.

New Entrants to the NEMS

New market participants and facilities registered in the NEMS

Two new market participants (MPs) were registered in the National Electricity Market of Singapore (NEMS) in June:

Market Participant	Market Participant Class	Date Registered
TuasOne Pte Ltd	Generator	1 June
UGS Energy Pte Ltd	Retailer	8 June

The total number of retailers in the NEMS is now 23*, while the total number of generators stand at 15.

In addition, two new facilities were registered by the following MPs:

Market Participant	Facility Type	Capacity (MW)	Date Registered
Sunseap Leasing Pte Ltd	Intermittent Generation Source (IGS)	1.003	9 May
Sembcorp Solar Singapore Pte Ltd	IGS	1.980	28 June

With these additions, coupled with capacity revisions for other IGS facilities, the total registered capacity of IGS facilities is currently 37.737MW, or 0.3 percent of the total registered generation capacity in the NEMS.

**Two retailers withdrew from the NEMS in June.*

User Forums

Market Information Sharing Forum (MISF)



The Market Operations team hosted the 99th session of the bi-monthly MISF on 22 May. During the forum, the following topics were shared with the attendees:

- Market performance in March, April and the first half of May 2018;
- Key highlights in March and April 2018;
- System enhancements and projects; and
- Feature topics:
 - Recap of Demand Response (DR) and brief of DR clearing on 17 April;
 - Compensation for generators adversely affected by price revision; and
 - Segregation for cash deposit account.

We would like to thank all participants for their continuous support and strong interest in the MISF. The next MISF is scheduled for 12 July. Market participants who are interested in presenting at future MISFs are encouraged to come forward.

Market Systems User Group (MSUG)

The bi-monthly MSUG forum was held on 21 June. EMC IT updated attendees on the following topics:

- Overview of NEMS systems availability year-to-date for FY2017/2018;
- Overview of NEMS systems service desk calls received between May 2017 and April 2018;
- Overview of change releases deployed between May 2017 and April 2018;
- NEMS IT incidents and actions taken to resolve them;
- Disaster Recovery Preparedness Exercise;
- RSA Hardware Token Fees;
- Status updates on IT infrastructure projects:
 - Server Hardware Application Refresh Project (SHARP);
 - Annual Secure Sockets Layer (SSL) certificate renewal;
 - Migration to Office365; and
 - Managed Security Services (MSS).
- Status updates on application projects:
 - Migration of Offer Management System (OMS) to the Submission Management System;
 - Webservices reports for generation and retail market shares;
 - EMC corporate website user interface (UI) update; and
 - Compensation for generators adversely affected by price revision.

The next MSUG forum is tentatively scheduled for Thursday, 16 August.

EMC Training Programme

Next course on 23 and 24 August 2018

EMC will be holding the next run of its two-day course *Understanding Electricity Markets* on 23 and 24 August 2018. Our staff will be conducting seven sessions covering the following topics:

- Understanding Electricity
- Why Reform and Regulation are Essential in the Electricity Industry
- The National Electricity Market of Singapore and its Unique Features
- Introduction to SGX Electricity Futures Market
- Pricing in Detail
- Market Settlement and Credit Risk Management
- How Consumers can Influence Electricity Markets
- The course dates for 2018 are as follows:
 - 23-24 August
 - 15-16 November

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

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 Jan Lee at +65 6779 3000.