

# Bulletin 116

May-June 2020

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## CEO's Message



It has been more than five months since the first coronavirus case surfaced in Singapore. I hope that everyone has been keeping well over the last few months.

On 19 June, Singapore entered Phase 2 of a three-phased approach to the safe resumption of activities. I would like to update you on our priorities for the coming months.

Our top priority continues to be business continuity while keeping our colleagues safe at the same time. In line with the government's advisory that telecommuting should remain the default working arrangement, all EMC colleagues will continue working from home during Phase 2.

Aside from ensuring the efficient operation of the National Electricity Market of Singapore (NEMS), our teams are busy with several new and ongoing projects. The largest and most critical project is the Forward Capacity Market (FCM) which will radically transform the NEMS from an energy-only market to an energy-plus-capacity market. This is the most significant change to the NEMS market design since the market started in 2003, and our teams have been working tirelessly to meet the project's implementation timeline.

Strengthening the NEMS systems and improving our operations and processes are constant priorities at EMC. We are embarking on a crucial technology refresh of the NEMS Demand Response, Compensation and Penalty (NEMSCAP) systems, which were launched five years ago, to enhance the systems' resilience and ensure that the hardware, middleware, operating systems and applications are up-to-date. Concurrently, in the area of market surveillance and compliance, we are working to digitalise the non-compliance reporting process to make it more efficient.

In support of the Rules Change Panel's workplan for the year, we are proposing compensation guidelines for interruptible loads and reviewing the remedies for default events. EMC is also leading the two industry working groups under the Market Advisory Panel to study aggregation models for distributed energy resources, and to provide the industry's inputs on the FCM to the Energy Market Authority.

The key projects outlined above, together with other ongoing projects and daily operations, will keep us busy in the coming months. We will continue to engage and seek feedback from relevant NEMS stakeholders as needed, through communication channels such as virtual meetings and forums, as well as emails. For example, our regular Market Information Sharing Forum and Market Systems User Group forum are now held virtually, and we are glad that they remain well-attended by our market participants (MPs). We look forward to the valuable inputs and continued support from our MPs as well as other industry partners.

Finally, to safeguard the safety of our colleagues and industry friends, we have made the difficult but necessary decision to put all charity and networking events this year on hold, until such time when it is safe to resume them – including the annual NEMS charity outing and the EMC Golf Day. Nevertheless, we are happy to share that we continued to support the NEMS charity, Child at Street 11, this year with a donation to help defray some of its operating costs, as the Covid-19 pandemic has posed challenges to its fund-raising efforts.

We are monitoring the government's advisories closely, and have been actively planning and implementing the necessary safe management measures in preparation for our return to the office. I look forward to the opportunity of meeting all our industry friends again.

**Toh Seong Wah**  
Chief Executive Officer

# Working from Home – How EMC Colleagues are Acing It

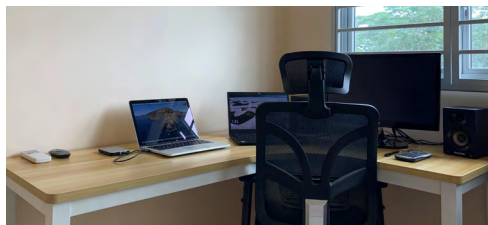
The Covid-19 pandemic has affected industries and businesses all over the world. With the implementation of the circuit breaker measures in Singapore on 7 April, workers and companies have had to adjust and adapt to a new normal, as most employees switched to working from home.

For EMC, the entire company has been working from home since 6 April – an unprecedented situation. Our colleagues have adjusted well to new routines and working environments, and have kept the operations of the National Electricity Market of Singapore (NEMS) as well as other business functions running smoothly over the past months. Here are five tips from our colleagues on how they stay motivated and ace working remotely.

## 1. Creating an office space

It can be difficult to separate work and play when you are working in the same space that you live in. Creating an office space helps you distinguish the work area from other parts of your home, enabling you to maintain a work-life balance.

"Before I organised a dedicated workstation, I faced distractions and became less productive. I believe that, as much as work must adjust to a new norm, my home must also adapt to work. The need to stay productive and work with a healthy posture at home are very important during this period," said Doren Ho, Market Analyst, Markets and Operations.

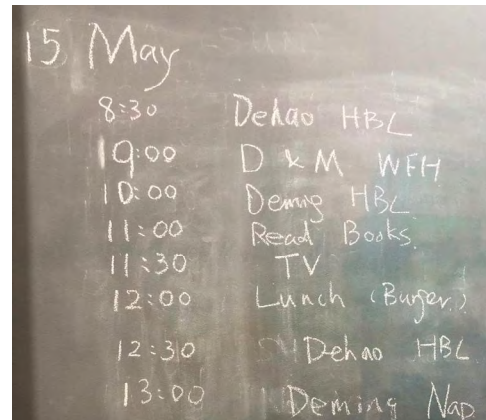


Doren Ho's office space at home

## 2. Maintaining a schedule

It is easy to lose track of time when working from home. Setting a schedule helps to instil discipline, making it easier to adhere to regular work hours and prevent burnout. This is even more essential for colleagues with young children, who have to keep track of both their own and their children's schedules.

Wang Jing, Assistant Vice President from the Market Administration team, recommends that parents with school-going children prepare a schedule to manage their activities throughout the day. "With a schedule, my kids have an idea of what comes after each activity. There are fewer disruptions from them and I am able to focus on my work, as I don't have to supervise them all the time," said Wang Jing.



Wang Jing maintains a daily schedule for her kids

## 3. Eating right and healthily

Working from home can make it difficult to eat healthily with the temptation of unhealthy food like instant noodles and snacks at hand. However, it is important to maintain a healthy diet in order to stay fit and reduce the chances of falling sick.

Debbie Tse, Strategic Project Manager, Executive Office, shared that healthy eating has given her more energy, which is especially important when working from home as the hours seem longer. It is easier to prepare her own healthy meals during this period, given the time saved from commuting.

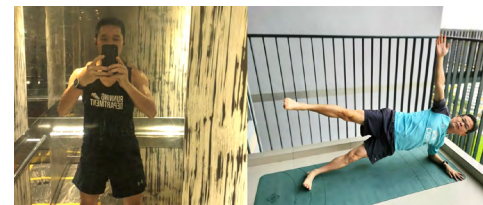


Healthy dishes prepared by Debbie Tse

## 4. Continuing to exercise

Exercising helps to build up our immune system and relieve stress, which are important during this period. According to Chen Jianhong, Vice President, Markets and Operations, "Exercising helps to release stress and enables me to work more efficiently. Making exercise a routine and joining virtual exercise groups kept me going during the circuit breaker."

Chua Hock Ann, Senior Market Analyst from the Markets and Operations team, shared that exercising creates a virtuous cycle of positive energy and sets him up for the day to take on challenges when working from home.



Chua Hock Ann and Chen Jianhong continue to exercise

## 5. Staying connected with families, friends and colleagues

Social support and interaction with others are essential for physical and mental health, which in turn affect productivity.

Serena Ho, Senior Business Development Manager from the Business Development team, said, "It is challenging to juggle working from home and caring for two active toddlers at the same time. I cope with this by asking my husband or helper to take care of them when I am having meetings, and try to do as much work as I can during their daytime naps and at night after they go to bed. I also video call my family and friends regularly to keep in touch, and maintain a support group of friends whom I share my challenges with and seek encouragement from."



Serena Ho and her husband coping with two active toddlers while working from home

# Changes to Catalogue of Data and Catalogue of Monitoring Indices

On 29 June, EMC published the updated Catalogue of Data and Catalogue of Monitoring Indices adopted by the Market Surveillance and Compliance Panel (MSCP) on the [EMC website](#). The catalogues were developed by the Market Assessment Unit (MAU) under the supervision and direction of the MSCP. They serve as an information requirement system and criteria for evaluation, to enable effective monitoring of the market. This is the first modification made by the MSCP since the start of the National Electricity Market of Singapore (NEMS).

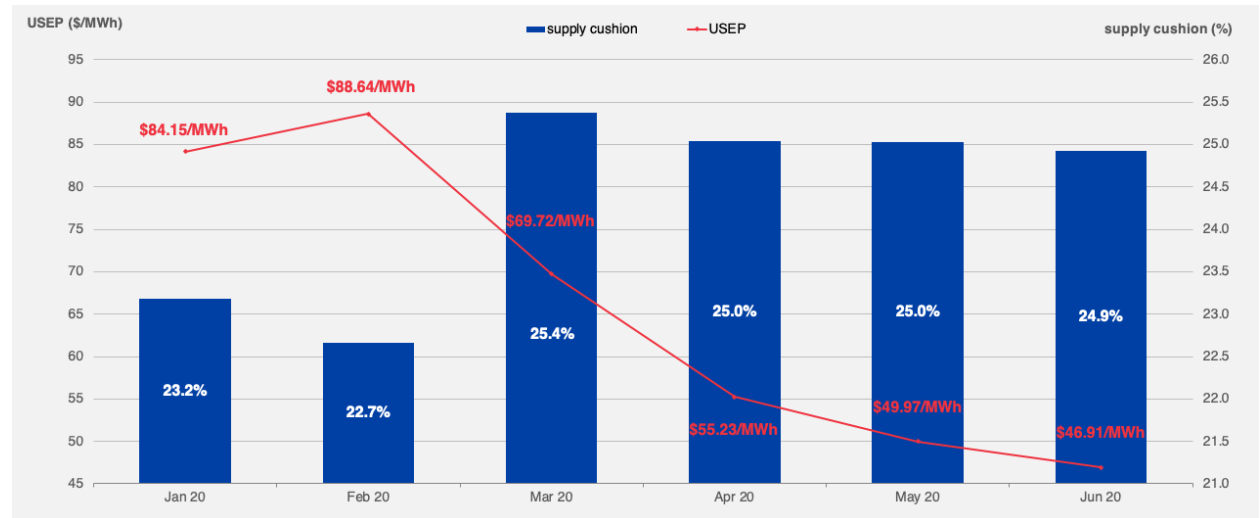
The modifications to the catalogues were proposed by the MSCP and the MAU based on a review of the developments in Singapore's wholesale electricity market. They also took into consideration an international benchmarking exercise undertaken to compare monitoring practices globally in order to establish appropriate benchmarks to adopt.

In accordance with the Singapore Electricity Market Rules, the modifications were put up for public consultation with the industry, namely, the NEMS market participants, the market support services licensee, the Power System Operator, EMC, and other interested parties. The comments received from the industry were considered by the MAU and deliberated by the MSCP at length, and adopted in the catalogues where appropriate.

The updated Catalogue of Data and Catalogue of Monitoring Indices took effect on 1 July.

# Market Update

## Overview of USEP and supply cushion – Jan to Jun 2020



The daily average Uniform Singapore Energy Price (USEP) ranged between \$36.02/MWh and \$79.00/MWh in May, and between \$34.48/MWh and \$57.79/MWh in June. The monthly average USEP dropped 9.5 percent to \$49.97/MWh in May, which was the sixth lowest monthly level since the market started in 2003. It decreased a further 6.1 percent to \$46.91/MWh in June, which was the fourth consecutive month of decline since February this year and the third lowest monthly level since 2003.

May's supply cushion remained unchanged at 25.0 percent as demand fell 1.0 percent and supply decreased 1.1 percent. The drop in May's USEP can be attributed to the fewer number of days in May when the USEP registered above \$60.00/MWh.

The average demand in June registered the first month-on-month growth since March. Singapore gradually re-opened its economy in June following the Covid-19 circuit breaker in April and May, during which most workplaces were closed and activities halted.

June's supply cushion decreased by 0.1 percentage point as a result of a 2.2 percent increase in demand and a smaller, 2.1 percent increase in supply. Despite this, the monthly average USEP fell in June as the daily USEP closed below \$60.00/MWh on all days in the month and hit a record low of \$34.48/MWh on 14 June.

A special analysis on the impact of the Covid-19 pandemic on the NEMS is available on the [EMC website](#).

# EMC's Business Continuity Preparedness Exercises and Plans

Every year, EMC conducts 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 2019/2020:

Exercise	Date	Activity
Disaster Recovery Preparedness Exercises	August – October 2019	<ul style="list-style-type: none"> <li>NEMS systems switched over to backup site.</li> </ul>
Exercise Epsilon / EMC Call Tree Activation	September 2019	<ul style="list-style-type: none"> <li>All staff activated by phone.</li> <li>Management team and identified personnel reported to office within pre-specified timeframe.</li> </ul>
Exercise Jaguar	October 2019	<ul style="list-style-type: none"> <li>Industry-wide BCP exercise.</li> </ul>
Home Quarantine Order Exercise	November 2019	<ul style="list-style-type: none"> <li>Critical teams conducted their daily operations from home.</li> </ul>

On top of completing the above exercises, our BCP plans were put to the test during the ongoing Covid-19 pandemic. The following plans were activated in line with the Covid-19 developments and advisories from the Singapore government:

BCP Plan	Date	Activity
Split Work Arrangement	February – April 2020	<ul style="list-style-type: none"> <li>All staff were divided into two teams – one team worked from home and the other worked from our office in SGX Centre.</li> <li>The teams were rotated every two weeks.</li> </ul>
Work from Home Order	April 2020 – to date	<ul style="list-style-type: none"> <li>All staff conducted their daily operations from home.</li> </ul>

There have been no disruptions to the National Electricity Market of Singapore's (NEMS) operations and EMC has been able to fulfil our obligations to the market even with all our colleagues working from home. The smooth running of the wholesale market during this challenging period is possible because of our comprehensive and robust BCP plans which are tested rigorously every year.

# User Forums

## Market Information Sharing Forum (MISF)

The Markets and Operations team hosted the 111<sup>th</sup> session of the bi-monthly MISF on 21 May virtually via WebEx due to the Covid-19 pandemic.

The following topics were shared with the attendees during the session:

- Market performance and key highlights in March and April;
- System enhancements and projects; and
- Feature topic:
  - Special analysis on the impact of Covid-19 pandemic on the National Electricity Market of Singapore (NEMS).

We would like to thank all participants for their continuous support and strong interest in the MISF. We will be conducting the next MISF virtually on 16 July via WebEx. Market participants who are interested in presenting at future MISFs are encouraged to contact the Markets and Operations team.

## Market Systems User Group (MSUG)

The bi-monthly MSUG forum was held virtually via WebEx on 18 June. EMC's Technology team updated attendees on the following topics:

- Overview of NEMS systems availability year-to-date for FY2019/2020;
- Overview of NEMS systems service desk calls received between June 2019 and May 2020;
- Overview of change releases deployed between June 2019 and May 2020;
- NEMS systems incidents;
- Planned NEMS maintenance;
- Disaster Recovery Preparedness (DRP) Exercise;
- Disabling of Transport Layer Security (TLS) 1.0 and TLS 1.1 for Single Electronic Window (SEW) and Webservices;
- Status updates on Technology (infrastructure) projects:
  - Network technology refresh; and
  - Tier 3 network segregation.
- Status updates on Technology (applications) projects:
  - Provision of processed Annual Generator Outage Programme (AGOP) data;
  - Review of timelines for provision of credit support; and
  - Review of default levy arrangements.

The next MSUG forum is tentatively scheduled for Thursday, 27 August. We will update all participants via email ahead of the forum.

# EMC Training Programme

## Next course on 20 and 21 August 2020

The next run of the two-day course *Understanding Electricity Markets* is tentatively scheduled\* on 20 and 21 August. Our trainers will be conducting six sessions covering the following topics:

- Understanding Electricity
- Why Reform and Regulation is Essential in the Electricity Industry
- The National Electricity Market of Singapore and its Unique Features
- Pricing Mechanism and Economic Dispatch
- Market Settlement and Credit Risk Management
- How Consumers can Influence Electricity Markets

The course dates\* for the second half of 2020 are as follows:

- 20 and 21 August
- 19 and 20 November

*\*Subject to changes arising from developments in the Covid-19 pandemic*

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

Further details on the programme and on how to register are on our website, [www.emcsg.com](http://www.emcsg.com). For enquiries, please e-mail [trainingprogramme@emcsg.com](mailto:trainingprogramme@emcsg.com) or contact Jan Lee at +65 6779 3000.