

Bulletin 117

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CEO's Message



For the financial year 2019/2020 which ended in June, I am pleased to report that the EMC team has once again exceeded all the performance targets set by the Energy Market Authority (EMA). We also

received high satisfaction ratings from the market participants of the National Electricity Market of Singapore (NEMS) for our annual Customer Satisfaction Survey.

The results are particularly gratifying in light of the challenging operating environment that we face this year. I would like to convey my sincere appreciation to our colleagues for keeping the NEMS operating throughout the Covid-19 circuit breaker and beyond. I also thank our regulator, governance panel members as well as market participants for your unwavering support during these unprecedented times.

All of us at EMC remain focused on our business priorities and services to the market. Following the bi-monthly industry forums, our flagship two-day training course, *Understanding Electricity Markets*, has also gone online successfully. We saw good attendance and robust participation for the first virtual run of the training course in August, and are encouraged by the positive feedback from the course participants. We look forward to more successful runs in the coming months.

In the wholesale market, the Uniform Singapore Energy Price (USEP) rose in July and August after four consecutive months of decline, but remained below \$70/MWh. In August, we registered one new interruptible load facility and rolled out a new, value-added service – processed Annual Generation Outage Plan data – to improve trading efficiency in the NEMS. A rule change on the review of the Automatic Financial Penalty Scheme (AFPS) was also approved by the EMA in the same month.

It has been more than two months since Singapore entered Phase 2 of a three-phased approach to safe re-opening. Looking ahead, while uncertainties remain from the ongoing pandemic, I am confident that with the continued partnership of all stakeholders, we can stay on course and remain focused on our efforts to develop the NEMS and Singapore's energy sector.

Toh Seong Wah
Chief Executive Officer

EMC's Non-Financial Performance Results for FY2019/2020

We are pleased to share the excellent results achieved by the EMC team for our key sets of performance measures for FY2019/2020.

We are particularly proud of our achievements this year in view of the unusual operating environment brought about by the Covid-19 pandemic, during which we have had to operate the National Electricity Market of Singapore (NEMS) remotely for a prolonged period of time. In this regard, we extend our sincere appreciation to all NEMS stakeholders for their patience and support, and to our colleagues for the tremendous effort put in to keep the market running smoothly throughout this period.

Regulated Performance Standards

For the fifth year running, EMC has exceeded all performance targets set by the Energy Market Authority (EMA) since the targets were introduced. The outstanding performance can be attributed to the team's sustained efforts in enforcing high standards and quality in our critical processes.

Service Dimension	Service Indicator	For the Period 1 Jul 2019 to 30 Jun 2020	
		Performance Target	Achievement
Systems Availability	Percentage of availability of EMC's systems including (i) trading website; (ii) clearing systems; and (iii) settlement system.	99.90%	100.00%
Pricing Accuracy	Percentage of all trading days free of incidents caused by EMC error*.	99.70%	100.00%
Settlement Accuracy	Percentage of all settlement payments free of EMC error*.	99.90%	100.00%
Customer Responsiveness	Percentage of all market participants' issues lodged with EMC Helpdesk to be resolved within 6 business days.	80.00%	100.00%
	Percentage of all market participants' issues lodged with EMC Helpdesk to be resolved within 10 business days.	100.00%	100.00%

*Excludes inaccurate data provided by other service providers or market participants in the NEMS, and trading days when the system is unavailable.



EMC Customer Satisfaction Survey

Separately, EMC conducts an annual Customer Satisfaction Survey to gather feedback from the key stakeholders of the NEMS. This is a voluntary exercise that we undertake to ensure that we continue to deliver high service levels to our stakeholders.

We are delighted to report that we continue to receive high satisfaction ratings from our stakeholders despite the challenge of managing the expectations of an increasing number and changing mix of market participants in the NEMS.

We thank all NEMS stakeholders for their trust in EMC and their continued participation in the survey. We will work towards closing the gaps where there were service lapses, while maintaining our service levels in the areas in which we have done well.

Measurement	Achievement 1 Jul 2019 – 30 Jun 2020
Satisfaction with Customer Responsiveness*	99.08%
Satisfaction with Market Assessment and Dispute Resolution Services	100.00%
Satisfaction with Rule Change Services	96.55%

*The question on Customer Responsiveness was fine-tuned to get feedback on specific services.

Update on Service Enhancement in the NEMS



EMC constantly strives to offer value-added services (VAS) to the National Electricity Market of Singapore (NEMS) and its market participants (MPs). We are pleased to provide an update on a service enhancement that we launched in August.

To help MPs utilise generation outage information conveniently and efficiently, EMC introduced a new set of processed Annual Generation Outage Plan (AGOP) data to the market on 25 August. Derived from the original AGOP provided by the Power System Operator, the processed AGOP data transforms the information on maintenance schedules into a table format, incorporates the total maintenance level of generating units out on maintenance, and is presented in a comma-separated values (CSV) file to facilitate analysis and decision-making. The processed AGOP data is now available to all MPs in the secured section of the EMC website.

We hope that this enhancement can help to improve information usage and trading efficiency. We thank all MPs for their continuous feedback and support, and will continue to explore new service enhancements to add value to the market.

Rule Change Update



Review of Automatic Financial Penalty Scheme

In 2015, the Automatic Financial Penalty Scheme (AFPS) was introduced by the Energy Market Authority (EMA) in the Singapore Wholesale Electricity Market to incentivise generation registered facilities (GRFs) to comply with dispatch schedules, thereby enhancing system reliability and stability. Under the scheme, financial penalties are imposed on GRFs if they deviate from the schedules.

Since the scheme was implemented, EMC has received feedback to conduct a review of the scheme. EMC revisited the objective of the scheme and the considerations at its conception, and examined, among other issues, the proposal raised by market participants (MPs) to broaden the cases where GRFs should be exempted from the penalties. Specifically, EMC recommended that the following cases should be exempted from penalties:

- (a) partial forced outages;
- (b) de-loading and failure to synchronise due to forced outages; and
- (c) generators that are on local control and responding positively to system disturbances.

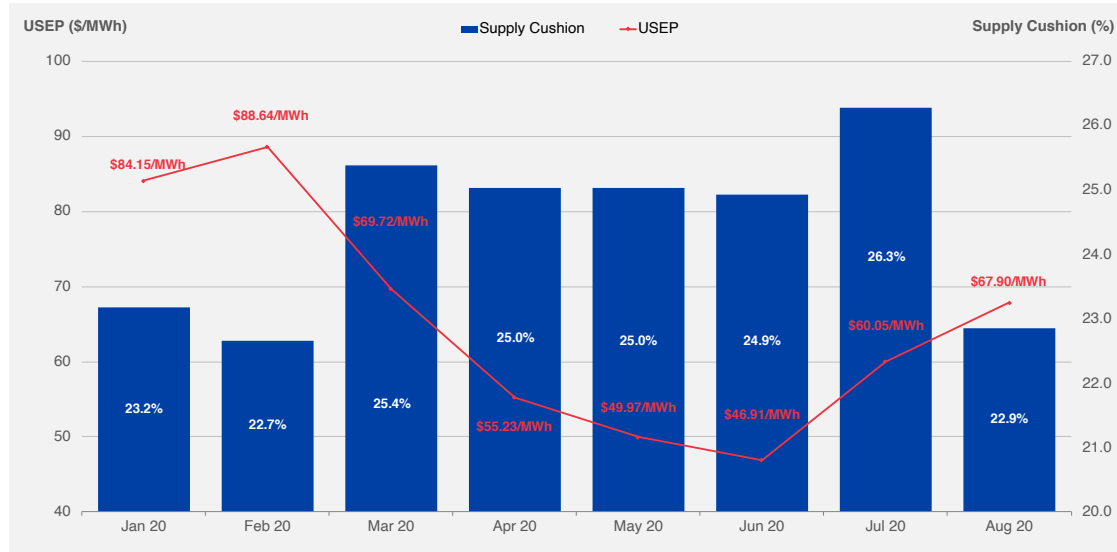
At its 112th meeting, the Rule Change Panel (RCP) supported EMC's recommendation that generators that are on local control and responding positively to system disturbances should be exempted from penalties. The RCP decided to defer the decision on the other two cases to a later date after more clarity is sought from the EMA.

The rule change, which gives effect to the Panel's decision above, was approved by the EMA on 31 August 2020 and took effect on 2 September 2020.

Details of this rule change can be found on [EMC's website](#).

Market Update

Overview of USEP and Supply Cushion – Jan to Aug 2020



The daily average Uniform Singapore Energy Price (USEP) ranged between \$44.53/MWh and \$101.27/MWh in July, and between \$57.19/MWh and \$134.37/MWh in August. The monthly average USEP, which rose 28.0 percent to \$60.05/MWh in July, increased a further 13.1 percent to \$67.90/MWh in August. The rise in the monthly average USEP in the last two months reversed the four consecutive months of downward trend recorded since March.

July's supply cushion grew to 26.3 percent as demand rose at a slower pace of 0.5 percent, against an increase of 2.3 percent in supply. The rise in July's USEP can be attributed to the increased number of days when the USEP climbed above \$50.00/MWh – there were 30 days in July which recorded a daily average USEP of more than \$50.00/MWh, compared to only ten days in June.

In August, demand rose 1.9 percent while supply dropped 2.6 percent. This led to a decline in the supply cushion by 3.4 percentage points, which contributed to the higher USEP in August.

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

New Entrant to the NEMS

One new facility registered in the NEMS



One market participant registered a new facility in the National Electricity Market of Singapore (NEMS) in August:

Market Participant	Facility Type	Capacity (MW)	Date Registered
Red Dot Power	Interruptible Load (IL)	2.0	14 August

With the addition of this new facility, the total registered capacity of IL facilities for contingency reserve in the NEMS increases to 14.1MW.

User Forums

Market Information Sharing Forum (MISF)

The Markets and Operations team hosted the 112th session of the bi-monthly MISF on 16 July virtually via WebEx.

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

- Market performance and key highlights in May and June;
- System enhancements and projects; and
- Feature topics:
 - Refresher on nodal pricing; and
 - New, processed Annual Generation Outage Plan (AGOP) in comma-separated values (CSV) format.

We would like to thank all participants for their continuous support and strong interest in the MISF.

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 27 August. EMC's Technology team updated attendees on the following topics:

- Overview of NEMS systems availability year-to-date for FY2020/2021;
- Overview of NEMS systems service desk calls received between August 2019 and July 2020;
- Overview of change releases deployed between August 2019 and July 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;
- Changes to the NEMS systems user account form (version 2.0);
- 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 (Stage 2).

The next MSUG forum is tentatively scheduled for Thursday, 15 October. We will update all participants via email ahead of the forum.

EMC Training Programme

Next course on 19 and 20 November 2020

The next run of the two-day course *Understanding Electricity Markets* is tentatively scheduled* on 19 and 20 November. 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

**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. For enquiries, please e-mail trainingprogramme@emcsg.com or contact Jan Lee at +65 6779 3000.