

Bulletin 124

September–October 2021

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CEO's Message



A tight global gas market has caused sustained price spikes in the Singapore Wholesale Electricity Market (SWEM) in recent months, given our reliance on natural gas for electricity generation. In October, high gas prices coupled with high demand and tight supply conditions pushed the monthly average Uniform Singapore Energy Price (USEP) to its highest level since the market started, at \$491.24/MWh.

EMC, as the operator of the SWEM, is committed to ensuring that the market remains efficient and operations are not disrupted during this challenging period. We have doubled our efforts in making sure that prices in the market accurately reflect prevailing market conditions. Our Market Assessment Unit (MAU) which supports the National Electricity Market of Singapore's (NEMS) independent governance panel, the Market Surveillance and Compliance Panel (MSCP), investigates unusual price events on behalf of the MSCP to ensure that no Market Rules are breached, and submits reports on its investigations to the Energy Market Authority. Finally, in the event of payment defaults by any market participant (MP), our Markets and Operations team works expeditiously with the MAU and the MSCP to suspend the defaulting MP's operations, so as to minimise the financial impact to the market.

Despite these challenging times, I am glad that we continue to see new investments in the NEMS. In the last two months, we welcomed two new waste-to-energy generation facilities and two new load registered facilities. These help to diversify Singapore's energy sources and enhance the reliability of our power system.

As part of our ongoing efforts to add value to the market, I am also pleased to share that our inaugural *Market Clearing Workshop* was held successfully over four half-days in October, for a mixed group of local and overseas participants from the energy sector.

Singapore has extended its current Covid-19 restrictions under the Stabilisation Phase, which started on 27 September, for another month to 21 November. In line with the government's advisory, all EMC staff will continue to work from home until further notice. There will be no impact on the market's operations, and we would like to thank our MPs once again for their understanding and support.

Toh Seong Wah
Chief Executive Officer

EMC Supports Child at Street 11



The industry's last outing with Child at Street 11 in May 2019

It has been more than two years since we were able to have a physical event with the children from Child at Street 11, the charity that the National Electricity Market of Singapore (NEMS) has supported since 2006.

Child at Street 11 provides emotional and educational support for vulnerable children. The ongoing Covid-19 pandemic has resulted in additional challenges for the Centre. Besides funding its daily operations, it is also supporting the families of its beneficiaries who are struggling with paying for their children's fees and uniforms during this challenging period.

We channelled our support for the Centre this year towards its *Help the Children* campaign on giving.sg, which enables the Centre to receive a dollar-for-dollar matching grant under an enhanced fund-raising programme.

If you are keen to support vulnerable groups in our community, do consider supporting Child at Street 11's project too. You can also reach out to the Centre directly at child@street11.org.sg to find out how else you can help.

EMC's Halloween Event



Staff actively participating in the scavenger hunt

Working remotely did not stop us from having a spooky and fun Halloween party in October!

From Halloween-themed virtual backgrounds, a bingo game to a scavenger hunt, our colleagues participated enthusiastically and tried to outdo each other in both individual and team games. Congratulations to all winners. You truly deserve your victories!

We capped off the exciting afternoon with our bi-monthly birthday celebration – this time, to celebrate the birthdays of colleagues born in the months of September and October.

We are all looking forward to the next event for some fun engagement outside of work.

New Entrants to the NEMS

Four new facilities registered in the NEMS

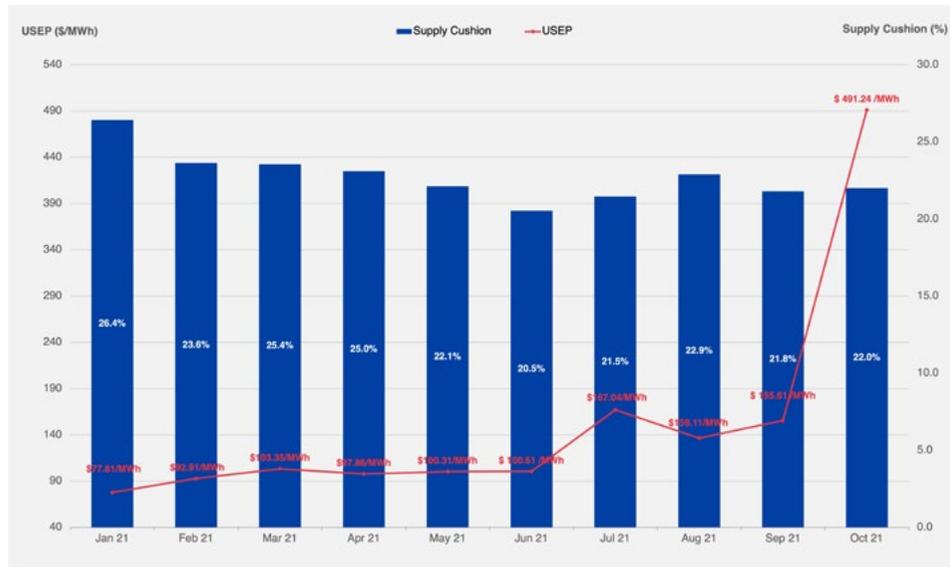
Two market participants registered four new facilities in the National Electricity Market of Singapore (NEMS) in September and October:

Market Participant	Facility Type	Capacity (MW)	Date Registered
TuasOne Pte Ltd	Steam Turbine (ST)	66.7	3 September
		66.7	
Keppel Electric Pte Ltd	Load Registered Facility (LRF)	1.0	19 October
		1.0	

With these additions, the total registered capacity of ST generators stands at 1,153.8MW and the total registered contingency reserve capacity for LRFs stands at 9.9MW.

Market Update

Overview of USEP and supply cushion – Jan to Oct 2021



The daily average Uniform Singapore Energy Price (USEP) ranged between \$97.31/MWh and \$829.55/MWh in September, and between \$121.10/MWh and \$1,821.60/MWh in October. The monthly average USEP rose 13.9 percent to \$155.61/MWh in September, and a further 215.7 percent to \$491.24/MWh in October, which is the highest monthly level since the market started.

In September, demand increased 1.0 percent to 6,238MW while supply decreased 0.3 percent. This resulted in a 1.0 percentage point drop in the monthly supply cushion to 21.8 percent and contributed to the increase in the monthly USEP.

In October, demand rose 1.0 percent to 6,298MW which is the second highest level since the market started. Although supply increased more, by 1.2 percent, which led to a 0.2 percentage point improvement in the supply cushion, the recent global gas supply issues and the high demand drove October's USEP up to a new high.

Inaugural Market Clearing Workshop



Participants and EMC course presenters at the inaugural Market Clearing Workshop

We conducted our first *Market Clearing Workshop* in October virtually, with a total of 11 local and overseas participants from the energy sector.

Throughout the four half-days of the workshop, participants engaged our market-clearing specialists on the unique features of the National Electricity Market of Singapore (NEMS) such as the co-optimisation of energy, reserve and regulation, and the pricing and scheduling of demand response by the Market Clearing Engine (MCE). With the demonstrations using EMC's proprietary market clearing software, participants were able to appreciate how the various data inputs and constraints interact to impact prices and schedules in the NEMS.

We are planning the next run of the *Market Clearing Workshop* in April 2022. Do look out for more details on our [website](#). For enquiries, please e-mail trainingprogramme@emcsg.com or contact Jan Lee at +65 6779 3000.

User Forums



Market Information Sharing Forum (MISF)

EMC's Markets and Operations team hosted the 119th session of the bi-monthly MISF on 16 September virtually via WebEx.

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

- Market performance and key highlights in July and August;
- System enhancements and projects; and
- Feature topics:
 - System enhancements for auto-renewal Banker's Guarantee and Standby Letter of Credit;
 - Demand Response simulation; and
 - Survey on corrected meter file to market participants.

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.

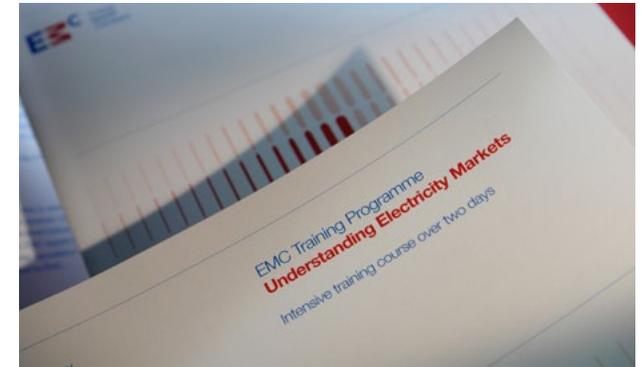
Market Systems User Group (MSUG)

The bi-monthly MSUG forum was held virtually via WebEx on 21 October. 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 availability year-to-date for FY2021/2022;
- Overview of NEMS systems service desk calls received between October 2020 and September 2021;
- Overview of change releases deployed between October 2020 and September 2021;
- NEMS systems incidents;
- Planned NEMS maintenance;
- Disaster Recovery Preparedness (DRP) Exercise;
- Status updates on Technology (infrastructure) project:
 - NEMSCAP Refresh Project (NRP).
- Statistics on report downloads (via Web Services);
- Setting of hard limit threshold on report downloads (via Web Services) for all market participants from 1 September;
- Status updates on Technology (applications) projects:
 - Migration of Submissions Management System;
 - NEMSCAP Refresh Project (NRP); and
 - Settlement Engine Application Upgrade Project.

The next MSUG forum is tentatively scheduled for Thursday, 16 December. We will update all participants via email ahead of the forum.

EMC Training Programme



Next course on 17 and 18 February 2022

The next run of the virtual two-day course *Understanding Electricity Markets* is scheduled on 17 and 18 February 2022. 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

Further details on the programme and on how to register can be found on our [website](#). For enquiries, please e-mail trainingprogramme@emcsg.com or contact Jan Lee at +65 6779 3000.