The highlight for the Singapore electricity industry in 2018 is undoubtedly the launch and subsequent rollout of the Open Electricity Market (OEM). EMC is excited to support the liberalisation of the retail electricity market with PowerSelect, an electricity procurement portal that helps businesses purchase electricity more efficiently. The successful launch of PowerSelect was the culmination of many months of hard work by our colleagues in partnership with electricity retailers, customers and vendors. I thank everyone who was involved for their tremendous support.

In the wholesale electricity market, the monthly Uniform Singapore Energy Price (USEP) has been above the $100/MWh mark since March this year. At the annual level, the USEP is 36.2 percent higher than 2017’s level, which corresponds with the 31.5 percent increase in fuel oil price this year.

The last two months of the year saw the registration of four new intermittent generation source facilities in the market, and the approval of a rule change on the publication of additional load scenarios in the forecast schedules. We ended the year hosting visitors from the United States of America and Asia who were keen to learn from Singapore’s market liberalisation experience.

I would like to take this opportunity to convey my appreciation to all market participants, governance panels, the Energy Market Authority and other business partners for your trust and partnership in the past year. I wish everyone the best and look forward to achieving new milestones with you in 2019.

Toh Seong Wah
Chief Executive Officer
Visitors to EMC

In the last two months of the year, we welcomed visitors from the United States of America (USA) and Asia.

In November, we were privileged to host Phillip Harris, the former Chairman, President and CEO of PJM Interconnection, a regional transmission organisation in the USA, and member of the National Electricity Market of Singapore’s (NEMS) Dispute Resolution and Compensation Panel. Phillip visited EMC to get an update on the market design as well as issues and challenges faced by Singapore's electricity market.

In the following month, we received two Asian delegations – one from the National Assembly Budget Office (NABO) of the Republic of Korea and the other from the Sustainable Energy Development Authority (SEDA) of Malaysia – who wanted to have a deeper understanding of Singapore's electricity market and our liberalisation journey.

Rule Change Update

Publishing additional load scenarios in the forecast schedules

EMC currently publishes three types of forecast schedules: namely the short-term schedule (STS), the pre-dispatch schedule (PDS) and the market outlook scenario (MOS).

Besides the normal load scenario, which uses the load forecast provided by the Power System Operator (PSO), the PDS and the MOS also include a high load scenario and a low load scenario. These additional load scenarios provide an indication of the market outcomes if the eventual load forecast for a given period were to deviate by 100MW from the current forecast for that period.

Since the STS is published most frequently and closest to real-time, having forecast information relating to different load levels in the STS would be more useful to market participants (MPs) compared to having the information in the PDS and the MOS.

A rule change was thus made to introduce the high and low load scenarios in the STS, while removing the same from the PDS and the MOS. With this change, all forecast schedules will continue to be produced using the normal load forecast with additional high and low load scenarios included only in the STS.

The rule change was supported by the Rules Change Panel (RCP) in July and approved by the Energy Market Authority (EMA) on 14 November. It will come into effect on 28 May 2019.

For more details of the above rule change, please visit EMC’s website.
Four new facilities were registered by three market participants (MPs) in November and December:

<table>
<thead>
<tr>
<th>Market Participant</th>
<th>Facility Type</th>
<th>Capacity (MW)</th>
<th>Date Registered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sun Electric Energy Assets Pte Ltd</td>
<td>Intermittent Generation Source (IGS)</td>
<td>0.150</td>
<td>28 November</td>
</tr>
<tr>
<td>Sunseap Leasing Pte Ltd</td>
<td>IGS</td>
<td>0.428</td>
<td>7 December</td>
</tr>
<tr>
<td>Changi Mega Solar Pte Ltd</td>
<td>Non-exporting IGS</td>
<td>2.840</td>
<td>28 December</td>
</tr>
</tbody>
</table>

With these additions, the total registered capacity of IGS facilities stands at 50.483MW, or 0.4 percent of the total registered generation capacity in the NEMS.
User Forums

Market Information Sharing Forum (MISF)

The Market Operations team hosted the 102nd session of the bi-monthly MISF on 13 November. During the forum, the following topics were shared with the attendees:

- Market performance in September and October 2018;
- Key highlights in September and October 2018;
- System enhancements and projects; and
- Feature topics:
  - Revamp of trading reports;
  - New Banker’s Guarantee format; and
  - Payment Default.

We would like to thank all participants for their continuous support and strong interest in the MISF. The next MISF is scheduled for 10 January 2019. 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 20 December. EMC Technology team updated attendees on the following topics:

- Overview of NEMS systems availability year-to-date for FY2018/2019;
- Overview of NEMS systems service desk calls received between December 2017 and November 2018;
- Overview of change releases deployed between December 2017 and November 2018;
- NEMS systems incident;
- Planned NEMS maintenance;
- Disaster Recovery Preparedness Exercise;
- Status updates on Technology (infrastructure) projects:
  - Server Hardware Application Refresh Project (SHARP); and
  - Managed Security Services (MSS);
- Status updates on Technology (applications) projects:
  - Annual Generator Outage Programme (AGOP) file upload and publication in Excel;
  - Additional load scenarios publication;
  - Load forecasts validation; and
  - Risk exposure enhancement.

The next MSUG forum is tentatively scheduled for Thursday, 28 February 2019.

EMC Training Programme

Next course on 21 and 22 February 2019

EMC will be holding the next run of its two-day course Understanding Electricity Markets on 21 and 22 February 2019. 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 2019 are as follows:

- 21-22 February
- 16-17 May
- 22-23 August
- 14-15 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.