

## **CATALOGUE OF MONITORING INDICES 2020**

As required under section 4.3.2 of Chapter 3 of the Singapore Electricity Market Rules (“Market Rules”), the Catalogue of Monitoring Indices was developed by the Market Assessment Unit (“MAU”), under the supervision and direction of the Market Surveillance and Compliance Panel (“MSCP”). The Catalogue of Monitoring Indices is used by the MSCP/MAU to evaluate the data acquired pursuant to the Catalogue of Data.

The Catalogue of Monitoring Indices was published on 29 July 2004 and made effective from 1 August 2004.

In accordance with section 4.3.6 of Chapter 3 of the Market Rules, the MAU, under the supervision and direction of the MSCP, has re-evaluated and proposed modifications to the Catalogue of Monitoring Indices as the Panel deemed appropriate.

The proposed updated Catalogue of Monitoring Indices was published by the Energy Market Company Pte Ltd for public comment on 13 April 2020. The MSCP has considered all comments submitted and has provided responses accordingly. The Catalogue of Monitoring Indices, where appropriate, has been modified based on the comments received through the consultation with market participants, service providers and all other interested parties.

The MSCP hereby adopts the Catalogue of Monitoring Indices attached, effective from 1 July 2020.

**29 June 2020**

**Catalogue of Monitoring Indices 2020**  
**National Electricity Market of Singapore**  
**Effective from 1 July 2020**

Type of Indices	No.	Description
Supply	1.	Capacity ratio of a generation registered facility – Ratio of a generation registered facility's (a) scheduled generation output to (b) maximum generation capacity
	2.	Supply cushion – Ratio of (a) the difference between total offered volume and system demand to (b) total offered volume
	3.	Outage frequency
	4.	Market share by: (a) generation type; (b) generation licensee; and (c) generation registered facility, and corresponding Herfindahl-Hirschman Index (“HHI”)
	5.	Percentage of time output when there was 1 pivotal supplier
	6.	Trend of price setting generating units
	7.	Comparison of metered generation quantity with scheduled dispatch quantity by generation registered facility/generation licensee
	8.	Frequency of issuance by the Power System Operator (“PSO”) of dispatch instructions deviating from real-time dispatch schedule
	9.	Frequency of offer/bid variations or revisions to standing offers/bids exceeding offer/bid change limits
	10.	Reasons and timings for the change in offer/bid variations exceeding offer/bid change limits
	11.	Frequency of demand response activation and analysis of energy bids
Demand	12.	Comparison of latest available very short-term load forecast with real-time load forecast
	13.	Comparison of real-time load forecast with metered generation quantity
Price	14.	Trend of Uniform Singapore Energy Price (“USEP”), reserve prices, regulation price and comparison of trends
	15.	Percentage of hours and quantity of load when wholesale electricity price <sup>1</sup> (“WEP”) falls into a particular price range
	16.	Correlation between WEP and system demand
	17.	Correlation between WEP and fuel price
	18.	Comparison of latest available short-term schedule projected prices with real-time prices

<sup>1</sup> The WEP comprises of the USEP, the allocated regulation price (“AFP”), hourly energy uplift charge (“HEUC”), monthly energy uplift charge (“MEUC”), Energy Market Company Pte Ltd (“EMC”) fees and PSO fees.