

PUBLIC CONSULTATION ON RE-EVALUATION AND MODIFICATION OF CATALOGUE OF MONITORING INDICES

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. A revised Catalogue of Monitoring Indices was adopted by the MSCP and made effective since 1 July 2020, after considering public comments received through consultation with market participants, service providers and all other interested parties in accordance with section 4.3.3 of Chapter 3 of the Market Rules.

Pursuant to section 4.3.6 of Chapter 3 of the Market Rules, the MSCP/MAU has re-evaluated and modified the Catalogue of Monitoring Indices 2020 to reflect the developments in the National Electricity Market of Singapore and the manner in which the monitoring indices are used for the MSCP’s market monitoring and reporting purposes. The proposed updated Catalogue of Monitoring Indices is enclosed in this paper.

Market participants, the market support services licensee, the Power System Operator, Energy Market Company Pte Ltd, and other interested parties are invited to provide comments on the proposed updated Catalogue of Monitoring Indices to the MSCP by 25 July 2024:

Market Surveillance and Compliance Panel
c/o Market Assessment Unit
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4 July 2024

Proposed Updated Catalogue of Monitoring Indices National Electricity Market of Singapore

Type of Index	No.	Monitoring Index	Means of Evaluation ¹
Market Concentration	1.	Market Concentration Index	Market share by: (a) generation type; (b) generation licensee; and (c) generation registered facility
	2.		Herfindahl-Hirschman Index (HHI)
	3.		Pivotal supplier test
Supply	4.	Price Setter Index	Trend of price setting generating units
	5.	Utilisation Index	Capacity ratio: Ratio of a generation registered facility's (a) scheduled generation output to (b) maximum generation capacity
	6.	Outage Index	Trend of outage volume
	7.	Offer Index	Supply cushion: Ratio of (a) the difference between total offered volume and system demand to (b) total offered volume
			Available generation capacity: Capacity that is not offered to the market even though the generation units are not on planned nor unplanned maintenance
			Analysis of offer/bid variations or revisions to standing offers/bids exceeding offer/bid change limits
8.	Demand Response Index	Trend of demand response activation	
Demand	9.	Actual Demand Index	Trend of actual demand
	10.	Load Forecast Index	Comparison of load forecast with real-time load forecast
Comparison of real-time load forecast with metered generation quantity			
Price	11.	Energy Price Index	Trend of Uniform Singapore Energy Price ("USEP")
			Trend of Wholesale Electricity Price ("WEP") ² and its correlation with vesting price, fuel oil price, electricity tariff
			Correlation between WEP and system demand
			Percentage of hours and quantity of load when WEP falls into a particular price range

¹ The means of evaluation is not exhaustive and is only intended to provide a list of examples under the monitoring index. This may be subject to change depending on the current market conditions to determine the evaluation that is best suited to be used.

² 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.

Type of Index	No.	Monitoring Index	Means of Evaluation ¹
			Comparison of latest available short-term schedule projected prices with real-time prices
Ancillary Services	12.	Reserve Index	Trend of reserve prices
			Trend of reserve requirement and reserve payment
	13.	Regulation Index	Trend of regulation prices and comparison of trends
			Trend of regulation availability
	14.	Interruptible Load Index	Trend of interruptible load activations in the contingency reserve market
			Trend of interruptible load in provision of scheduled reserve