

PUBLIC CONSULTATION ON RE-EVALUATION AND MODIFICATION OF THE CATALOGUE OF DATA

As required under section 4.3.2 of Chapter 3 of the Singapore Electricity Market Rules ("Market Rules"), the Catalogue of Data was developed by the Market Assessment Unit ("MAU"), under the supervision and direction of the Market Surveillance and Compliance Panel ("MSCP"). It is a detailed catalogue of all the data or categories of data the MSCP/MAU will have the need or means of acquiring.

The Catalogue of Data was made effective since 1 October 2003, 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. The Catalogue of Data was further updated and adopted by the MSCP on 1 July 2020 and 1 February 2023 respectively.

Pursuant to section 4.3.6 of Chapter 3 of the Market Rules, the MSCP/MAU has reevaluated and modified the Catalogue of Data. The proposed updated Catalogue of Data is enclosed in this paper.

Market participants, the market support services licensee ("MSSL"), the Power System Operator ("PSO"), Energy Market Company Pte Ltd ("EMC"), and other interested parties are invited to provide comments on the proposed updated Catalogue of Data to the MSCP by 25 July 2024:

Market Surveillance and Compliance Panel c/o Market Assessment Unit E-mail: <u>mau@emcsg.com</u>

4 July 2024

Proposed Updated Catalogue of Data National Electricity Market of Singapore

Items marked "*" are considered confidential information

Type of Data	No.	Description	Frequency of Collection	Source	Means of Obtaining	MSCP/MAU Comments
Generation Registered Facility	1	Maximum generation capacity of each generation registered facility	Once and within 3 business days upon change	EMC	EMC website	
Characteristics Data	2*	Maximum ramp-up rate of each generation registered facility	Once and within 3 business days upon change	EMC	By e-mail	
	3*	Maximum ramp-down rate of each generation registered facility	Once and within 3 business days upon change	EMC	By e-mail	
	4	Maximum reserve capacity (primary and contingency) of each generation registered facility	Once and within 3 business days upon change	EMC	EMC website	
	5*	Maximum combined generation capacity and reserve capacity of each generation registered facility	Once and within 3 business days upon change	EMC	By e-mail	
	6	Maximum regulation capacity of each generation registered facility	Once and within 3 business days upon change	EMC	EMC website	
	7*	Registered automatic generator control ("AGC") maximum energy output level for each generation registered facility	Once and within 3 business days upon change	EMC	By e-mail	
	8*	Registered AGC minimum energy output level for each generation registered facility	Once and within 3 business days upon change	EMC	By e-mail	
	9*	Fuel type of each generation registered facility	Once and within 3 business days upon change	Generation Licensee	By e-mail	
	10	Date the generation registered facility was first commissioned	Once	EMC	By e-mail	

Type of Data	No.	Description	Frequency of Collection	Source	Means of Obtaining	MSCP/MAU Comments
	11*	Total forced outage duration (past quarter) of each generation registered facility	Quarterly	PSO	By e-mail	
	12	Annual planned outage plan of each generation registered facility	Once and within the next business day upon change	PSO	EMC website	
Generation Settlement Facility ¹	13	Maximum generation capacity of each generation settlement facility	Once and within 3 business days upon change	EMC	EMC website	
Characteristics Data	14*	Maximum ramp-up rate of each generation settlement facility	Once and within 3 business days upon change	EMC	By e-mail	
	15*	Maximum ramp-down rate of each generation settlement facility	Once and within 3 business days upon change	EMC	By e-mail	
	16*	Fuel type of each generation settlement facility	Once and within 3 business days upon change	Generation Licensee	By e-mail	
	17	Date the generation settlement facility was first commissioned	Once	EMC	By e-mail	
Load Registered Facility Characteristics	18	Maximum load curtailment capacity of each load registered facility	Once and within 3 business days upon change	EMC	EMC website	
Data	19*	Maximum ramp-up rate of each load registered facility	Once and within 3 business days upon change	EMC	By e-mail	
	20*	Maximum ramp-down rate of each load registered facility	Once and within 3 business days upon change	EMC	By e-mail	
	21	Maximum reserve capacity (primary and contingency) of each load registered facility	Once and within 3 business days upon change	EMC	EMC website	
	22	Date the load registered facility was first commissioned	Once	EMC	By e-mail	

¹ Includes Intermittent Generation Facility.

Type of Data	No.	Description	Frequency of Collection	Source	Means of Obtaining	MSCP/MAU Comments
Import Registered Facility	23	Maximum import capacity of each import registered facility	Once and within 3 business days upon change	EMC	EMC website	
Characteristics Data	24*	Minimum scheduled quantity of each import registered facility established by the EMA	Once and within the next business day upon change	EMC	By e-mail	
	25	Annual planned outage plan of each import registered facility	Once and within the next business day upon change	PSO	EMC website	
	26*	Total forced outage duration (past quarter) of each import registered facility	Quarterly	PSO	By e-mail	
Transmission System Data	27*	Ratings of transmission lines import links from Malaysia	Once and within 3 business days upon change	PSO	By e-mail	
	28	Proposed transmission line de-rating advice	Upon occurrence, by the next business day	PSO	By e-mail	
	29	Proposed transmission line maintenance outage programme	Daily, by the next business day	PSO	EMC website	
Supply Data	30*	Occurrences of discretionary dispatch action taken by PSO	Upon occurrence, by the next business day	PSO	By e-mail	
	31*	Occurrences of measures introduced by	Upon occurrence, by the next business day	EMA/PSO	By e-mail	
	32*	Offers/bids of energy, reserve and regulation submitted by all market participants	Daily	EMC	By CSV reports	
	33*	Offers/bids submitted after gate closure	Daily, by the next business day	EMC	By CSV reports	
	34*	Scheduled dispatch quantities of energy, reserve and regulation by generation/load/import registered facility and market participant	Daily, within 6 business days after the trading day	EMC	By CSV reports	
	35*	Pre-dispatch solar generation forecast	Daily, within 6 business days after the trading day	EMC	By CSV reports	This is a new addition to reflect the development in the market.

Type of Data	No.	Description	Frequency of Collection	Source	Means of Obtaining	MSCP/MAU Comments
	36*	Real-time solar generation forecast	Daily, within 6 business days after the trading day	EMC	By CSV reports	This is a new addition to reflect the development in the market.
	37*	Maximum target, minimum target and initial output of each scheduled generation/import registered facility	Daily	EMC	By CSV reports	
	38*	Metered generation quantity by generation registered facility/market participant	Daily, within 11 business days after the trading day	EMC	By CSV reports	
	39	Generation/import registered facility de- rating notification	Upon occurrence, by the next business day	PSO	By e-mail	
	40	Security constraints (location, timing, volume, cause)	Upon occurrence, by the next business day	PSO	EMC website	
	41	Load shed forecast	Upon occurrence, by the next business day	PSO	EMC website	
	42	Load shed advisory notice	Upon occurrence, by the next business day	PSO	EMC website	
	43*	Intertie schedule	Daily, within 6 business days after the trading day	EMC	By CSV reports	
Demand Data	44	Pre-dispatch load forecast	Daily, within 6 business days after the trading day	EMC	By CSV reports	
	45	Real-time load forecast	Daily, within 6 business days after the trading day	EMC	By CSV reports	
	46	Actual system demand (settlement ready metering data)	Daily, within 11 business days after the trading day	EMC	By CSV reports	
Pricing Data	47	Half-hourly Market Energy Price ("MEP") at all market network nodes ("MNN")	Daily, within 6 business days after the trading day	EMC	By CSV reports	
	48	Half-hourly Uniform Singapore Energy Price ("USEP")	Daily, within 6 business days after the trading day	EMC	By CSV reports	
	49	Half-hourly regulation price	Daily, within 6 business	EMC	By CSV	

Type of Data	No.	Description	Frequency of Collection	Source	Means of Obtaining	MSCP/MAU Comments
			days after the trading day		reports	
	50	Half-hourly reserve prices: primary and contingency	Daily, within 6 business days after the trading day	EMC	By CSV reports	
	51	Half-hourly prices related to the Temporary Price Cap ("TPC") (i.e. Reference USEP, Moving Average Price ("MAP"), MAP threshold) and TPC application	Daily	EMC	EMC website	This is a new addition to reflect the development in the market.
	52	Uplift charges	Daily, within 11 business days after the trading day	EMC	By CSV reports	
	53*	Pre-dispatch schedules	Daily, within 6 business days after the trading day	EMC	By CSV reports	
	54*	Real-time dispatch schedules	Daily, within 6 business days after the trading day	EMC	By CSV reports	
	55	Half-hourly Wholesale Electricity Price ("WEP")	Daily, within 11 business days after the trading day	EMC	By CSV reports	
Other Data	56	Advisory notices reported by frequency, time, day and type	Daily, within 6 business days after the trading day	EMC	EMC website	
	57*	Information on issuance of notice of default and exercise of rights of credit support	Upon occurrence, on the same business day	EMC	By e-mail	
	58*	Information on total cost and providers of contracts of ancillary services	Within 10 business days of entry into new contracts	EMC	By CSV reports	
	59*	Total turnover in the energy market (in MWh and \$)	Monthly, within 11 business days after month end	EMC	By CSV reports	
	60*	Information on issuance and satisfaction of margin calls	Upon occurrence, on the same business day	EMC	By e-mail	

Type of Data	No.	Description	Frequency of Collection	Source	Means of Obtaining	MSCP/MAU Comments
	61*	Information in relation to penalty imposed under the automatic financial penalty scheme on generation/load registered facility	Daily, within 10 business days after the trading date	EMC	By CSV reports	
	62*	Information in relation to non-compliance of embedded generation's declared quantity	Daily, within 10 business days after the trading date	EMC	By CSV reports	
	63*	Information in relation to non-compliance of import registered facility's scheduled quantity requirement	Daily, within 10 business days after the trading date	EMC	By CSV reports	