

**Proposed Catalogue of Data
Singapore Wholesale Electricity Market
Effective From [1 calendar month after the EMC publishes
the catalogue adopted by the Market Surveillance and Compliance Panel],
with data provided from market start**

Type of data		Description	Frequency of collection	Source	Means of obtaining
Generation Registered Facility Characteristics Data	1	Maximum installed capacity of each generation registered facility	Once and within 3 business days upon change	PSO	By fax
	2	Maximum generation capacity of each generation registered facility	Once and within 3 business days upon change		
	3	Maximum ramp-up rate of each generation registered facility	Once and within 3 business days upon change		
	4	Maximum ramp-down rate of each generation registered facility	Once and within 3 business days upon change		
	5	Maximum reserve capacity (primary, secondary and contingency) of each generation registered facility	Once and within 3 business days upon change		
	6	Maximum combined generation capacity and reserve capacity of each generation registered facility	Once and within 3 business days upon change		
	7	Maximum regulation capacity of each generation registered facility	Once and within 3 business days upon change		
	8	Maximum energy output at which AGC can operate for each generation registered facility	Once and within 3 business days upon change		
	9	Minimum energy output at which AGC can operate for each generation registered facility	Once and within 3 business days upon change		
	10	Fuel type of each generation registered facility	Once and within 3 business days upon change		
	11	Heat rate of each generation registered facility	Monthly, within 10 business days after month end	Generation Licensee	By E-mail
	12	Year the generation registered facility was first commissioned	Once		
	13	Total annual forced outage hours (past three years) of each generation registered facility	Once		
	14	Total annual planned outage hours (past three years) of each generation registered facility	Once		
	15	Total annual overhaul hours (past three years) of each generation registered facility	Once		
	16	Annual availability factor i.e. the percentage of time a generation registered facility is available to generate electricity in a year (past three years) of each generation registered facility	Once		

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Transmission System Data	17	Maps and diagrams of the transmission system showing: ratings of transmission lines import links from Malaysia location of each generation registered facility	Once and within 3 business days upon change	Transmission Licensee	By registered mail
	18	Transmission line forced outage	Upon occurrence, by the next business day	PSO	By fax
	19	Proposed transmission line de-rating advice	Upon occurrence, by the next business day		EMC website
	20	Proposed transmission line maintenance outage programme	Daily, by the next business day		
Supply Data	21	Occurrences of discretionary dispatch action taken by PSO	Upon occurrence, by the next business day	PSO	By fax
	22	Offers of energy, reserve and regulation submitted by all market participants	Daily, within 6 business days after the trading day	EMC	By CSV reports
	23	Offers exceeding offer change limits (offer variations and revisions to standing offers)	Daily, by the next business day		
	24	Scheduled dispatch quantity of energy, reserve and regulation by generation registered facility/market participant	Daily, within 6 business days after the trading day	EMC	By CSV reports
	25	Maximum target, minimum target and initial output of each scheduled generation registered facility	Daily, within 6 business days after the trading day		
	26	Metered generation quantity by generation registered facility/market participant	Daily, within 11 business days after the trading day		
	27	Annual overhaul duration of each generation registered facility in hours	Annually and upon change, within 3 business days after approval by PSO	PSO	EMC website
	28	Total generation capacity under maintenance (planned outages and annual overhaul)	Daily, by the next business day		
	29	Short-term planned outage by generation registered facility	Upon occurrence, by the next business day		By fax
	30	Forced outage by generation registered facility	Upon occurrence, by the next business day		
	31	Generation registered facility de-rating notification	Upon occurrence, by the next business day		
	32	Security constraints (location, timing, volume, cause)	Upon occurrence, by the next business day		
	33	Load shed forecast	Upon occurrence, by the next business day		By E-mail
	34	Load shed advisory notice	Upon occurrence, by the next business day		
	35	Intertie submission information	Upon occurrence, by the next business day	By fax	
	36	Costs of generation of electricity for each generation registered facility in \$/MWh i.e. (a) Fuel Costs (b) Total Variable Costs (i.e. fuel costs plus other variable costs) (c) Total Costs (i.e. total variable costs plus fixed costs)	Monthly, within 6 business days after month end		Generation Licensee

Type of data		Description	Frequency of collection	Source	Means of obtaining
Demand Data	37	Pre-dispatch load forecast	Daily, within 6 business days after the trading day	EMC	By CSV reports
	38	Real-time load forecast	Daily, within 6 business days after the trading day		
	39	Actual system demand (settlement ready metering data)	Daily, within 11 business days after the trading day		
	40	Historical system demand (past three years)	Once		By E-mail
Pricing Data	41	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
	42	Half hourly Uniform Singapore Energy Price ("USEP")	Daily, within 6 business days after the trading day		
	43	Half hourly regulation price	Daily, within 6 business days after the trading day		
	44	Half hourly reserve prices: primary, secondary and contingency	Daily, within 6 business days after the trading day		
	45	Uplift charges	Daily, within 11 business days after the trading day		
	46	Pre-dispatch schedules	Daily, within 6 business days after the trading day		
	47	Real-time dispatch schedules	Daily, within 6 business days after the trading day		
	48	Wholesale price (i.e. the approximate wholesale price that retailers pay for electricity) in \$/MWh	Monthly, within 6 business days after month end		
Other Data	49	Advisory notices reported by frequency, time, day and type	Daily, within 6 business days after the trading day	EMC	By CSV reports
	50	Information on issuance of notice of default and exercise of rights of credit support	Upon occurrence, by the next business day		
	51	Information on total cost and providers of contracts of ancillary services	Within 10 business days of entry into new contracts		
	52	Total turnover in the energy market in MWh and \$	Monthly, within 11 business days after month end	Market Support Services Licensee	By fax or E-mail
	53	Vesting contracts information	Quarterly, within 6 business days after end of quarter	Generation Licensee	By fax
	54	Bilateral contract information	Upon entry into new contract or amendment of contract, within 6 business days of occurrence	Market Participants, Market Support Services Licensee and EMC	By fax
	55	Copies of licenses issued under the Electricity Act	Once and within 3 business days upon change		