Singapore Electricity Market Rules

Chapter 8
Definitions

Energy Market Authority

1 April 2022
1 DEFINITIONS

1.1 In the market rules:

1.1.1 adequacy means the ability of the electricity system, or the power system or the transmission system, as the case may be, to supply electrical demand and energy requirements at all times, taking into account planned outages and forced outages of equipment or components;

1.1.2 agent means a service provider or other agent referred to in section 6.4.1 of Chapter 1;

1.1.3 ancillary service means a service required or provided for the security or reliability of the electricity system;

1.1.4 ancillary service contract means an agreement entered into between a market participant and the EMC in accordance with section 8 of Chapter 5;

1.1.5 ancillary service financier means any person who provides financing, credit, advances or loans (or any refinancing thereof) to the Authority to fund the refurbishment cost pursuant to any AS financing documents;

1.1.6 ancillary service funding agreement means an agreement entered or to be entered into between the Authority and an ancillary service provider pursuant to section 8.2A.1 of Chapter 5;

1.1.7 ancillary service provider means a person that provides an ancillary service;

1.1.8 applicable law means all laws, regulations, subsidiary legislation, other statutory instruments and rules and other documents of a legislative nature which apply to the EMC, the PSO, market participants or market support services licensees, and all orders of a government, governmental body, authority or agency having jurisdiction over the EMC, the PSO, a market participant or a market support services licensee, including any electricity licence issued to the EMC, a market participant or a market support services licensee, provided that the PSO shall not, for the purposes of this definition, be considered a governmental body, authority or agency;
1.1.9  application for authorisation means the form by which a market support services licensee may apply for authorisation to participate in the wholesale electricity markets or to cause or permit a physical service to be conveyed into, through or out of the transmission system;

1.1.10  approved annual outage plan means the plan prepared by the PSO in accordance with section 7.2 of Chapter 5 that lists the planned outages that have received planning approval from the PSO as of a given date in a year;

1.1.11  arbitration complainant has the meaning ascribed thereto in section 3.9.2 of Chapter 3;

1.1.12  arbitration panel means the person or persons appointed pursuant to section 3.5.1.2 of Chapter 3;

1.1.13  arbitration tribunal means a person or persons selected from the arbitration panel and appointed to resolve a dispute through arbitration pursuant to section 3.9.11 or 3.9.13 of Chapter 3;

1.1.14  AS financing documents means all financing agreements entered or to be entered into by the Authority and other documents in relation thereto, for or in connection with the financing of the refurbishment cost for the purpose of procurement of contracted ancillary services and any refinancing thereof provided by one or more ancillary service financiers;

1.1.15  ASC payments means any payments or monies due (or as may become due) to an ancillary service provider under one or more ancillary service contracts entered into by that ancillary service provider (including fees for the provision of any contracted ancillary service and compensation and any other payment arising from the termination of any ancillary service contract);

1.1.16  ASFA liabilities means any damages, losses, costs, expenses and liabilities due (or as may become due) to the Authority under an ancillary service funding agreement (including liquidated damages for any delay in the completion of the refurbishment works and liabilities arising from termination of the ancillary service funding agreement);

1.1.17  Authority means the Energy Market Authority of Singapore established under the EMA Act 2001;
1.1.18 **Authority funding costs** means the total of:

(a) the fees, costs and expenses (including pre-assessment inspection, technical consultation, legal costs and taxes) incurred by the Authority to procure, negotiate and/or execute the framework agreement, the ancillary service funding agreements, the tripartite agreements, the AS financing documents and all other ancillary documents in relation thereto;

(b) any refurbishment cost, interests, charges, fees, damages, losses, costs, liabilities and expenses which are incurred and/or payable by the Authority under the ancillary service funding agreements;

(c) if the Authority elects to fund all or any part of the refurbishment cost using its own funds, any interests, charges, fees, taxes, costs and expenses which are imposed, prescribed, incurred and/or payable by the Authority with respect to such funding;

(d) if the Authority elects to fund all or any part of the refurbishment cost using any financing, credit, advances or loans (or any refinancing thereof) granted to the Authority by an ancillary service financier, the principal amount of loans, interests, charges, fees, taxes, costs, liabilities (if any) and expenses which are incurred and/or payable by the Authority under the AS financing documents (including any charges, fees, costs and expenses payable by the Authority to an ancillary service financier in the event of any termination or cancellation of the AS financing documents or any part thereof);

(e) the fees, costs and expenses (including legal costs and taxes) incurred by the Authority in connection with the performance of any of its obligations or the exercise of any of its rights (including the exercise of any step-in rights by the Authority) under the framework agreement, the ancillary service funding agreements, the tripartite agreements and/or the AS financing documents, and/or all other ancillary documents in relation thereto; and

(f) such other costs and/or compensation amount as the Authority determines to be fair and reasonable under the circumstances.

1.1.19 **Automatic generator control** or AGC means the process that allows the PSO to centrally adjust the output of generation registered facilities automatically via electronic commands so as to balance
generation and load in real-time. A generation registered facility is considered to be operating under AGC when it is operating within its registered AGC minimum and maximum output level and is responding to AGC commands from the PSO;

1.1.20 automatic means, in respect of a facility or equipment, including governor control equipment, being under the control of systems such as automatic generator control equipment, governor systems or protection systems designed to respond without human intervention and, without limiting the generality of section 7.1.1.3 of Chapter 1, "automatically" shall be interpreted accordingly;

1.1.21 bank account means a bank account held by the EMC or a market participant for settlement or other purposes as may be prescribed or contemplated under the market rules or any market manual and has, where applicable, the extended meaning ascribed thereto in section 5.17 of Chapter 7;

1.1.21.1 bid means an energy bid;

1.1.22 bid variation means an energy bid submitted to the EMC for a load registered facility that varies the terms of a previous energy bid submitted to the EMC for that load registered facility for the same dispatch period;

1.1.23 bilateral contract data means the data in respect of a bilateral financial contract that a selling market participant provides to the EMC for settlement purposes;

1.1.24 bilateral financial contract means a contract pursuant to which a selling market participant is selling energy, reserve or regulation to a buying market participant;

1.1.25 black start capability means the capability of a generation facility to start without an outside electrical supply so as to be used to energise a defined portion of the transmission system;

1.1.26 business day means, where expressed by reference to a person in Singapore, any day other than a Saturday, a Sunday or a day on which banks are authorised or required to be closed in Singapore and, where expressed by reference to the jurisdiction of a person other than Singapore, means any day other than a Saturday, a Sunday or a day on which banks are authorised or required to be closed in the jurisdiction of that person;
1.1.27 **business day convention** means that if the *market participant* or the *EMC’s payment date* falls on a non-*business day*, payment will be made on the next *business day*;

1.1.28 **buying market participant** means a *market participant* that is purchasing *energy, reserve or regulation* under a *bilateral financial contract*;

1.1.29 **claimant** has the meaning ascribed thereto in section 3.11.1 of Chapter 3;

1.1.30 **close of banking business** means 5:00 p.m;

1.1.31 **code of practice** means a code issued or approved by the *Authority* under section 16 of the *Electricity Act*;

1.1.32 **commissioning generation facility** means a *generation facility* located within Singapore that (a) is either newly constructed, significantly redesigned, or significantly rebuilt; (b) is registered by the *EMC* as a *commissioning generation facility*; and (c) has not yet completed the commissioning tests referred to in section 5.3.4.2 of Chapter 2;

1.1.33 **conditional registration** means a conditional registration granted by the *EMC* pursuant to section 3.1.4.2 of Chapter 2;

1.1.34 **confidential information** means information which is or has been provided pursuant to the *market rules, a market manual* or the *system operation manual* which is (a) stated by the *market rules, a market manual* or the *system operation manual* to be confidential information; (b) otherwise confidential or commercially sensitive; or (c) derived from information referred to in (a) or (b), but shall not include information that is required by the *market rules, a market manual* or the *system operation manual* to be published by the *EMC* or the *PSO* or otherwise made available to all *market participants*;

1.1.35 **connect** means to form a physical link to or with the *transmission system* for the purpose of enabling the flow of *electricity* at the boundary between the *transmission system* and a facility or other equipment and, without limiting the generality of section 7.1.1.3 of Chapter 1, and “reconnect” shall be interpreted accordingly;

1.1.36 **connection agreement** means an agreement pertaining to the conditions for *connection* and access to the *transmission system*, entered into between the *transmission licensee* and any person
whose plant, apparatus, structure, equipment or thing used for the generation, transmission, import, supply or use of electricity is connected or intended to be connected directly or indirectly to the transmission system, and to the terms and conditions relating to changes for services provided by the transmission licensee pursuant to section 20(2) of the Electricity Act;

1.1.37 *constituent documents* means the memorandum and articles of association of the EMC;

1.1.38 *constraint violation cost* means a cost applied by the market clearing engine to ensure that certain constraints may be violated at an associated cost established to discourage such violation and to control its extent;

1.1.39 *consumer* means a person (a) to whom electricity is supplied and sold for consumption on that person’s own premises; or (b) whose premises are for the time being connected to any system for the purpose of purchasing a supply of electricity for consumption on that person’s own premises;

1.1.40 *contingency event* means the unexpected failure of a single component or multiple components connected to the transmission system;

1.1.41 *contracted ancillary service* means an ancillary service procured by contract rather than in the real-time markets in accordance with section 8 of Chapter 5;

1.1.42 *contracted ancillary service resource* means a facility that is subject to an ancillary service contract;

1.1.43 *cost of decommitment* or CDC means a constraint violation cost representing the level to which prices for energy determined by the market clearing engine will be allowed to fall before the forced desynchronisation of generation facilities can be recommended;

1.1.44 *credit support* means the obligations owed to the EMC by a third party and other forms of security or support for the financial obligations of a market participant, in a form set forth in section 7.6.2 of Chapter 2, and has, where applicable, the extended meaning ascribed thereto in section 7.1.4 of Chapter 2;

1.1.45 *credit support provider* means a person that has provided credit support in relation to or on behalf of a market participant, and has,
where applicable, the extended meaning ascribed thereto in section 7.1.4 of Chapter 2;

1.1.46 *credit support value* in relation to a *market participant* means the value calculated in accordance with section 7.3.2 of Chapter 2;

1.1.47 *cut-off size* or *CSZ* has the meaning ascribed thereto in Appendix 7A;

1.1.48 *deemed flow* means a flow of *energy* measured by one or more *revenue quality meters* that is deemed, for *settlement* purposes, to represent the flow of *energy* at a *market network node* that does not have a *revenue quality meter* associated with it;

1.1.49 *default amount* means a dollar amount by which a *defaulting market participant* has defaulted upon its obligations to settle with the *EMC* and shall, for purposes of the imposition of a *default levy*, be calculated in accordance with section 9.3.1 of Chapter 2;

1.1.50 *default interest* means interest at the *default interest rate*;

1.1.51 *default interest rate* means the rate calculated as 2% above the base lending rate (as at the date on which the relevant *default interest* accrues) that the bank where the *EMC’s bank accounts* are maintained charges for commercial loans to its best and most creditworthy commercial customers;

1.1.52 *default levy* means a levy imposed by the *EMC* in accordance with sections 9.2 to 9.7 of Chapter 2;

1.1.53 *default notice* means a notice issued by the *EMC* to a *market participant* pursuant to section 9.2.1.1 of Chapter 2 or section 7.3.3.1, 7.3.3A.1 or 7.3.3B.1 of Chapter 3, and has, where applicable, the extended meaning ascribed thereto in section 9.1.5 of Chapter 2;

1.1.54 *default recovery measures* means the steps taken by the *EMC* or on its behalf under section 9.8.1 of Chapter 2 to recover from the *defaulting market participant* all amounts owing to the *EMC* under the *market rules* in respect of the *defaulting market participant’s* default in payment and any costs and expenses incurred by the *EMC* in connection with or in relation to the recovery of such amounts owing by the *defaulting market participant* (including but not limited to costs and expenses incurred by the *EMC* in investigating the default in payment, in realising any applicable *credit support*, in
implementing the *default levy* or *multiple default levy*, and in taking any steps under section 9.8.1 of Chapter 2);

1.1.55 *defaulting market participant* means a *market participant* that is in default of payment in respect of monies owing to the EMC under the *market rules* and has, where applicable, the extended meaning ascribed thereto in section 9.1.5 of Chapter 2;

1.1.56 *derogation applicant* means a person that applies for a derogation pursuant to section 14 of Chapter 1 and has, where applicable, the extended meaning ascribed thereto in section 14.1.3 or 14.6.5 of Chapter 1;

1.1.57 *derogation application* means an application for a derogation submitted to the EMC by a *derogation applicant* pursuant to section 14.2.1 of Chapter 1;

1.1.58 *desynchronise* means the process of disconnecting a *generation facility* from the *transmission system*;

1.1.59 *disconnect* means to sever physical links to or with the *transmission system* for the purpose of preventing the flow of *electricity* at the boundary between the *transmission system* and a *facility* or other equipment;

1.1.60 *disconnection order* means an order issued to direct a *transmission licensee* to disconnect one or more facility(ies) or other equipment from the *transmission system*;

1.1.61 *dispatch* means, in respect of the *PSO*, the act of instructing a *registered facility* as to the level of physical operation required in a given *dispatch period* and, in respect of a *registered facility*, means the act of receiving an instruction as to the level of its physical operation required in a given *dispatch period*, of operating in accordance with such instruction, or both, as the context may require;

1.1.62 *dispatch coordinator* means a *market participant* that is registered with the EMC to submit *dispatch data* with respect to a *registered facility*;

**Explanatory Note:** The dispatch coordinator will typically be a role within a market participant that deals with real-time and dispatch communications with the EMC.
1.1.63 **dispatch data** means the offers, bids, standing offers, standing bids, offer variations and bid variations submitted to the EMC in accordance with these market rules;

1.1.64 **dispatch day** means a period from midnight to the following midnight;

1.1.65 **dispatch error** means an error made by the PSO in the real-time dispatch process in circumstances where the market rules, a market manual or the system operation manual do not admit of any deviation or departure from such real-time dispatch process;

1.1.66 **dispatch instruction** means a physical operating instruction issued or deemed to be issued to a registered facility by the PSO in the real-time dispatch process;

1.1.67 **dispatch network data** means a representation of all dispatch network lines, dispatch network nodes and certain facilities forming part of or connected to the PSO controlled grid prepared and updated by the PSO pursuant to section 2.1 of Chapter 6;

1.1.68 **dispatch network line** means any line that is determined to be required to represent the dispatch network in the MCE, being either an electric line that is determined by the PSO to be required to be represented in dispatch network data pursuant to section 2.1 of Chapter 6, or an artificial line added by the EMC pursuant to Section D.6.3.4, D.6.5.2 or D.8.2 of Appendix 6D;

1.1.69 **dispatch network node** means a node that is either determined to be required to be represented in dispatch network data pursuant to section 2.1 of Chapter 6, or is an artificial node added by the EMC pursuant to section D.6.5.1 or D.8.2 of Appendix 6D;

1.1.70 **dispatch period** means a thirty-minute time interval beginning on the hour or the half-hour;

1.1.71 **dispatch related data** means the data referred to in Appendix 6G relating to the dispatch process, determined and updated by the PSO in accordance with sections 6.1.1 and 8.1.1 of Chapter 6;

1.1.72 **dispatch schedule** means a schedule produced by the market clearing engine and provided to the PSO that indicates the target energy, regulation and reserve levels of output of registered facilities at the end of a dispatch period;
1.1.73 *dispute management system* means the system for managing disputes that each *market participant*, each *market support services licensee*, the *EMC* and the *PSO* must adopt and implement pursuant to section 3.6.1 of Chapter 3;

1.1.74 *dispute resolution and compensation panel* means the persons appointed pursuant to section 3.5.1 of Chapter 3;

1.1.75 *dispute resolution counsellor* means the person appointed by the *EMC Board* pursuant to section 3.4.1 of Chapter 3;

1.1.76 *DMS contact* means a person nominated by the *EMC*, the *PSO*, a *market participant* or a *market support services licensee* in its *dispute management system* as the first point of contact for the notification of disputes pursuant to section 3.6.1.1 of Chapter 3;

1.1.77 *EGF group* means a group comprising of one or more *embedded generation facilities* assigned to such group under section 5.5 or section 5.5A of Chapter 2;

1.1.78 *electric line* means any line which is used for carrying *electricity* for any purpose and includes (a) any support for the line, that is to say, any structure, pole or other thing in, on, by or from which the line is or may be supported, carried or suspended; (b) any apparatus connected to the line for the purposes of carrying *electricity*; (c) any wire, cable, tube, pipe or other similar thing (including its casing or coating) which surrounds or supports, or is surrounded or supported by, or is installed in close proximity to, or is supported, carried or suspended in association with, the line; and (d) any electricity cable;

1.1.79 *electricity* means electrical power when *generated*, *transmitted*, *supplied* or used for any purpose except the transmission of any communication or signal;

1.1.80 *Electricity Act* means the *Electricity Act* (Cap.89A) and any subsidiary legislation made thereunder;

1.1.81 *electricity licence* means a licence granted or extended by the *Authority* under section 9 of the *Electricity Act*, and *electricity licensee* means a person who holds an *electricity licence*;

1.1.82 *Electricity Market Company* or *EMC* means the company, referred to in the *Electricity Act* as the “Market Company”, which holds an *electricity licence* authorising it to operate any *wholesale electricity market*;
electricity system means a system comprising the transmission system and generating stations connected directly or indirectly to the transmission system;

electronic communications system means the communication network that is used for the exchange of information pertaining to standing offers, standing bids, offer variations and bid variations;

electronic funds transfer means the transfer of funds between bank accounts by electronic means;

electronic information system means the communication network that is used for the exchange of settlement information and such other information as may be prescribed or contemplated under the market rules or any market manual;

EMA Act 2001 means the Energy Market Authority of Singapore Act 2001;

embedded generation facility means a generation facility which is classified as such by the EMC under section 5.5 or section 5.5A of Chapter 2;

EMC adjustment account means the settlement account operated by the EMC which is used to disburse and receive payments related to financial penalties, damages and payment adjustments arising from resolved settlement disputes and to reimburse the EMC for associated costs and expenses;

EMC Board means the Board of Directors of the EMC;

EMC Board Committee means any committee of members of the EMC Board created by the EMC Board, and to which the EMC Board may delegate certain issues;

EMC operating account means the bank account operated by the EMC which is designated by the EMC to receive payments of the EMC’s and the PSO’s administrative costs referred to in section 4.2 of Chapter 7;

EMC payment date means a date on which the EMC is to make settlement payments to market participants and has, where applicable, the extended meaning ascribed thereto in section 5.17 of Chapter 7;
1.1.93 *EMC prepayment account* means the bank account operated by the EMC to hold payments by market participants prior to the relevant market participant payment date to which such payments apply and has, where applicable, the extended meaning ascribed thereto in section 5.17 of Chapter 7;

1.1.94 *EMC settlement clearing account* means the bank account operated by the EMC for holding settlement payments, other than the prepayments required to be held in the *EMC prepayment account*, made to the EMC;

1.1.95 *EMC settlement reserve account* means the bank account operated by the EMC in which the EMC maintains reserve funds to protect against a shortfall in funds required to effect settlement;

1.1.96 *EMC/PSO agreement* means the agreement required to be executed between the EMC and the PSO as required by the conditions of the EMC’s electricity licence and pursuant to which the EMC and the PSO agree, among other matters, to be bound by the market rules.

1.1.97 *emergency operating state* means the state described in section 2.3 of Chapter 5;

1.1.98 *energy* means real energy only;

1.1.99 *energy bid* means either a bid submitted to the EMC for an LRF with REB to withdraw energy, or a bid to purchase energy created by the EMC in accordance with sections D.9A.3 and D.9A.4 of Appendix 6D, as applicable;

1.1.100 *energy offer* means a standing offer or an offer variation submitted to the EMC for a generation registered facility or import registered facility to provide energy to the real-time market for energy;

1.1.101 *energy price ceiling* or ENPC means the upper limit on the energy price that may be used for settlement purposes, as specified in Appendix 6J;

1.1.102 *energy price floor* or ENPF means the lower limit on the energy price that may be used for settlement purposes, as specified in Appendix 6J;

1.1.103 *equipment limit* means a limit on the operating range of market participant facilities established by the PSO pursuant to and on the
basis of the factors referred to in section 5.2.3.2 of Chapter 5 reflecting the capabilities of the equipment;

1.1.104 event of default means an event referred to in section 7.3.1 of Chapter 3;

1.1.105 existing support has the meaning ascribed thereto in section 7.6.6 of Chapter 2;

1.1.106 export limit means the limit on net energy flows out of Singapore across all connections, including interties, to facilities outside of Singapore established by the Authority in accordance with section 2.2 of Chapter 6;

1.1.107 fast start service means the service whereby a generation registered facility provides the capability to synchronise and commence generating at a defined level within a specified time;

1.1.108 final approval means the approval granted by the PSO in respect of a planned outage pursuant to section 7.3.2 of Chapter 5 following confirmation of the outage by the PSO pursuant to section 7.3.1 of Chapter 5;

1.1.109 final settlement statement means the EMC’s final statement of the payments to be made by or to a market participant and has, where applicable, the extended meaning ascribed thereto in section 5.17 of Chapter 7;

1.1.110 financial transmission right or FTR means a right to receive a settlement amount determined in the manner described in section 3.4 of Chapter 7 on the basis of the information contained in the FTR register referred to in section 2.4 of Chapter 7;

1.1.111 fixed market-related charge means the amount, as calculated in accordance with the methodology approved by the Authority, that is payable by a market participant (a) in respect of each of its non-exporting embedded intermittent generation facilities; or (b) as a condition of obtaining the registration of a generation facility as a non-exporting embedded intermittent generation facility, as the case may be;

1.1.112 force majeure event means, in relation to a person, any event or circumstance, or combination of events or circumstances, (a) that is beyond the reasonable control of the person; (b) that adversely affects the performance by the person of its obligations under these
market rules, a market manual or the system operation manual; and (c) the adverse effects of which could not have been foreseen and prevented, overcome, remedied or mitigated in whole or in part by the person through the exercise of diligence and reasonable care, and includes, but is not limited to, acts of war (whether declared or undeclared), invasion, armed conflict or act of a foreign enemy, blockade, embargo, revolution, riot, insurrection, civil disobedience or disturbances, vandalism or act of terrorism; strikes, lockouts, restrictive work practices or other labour disturbances; unlawful arrests or restraints by governments or governmental, administrative or regulatory agencies or authorities; orders, regulations or restrictions imposed by governments or governmental, administrative or regulatory agencies or authorities unless the result of a violation by the person of a permit, licence or other authorisation or of any applicable law; and acts of God including lightning, earthquake, fire, flood, landslide, unusually heavy or prolonged rain or lack of water arising from weather or environmental problems; provided however, for greater certainty, that (i) the lack, insufficiency or non-availability of funds shall not constitute a force majeure event, (ii) an act of the EMC or the PSO effected in accordance with the market rules, a market manual or the system operation manual shall not constitute a force majeure event in respect of a market participant, (iii) an act of a market participant effected in accordance with the market rules, a market manual or the system operation manual shall not constitute a force majeure event in respect of the EMC or the PSO; and (iv) the PSO shall not, for the purposes of this definition, be considered a governmental, administrative or regulatory agency or authority;

1.1.113 forced outage means an unanticipated intentional or automatic removal from service of equipment or the temporary de-rating of, restriction of use or reduction in performance of equipment;

1.1.114 framework agreement means a contract entered or to be entered into between the EMC and the Authority pursuant to section 8.2D.1 of Chapter 5;

1.1.115 funded contracted ancillary service resource means a registered facility that is subject to both an ancillary service funding agreement and an ancillary service contract which is concluded at or about the same time as such ancillary service funding agreement pursuant to section 8.2B.2;

1.1.116 generate means to produce electricity by means of a generating station for the purpose of giving a supply to any premises or enabling a supply to be so given;
1.1.117 generating station means any installation used for, or for purposes connected with, the production of electricity;

1.1.118 generating unit means any apparatus used for, or for purposes connected with, the production of electricity;

1.1.119 generation capacity means the maximum power that a generation facility or other electrical apparatus can produce, usually expressed in megawatts;

1.1.120 generation facility means one or more generating units at the same generating station;

1.1.121 generation fixing constraint means a class of generic constraint imposed by the PSO on the output of a generation facility or import registered facility;

1.1.122 generation licensee means a person who is authorised by an electricity licence to generate electricity;

1.1.123 generation registered facility or GRF means a generation facility that has been registered as a registered facility to provide one or more of energy, reserve, regulation or contracted ancillary services;

1.1.124 generation settlement facility or GSF means a generation facility that has been registered for settlement purposes only in accordance with section 5.4 or section 5.4A of Chapter 2;

1.1.125 generic constraint means a constraint on any one or more of the flows on a transmission line, the output of a generation facility or import registered facility or the net injections at a dispatch network node, and includes a security constraint and a generation fixing constraint;

1.1.126 high-risk operating state means the state described in section 2.2 of Chapter 5;
1.1.127 import means to deliver electricity from an interconnected system via the intertie;

1.1.128 import capacity means the maximum power that an import registered facility can deliver for purposes of import, usually expressed in megawatts;

1.1.129 import limit means the limit on net energy flows into Singapore across all connections, including interties, from facilities outside of Singapore established by the Authority in accordance with section 2.2 of Chapter 6;

1.1.130 import registered facility or IRF means a facility, installation and/or apparatus referred to in section 5.1.11 of Chapter 2 that has been registered as a registered facility to provide one or more of energy, reserve, regulation or contracted ancillary services;

1.1.131 importer licensee means a person who is authorised by an electricity licence to import electricity;

1.1.132 interconnected system means a system of interconnected electric lines that is located outside of Singapore and is connected to the transmission system;

1.1.133 interconnected system operator means the person who is responsible for the operation of an interconnected system;

1.1.134 intermittent generation facility means any generation facility whose power output, in the course of its ordinary and proper operation, cannot be predicted or be directly or indirectly controlled or varied at will. For the avoidance of doubt, a generation facility that is integrated with one or more energy storage facilities shall not be considered to be an intermittent generation facility;

1.1.135 intertie means a transmission interconnection between the transmission system and an interconnected system;

1.1.136 intertie schedule means a schedule of the energy flow across an intertie between the transmission system and an interconnected system as provided by the PSO pursuant to section G.4.5 of Appendix 6G;

1.1.137 invoice means an invoice from the EMC to a market participant which sets forth one or more settlement amounts and has, where
applicable, the extended meaning ascribed thereto in section 5.17 of Chapter 7;

1.1.138 islanded in relation to a generating unit means a generating unit that is not represented as synchronised in the dispatch network data, and neither its designated main nor alternate default buses, as determined in accordance with section D.7 of Chapter 6, is connected to the PSO controlled system;

1.1.139 land lease extension means any extension of the term of the registered facility lease to enable a funded contracted ancillary service resource to provide the contracted ancillary service for the period required under the applicable ancillary service funding agreement;

1.1.140 load means the withdrawal of energy from the transmission system or from any embedded generation facility otherwise than through the transmission system;

1.1.141 load curtailment means a reduction in the energy scheduled to be withdrawn in a dispatch period by an LRF with REB relative to the total quantity in all the price-quantity pairs of the restricted energy bid of such LRF with REB submitted to the EMC for that dispatch period;

1.1.142 load curtailment price or LCP means the market price applicable in respect of the load curtailment quantity of LRFs with REB;

1.1.143 load curtailment quantity or LCQ means the MWh quantity of energy withdrawal deemed to have been reduced by a given LRF with REB, calculated in accordance with Appendix 6L;

1.1.144 load facility means a facility that may withdraw energy from (a) the transmission system; (b) any embedded generation facility otherwise than through the transmission system; or (c) both (a) and (b);

1.1.145 load registered facility or LRF means a load facility that has been registered as a registered facility to either (a) provide reserve or be scheduled for energy withdrawal for the purposes of load curtailment; or (b) provide reserve and be scheduled for energy withdrawal for the purposes of load curtailment;

1.1.146 load registered facility with a restricted energy bid or LRF with REB means a load registered facility which has been registered with the
EMC to be scheduled for energy withdrawal for the purposes of load curtailment;

1.1.147 load shedding means a reduction of load ordered by the PSO, or by means of automatic under-frequency response equipment;

1.1.148 load zone means a group of load registered facilities that have been grouped by the PSO for the purpose of maintaining the security of the power system;

1.1.149 market assessment unit means the entity established by the EMC pursuant to section 4.2 of Chapter 3;

1.1.150 market clearing engine means the software provided by the EMC pursuant to section 3.3 of Chapter 6 to implement the formulation described in Appendix 6D and to perform the other functions assigned to it under Chapter 6;

1.1.151 market commencement date means the date on which the first of the real-time markets commences operation, as determined by the Authority pursuant to section 3.3.2 of Chapter 1;

1.1.152 market creditor means a person that is owed monies by the EMC as a result of transactions effected in the wholesale electricity markets and has, where applicable, the extended meaning ascribed thereto in section 5.17 of Chapter 7;

1.1.153 market debtor means a person that owes monies to the EMC as a result of transactions effected in the wholesale electricity markets;

1.1.154 market energy price or MEP means the market price for energy for a dispatch period for a market network node determined in accordance with section 10.2 of Chapter 6;

1.1.155 market entity means the EMC, the PSO, a market participant or a market support services licensee;

1.1.156 market manual means a published document that (a) is entitled as such, (b) is created and adopted by the EMC in accordance with section 8 of Chapter 1 and (c) that contains requirements to be followed, met or performed by one or more of the PSO, the EMC, market participants and market support services licensees in support of the obligations contained in these market rules relating to the operation of the wholesale electricity markets;
1.1.157 market network node or MNN means a point of settlement uniquely associated with a single dispatch network node and with a single market participant, or in the case of an MNN assigned by the EMC pursuant to section D.7.9 of Appendix 6D, a point of settlement at which all energy injected onto the transmission system by all pseudo generation settlement facilities is deemed to be injected;

1.1.158 market operations timetable means the timetable set forth in Appendix 6A;

1.1.159 market outlook horizon has the meaning ascribed thereto in section 7.1.1 of Chapter 6;

1.1.160 market outlook scenario means a schedule containing the information described in section 7.7 of Chapter 6, as determined by the EMC in accordance with sections 7.3, 7.5 and 7.6 of Chapter 6 for a given load scenario over the market outlook horizon;

1.1.161 market participant means a person (a) authorised by an electricity licence; and (b) registered in accordance with these market rules, to trade in any wholesale electricity market and includes a transmission licensee

1.1.162 market participant bank account means, in respect of a market participant, a bank account designated by that market participant as the bank account from and into which settlement and other payments as may be prescribed or contemplated under the market rules or any market manual, are made and has, where applicable, the extended meaning ascribed thereto in section 5.17 of Chapter 7;

1.1.163 market participant payment date means a date on which market participants are to make settlement payments to the EMC and has, where applicable, the extended meaning ascribed thereto in section 5.17 of Chapter 7;

1.1.164 market regulation price or MFP means the market price for regulation for a dispatch period determined in accordance with section 10.2 of Chapter 6;

1.1.165 market reserve price or MRP means the market price for reserve for a dispatch period and for a reserve provider group determined in accordance with section 10.2 of Chapter 6;

1.1.166 market rules means the rules made or modified under section 46 of the Electricity Act;
1.1.167  *market schedule* means a *market outlook scenario, pre-dispatch schedule, short-term schedule or real-time schedule*;

1.1.168  *market support services* means any of the following activities in connection with the *supply of electricity*:

(a) the reading of the register of any *electricity* meter and the management of data relating to meter reading;

(b) the facilitation of access to any *wholesale electricity market* for the purposes of obtaining *supply of electricity* for contestable *consumers* and *retail electricity licensees*;

(c) the provision of customer transfer services for *retail electricity licensees* and *consumers* to facilitate the transfer of contestable *consumers* between one *retail electricity licensee* and another or between *retail electricity licensees* and *market support services licensees*;

(d) the provision of other services related to access to any *wholesale electricity market* and the retail *electricity market*; and

(e) the *supply and sale of electricity* to non-contestable *consumers*, in so far as they pertain to the *wholesale electricity markets*;

1.1.169  *market support services licensee* means a person who is authorised by an *electricity license* to provide *market support services*;

1.1.170  *market surveillance and compliance panel* means the *panel* established by the *EMC* pursuant to section 2.6 of Chapter 3;

1.1.171  *mediation complainant* has the meaning ascribed thereto in section 3.8.1 of Chapter 3;

1.1.172  *mediation panel* means the person or persons appointed pursuant to section 3.5.1.1 of Chapter 3;

1.1.173  *mediator* has the meaning ascribed thereto in section 3.8.8 of Chapter 3;

1.1.174  *metering code* means the *code of practice* that sets forth requirements relating to meters and metering in the *wholesale electricity market* and the *retail electricity market*. 
1.1.175 *metering data* means electrical quantities measured and recorded by a metering installation;

1.1.176 *metering error* means an error in the *metering data* or in the corrected *metering data* in respect of a given *trading day* provided by the *market support services licensee* to the *EMC* pursuant to section 2.1 of Chapter 7;

1.1.177 *modification* includes any amendment, addition, alteration and variation;

1.1.178 *modification proposal* means a request by a *proposer* under section 5.2.1 or 5.2.4 of Chapter 3 for a *modification* or review of the *market rules* or a notice given by the *rules change panel* on its own initiative under section 5.2.3 of Chapter 3 of its intention to consider a *modification* or review of the *market rules*;

1.1.179 *monthly confirmation notice* means a notice issued by the *EMC* to a *market participant* containing statements of amounts received from or paid to that *market participant* in a month and has, where applicable, the extended meaning ascribed thereto in section 5.17 of Chapter 7;

1.1.180 *MSSL counterparty* means the *market support services licensee* that is party to a *vesting contract*. Such *market support services licensee* must be authorised to participate in the *wholesale electricity markets* in accordance with section 3 of Chapter 2;

1.1.181 *multiple default levy* means the levy implemented by the *EMC* under section 9.10 of Chapter 2 for the purposes of recovering costs and expenses incurred in connection with or in relation to steps taken by the *EMC* pursuant to section 9.8.1 of Chapter 2 in respect of one or more defaults by the *defaulting market participant*;

1.1.182 *multi-unit facility* means a *generation registered facility* or *generation settlement facility* that comprises more than one *generating unit* at the same *generating station*;

1.1.183 *net AFP treatment* means the determination of the total *energy* associated with a *settlement account* that is subject to *regulation payments* in accordance with section 3.2.2.3 of Chapter 7;

1.1.184 *nodal load forecast* means a forecast of *load* prepared on a nodal basis in accordance with section 7.2.1 of Chapter 6 and revised, where applicable, in accordance with section 9.1.1 of chapter 6;
1.1.185 non-curtailment event has the same meaning ascribed thereto in section 2.8 of Chapter 7;

1.1.186 non-defaulting market participant means, for purposes of the imposition of the default levy, each market participant other than the defaulting market participant whose default in payment has triggered the imposition of the default levy and has, where applicable, the extended meaning ascribed thereto in section 9.1.5 of Chapter 2;

1.1.187 non-dispatchable load means load which is not subject to dispatch by the PSO and whose level is not selected or set based on the price of energy in the real-time market;

1.1.188 non-exporting embedded intermittent generation facility means a generation facility that has been registered in accordance with section 5.4B of Chapter 2;

1.1.189 non-provision event means a failure by a market participant, as determined by the PSO, to provide reserve or regulation from its generation registered facility or load registered facility for any duration in a dispatch period in accordance with the market rules and the system operation manual;

1.1.190 normal operating state means the state described in section 2.1 of Chapter 5;

1.1.191 notice of arbitration has the meaning ascribed thereto in section 3.9.2 of Chapter 3;

1.1.192 notice of default levy means a notice issued by the EMC to a non-defaulting market participant in accordance with section 9.2.3 or 9.4.1 of Chapter 2;

1.1.193 notice of disagreement means a notice provided by a market participant to the EMC pursuant to section 5.5.2 of Chapter 7 with respect to a disagreement relating to a preliminary settlement statement and has, where applicable, the extended meaning ascribed thereto in section 5.17 of Chapter 7;

1.1.194 notice of dispute has the meaning ascribed thereto in section 3.7.1.1 of Chapter 3;

1.1.195 notice of mediation has the meaning ascribed thereto in section 3.8.1 of Chapter 3;
1.1.196 offer means an energy offer, a reserve offer or a regulation offer;

1.1.197 offer variation means an energy offer, a reserve offer or a regulation offer submitted to the EMC for a generation registered facility or import registered facility or a reserve offer submitted to the EMC for a load registered facility that varies the terms of a previous energy offer, reserve offer or regulation offer (as the case may be) submitted to the EMC for that generation registered facility, import registered facility or load registered facility for the same dispatch period;

1.1.198 operating agreement means an agreement between the PSO and the transmission licensee which gives the PSO the authority to direct the operations of the PSO controlled grid;

1.1.199 outage means the removal of equipment from service, unavailability for connection of equipment or temporary de-rating, restriction of use or reduction in performance of equipment for any reason and includes a planned outage, a forced outage or both, as the context may require;

1.1.200 outage submission means a submission made by a market participant to the PSO in respect of an outage;

1.1.201 panel means the rules change panel, the market surveillance and compliance panel or both, as the context may require;

1.1.202 participant registration application means the form by which a person may apply for registration as a market participant or for authorisation to cause or permit a physical service to be conveyed into, through or out of the transmission system;

1.1.203 participation applicant means a person filing a participant registration application pursuant to section 3.1.1 of Chapter 2 and, where applicable, shall have the extended meaning ascribed to it in section 3.1.11.3 of Chapter 2;

1.1.204 physical service means one or more of energy, reserve, regulation or a contracted ancillary service;

1.1.205 planned outage means an outage that is planned, including where such planning is merely indicative;
1.1.206 planning approval means the approval granted by the PSO in respect of a planned outage pursuant to section 7.2 of Chapter 5 (for the avoidance of doubt, other than the indicative planned outages that have been submitted to the PSO in accordance with section 7.2.4.2 of Chapter 5 in respect of a pro forma biennial outage plan) prior to confirmation of the outage by the PSO pursuant to section 7.3.1 of Chapter 5;

1.1.207 pool meter means a meter used for settlement purposes in the wholesale electricity markets that measures aggregate loads, at various points on the transmission system having voltages below 66 kV;

1.1.208 power system means the system comprising the transmission system and generation facilities and load facilities connected to the transmission system;

1.1.209 pre-dispatch horizon has the meaning ascribed thereto in section 7.1.2 of Chapter 6;

1.1.210 pre-dispatch schedule means a schedule containing the information described in section 7.7 of Chapter 6, as determined by the EMC in accordance with sections 7.4, 7.5 and 7.6 of Chapter 6 for a given load scenario over the pre-dispatch horizon;

1.1.211 preliminary settlement statement means the EMC’s preliminary statement of the payments to be made by or to a market participant and has, where applicable, the extended meaning ascribed thereto in section 5.17 of Chapter 7;

1.1.212 price neutralisation means (USEP+HEUC)/nodal price neutralisation under section 4.4 of Chapter 7;

1.1.213 price schedule means a schedule produced by the market clearing engine that contains prices for energy, reserve or regulation;

1.1.214 price-quantity pair means a price and an associated quantity stated in an offer or bid;

1.1.215 primary contingency unit or PCU has the meaning ascribed thereto in Appendix 7A;

1.1.216 principal means the market participant or market support services licensee that uses any information system, communication system, business process, personnel or agent to assist in performing the market participant’s or market support services licensee’s
obligations under the market rules, any market manual or the system operation manual;

1.1.217 pro forma biennial outage plan means the plan prepared by the PSO in accordance with section 7.2 of Chapter 5 that lists the indicative planned outages that have been submitted to the PSO pursuant to section 7.2.4.2 of Chapter 5 covering a consecutive period of two calendar years, which period commences immediately after the end of the calendar year to which a given approved annual outage plan relates (referred to as its “related approved annual outage plan”);

1.1.218 probability of failure has the meaning ascribed thereto in Appendix 7A;

1.1.219 procurement market means any one of the markets operated for the procurement of contracted ancillary services;

1.1.220 proposer has the meaning ascribed thereto in section 5.2.1 of Chapter 3;

1.1.221 pseudo generation settlement facility means a generation settlement facility that is classified as such by the EMC under section 5.4A.4 or 5.4C.6 of Chapter 2;

1.1.222 PSO or Power System Operator means the Authority acting in its capacity as the person responsible for ensuring the security of supply of electricity to consumers and arranging for the secure operation of the transmission system as described in subsection 3(3)(e) of the Electricity Act;

1.1.223 PSO controlled grid means the transmission system at voltage levels of 66kV and above, that is controlled by the PSO;

1.1.224 PSO controlled system means the system of registered facilities comprising transmission facilities at voltage levels of 66kV and above, generation facilities and load facilities connected to the transmission system;

1.1.225 PSO/MP agreement means the agreement required to be executed between the PSO and each market participant referred to in section 1.2.2.3 of Chapter 2 and pursuant to which the PSO and the market participant agree, among other matters, to be bound by the market rules;
1.1.226  *pst line* means a *dispatch network line* with a phase-shifting transformer;

1.1.227  *publish* means, in respect of a document or information, to place that document or information on the EMC’s website and has, where applicable, the extended meaning ascribed thereto in section 12.1.3 of Chapter 1 and, without limiting the generality of section 7.1.1.3 of Chapter 1, *publication* shall be interpreted accordingly;

1.1.228  *reactive support and voltage control* or *reactive support and voltage control service* means an *ancillary service* provided by a *market participant* so as to allow the *PSO* to maintain the voltage levels around the *PSO controlled system* at prescribed levels;

1.1.229  *real-time dispatch schedule* means a schedule determined by the *market clearing engine* that contains the quantities of energy, *reserve* and *regulation* scheduled in respect of a *registered facility*;

1.1.230  *real-time market* means any one of the *wholesale electricity markets* operated by the EMC for *energy*, *reserve* or *regulation* pursuant to Chapter 6;

1.1.231  *real-time price schedule* means a schedule determined by the *market clearing engine* that contains the prices referred to in section 9.2.1.2 of Chapter 6;

1.1.232  *real-time schedule* means a *real-time dispatch schedule* and a *real-time price schedule*;

1.1.233  *refurbishment cost* means the costs of the *refurbishment works* (including insurance costs) and if applicable, *land lease extension*;

1.1.234  *refurbishment works* means the works and services procured or to be procured by an *ancillary service provider* to enable its *funded contracted ancillary service resource* to provide *contracted ancillary services* in accordance with the performance standards and other applicable requirements referred to in section 4 of Chapter 5;

1.1.235  *registered facility* means a facility that is registered with the EMC pursuant to section 5.1A.1.1 of Chapter 2;

1.1.236  *registered facility lease* means the agreement for lease or if issued, the lease with respect to the land on which a *funded contracted ancillary service resource* is located;
1.1.237 registration terms means the terms and conditions which the EMC may impose on the registration of a participation applicant as a market participant under section 3.1.4.1 or 3.1.6 of Chapter 2 (as the case may be);

1.1.238 regulation means, in relation to a generation registered facility, the frequent adjustment to its output so that any power system frequency variations or imbalances between load and the output from generation facilities can be corrected;

1.1.239 regulation compromise price or RGCP means a constraint violation cost representing the level to which the price determined by the market clearing engine for regulation will be allowed to rise before the compromise of regulation requirements can be recommended;

1.1.240 regulation offer means a standing offer or an offer variation submitted to the EMC for a generation registered facility to provide regulation to the real-time market for regulation;

1.1.241 regulation price means the price of regulation determined by the market clearing engine for a given dispatch period;

1.1.242 regulation price ceiling or RGPC means the upper limit on the regulation price that may be used for settlement purposes, as specified in Appendix 6J;

1.1.243 related corporation in respect of a generation licensee shall mean companies that are i) at least 50% owned by the generation licensee or ii) at least 50% owned by another company that also owns at least 50% of the generation licensee;

1.1.244 reliability means, in respect of electricity service, the ability to deliver electricity within reliability standards and in the amount desired and means, in respect of the electricity system, the power system or the transmission system, the ability of the electricity system, the power system or the transmission system to operate within reliability standards in an adequate and secure manner;

1.1.245 reliability must-run service means an ancillary service provided by a generation licensee that allows the PSO to call on that generation licensee’s generation facilities in order to maintain reliability of the electricity system;

1.1.246 reliability standards means the criteria, standards and requirements relating to reliability established by a standards authority, together
with those set forth in these market rules or the system operation manual or otherwise established by the PSO pursuant to these market rules;

1.1.247 reserve means generation capacity or load reduction capacity that can be called upon to replace scheduled energy supply that is unavailable as a result of a forced outage or to augment scheduled energy as a result of unexpected demand or other contingencies;

1.1.248 reserve class means a class of reserve differentiated based on the response time required of reserve providers for that class;

1.1.249 reserve compromise price or RSCP means a constraint violation cost representing the level to which the price determined by the market clearing engine for any reserve class will be allowed to rise before the compromise of reserve requirements can be recommended;

1.1.250 reserve offer means a standing offer or an offer variation submitted to the EMC for a generation registered facility or a load registered facility to provide reserve of any reserve class to the real-time market for reserve;

1.1.251 reserve price means the price of reserve for a given reserve class determined by the market clearing engine for a given dispatch period;

1.1.252 reserve price ceiling or RSPC means the upper limit on the reserve price that may be used for settlement purposes, as specified in Appendix 6J;

1.1.253 reserve provider means a generation registered facility or a load registered facility that provides reserve to the real-time market for reserve;

1.1.254 reserve provider group means a group of reserve providers that have similar effectiveness characteristics;

1.1.255 reserve responsibility share means, in respect of a generation registered facility, the costs to be paid by that generation registered facility for reserve, determined in accordance with Appendix 7A;

1.1.256 residential premises has the same meaning ascribed thereto in the Electricity Act;
1.1.257 residual default amount means a dollar amount calculated in accordance with section 9.5.1 of Chapter 2;

1.1.258 restoration plan market participant means a market participant that is designated as such by the PSO;

1.1.259 restricted energy bid means an energy bid which is submitted for a load registered facility to withdraw energy, for the purposes of load curtailment;

1.1.260 restricted standing bid means a standing bid which is submitted for an LRF with REB;

1.1.261 retail electricity licensee means a person who is authorised by an electricity licence to retail electricity to a contestable consumer;

1.1.262 revenue quality meter or RQM means a meter used for settlement purposes on the wholesale electricity markets that measures aggregate loads at various high-tension points on the transmission system and meets the requirements of the metering code;

1.1.263 revocation order means an order issued pursuant to sections 7.4 and 7.5 of Chapter 3 revoking the registration of one or more of a market participant’s registered facilities;

1.1.264 rules change panel means the panel established by the EMC pursuant to section 2.2 of Chapter 3;

1.1.265 secondary contingency unit or SCU has the meaning ascribed thereto in Appendix 7A;

1.1.266 security means the ability of the electricity system, the power system or the transmission system to withstand sudden disturbances including, without limitation, electric short circuits or unanticipated loss of equipment or components;

1.1.267 security constraint means a generic constraint defined by the PSO to be used as input data to the market clearing engine to restrict dispatch solutions for the purpose of maintaining the security of the power system;

1.1.268 security limit means a limit on the operating range of market participant facilities established by the PSO pursuant to and on the basis of the factors referred to in section 5.2.3.1 of Chapter 5 so as to prevent, contain or alleviate the effects of contingency events;
1.1.269 selling market participant means a market participant who is selling energy, reserve or regulation under a bilateral financial contract;

1.1.270 settlement means the process of calculating settlement amounts and transferring payments from those who are required to make payment to those who are required to be paid under the market rules;

1.1.271 settlement account means an accounting balance maintained by the EMC in respect of a given market participant to and from which the EMC transfers or allocates settlement amounts for settlement purposes in accordance with Chapter 7 and has, where applicable, the extended meaning ascribed thereto in section 5.17 of Chapter 7;

1.1.272 settlement amount means any amount of money to be credited to, debited from or paid by or to a market participant, determined in accordance with Chapter 7 and has, where applicable, the extended meaning ascribed thereto in section 5.17 of Chapter 7;

1.1.273 settlement ID means a designation that identifies a particular settlement amount on an invoice;

1.1.274 settlement interval means a thirty-minute time interval beginning on the hour or the half-hour;

1.1.275 settlement statement means a preliminary settlement statement, a final settlement statement or both, as the context may require;

1.1.276 short-term horizon has the meaning ascribed in section 7.1.2A of Chapter 6;

1.1.277 short-term schedule means a schedule containing the information described in section 7.7 of Chapter 6, as determined by the EMC in accordance with sections 7.4A, 7.5 and 7.6.1B of Chapter 6 for a given load scenario over the short-term horizon;

1.1.278 shut-down in respect of a generation registered facility means the time its scheduled generation output falls below its minimum stable load, as specified in its facility registration form submitted to the PSO for the purpose of facility registration, to the time it is desynchronised from the transmission system;

1.1.279 Singapore electricity emergency plan means the plan describing the responsibilities of, and coordinating the actions of, market participants, the EMC and the PSO for the purpose of alleviating the effects of an emergency on the power system;
1.1.280 Singapore hub or SHUB means the MNN at which all energy taken from the transmission system by load facilities is deemed to be withdrawn and all energy injected onto the transmission system by generation facilities referred to in section 5.1.3 of Chapter 2 is deemed to be injected;

1.1.281 Singapore power system restoration plan means the plan for restoring the security of the power system following a major contingency event or emergency;

1.1.282 standards authority means any agency or body that recommends standards or criteria relating to the reliability of power systems;

1.1.283 standing bid means a bid required to be submitted to the EMC for a load registered facility in accordance with section 5 of Chapter 6;

1.1.284 standing capability data means the data described in Appendix 6E;

1.1.285 standing offer means an offer required to be submitted to the EMC for a generation registered facility, import registered facility or a load registered facility in accordance with section 5 of Chapter 6;

1.1.286 start-up in respect of a generation registered facility means the time of its synchronisation to the transmission system to the time its scheduled generation output first attains its minimum stable load, as specified in its facility registration form submitted to the PSO for the purpose of facility registration;

1.1.287 supply means the supply of electricity through electric lines and includes (a) the supply of electricity generated outside Singapore to any person or premises in Singapore; and (b) the supply of electricity generated in Singapore to any person or premises outside Singapore;

1.1.288 suspended market participant means a market participant that is the subject of a suspension order and has, where applicable, the extended meaning ascribed thereto in section 7.1.7 of Chapter 3;

1.1.289 suspension order means an order issued pursuant to section 7.3 of Chapter 3 suspending all or part of the rights of a market participant to participate in the wholesale electricity markets or to cause or permit a physical service to be conveyed into, through or out of the transmission system;
1.1.290 synchronise means the process of connecting a generation facility or its generating unit(s) to the transmission system after matching their respective frequencies, voltages and voltage angles;

1.1.291 system operation manual means the published document that (a) is entitled as such, (b) is created and adopted by the PSO in accordance with section 9 of Chapter 1 and (c) that contains requirements to be followed, met or performed by one or more of the PSO, the EMC, market participants and market support services licensees in support of the obligations contained in these market rules relating to the reliable operation of the PSO controlled system;

1.1.292 technical assessment, in respect of the cancellation of registration of a registered facility, means a technical assessment of the impact of the cancellation of the registration of the registered facility on the reliability or security of the PSO controlled system referred to in section 6.1.2 of Chapter 2;

1.1.293 terminated market participant means a market participant that is the subject of a termination order and has, where applicable, the extended meaning ascribed thereto in section 7.1.7 of Chapter 3;

1.1.294 termination order means an order issued pursuant to section 7.4 of Chapter 3 terminating the rights of a market participant to participate in the wholesale electricity markets or to cause or permit a physical service to be conveyed into, through or out of the transmission system and has, where applicable, the extended meaning ascribed thereto in section 7.1.7 of Chapter 3;

1.1.295 trade means (a) to sell electricity, ancillary services or any other electricity related product or service to a person other than a consumer who is being supplied and sold electricity by a retail electricity licensee or a market support services licensee; or (b) to purchase electricity, ancillary services or any other electricity related product or service, where such purchase is made by a person other than a consumer who is being supplied and sold electricity by a retail electricity licensee or a market support services licensee;

1.1.296 trading day means a period from midnight to the following midnight;

1.1.297 transitional payment means any payment which the EMC is required by the Authority to make to a market participant in relation to arrangements that existed prior to the market commencement date;
1.1.298 transmission code means the code of practice issued by the Authority that describes the minimum standards of performance which a transmission licensee and those electricity licensees subject to such code of practice are required to observe with respect to the provision or use of transmission services;

1.1.299 transmission facility means assets and equipment forming part of the transmission system;

1.1.300 transmission licensee means a person authorised by an electricity licence to transmit electricity;

1.1.301 transmission system means the system of interconnected electric lines owned by a transmission licensee for the purpose of conveying electricity;

1.1.302 transmit means to convey electricity by means of a system which consists wholly or mainly of electric lines and electrical plants and is used for conveying electricity (a) from an electrical plant to a substation; (b) from one electrical plant to another or from one substation to another; or (c) from a substation or electrical plant to the electrical installation serving the premises of a consumer or, where such premises are not served by an electrical installation, from a substation or electrical plant directly to such premises;

1.1.303 tripartite agreement means an agreement entered or to be entered into between the Authority, the EMC and an ancillary service provider pursuant to section 8.2A.2 of Chapter 5.

1.1.304 uniform Singapore energy price or USEP means the uniform price of energy that applies for settlement purposes for all energy injections or withdrawals that are deemed to occur at the Singapore hub or SHUB;

1.1.305 updated outage plan means a plan prepared by the PSO in accordance with section 7.2 of Chapter 5 that lists the planned outages that have received planning approval from the PSO or have been withdrawn or cancelled, subsequent to the publication of the most recent approved annual outage plan;

1.1.306 urgent modification means a modification to the market rules that is urgently required (a) to avoid, reduce the risk of or mitigate the effects of one or more of (i) conditions that affect the ability of the power system to function normally, (ii) the abuse of market power, or (iii) an unintended adverse effect of a provision of the market
rules; or (b) to implement standards or criteria of a standards authority;

1.1.307 urgent rule modification committee means the committee established by the EMC Board pursuant to section 5.10 of Chapter 3 for the purpose of making urgent modifications to the market rules;

1.1.308 value of lost load or VoLL means a constraint violation cost representing the level to which prices for energy determined by the market clearing engine will be allowed to rise before load shedding can be recommended;

1.1.309 vesting contract means a contract or other financial arrangement between a market support services licensee and a generation licensee in a form approved by, and designated as a vesting contract by, the Authority;

1.1.310 vesting period means a period of three months commencing on the first day each of January, April, July and October in any year; and

1.1.311 wholesale electricity market means an electricity market established by these market rules for the trading of electricity, ancillary services or any other electricity related products or services.