Singapore Electricity Market Rules

Chapter 8

Definitions

Energy Market Authority

1 July 2026

1 DEFINITIONS

1.1 In the *market rules*:

1.1.1 *Additional performance bonds* means *performance bonds* a *retail electricity licensee* class of *market participant* is required to provide when the positive difference between the aggregate Actual Retail Contract Quantity and the aggregate Projected Retail Contract Quantity for any Assessment Period is equal to or more than a threshold as may be reasonably determined by the *Authority,* in accordance with the *Code of Conduct for Retail Electricity Licensees.* For avoidance of doubt, this shall be in addition to any *performance bonds* already provided by the *retail electricity licensee* class of *market participant;*

1.1.2 *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;

1.1.3 *advisory notice* means a notice issued by the *EMC* pursuant to section 9.3 of Chapter 6 to describe the incidence and extent of certain events in respect of certain *dispatch periods*;

1.1.4 *affiliate* means, with respect to a corporation, any corporation that is related to the first-mentioned corporation in terms of Section 6 of the Companies Act 1994;

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

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

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

1.1.8 *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*;

1.1.9 *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;

1.1.10 *ancillary service provider* means a person that provides an *ancillary service*;

1.1.11 *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;

1.1.12 *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*;

1.1.13 *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;

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

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

1.1.16 *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;

1.1.17 *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*;

1.1.18 *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*);

1.1.19 *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*);

1.1.20 *Authority* means the Energy Market Authority of Singapore established under the *EMA Act 2001*;

1.1.21 *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.

1.1.22 *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*;

1.1.23 *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;

1.1.24 *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;

1.1.25 *bid* means an *energy bid*;

1.1.26 *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*;

1.1.27 *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;

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

1.1.29 *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*;

1.1.30 *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;

1.1.31 *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*;

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

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

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

1.1.35 *Code of Conduct for Retail Electricity Licensees* means the *code of practice* that sets forth minimum standards of performance in accordance with which a *Retail Electricity Licensee* is required to conduct its retail activities with respect to all *consumers* (residential and non-residential);

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

1.1.37 *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;

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

1.1.39 *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*;

1.1.40 *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;

1.1.41 *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*;

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

1.1.43 *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;

1.1.44 *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;

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

1.1.46 *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;

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

1.1.48 *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;

1.1.49 *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;

1.1.50 *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;

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

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

1.1.53 *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;

1.1.54 *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;

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

1.1.56 *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;

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

1.1.58 *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;

1.1.59 *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);

1.1.60 *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;

1.1.61 *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;

1.1.62 *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;

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

1.1.64 *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;

1.1.65 *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*;

1.1.66 *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;

1.1.67 *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.

1.1.68 *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*;

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

1.1.70 *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;

1.1.71 *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;

1.1.72 *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;

1.1.73 *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;

1.1.74 *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;

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

1.1.76 *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;

1.1.77 *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*;

1.1.78 *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;

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

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

1.1.81 *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;

1.1.82 *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;

1.1.83 *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;

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

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

1.1.86 *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*;

1.1.87 *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*;

1.1.88 *electricity system* means a system comprising the *transmission system* and *generating stations connected* directly or indirectly to the *transmission system*;

1.1.89 *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*;

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

1.1.91 *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*;

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

1.1.93 *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;

1.1.94 *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;

1.1.95 *EMC Board* means the Board of Directors of the *EMC*;

1.1.96 *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;

1.1.97 *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;

1.1.98 *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;

1.1.99 *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;

1.1.100 *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*;

1.1.101 *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*;

1.1.102 *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*.

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

1.1.104 *energy* means real energy only;

1.1.105 *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;

1.1.106 *energy offer* means a *standing offer* or an *offer variation* submitted to the *EMC* for a *generation registered facility* that is not an *energy storage facility*, or *import registered facility* to provide *energy* to the *real-time market* for *energy*;

1.1.107 *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;

1.1.108 *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;

1.1.109 *energy storage facility* means a facility that can withdraw *energy* from the *transmission system,* store it for production of *electricity* and inject into the *transmission system* at a later time;

1.1.110 *energy storage offer* means a *standing offer* or an *offer variation* submitted to the *EMC* for a *generation registered facility* that is an *energy storage facility* to provide *energy* to, or withdraw *energy* from, the *real-time market* for *energy*;

1.1.111 *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;

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

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

1.1.114 *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;

1.1.115 *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;

1.1.116 *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;

1.1.117 *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;

1.1.118 *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;

1.1.119 *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;

1.1.120 *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;

1.1.121 *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;

1.1.122 *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;

1.1.123 *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;

1.1.124 *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;

1.1.125 *generating station* means any installation used for, or for purposes connected with, the production of *electricity*;

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

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

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

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

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

1.1.131 *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*;

1.1.132 *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;

1.1.133 *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*;

1.1.134 *high-risk operating state* means the state described in section 2.2 of Chapter 5;

1.1.135 *import* means to deliver *electricity* from an *interconnected system* via the *intertie*;

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

1.1.137 *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;

1.1.138 *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*;

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

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

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

1.1.142 *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* which render the output of the *generation facility* dispatchable shall not be considered to be an *intermittent generation facility*;

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

1.1.144 *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;

1.1.145 *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;

1.1.146 *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*;

1.1.147 *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*;

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

1.1.149 *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*;

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

1.1.151 *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;

1.1.152 *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);

1.1.153 *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*;

1.1.154 *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*;

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

1.1.156 *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*;

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

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

1.1.159 *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;

1.1.160 *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;

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

1.1.162 *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;

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

1.1.164 *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*;

1.1.165 *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;

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

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

1.1.168 *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*;

1.1.169 *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*

1.1.170 *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;

1.1.171 *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;

1.1.172 *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;

1.1.173 *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;

1.1.174 *market rules* means the rules made or modified under section 46 of the *Electricity Act*;

1.1.175 *market schedule* means a *market outlook scenario*, *pre-dispatch schedule*, *short-term schedule* or *real-time schedule*;

1.1.176 *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*;

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

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

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

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

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

1.1.182 *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;

1.1.183 *metering data* means electrical quantities measured and recorded by a metering installation;

1.1.184 *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;

1.1.185 *Minimum Trigger Period* refers to the minimum number of *dispatch periods* the *temporary price cap* will be in effect for as determined by the *Authority;*

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

1.1.187 *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*;

1.1.188 *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;

1.1.189 *moving average price* or MAP refers to the average of *USEP* across the latest *TPC Trigger Period*, calculated under section N.2.1 of Appendix 6N;

1.1.190 *moving average price threshold* refers to a value used in the assessment of the application of the *temporary price cap,* determined by a methodology approved by the *Authority* in accordance with section N.2.3 of Appendix 6N;

1.1.191 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;

1.1.192 *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*;

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

1.1.194 *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;

1.1.195 *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;

1.1.196 *non-curtailment event* has the same meaning ascribed thereto in section 2.8 of Chapter 7;

1.1.197 *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;

1.1.198 *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*;

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

1.1.200 *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*;

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

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

1.1.203 *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;

1.1.204 *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;

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

1.1.206 *notice of mediation* has the meaning ascribed thereto in section 3.8.1 of Chapter 3;

1.1.207 *offer* means an *energy offer*, an *energy storage offer,* a *reserve offer* or a *regulation offer*;

1.1.208 *offer variation* means an *energy offer,* an *energy storage 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, energy storage 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*;

1.1.209 *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*;

1.1.210 *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;

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

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

1.1.213 *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*;

1.1.214 *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;

1.1.215 *Performance bonds* means with respect to a *retail electricity licensee* class of *market participant*, a irrevocable, unconditional and on-demand guarantee provided by the *retail electricity licensee* class of *market participant* issued in favour of the *EMC,* in accordance with the *Code of Conduct for Retail Electricity Licensees*;

1.1.216 *Performance bond provider* means a person that has provided *performance bonds* or *additional performance bonds* in relation to or on behalf of a *retail electricity licensee* class of *market participant*;

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

1.1.218 *planned outage* means an *outage* that is planned, including where such planning is merely indicative;

1.1.219 *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;

1.1.220 *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;

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

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

1.1.223 *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*;

1.1.224 *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;

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

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

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

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

1.1.229 *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*;

1.1.230 *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*");

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

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

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

1.1.234 *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;

1.1.235 *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;

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

1.1.237 *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*;

1.1.238 *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*;

1.1.239 *pst line* means a *dispatch network line* with a phase-shifting transformer;

1.1.240 *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;

1.1.241 *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;

1.1.242 *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*;

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

1.1.244 *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;

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

1.1.246 *reference market energy price* or *RMEP* means the market price for *energy* for a *dispatch period* for a *market network node* determined in accordance with section D.24.1A of Appendix 6D;

1.1.247 *reference regulation price* means the price of *regulation* determined by the *market clearing engine* for a given *dispatch period* in accordance with section D.24.4A of Appendix 6D;

1.1.248 *reference reserve prices* means the price of *reserve* for a given *reserve class* determined by the *market clearing engine* for a given *dispatch period* in accordance with section D.24.3A of Appendix 6D;

1.1.249 *reference uniform Singapore energy price* or *RUSEP* means the uniform price of energy that applies for the calculation of the *moving average price* and determined in accordance with section D.24.6A of Appendix 6D;

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

1.1.251 *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;

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

1.1.253 *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;

1.1.254 *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);

1.1.255 *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;

1.1.256 *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;

1.1.257 *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*;

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

1.1.259 *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;

1.1.260 *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*;

1.1.261 *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;

1.1.262 *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*;

1.1.263 *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*;

1.1.264 *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;

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

1.1.266 *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;

1.1.267 *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*;

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

1.1.269 *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;

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

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

1.1.272 *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;

1.1.273 *residential premises* has the same meaning ascribed thereto in the *Electricity Act*;

1.1.274 *residual default amount* means a dollar amount calculated in accordance with section 9.5.1 of Chapter 2;

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

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

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

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

1.1.279 *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*;

1.1.280 *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*;

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

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

1.1.283 *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;

1.1.284 *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*;

1.1.285 *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*;

1.1.286 *selling market participant* means a *market participant* who is selling *energy*, *reserve* or *regulation* under a *bilateral financial contract*;

1.1.287 *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*;

1.1.288 *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;

1.1.289 *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;

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

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

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

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

1.1.294 *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*;

1.1.295 *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 de-*synchronised* from the *transmission system*;

1.1.296 *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*;

1.1.297 *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;

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

1.1.299 *SoC* or *State-of-Charge* refers to the remaining percentage of stored *energy* in an *energy storage facility*. Unless otherwise stated, this is a factor which represents the amount of stored *energy* in the *energy storage facility* as a fraction of the maximum *energy* storage capacity of the *energy storage facility;*

1.1.300 *solar generation* means the electrical power outage from *intermittent generation facilities* including solar photovoltaic systems, usually expressed in megawatts (alternating current);

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

1.1.302 *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;

1.1.303 *standing capability data* means the data described in Appendix 6E;

1.1.304 *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;

1.1.305 *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;

1.1.306 *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;

1.1.307 *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;

1.1.308 *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*;

1.1.309 *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;

1.1.310 *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*;

1.1.311 *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;

1.1.312 *temporary price cap* or *TPC* refers to the value that is used to determine the upper limit of *energy* prices when the *moving average price threshold* is reached and is determined in accordance with section J.1.7A of Appendix 6J;

1.1.313 *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;

1.1.314 *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;

1.1.315 *TPC Contingency Reserve Multiplier* refers to the multiplier used in the calculation of ResConPriceMax in accordance with section J.1.7A. The multiplier is to ensure the ratio between EnergyPriceMax and ResConPriceMax remains consistent between sections J.1.7 and J.1.7A of Appendix 6J, accurate up to two decimal points;

1.1.316 *TPC Energy Multiplier* refers to the multiplier used in the calculation of EnergyPriceMax in accordance with section J.1.7A of Appendix 6J, as determined by the *Authority*; *TPC Price Parameter* refers to a value as determined by the *Authority,* which is used for the calculation of the *temporary price cap* in accordance with section J.1.7A of Appendix 6J;

1.1.317 *TPC Primary Reserve Multiplier* refers to the multiplier used in the calculation of ResPriPriceMax in accordance with section J.1.7A. The multiplier is to ensure the ratio between EnergyPriceMax and ResPriPriceMax remains consistent between sections J.1.7 and J.1.7A of Appendix 6J, accurate up to two decimal points;

1.1.318 *TPC Regulation Multiplier* refers to the multiplier used in the calculation of RegPriceMax in accordance with section J.1.7A. The multiplier is to ensure the ratio between EnergyPriceMax and RegPriceMax in section J.1.7A of Appendix 6 J remains consistent with that in section J.1.7 of Appendix 6J, accurate up to two decimal points;

1.1.319 *TPC Trigger Period* refers to a number of the most recent block of *dispatch periods* as determined by the *Authority* to be used in the calculation of the *moving average price* under section N.2.1 of Appendix 6N;

1.1.320 *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*;

1.1.321 *trading day* means a period from midnight to the following midnight;

1.1.322 *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*;

1.1.323 *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;

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

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

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

1.1.327 *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;

1.1.328 *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.

1.1.329 *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*;

1.1.330 *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*;

1.1.331 *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*;

1.1.332 *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*;

1.1.333 *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;

1.1.334 *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*;

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

1.1.336 *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.