



PUBLIC

# Definition of Terms

Issue 1.0

This document is a compilation of the definitions of terms as provided in the WESM Rules, Retail Rules, and Market Manuals.

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This document is for information only. In case of inconsistency between this document and the DOE Circulars, the latter shall prevail.

## Reference Documents

| Document ID  | Document Title   |
|--------------|--|
| WESM Rules   | WESM Rules   |
| Retail Rules | Retail Rules   |
| WESM-BSM     | Billing and Settlement Manual  |
| WESM-CVC     | Constraint Violation Coefficients and Pricing Re-Runs Manual   |
| WESM-DP      | Dispatch Protocol Manual   |
| WESM-DRM     | Dispute Resolution Manual  |
| WESM-ECM     | Enforcement and Compliance Manual  |
| WESM-FASMD   | Procedures for the Monitoring of Forecast Accuracy Standards for Must Dispatch Generating Units Manual |
| WESM-GSV     | Guidelines on Significant Variations in and between Trading Intervals Manual                           |
| WESM-IDC     | Market Operator Information Disclosure and Confidentiality Manual                                      |
| WESM-LFM     | Load Forecasting Methodology Manual  |
| WESM-MNMCP   | Market Network Model Development and Maintenance – Criteria and Procedures Manual                      |
| WESM-MSM     | Market Surveillance Manual   |
| WESM-MSP     | Metering Standards and Procedures Manual   |
| WESM-PCSD    | Protocol for Central Scheduling and Dispatch of Energy and Contracted Reserves Manual                  |
| WESM-PDM     | Price Determination Methodology Manual   |
| WESM-PEMAUD  | PEM Audit Market Manual  |
| WESM-PM      | Penalty Manual   |

| <b>Document ID</b> | <b>Document Title</b>   |
|--------------------|---|
| WESM-RCM           | Procedures for Changes to the WESM Rules, Retail Rules and Market Manuals     |
| WESM-RSDCP         | Registration, Suspension and De-Registration Criteria and Procedures Manual   |
| WESM-SSRG          | System Security and Reliability Guidelines Manual                             |
| WESM-TCMM          | Technical Committee Market Manual   |
| WESM-WCR           | WCO Certification and Registration Manual                                     |
| WESM-WGC           | Guidelines Governing the Constitution of the WESM Governance Committee Manual |
| RCOA-DCRCI         | Disclosure and Confidentiality of Retail Customer Information Manual          |
| RCOA-GEOPP         | Green Energy Option Program Procedures Manual                                 |
| RCOA-MSP           | Metering Standards and Procedures Manual                                      |
| RCOA-MTP           | Market Transactions Procedures Manual   |
| RCOA-RCP           | Registration Criteria and Procedures Manual                                   |

# Contents

|                  |   |           |
|------------------|---|-----------|
| <b>SECTION 1</b> | <b>INTRODUCTION .....</b>               | <b>4</b>  |
| 1.1              | BACKGROUND .....                        | 4         |
| 1.2              | PURPOSE .....                           | 4         |
| <b>SECTION 2</b> | <b>DEFINITIONS.....</b>                 | <b>4</b>  |
| 2.1              | DEFINITIONS .....                       | 4         |
| 2.2              | A.....                                  | 4         |
| 2.3              | B.....                                  | 9         |
| 2.4              | C.....                                  | 11        |
| 2.5              | D.....                                  | 16        |
| 2.6              | E.....                                  | 22        |
| 2.7              | F.....                                  | 26        |
| 2.8              | G.....                                  | 28        |
| 2.9              | H.....                                  | 31        |
| 2.10             | I.....                                  | 31        |
| 2.11             | L.....                                  | 34        |
| 2.12             | M.....                                  | 36        |
| 2.13             | N.....                                  | 44        |
| 2.14             | O.....                                  | 47        |
| 2.15             | P.....                                  | 48        |
| 2.16             | Q.....                                  | 52        |
| 2.17             | R.....                                  | 52        |
| 2.18             | S.....                                  | 59        |
| 2.19             | T.....                                  | 65        |
| 2.20             | U.....                                  | 67        |
| 2.21             | V.....                                  | 68        |
| 2.22             | W.....                                  | 69        |
| 2.23             | Z.....                                  | 71        |
| <b>SECTION 3</b> | <b>AMENDMENTS AND PUBLICATION .....</b> | <b>72</b> |
| 3.1              | AMENDMENTS AND PUBLICATION .....        | 72        |

## SECTION 1 INTRODUCTION

### 1.1 BACKGROUND

- 1.1.1 The Philippine Electricity Market is governed by WESM Rules, Retail Rules and twenty-seven (27) Market Manuals. These Market Rules and Manuals establish the basic rules, requirements, and procedures and terms intended to be complimentary with the Philippine Grid Code and Philippine Distribution Code.
- 1.1.2 This document contains a collection of terms used and defined in WESM Rules, Retail Rules, and Market Manuals. It is provided for information only and intended to facilitate easy access to the terminologies used in the said market documents.
- 1.1.3 This document contains terms on which the definitions make reference to a specific provision on the WESM Rules, Retail Rules or Market Manuals. It is advisable to refer to the specific provisions in the said market documents for a thorough understanding.
- 1.1.4 This document may be amended from time to time. In instances where inconsistency is observed between the definition in this document and the definition in the WESM Rules, Retail Rules and Manuals, the latter documents shall prevail.

### 1.2 PURPOSE

- 1.2.1 For users to refer to a single document providing the definitions of the terms used in WESM/Retail Rules and WESM/Retail Manuals.

## SECTION 2 DEFINITIONS

### 2.1 DEFINITIONS

- 2.1.1 The reference document ID of Market Rules and Market Manuals is provided in italic form alongside the definition.
- 2.1.2 A term may be defined in Market Rules and various Market Manuals.

#### 2.2 A

##### **AC**

(WESM Rules) Alternating Current.

##### **Accuracy**

(WESM-MSP) The extent to which a given measurement agrees with the defined value.

**Accuracy Class**

(WESM-MSP) A designation assigned to an instrument transformer the errors of which remain within specified limits under prescribed conditions of use.

**Act**

(WESM Rules) Refers to Republic Act No. 9136 also known as the "Electric Power Industry Reform Act of 2001".

(WESM-DRM) Refers to the Republic Act No. 9136 also known as the Electric Power Industry Reform Act (EPIRA), as may be replaced or modified by competent authorities from time to time.

(WESM-MSM) Means Republic Act No. 9136, also known as the Electric Power Industry Reform Act (EPIRA) of 2001.

(WESM-RCM) Enacted as Republic Act No 9136.

(WESM-TCMM) Means the Republic Act No. 9136 also known as the Electric Power Industry Reform Act (EPIRA), as they may be issued or modified by competent authorities from time to time.

**Active Energy**

(WESM Rules) The integral of the Active Power with respect to time, measured in Watthours (Wh) or multiples thereof. Unless otherwise qualified, the term "Energy" refers to Active Energy.

**Actual Exposure**

(WESM Rules) The total amount of obligation that a WESM member is required to pay on due date.

**Adequacy**

(WESM-SSRG) The ability of the power system to supply the aggregate electrical demand and energy requirements of the Customers at all times, taking into account scheduled and reasonably expected unscheduled outages of system elements.

**Administered Price**

(WESM Rules) A price imposed by the Market Operator to the Trading Participants during market suspension and market intervention to be used for settlements, which price is determined in accordance with the methodology developed and published by the Market Operator and approved by the ERC.

(WESM-MSM) Means a price imposed by the Market Operator to the Trading Participants during market suspension and intervention to be used for settlements which price is determined in accordance with the methodology developed and published by the Market Operator and approved by the ERC.

**ADR**

(WESM-DRM) Refers to Alternative Dispute Resolution.

**ADR Providers**

(WESM-DRM) Means the institutions or persons accredited as mediators, conciliators, arbitrators, neutral evaluators or any person exercising similar functions in any Alternative Dispute Resolution system.

**ADR Support Service Center or "ASSC"**

(WESM-DRM) Refers to the WESM-accredited ADR secretariat appointed to a particular case assisting the Mediator and/or Arbitral Tribunal.

**Affected Participants**

(WESM Rules) A WESM member who is affected by a decision or has a pecuniary interest in a decision.

**Algorithm**

(WESM-PDM) The process/processes applied by the market dispatch optimization model in computing the dispatch schedules and prices.

**American National Standards Institute or "ANSI"**

(RCOA-MSP) A private non-profit organization that oversees the development of voluntary consensus standards for products, services, processes, systems, and personnel in the United States.

**Ancillary Service Procurement Agreement or Ancillary Services Agreement**

(WESM Rules) An agreement under which a WESM member, registered as an Ancillary Service Provider, agrees to provide ancillary services.

(WESM-DP) A contractual agreement under which a WESM Member, registered as an Ancillary Service Provider, agrees with the System Operator to provide ancillary services.

**Ancillary Services**

(WESM Rules) Those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the transmission system in accordance with good utility practice, the Grid Code and Distribution Code.

**Ancillary Services Provider**

(WESM Rules) A person or an entity providing ancillary services and registered with the Market Operator.

**Answer**

(WESM-DRM) Refers to a written response setting forth the defenses and/or counter-claims to a Request for Arbitration referred to in Section 9.2.2 of this Manual.

**Anti-Competitive Behavior**

(WESM Rules) This refers to anti-competitive behavior as defined in the Act, IRR and other rules and regulations that ERC may promulgate.

(WESM-MSM) Means any act or omission, or combination thereof, that constitutes anti-competitive behavior or abuse of market power as defined in Section 45 of the Act, and its IRR and the Philippine Competition Act, and its IRR and other rules and regulations that ERC may promulgate.

**Applicable Law, Rules and Regulations**

(WESM-DRM) Shall include the EPIRA and its Implementing Rules and Regulations, the WESM Rules and the Market Manuals, the Philippine Grid Code, the Philippine Distribution Code, the Competition Rules, and such other codes, rules, regulations and issuances relating to the WESM, as they may be issued or modified by competent authorities from time to time.

(WESM-MSM) Shall include the Act or EPIRA and its IRR, the Philippine Grid Code, the Philippine Distribution Code, the Competition Rules, the WESM Rules and Market Manuals and such other codes, rules, regulations, and issuances related to the WESM.

(WESM-TCMM) Shall include the EPIRA and its Implementing Rules and Regulations, the Philippine Grid Code, the Philippine Distribution Code, the WESM Rules and Market Manuals, the Competition Rules, and such other codes, rules, regulations, issuances related to the WESM, as they may be issued or modified by competent authorities from time to time.

(WESM-WGC) Include the EPIRA and its Implementing Rules and Regulations, the WESM Rules, the Philippine Grid Code, Philippine Distribution Code and all other laws, rules and regulations relating to or affecting the WESM.

**Applicant**

(WESM-RSDCP) A person or entity eligible to register as a WESM Member and who has submitted or intends to submit the requisite application to the Market Operator.

**Arbitral Tribunal**

(WESM-DRM) Refers to the panel comprised of three (3) arbitrators nominated and appointed in the manner prescribed herein, and constituted to hear and decide WESM disputes under Section 9 of this Manual.



**Arbitration**

(WESM-DRM) Refers to a dispute resolution process in which three (3) arbitrators from the roster of WESM-Accredited Arbitrators are selected and appointed to constitute an Arbitral Tribunal in accordance with Dispute Resolution Manual, to resolve a dispute by rendering an award.

**Arbitration Rules**

(WESM-DRM) Means the arbitration rules contained in Section 9 of this Manual.

**Arbitrator**

(WESM-DRM) Refers to a person appointed to render an award alone or with others, in dispute that is subject of an arbitration agreement.

**Audit Report**

(WESM-PEMAUD) Refers to the report of the PEM Audit Committee or the auditors that presents the audit results and recommendations.

**Authorization**

(WESM Rules) A permit, consent, approval, license or other form of authority issued under the Act which may be required as a prerequisite for undertaking certain activities in the Philippines electric power industry.

**Automatic Generation Control or "AGC"**

(WESM Rules/WESM-DP/WESM-SSRG) Equipment that automatically adjusts the generation to maintain its generation dispatch, interchange schedule plus its share of frequency regulation. AGC is a combination of secondary control for a control area/control block and real-time operation of the generation dispatch function (based on generation scheduling). Secondary control is operated by the System Operator while generation scheduling is operated by the respective Generation Companies.

**Automatic Load Dropping or "ALD"**

(WESM-DP/WESM-SSRG) The process of automatically and deliberately removing pre-selected loads from a power system in response to an abnormal condition in order to maintain the integrity of the system. It can be classified as: 1) Under frequency Load Shedding (UFLS); and 2) Under-voltage Load Shedding (UVLS).

**Automatic Pricing Re-run**

(WESM Rules) The automated process under Clause 3.6.7 that solves the market dispatch optimization model with relaxed constraints after detecting non-zero constraint violation variable values to produce energy and reserve prices according to the timetable.

**Autonomous Group Market Operator or "AGMO"**

(WESM Rules) The Autonomous Group Market Operator constituted by the DOE under Section 30 of the Act, which shall undertake the preparatory work and initial operation

of the WESM for a period of twelve months from the spot market commencement date, initially under the administrative supervision of the TRANSCO. For the avoidance of doubt, during that initial twelve-month period, all references in the WESM Rules to "Market Operator" shall be construed to mean "AGMO".

**Availability**

(WESM-DP) The duration of time over a specified period that a plant/unit is ready to be in service or operational.

**Average Actual Market Price**

(WESM-BSM) This refers to the ratio of the total spot market payment of a WESM Member, which may include spot market energy and reserve transactions to the total metered quantities net of bilateral contract quantities for each billing month.

**Award**

(WESM-DRM) Means any partial or final decision by an Arbitral Tribunal in resolving the issue in a controversy or dispute.

**2.3 B**

**Back-up Meter**

(WESM-MSP) A registered revenue meter identical to the main meter connected at the same metering point. In case of defective main meter data, the back-up registered meter data may be used.

**Basic Insulation Level or "BIL"**

(WESM-MSP) A specific insulation level in kilovolts of the crest value of a standard lightning impulse.

**Basic WESM Course**

(WESM-DRM) Refers to a short training course given by PEMC to educate or make proficient its attendees on the WESM operations, Market Manuals and related matters.

**Battery Energy Storage System**

(WESM Rules) A system with all related equipment essential to its functioning as a single entity which is capable of storing electrical energy through chemical reactions from which it is able to charge or discharge electrical energy to the power system.

**Battery Energy Storage System Offer**

(WESM Rules) A market offer either to supply or purchase electricity, submitted or revised by a Generation Company in accordance with Clauses 3.5.5, 3.5.9, 3.5.10 or 3.5.11.

**Bilateral Buy Quantity**

(WESM Rules) The quantity of electricity purchased by a Trading Participant pursuant to a bilateral contract determined in accordance with Clause 3.13.1.2.

**Bilateral Contract**

(WESM Rules) A contract between parties, the net effect of which is that a defined quantity of electricity has been sold by one party to another, at a particular node.

**Bilateral Sell Quantity**

(WESM Rules) The quantity of electricity sold by a Trading Participant pursuant to a bilateral contract submitted to the Market Operator under Clause 3.13.1.1 (a).

**Billing and Settlement Timetable**

(Retail Rules) Timetable implemented by the Market Operator for the calculation, billing, collection and payment of settlement amounts of Trading Participants in the WESM.

**Billing Period**

(WESM Rules) The period of one month commencing at 00:00 hours of the twenty sixth (26th) day of each calendar month to 24:00 hours of the Twenty-fifth (25th) day of the next calendar month.

**Black Start**

(WESM-SSRG) The process of recovery from total system blackout using a generating unit with the capability to start and synchronize with the system without an external power supply.

**Black Start Capability**

(WESM Rules) In relation to a generating unit, the ability to start and synchronize without using supply from the power system.

**Black Start-up Facilities**

(WESM Rules) Facilities which provide black start capability.

**Blondel's Theorem**

(WESM-MSP) In a system of N conductors, N-1 meter elements, properly connected, will measure the active power or energy taken. The connection must be such that all voltages coils have a common tie to the conductor in which there is no current coil.

**Board Selection Committee**

(WESM-DRM) Refers to the committee composed of at least three (3) members of the PEM Board, one of whom should be an Independent PEM Board director, which is tasked to review and evaluate the qualifications of all persons nominated to any WESM Governance Committee requiring appointment by the PEM Board.

**Branch Group**

(WESM-CVC) A group of lines and/or transformers.

**Breach**

(WESM Rules) Any act or omission that constitutes a violation of or a non-compliance with any provision of the WESM Rules and its associated Market Manuals, which are expressly provided for as subject of sanctions if committed.

(WESM-ECM) Act or omission that constitutes a violation or non-compliance with any provision of the Market Rules that are expressly provided for as subject of sanctions and penalties if committed.

(WESM-MSM) Means act or omission that constitutes a violation or non-compliance with any provision of the WESM Rules and Market Manuals that are expressly provided for as subject of sanctions or penalties if committed.

(WESM-PM) Failure to comply with the provisions of the Market Rules that is subject of a penalty under the WESM Penalty Manual. For purposes of this Manual, breach is not synonymous with non-compliance.

**Burden**

(WESM-MSP) For a voltage transformer, the total volt-ampere load, with specified power factor, applied to the secondary terminals. For a current transformer, the total apparent impedance, expressed in ohms, connected to the secondary terminals.

**Business Continuity**

(WESM Rules) Refers to the activity performed by the Market Operator to ensure that critical business functions will be available to the Trading Participants, System Operator, Metering Services Provides, ERC, DOE, and other entities that must have access to those functions.

**Business Day**

(WESM Rules) Any day on which the spot market is open for business.

(WESM-RSDCP) Refers to regular banking days.

**2.4 C****Capability**

(WESM-DP) Highest power that a specified generating unit can deliver and sustain whenever called upon.

**Captive customer**

(Retail Rules) An electricity end user who does not have a choice of a Supplier of electricity, as may be determined by the ERC in accordance with the Act. Collectively, the end users make up the captive market.

**Cascading Outage**

(WESM-DP) The uncontrolled successive loss of system elements triggered by an incident at any location.

(WESM-SSRG) The uncontrolled successive loss of system elements triggered by an incident at any location.

**Central Dispatch**

(WESM Rules) The process of scheduling by the Market Operator and issuing direct instructions to electric power industry participants by the System operator achieve the economic operation of the transmission system while maintaining its quality, stability, reliability and security.

**Central Registration Body**

(Retail Rules) The entity designated by the DOE to undertake the management of the required systems and processes and information technology system that is capable of handling Customer switching and information exchange as well as their transactions in the WESM.

**Central Scheduling**

(WESM-PCSD) Shall refer to the activities taken prior to Commercial Launch Date of the WESM Reserve Market for the purpose of central dispatch of energy and reserve categories traded in the WESM. It intends to reflect the entire capacities in the WESM, including the reserve capacities contracted by NGCP, so that these can be centrally scheduled for either energy or reserve. No settlement of reserves shall be made through the WESM, but rather these shall be settled based on the respective provisions of their ASPA.

**Certificate of Compliance**

(WESM-RSDCP) Certificate issued by the Energy Regulatory Commission to generation companies or facilities authorizing and setting conditions for the operations of the generation companies or facilities.

**Chairperson**

(WESM Rules) The person appointed by the DOE to chair meetings of the PEM Board.

**Channel**

(WESM-MSP) Individual input, output and intervening circuitry required to record time-tagged data.

**Check Data**

(WESM Rules) Data supplied to the Market Operator by a Trading Participant in accordance with clause 3.5.5.3 for the purpose of checking the validity of any future offer or demand bid in accordance with clause 3.5.12.

**Claimant**

(WESM-DRM) Means a party to a WESM dispute who is making a claim.

**Commissioning Test**

(WESM-MSP) A procedural test on a new metering installation (MI) prior to its operation which consists of the visual check and safety of the surroundings of the new MI; continuity test; insulation test; instrument transformer ratio-check and the recordings of the required information on the meters and instrument transformers.

**Compliance Committee or "CC"**

(WESM Rules) The committee created by the PEM Board pursuant to Clause 1.8.1.1 primarily tasked to review investigation reports, recommend imposition of penalties if warranted and monitor compliance of WESM Members to the WESM Rules and Market Manuals.

(WESM-MSM) Refers to one of the WESM Governance Committees tasked to review investigation reports, recommend imposition of penalties if warranted and monitor compliance of WESM Trading Participants to the WESM Rules and Manuals.

**Compliance Monitoring and Assessment**

(WESM-ECM/WESM-PM) An integral part of enforcement proceedings in the WESM that is initiated and carried out by the Enforcement and Compliance Office, primarily for the purpose of determining the occurrence of breach of the Market Rules. Assessment is done by taking into consideration all the relevant and verified market data and information from the Market Operator, the System Operator, the WESM Members, among others, with the end in view of determining the appropriate enforcement actions, if warranted.

**Compliance Plan**

(WESM-ECM) A plan detailing the actions or tasks required to be carried out by a WESM Member to implement a remedial measure.

**Confidential Information**

(WESM Rules) Information, which is or has been provided to, or by, a Participant or the Market Operator under, or in connection with, the WESM Rules and is stated under the WESM Rules to be, or is classified by the Market Operator as, confidential information or is otherwise confidential or commercially sensitive information or is information which is derived from any such information.

**Connect, Connected, Connection**

(WESM Rules) To form a physical link to or through the transmission network or a distribution network in such a way as to allow transmission of electricity in accordance with the standards set out in the Grid Code.

**Connection Assets**

(WESM Rules) Any component of a transmission system or distribution system which, in the reasonable opinion of the Market Operator, is associated with a connection point, including metering installations.

**Connection Point**

(WESM Rules) The agreed point of supply established between a Network Service Provider and a Trading Participant.

(WESM-MSP) The point of connection of the User System or Equipment to the Grid (for Users of the Grid) or to the Distribution System (for Users of the Distribution System).

**Constrained Solution**

(WESM-PDM) A solution produced by the market dispatch optimization model considering all constraints based on the price determination methodology.

**Constrained-on Generators**

(WESM-PDM) Generation units that were scheduled to run pursuant to the original market solution but would not have been cleared or cleared at a lower quantity based on the unconstrained solution.

**Constrain-Off**

(WESM Rules) In respect of a generating unit the output of that generating unit is re-dispatched by the System Operator below its Real-Time Dispatch schedule in accordance with the WESM Merit Order Table.

**Constrain-On**

(WESM Rules) In respect of a generating unit, the output of that generating unit is re-dispatched by the System Operator above its Real-Time Dispatch schedule in accordance with the WESM Merit Order Table.

**Constraint**

(WESM Rules/WESM-MSM) A limitation on the capability of any combination of network elements, loads, generating units or Ancillary Service Providers such that it is, or is deemed by the System operator to be, unacceptable to adopt the pattern of transfer, consumption, generation or production of electrical power or other services that would be most desirable if the limitation were removed.

**Constraint Violation**

(WESM Rules) A constraint is violated when the loadings of network elements, loads, generating units or Ancillary Service Providers involved in that constraint combine in such a way as to exceed the limit specified by that constraint.

**Constraint Violation Coefficients**

(WESM Rules) Coefficients set for constraint violation variables by the Market Operator in accordance with clause 3.6.2. The Market Operator is to ensure that, if constraints shall be violated, such violation will occur in appropriate priority order.

**Contestable Customer**

(WESM Rules) An electricity end user that is certified by the ERC as having met the demand threshold for contestability as set out in the Act. Collectively, these end users make up the contestable market.

**Contestable Market**

(WESM Rules) Refers to the electricity End-users who have a choice of a Supplier of electricity, as may be determined by the ERC in accordance with the Act.

**Contingency**

(WESM-DP/WESM-SSRG) The outage of a single component of the grid that cannot be predicted in advance but excludes scheduled maintenance.

**Contingency Reserve**

(WESM Rules/WESM-DP/WESM-SSRG) Synchronized generation capacity from qualified generating units and qualified interruptible loads allocated to cover the loss or failure of a synchronized generating unit or a transmission element or the power import from a circuit interconnection.

**Continuous Rating**

(WESM-SSRG) The rating of a component or equipment which defines the substantially constant conditions which can be tolerated for an indefinite time without significant reduction of service life. It is also the maximum constant load that can be carried by a piece of electric equipment without exceeding a designated temperature rise.

**Credit Support**

(WESM Rules) An obligation owed to the Market Operator by a third party supporting the obligations of a Trading Participant under clause 3.14.11 of WESM Rules.

**Credit Support Provider**

(WESM Rules) WESM Rules - The party which assumes credit support obligations to the Market Operator under clause 3.14.11.

(WESM-BSM) Banks, or insurance companies.



**Critical Loading**

(WESM-SSRG) The condition when the loading of transmission lines or substation equipment is between 90 percent and 100 percent of the continuous rating.

**Current Transformer**

(WESM-MSP) An instrument transformer intended to have its primary winding connected in series with the conductor carrying the current to be measured or controlled.

**Customer**

(WESM Rules) A person who:

- (a) engages in the activity of purchasing electricity supplied through a transmission or distribution system, and
- (b) registers with the Market Operator in that capacity under clause 2.3.2.

(WESM-MSM) Means person who: (a) engages in the activity of purchasing electricity supplied through a transmission or distribution system other than where all that person's electricity requirements are purchased from a Supplier; and (b) registers with the Market Operator in that capacity under Clause 2.3.2 of the WESM Rules.

**Customer Market Trading Node**

(WESM Rules) A market trading node at which electricity will normally be purchased from the spot market and which is classified as a Customer market trading node in accordance with Clause 3.2.2.2.

**Customer Pricing Zone**

(WESM Rules) A zone within which all customers will face the same price for electricity consumed, as published by the Market Operator in accordance with clause 3.2.3.1.

**Customer Switching**

(Retail Rules) Commercial transfer of a Retail Customer to another Supplier, other than a transfer to a Supplier of Last Resort.

**2.5 D****Data Collection System**

(WESM Rules) All equipment and arrangements that lie between the metering database and the point where the metering data enters the public telecommunications network.

**Data Logger**

(WESM Rules) A device that collects energy data and is capable of being accessed electronically by the Market Operator via the data collection system.

**Day**

(WESM-RSDCP) Refers to calendar days.

**Day Ahead Projections**

(WESM Rules) Projections of market conditions for the day ahead determined and published by the Market Operator in accordance with clause 3.7.2.

**DC**

(WESM Rules) Direct Current

**Default Event**

(WESM Rules) Any one or more of the events listed in clause 3.14.11.1.

**Default Interest Rate**

(WESM Rules) An interest rate of three percent (3%) per annum or the approved default interest by the PEM Board, in addition to the Interest Rate, to be applied to the remaining default amount.

**Default Notice**

(WESM Rules) A notice issued by the Market Operator under clause 3.14.11.2.

**Demand**

(WESM-LFM) Total power consumed in a power system or grid inclusive of the relevant losses produced during the delivery of power. It is also the total power generated in the grid.

(WESM-MSP) The average power or a related quantity over a specified interval of time.

**Demand Bid**

(WESM Rules) A standing bid, or market bid to buy electricity submitted, or revised, by a Customer in accordance with clause 3.5.6, 3.5.9, 3.5.12 or 3.5.13, and containing the information specified in Appendix A1.

**Demand Control**

(WESM-DP/WESM-SSRG) The reduction in demand for the control of the frequency when the grid is in an emergency state. This includes Automatic Load Dropping, Manual Load Dropping, demand reduction upon instruction by the System Operator, and voluntary demand management.

**Demand Control Imminent Warning**

(WESM-DP) A warning from the System Operator, not preceded by any other warning, which is issued when demand reduction is expected within thirty (30) minutes.

**Demand Forecast**

(WESM-LFM) Demand projection for a particular forecast area.

**Demand Interval**

(WESM-MSP) The specified interval of time on which a demand measurement is based.

**Deregistered WESM member**

(WESM Rules) A person who is registered as a WESM member until deregistered under clauses 2.5 and 2.6.

**Direct Member counterparty**

(Retail Rules) Direct Member that transacts in the WESM on behalf of an Indirect Member.

**Direct WESM member**

(WESM Rules) A person or an entity who is registered with the Market Operator under clause 2.3.

**Directly Connected Customer**

(Retail Rules) Refer to industrial or bulk electricity end-users, which are directly supplied with electricity by a Generation Company or Power Sector Assets and Management Corporation (PSALM) or NPC pursuant to Republic Act No. 6395 as amended by Presidential Decree No. 395.

**Director**

(WESM Rules) A member of the PEM Board or IMO Board, as the case may be.

**Disaster**

(WESM Rules) Refers to natural or man-made event that results in physical damage, destruction of property or loss of life. Disasters shall include, but are not limited to earthquakes, typhoons, floods, storms, fires, bomb threats, acts of terrorism or sabotage, power system blackouts or civil disturbances.

**Disaster Recovery**

(WESM Rules) Refers to a subset of business continuity. This is the process, policies and procedures that are related to preparing for recovery or continuation of technology infrastructure which are vital to the Market Operator after a natural or human-induced disaster.

**Disclose**

(WESM-IDC) Means to directly or indirectly reveal, distribute report, publish or otherwise transfer information to any party other than to the party that originally provided the information.

**Disclosing Party**

(WESM-IDC) The party that owns, furnishes or provides confidential information.

**Disconnect**

(WESM Rules) The operation of switching equipment or other action so as to prevent the flow of electricity at a connection point.

**Dispatch**

(WESM Rules) The act by which the System operator initiates all or part of the response offered or bid by a scheduled generating unit or scheduled load in accordance with clause 3.8.2.

**Dispatch Conformance Standards**

(WESM Rules) Standards that set the criteria and procedures for determining whether the scheduled generating units and the priority dispatch generating units comply with their dispatch schedules and which are required to be set out in a Market Manual in accordance with Clause 3.8.5.

**Dispatch Instruction**

(WESM Rules) Refers to the instruction issued by the System Operator to Trading Participants such as Generation Companies with scheduled generating units and to Generation Companies whose generating units will provide ancillary services to implement the final dispatch schedule in real time.

**Dispatch Interval**

(WESM Rules) A five-minute period commencing every five (5) minutes according to the timetable and Clause 3.4.1.

**Dispatch Schedule**

(WESM Rules) The target loading levels in MW for each scheduled generating unit, must dispatch generating unit, priority dispatch generating unit, non-scheduled generating unit, scheduled load and reserve facility for the end of that dispatch interval, determined by the Market Operator through the use of a market dispatch optimization model in accordance with Clause 3.8.1.

**Dispatchable Load**

(WESM Rules) A load which is able to respond to dispatch instructions and so may be treated as a scheduled load' in the dispatch process.

**Dispatchable Reserve**

(WESM Rules) Generating capacity that are readily available for dispatch in order to replenish the Contingency Reserves service whenever a generating unit trips or a loss of a single transmission interconnection occurs.

(WESM-DP) Generating capacity that is not scheduled for regular energy supply, regulating reserve, contingency reserve, or interruptible loads not scheduled for contingency reserve, and that are readily available for dispatch in order to replenish the Contingency Reserve service whenever a generating unit trips or a loss of a single transmission interconnection occurs.

(WESM-SSRG) The target loading levels in MW for each scheduled Generating Unit or scheduled Loads and for each reserve facility for the end of that trading interval

determined by the Market Operator through the use of a market Dispatch optimization model.

**Display**

(WESM-MSP) A means of visually identifying and presenting measured or calculated quantities and other information.

**Dispute Management Protocol or "DMP"**

(WESM Rules) The DMP is a system to be followed by the disputing parties and shall form part of the negotiation stage of the WESM dispute resolution framework.

(WESM-DRM) Is a system to be followed by the disputing parties and shall form part of the negotiation stage of the WESM dispute resolution framework.

**Dispute Resolution Administrator or "DRA"**

(WESM Rules) A person appointed by the PEM Board under clause 7.3.2.1.

(WESM-DRM) Is the person appointed by the PEM Board to perform the functions provided for under the WESM Rules and Section 5 of the Manual.

**Dispute Resolution Process or "DRP"**

(WESM-DRM) Means mediation or arbitration or both processes.

**Distribution Code**

(WESM Rules) The set of rules, requirements, procedures, and standards governing Distribution Utilities and users in the operation, maintenance, and development of their distribution systems. It also defines and establishes the relationship of the distribution systems with the facilities or installations of the parties connected thereto.

(WESM-TCMM) Refers to a compilation of rules and regulations governing electric utilities in the operation and maintenance of their distribution systems which includes, among others, the standards for service and performance, and defines and establishes the relationship of the distribution systems with the facilities or installations of the parties connected thereto.

**Distribution Line**

(WESM Rules) A power line, including underground cables that is part of a distribution network.

**Distribution Network**

(WESM Rules) A network which is not a transmission network.

**Distribution Service**

(WESM Rules) The services provided by a Distribution Utility which are associated with the conveyance of electric power from transmission facilities or embedded generators

to End-users by a Distribution Utility through its distribution system pursuant to the provisions of the Act and the IRR.

### **Distribution System**

(WESM Rules) The system of wires and associated facilities belonging to a franchised Distribution Utility, extending between the delivery points on the transmission or sub-transmission system, or generator connection and the point of connection to the premises of the End-User.

### **Distribution Utility**

(WESM Rules) An Electric Cooperative, private corporation, government-owned utility, or existing local government unit, that has an exclusive franchise to operate a distribution system in accordance with its franchise and the Act, and registered with the Market Operator as a Network Service Provider under clause 2.3.4.

### **Distributors**

(WESM-MSP) An electric cooperative, private corporation, government-owned utility or existing local government unit that has an exclusive franchise to operate a Distribution System.

### **Disturbance**

(WESM-DP/WESM-SSRG) An unplanned event that produces an abnormal system condition.

### **DMC**

(WESM-TCMM) Refers to the Distribution Management Committee which was established by the ERC to monitor Distribution Code compliance at the operations level and to submit regular and special reports pertaining to the Distribution Operations. It shall also initiate an enforcement process for any perceived violations of Distribution Code provisions and recommend to the ERC the appropriate fines and penalties for such violations.

### **Department of Energy or "DOE"**

(WESM Rules) The government agency created pursuant to Republic Act No. 7638 whose expanded functions are provided in the Act.

(WESM-DRM) Refers to the Department of Energy, the government agency created pursuant to Republic Act No. 7638.

(WESM-MSM) Refers to the Department of Energy, the government agency created pursuant to Republic Act No. 7638 whose expanded functions are provided in the Act.

(WESM-RCM) Refers to the Department of Energy.

(WESM-TCMM) Refers to the Department of Energy, the government agency created pursuant to Republic Act No. 7638.

**Double Secondary Current Transformer (Double Core)**

(WESM-MSP) One which has two secondary coils each on a separate magnetic circuit with both magnetic circuits excited by the same primary winding.

**Double Secondary Potential Transformer (Double Core)**

(WESM-MSP) One which has two secondary windings on the same magnetic circuit insulated from each other and the primary.

**DRA Secretariat**

(WESM-DRM) Refers to the Market Assessment Group tasked to assist the DRA in the performance of his/her responsibilities under the WESM Rules.

**2.6 E**

**Economic Gain**

(WESM-PDM) The total benefit that will be received by the producers and consumers of electricity in the security-constrained economic dispatch optimization.

**Economic Rental**

(WESM Rules) Means, for a constraint in the market dispatch optimization model where the constraint is in linear programming canonical form (that is, for a maximizing optimization model: the sum of the variable terms less than or equal to the constant term), the shadow price of the constraint multiplied by the constant term of the constraint.

**EFT Facility**

(WESM Rules) An electronic funds transfer facility.

**Electric Cooperative**

(WESM Rules) A cooperative or corporation authorized to provide electric services pursuant to Presidential Decree No. 269, as amended, and Republic Act No. 6938 within the framework of the national rural electrification plan.

**Electronic Communication Procedures**

(WESM Rules) The procedures established by the Market Operator and updated from time to time in accordance with clause 5.2.2.5.

**Electronic Communication System**

(WESM Rules) A system used by Trading Participants and the Market Operator for exchange of information in accordance with clause 5.2.2.1.

**Embedded Generators**

(WESM Rules) Generating units that are indirectly connected to the Grid through the Distribution Utilities' lines or industrial generation facilities that are synchronized with the Grid.

**Emergency**

(WESM Rules) An event or situation described in clauses 6.3.1.1 and 6.3.1.2.

(WESM-SSRG) Any abnormal system condition that requires automatic or immediate manual action to prevent or limit loss of transmission facilities or generation supply that could adversely affect the reliability of the electric system.

**Emergency Instructions**

(WESM Rules) Instructions issued by the System Operator in an emergency under Clause 6.5.1.

**Emergency Restoration Plan**

(WESM-MSP) Sometimes called the Emergency Instrument Transformer Restoration Plan, are plans which the Metering Services Provider must take in case of any failures on the meters or the Instrument Transformers.

**Emergency State**

(WESM Rules) The grid shall be considered in the emergency state when:

- (a) Single Outage Contingency (N-1) Criterion is not met. Imminent threat in system security would exist should a credible n-1 contingency occur that would result in the cascading outages of lines and equipment if not corrected immediately.
- (b) There is generation deficiency or operating margin is zero.
- (c) Grid transmission voltage is outside the limits of -10% or +10% of the nominal value.
- (d) The loading levels of all transmission lines and substation equipment are beyond the threshold as set by the Grid Code.
- (e) The grid frequency is beyond the limits of 59.4Hz and 60.6Hz.

**End-to-End Test**

(RCOA-MSP) A continuity test of data transfer from the meter to the Meter Data Retrieval System of the Retail Metering Services Provider and then to the Meter Data Collection System of the Central Registration Body.

**End-User**

(WESM Rules) Any person or entity requiring the supply and delivery of electricity for its own use.

**Energy**

(WESM Rules) Generally, active energy and/or reactive energy but for the purposes for Chapter 3 means active energy only.



(WESM-MSP) The integral of active power with respect to time.

### **Energy Balance Equation**

(WESM Rules) An equation determined by the Market Operator in accordance with clause 3.6.1.4 (c), representing the balance between generation, load and transmission flows at a particular node of the market network model.

### **Energy Data**

(WESM Rules) The data that results from the measurement of the flow of electricity in a power conductor. The measurement is carried out at a metering point.

### **Energy Regulatory Commission or "ERC"**

(WESM Rules) The independent, quasi-judicial regulatory body created under the Act.

(WESM-DRM) Refers to the Energy Regulatory Commission, the independent quasi-judicial regulatory body created by the EPIRA.

(WESM-MSM) Refers to the Energy Regulatory Commission, the independent quasi-judicial regulatory body created by the Act.

(WESM-RCM) Refers to the Energy Regulatory Commission.

(WESM-TCMM) Refers to the Energy Regulatory Commission, the independent quasi-judicial regulatory body created by the EPIRA.

### **Energy Trading Amount**

(WESM Rules) The amount to be paid by, or paid to a Trading Participant, or Network Service Provider in respect of energy in accordance with Clause 3.13.8.

### **Enforcement**

(WESM Rules) This is the process by which a WESM Member found in breach of the WESM Rules or Market Manuals is imposed penalties, whether financial or non-financial in nature, and/or take corrective actions, as a consequence of the breach.

(WESM-ECM) This is the process by which a WESM Member found in breach is imposed penalties, which may be financial or non-financial in nature, and/or required to take corrective actions or remedial measures as a consequence of the breach.

### **Enforcement Action**

(WESM Rules/WESM-ECM) This is an action carried out against a WESM Member as a consequence of the breach by that WESM Member of the WESM Rules or Market Manuals, which may include imposition of penalties, remedial measures and other corrective actions.

**Enforcement and Compliance Office**

(WESM Rules) The unit created within PEMC pursuant to Clause 1.4.8, which is primarily responsible for the administration of the enforcement and compliance which shall include monitoring, assessment, and investigation of the WESM Members in relation to their compliance with the WESM Rules.

(WESM-ECM) The unit created within PEMC pursuant to WESM Rules Clause 1.4.8, which is primarily responsible for the administration of the enforcement and compliance which shall include monitoring, assessment and investigation of the WESM Members in relation to their compliance with the WESM Rules.

(WESM-MSM) Refers to the unit created within PEMC pursuant to WESM Rules Clause 1.4.8, which is primarily responsible for the administration of the enforcement and compliance, which includes monitoring, assessment and investigation of the WESM Members in relation to their individual compliances with the WESM Rules.

**Enforcement and Compliance Office Head**

(WESM Rules) This is the person appointed pursuant to the WESM Rules that will head the Enforcement and Compliance Office.

(WESM-ECM) This is the person appointed pursuant to the WESM Rules that will head the Enforcement and Compliance Office.

**Enforcement Proceeding**

(WESM Rules/WESM-ECM) This is the activity carried out to establish and determine the occurrence of breach and the corresponding enforcement action that will be carried out as a consequence of the breach, and includes monitoring, assessment, investigation and imposing enforcement actions.

**Equipment**

(WESM Rules) All apparatus, machines, conductors, etc., used as part of, or in connection with, an electrical installation.

**Ex-Ante**

(WESM Rules) A matter determined in relation to a dispatch interval before that dispatch interval commences.

**Ex-Ante Energy Settlement Quantity**

(WESM Rules) The gross amount determined by the Market Operator in accordance with clause 3.13.5, and adjusted for bilateral contracts in accordance with clause 3.13.7.

**Excess Generation**

(WESM Rules) Generations which may be scheduled to occur in excess of load requirements, even though nodal energy dispatch prices have fallen to the market price floor, and which shall then be dealt with in accordance with clause 3.9.8.

**Exemption**

(WESM-ECM) This is the authority granted by the PEM Board exempting a WESM Member from sanctions for non-compliance with an obligation, which would otherwise amount to a breach if no exemption was granted.

**Expansion Unit**

(WESM-FASMD) It shall refer to the expanded capacity of a must-dispatch generating unit or that built in phases and is designed to have the same plant substation and revenue meter as the existing capacity unit.

**2.7 F****Facility**

(WESM Rules) A generic term associated with apparatus, equipment, buildings and necessary supporting resources for the generation, transmission, supply, sale and consumption of electricity.

**Fault**

(WESM-SSRG) An event occurring on an electric system such as a short circuit, a broken wire, or an intermittent connection.

**Feed-In Tariff (FIT)-Eligible Renewable Energy (RE) Plant**

(WESM Rules) Generating Unit or Generating System in respect of which ERC has issued, in accordance with the Feed- In Tariff Rules, a certificate of compliance authorizing the Generating Unit to operate as a FIT-eligible RE plant.

**Feed-In Tariff Allowance (FIT-All) Guidelines**

(WESM Rules) Resolution No. 24, Series of 2013 issued by the ERC adopting the Guidelines on the Collection of the FIT-All and the Disbursement of the FIT-All Fund.

**Feed-In Tariff Certificate of Compliance**

(WESM Rules) Refers to the certificate secured from the ERC before commercial operation of eligible RE plants that authorizes it to engage in the operation of a renewable energy power plant facility used to generate electricity pursuant to the Feed-In Tariff Rules and the Feed-In Tariff –Allowance (FIT-All) Guidelines.

**Feed-In Tariff Rules**

(WESM Rules) Annex A of ERC Resolution No 16, Series of 2010, Resolution adopting the Feed-In Tariff Rules, promulgated pursuant to the Renewable Energy Act.

**Feed-In Tariff System (FIT) System**

(WESM Rules) Program established under the Renewable Energy Act to accelerate the development of emerging renewable energy resources whose mechanisms are provided by the Feed-In Tariff Rules.

**Final Demand Forecast**

(WESM-LFM) Sum of the net load forecasts plus the losses in a forecast area.

**Final Nodal Energy Dispatch Price**

(WESM-PDM) The final nodal price for energy after the application of price substitution due to network congestion or when conditions for price mitigation exists, or administered prices, as applicable.

**Final Statement**

(WESM Rules) A statement issued by the Market Operator under clause 3.14.5.

**Final WESM**

(WESM Rules) The spot market operated by an independent entity to which the functions, assets and liabilities of the AGMO are transferred in accordance with Section 30 of the Act.

**Financial Penalty**

(WESM-PM) An amount in Philippine pesos imposed on a WESM Member as a consequence of breach pursuant to the Market Rules and this Manual excluding the cost of investigation of an actual breach by a WESM Member.

**Financial Year**

(WESM-PM) An amount in Philippine pesos imposed on a WESM Member as a consequence of breach pursuant to the Market Rules and this Manual, excluding the cost of investigation of an actual breach by a WESM Member.

**FIT-All Administrator**

(WESM-BSM) The National Transmission Corporation as administrator of the FIT-All Fund, as designated in Resolution No. 15, Series of 2012, amending the FIT Rules.

**Flicker**

(WESM-MSP) The impression of unsteadiness of visual sensation induced by a light stimulus whose luminance or special distribution fluctuates with time.

**Force Majeure Event**

(WESM Rules) An event arising from major network trouble that caused partial or system-wide blackout, market system software failure, and any other event, circumstance or occurrence in nature of, or similar in effect to any of the foregoing.

**Forecast Accuracy Standards Report**

(WESM-FASMD) Reports which are prepared and issued by the Enforcement and Compliance Office, as prescribed in Section 4.4 of this Manual.

**Forecast Area**

(WESM-LFM) A grid in the Philippine power system where demand forecast will be applied. Currently, each grid in the Philippines is designated as a forecast area, namely the Luzon, the Visayas, and the Mindanao grids.

**Forecast Percentage Error**

(WESM-FASMD) Error (in %) of the projected output submitted by a must dispatch generating unit with respect to its maximum metered quantity over a billing period as dependable capacity and calculated in accordance with Section 4.2.3 of this Manual.

**Formulation**

(WESM Rules) A mathematical specification of an optimization model.

**Franchise Area**

(WESM Rules) A geographical area exclusively assigned or granted to a Distribution Utility for distribution of electricity.

**Frequency**

(WESM Rules) For alternating current electricity, the number of cycles occurring in each second. The term Hertz (Hz) corresponds to cycles per second.

**Frequency Control**

(WESM-DP) A strategy used by the System Operator to maintain the frequency of the grid within the limits prescribed by the Grid Code by the timely use of reserves and demand control.

**2.8 G****Generating System**

(WESM Rules) A system comprising one or more generating units capable of generation with its own metering facility.

**Generating Unit**

(WESM Rules) A conversion apparatus including auxiliaries and associated equipment functioning as a single unit, which is used to produce electric energy from some other form of energy.

**Generation**

(WESM Rules) The process of converting one form of energy to electrical energy.

**Generation Company**

(WESM Rules/WESM-MSM) A person or entity authorized by the ERC to operate facilities used in the generation of electricity, and registered with the Market Operator in that capacity in accordance with Clause 2.3.1 of the WESM Rules.

**Generation Offer**

(WESM Rules) A market offer to supply electricity, submitted or revised by a Generation Company in accordance with Clauses 3.5.5, 3.5.9, 3.5.10 or 3.5.11.

**Generator**

(WESM-DP) Generation Company.

(WESM-MSP) Any person or entity authorized by the ERC to operate a facility used in the Generation of Electricity.

**Generator Interconnection Lines**

(WESM-MNMCP) Refers to the lines connecting generating plants to the transmission system.

**Generator Market Trading Node**

(WESM Rules) A market trading node at which electricity will normally be sold to the spot market and which is classified as a generator market trading node in accordance with Clause 3.2.2.2.

**GEOP Demand Threshold**

(RCOA-GEOPP) Refers to the minimum average peak demand required of an end-user to be eligible to participate in the GEOP as declared by the DOE.

**GEOP Registry**

(RCOA-GEOPP) Refers to the registry maintained and published by the Central Registration Body containing the registration records of all switches in electronic copies.

**GEOP Supply Contracts**

(RCOA-GEOPP) The agreement between a GEOP End-User and a duly authorized RE Supplier for the supply of electricity generated from Renewable Energy.

**GMC**

(WESM-TCMM) Refers to the Grid Management Committee which was established by the ERC to monitor Grid Code compliance at the operations level and to submit regular and special reports pertaining to the Grid Operations. It shall also initiate an enforcement process for any perceived violations of Grid Code provisions and recommend to the ERC the appropriate fines and penalties for such violations.

**Governance Arm Website**

(WESM-WGC) The facility established by the Governance Arm to publish information, which is available to and may be accessed by WESM Members and the public.

**Government**

(WESM Rules) The Government of the Philippines.

**Government Authority**

(WESM Rules) Any government or governmental, semi-governmental, administrative or judicial body, department, commission, authority, tribunal, agency or entity.

**Green Energy Option Program**

(WESM Rules/Retail Rules) The mechanism to empower end-users to choose renewable energy in meeting their energy requirements pursuant to Republic Act No. 9513.

**Grid**

(WESM Rules) The high voltage backbone system of interconnected transmission lines, substations and related facilities, located in each of Luzon, Visayas and Mindanao, or as may otherwise be determined by the ERC in accordance with Section 45 of the Act.

**Grid Code**

(WESM Rules) The set of rules, requirements, procedures, and standards to ensure the safe, reliable, secured and efficient operation, maintenance, and development of the high voltage backbone Transmission Systems and its related facilities.

(WESM-TCMM) Refers to the set of rules and regulations governing the safe and reliable operation, maintenance and development of the high voltage backbone transmission system and its related facilities.

**Grid Off-Take Meter**

(RCOA-MSP) The device which measures and records the consumption or production of electricity at the grid off-take metering point.

**Grid Off-Take Metering Point**

(WESM Rules/Retail Rules/RCOA-MSP) Metering point at a grid at which the settlement quantity of a Retail Customer connected to a distribution system shall be determined.

**Gross Energy Settlement Quantity**

(WESM Rules) The energy quantity determined in accordance with Clause 3.13.6 for a market trading node, in a dispatch interval.

**Ground**

(WESM-MSP) The Earth.

**Grounding**

(WESM-MSP) A conducting connection by which an electrical circuit or equipment is connected to earth or to some conducting body of relatively large extent that serves as ground.

**Guidelines**

(WESM-WGC) This document otherwise called: “Guidelines Governing the Constitution of the WESM Governance Committees.”

**2.9 H****Harmonics**

(WESM-MSP) Sinusoidal voltages and currents having frequencies that are integral multiple of the fundamental frequency.

**Hour-Ahead Projection**

(WESM Rules) Projections of market conditions for the dispatch intervals in the hour ahead determined and published by the Market Operator in accordance with Clause 3.7.3.

**HVDC**

(WESM Rules) High Voltage Direct Current.

**2.10 I****ICT Change Management Process or “ICMP”**

(WESM Rules) The process instituted by the Market Operator that ensures proper and timely review, approval, implementation, monitoring and documentation of all ICT changes requirements of the Market Operator.

**Imminent Overloading**

(WESM-SSRG) The condition when the loading of transmission lines or substation equipment is above 100 percent up to 110 percent of the continuous rating.

**Independent**

(WESM-DRM/WESM-TCMM) Means a person who is considered as independent of the Philippine electric power industry, in accordance with the criteria set forth in Clause 1.4.2.7 of the WESM Rules.

(WESM-PEMAUD) Means a person that is considered as independent of the Philippine electric power industry, in accordance with the criteria set forth in the WESM Rules.

**Independent Auditor**

(WESM-PEMAUD) Refers to the third-party entity with adequate expertise, organized to conduct market audits or special audits of the processes and the systems of the WESM and the Retail Market and review of the Metering Service Providers (MSPs) and metering installation and arrangement.



**Independent Market Operator or "IMO"**

(WESM Rules) The Independent Market Operator referred to by Sec.30 of the EPIRA, referred herein as the Market Operator.

**Indirect WESM Member**

(WESM Rules) A person or an entity who wishes to indirectly trade in the spot market. However, an Indirect WESM member may only transact through a direct WESM member.

**Initial Commercial Operations**

(Retail Rules) The period commencing from start of commercial operations of retail competition as declared by the ERC and ending before the start of the billing month in which regular Customer switching is permitted.

**Initial Loading**

(WESM-FASMD) It shall refer to the previous dispatch schedule of the must dispatch generating unit. For example, the initial loading for 0105H shall be the dispatch schedule for 0100H.

**Input Demand Forecast**

(WESM-LFM) Initially assumed demand forecast that shall be used as the off-take for determining the unrestrained net load forecast.

**Installation Database**

(WESM Rules) The database which a Market Operator is required to keep in respect of its metering installations pursuant to clause 4.7 of the WESM Rules.

**Institute of Electrical and Electronics Engineers or "IEEE"**

(RCOA-MSP) A professional association that is dedicated to advancing technological innovation and excellence.

**Instrument Transformers**

(WESM-MSP/RCOA-MSP) A general term for Current Transformers and Voltage Transformers.

**Intending WESM Member**

(WESM Rules) A person who wishes to become a WESM member and who registers with the Market Operator under clause 2.9.

(WESM-DRM) Means any person or entity who intends to register as a WESM Member, provided that such person can satisfy the MO of its bona fide intent to commence an activity within a reasonable timeframe, which would entitle or require that person or entity to be registered as a WESM Member once that activity is commenced.

**Interest Rate**

(WESM Rules) In relation to any period for which an interest rate is to be determined hereunder, a rate per annum equal to the lending rate published by the Bangko Sentral ng Pilipinas at the time of payment.

**Interim WESM**

(WESM Rules) The spot market operated by AGMO for a period of twelve months from the spot market commencement date or until such time that AGMO ceases to exist.

**Intermittent Renewable Energy Resource**

(WESM Rules) A Renewable Energy Resource specified in Section 20 of the Renewable Energy Act, those being: wind energy, solar energy, run-of-river hydro, ocean energy or any other Renewable Energy Resource designated as such by the DOE.

**International Electrotechnical Commission or "IEC"**

(RCOA-MSP) A non-profit, non-governmental international standards organization that prepares and publishes International Standards for all electrical, electronic and related technologies – collectively known as "electrotechnology".

**Interruptible Load**

(WESM Rules) Means load that a Customer is able to interrupt at very short notice in response to:

(a) A frequency deviation; or

(b) A request of the System operator,

in order to meet applicable ancillary service requirements, subject to the requirements of the Grid Code and Distribution Code.

**Interval Data**

(WESM-MSP) The recorded demand data based on specified demand time interval.

**Intervention Report**

(WESM-MSM) Means the report prepared by the Market Surveillance Committee and submitted to the PEM Board in accordance with Section 5.3 of this Manual.

**Investigation**

(WESM-ECM) An integral part of enforcement proceedings in the WESM that may be initiated by the Enforcement and Compliance Office, from a notice of probable breach by the Market Operator or the System Operator, or by request for investigation from other WESM Members or WESM Governance Committees.

(WESM-PM) An integral part of enforcement proceedings in the WESM that may be initiated by the Enforcement and Compliance Office, from a notice of probable breach by the Market Operator or the System Operator, or by request for investigation from other WESM Members or WESM Committees.

**IPP Administrator or "IPPA"**

(WESM-RSDCP) Qualified independent entities appointed by the Power Sector Assets and Liabilities Management Corporation who shall administer, conserve and manage the contracted energy output of the National Power Corporation Independent Power Producer (NPC-IPP) contracts pursuant to Republic Act No. 9136, including selling the contracted energy output of these contracts and offering ancillary services, where applicable.

**IRR**

(WESM-MSM) Means the Implementing Rules and Regulations of the Act.

**Island also known as Island Grid**

(WESM-SSRG) A generating plant or a group of generating plants and its associated load, which is isolated from the rest of the grid but is capable of generating and maintaining a stable supply of electricity to customers within an isolated area.

**Islanding Operation**

(WESM-DP/WESM-SSRG) The isolated operation of certain portions of the grid as a result of forced outages or contingency action by the System Operator.

**2.11 L****Last Resort Supply Event**

(Retail Rules) Any of the events stated in these Retail Rules that will give reason for a Retail Customer to be served by the Supplier of Last Resort.

**Line Rental**

(WESM Rules) The economic rental arising from the use of a transmission of bilateral contract quantities from a market trading node of the selling Trading Participant to a market trading node of the buying Trading Participant.

**Line-Loss Compensation**

(WESM-MSP) A method that adds to or subtracts from the meter registration to compensate for predetermined energy losses of transmission/distribution lines.

**Load**

(WESM Rules) The amount of energy consumed in a defined period via a node.

**Load Distribution Factor or "LDF"**

(WESM-LFM) Factor used in allocating the total projected load to individual loads in the market network model.

**Load Flow**

(WESM-MNMCP) Refers to the process for calculating currents, voltages, and real and reactive power flows at every node in a given power system condition.

**Load Forecast**

(WESM Rules) Has the same meaning as net load forecast.

**Load Shedding**

(WESM Rules) Reducing or disconnecting load from the power system.

(WESM-DP) The reduction or disconnection of load from the system as exercised by the System Operator in response to the following:

- i. An overall shortage of energy at a node or in a region specified in the market network model;
- ii. A severe under-voltage or voltage instability at one or more nodes; or
- iii. Other network conditions, as determined by the System Operator in accordance with the procedures established under the Grid Code and the Distribution Code.

**Load Weighted Average**

(WESM Rules) An average produced by multiplying each nodal energy dispatch price by the load at that node, summing the results, and then dividing by the sum of the loads involved.

**Loading Level**

(WESM Rules) The instantaneous level of output or consumption (in MW) of a generating unit or load.

**Local Supplier**

(WESM Rules) In relation to a local area, the Market Customer who is responsible for the supply of electricity to franchise customers in that local area.

**Locational Marginal Pricing**

(WESM-PDM) The mechanism by which the nodal energy dispatch price is determined.

**Locationally Specific Reserve Requirement**

(WESM Rules) A requirement for a particular reserve category to be met at a particular location, by reserve facilities in a particular reserve region in accordance with clause 3.3.5, and with costs to be recovered from a particular reserve cost recovery zone, in accordance with clause 3.3.5.

**Loss Differential**

(WESM Rules) Has the same meaning as agreed loss differential.

**Low-Voltage Winding of an Instrument Transformer**

(WESM-MSP) The winding that is intended to be connected to the measuring or control devices.

## 2.12 M

### **Manual Load Dropping**

(WESM-DP/WESM-SSRG) The process of manually and deliberately removing pre-selected loads from a power system in response to an abnormal condition in order to maintain the integrity of the system.

### **Margin Call**

(WESM Rules) An amount which the Market Operator calls to be paid by a Trading Participant in accordance with clause 3.15.10.1 to make up any anticipated shortfall between that Trading Participant's trading limit and the Market Operator's exposure in respect of that Trading Participant.

### **Margin Cost of Congestion**

(WESM-BSM) Congestion component of the locational marginal price as defined under Section 4.10.1 of the Price Determination Methodology.

### **Marginal Cost of Losses**

(WESM-BSM) Losses component of the locational marginal price as defined under Section 4.10.1 of the Price Determination Methodology.

### **Market Assessment Group**

(Retail Rules) The unit created by the PEM Board in the Philippine Electricity Market Corporation under clause 1.4.7.1 of the WESM Rules.

(WESM-DRM) Refers to the PEMC unit created under Clause 1.4.7.1 of the WESM Rules.

(WESM-MSM) Is a PEMC unit established pursuant to the WESM Rules to serve as the primary support unit of the WESM Governance Committees, which include the Market Surveillance Committee, which regularly prepares assessment reports on the overall performance and competitiveness of the WESM.

### **Market Assessment Report**

(WESM-MSM) Means the periodic report prepared by the Market Assessment Group and submitted to the Market Surveillance Committee.

### **Market Assessment System**

(WESM-MSM) Means the system to be used by the Market Assessment Group in collecting, storing and processing monitoring data and other information necessary for the Market Surveillance Committee to carry out its functions.

### **Market Bid**

(WESM Rules) A demand bid for a particular dispatch interval corresponding to a settlement interval of a particular trading day in the current market horizon, whether

formed from a standing bid in accordance with clause 3.5.10 or revised by the relevant Trading Participant, in accordance with clause 3.5.11.

(WESM-DP) Pertains to a tender of a load customer in the WESM.

### **Market Dispatch Optimization Model**

(WESM Rules) The optimization model which contains the mathematical algorithm to be used for the purposes of determining dispatch schedules and nodal dispatch prices, and preparing market projections based on the price determination methodology approved by ERC.

### **Market Fees**

(WESM Rules) The charges imposed on all WESM members by the Market Operator to cover the cost of administering and operating the WESM, as approved by the ERC.

(WESM-PM) Refers to the revenue requirements of the Market Operator for a specified period, approved by the Energy Regulatory Commission.

### **Market Horizon**

(WESM Rules) A period for which day-ahead or week-ahead projections are performed, as defined in the timetable.

### **Market Information**

(WESM-IDC) Means any information in written, oral, electronic or other form that is furnished to or received by or produced or provided by the Market Operator in the course of or arising from its operations of the WESM that is related to market transactions including but not limited to forecasting, projections, scheduling, pricing and dispatch of electricity, and to the metering and settlements of market transactions.

### **Market Information Website**

(WESM Rules) A facility to be established by the Market Operator on the electronic communication system on which it may publish information which is then available to and may be accessed by WESM members.

(WESM-DRM/WESM-TCMM) Means the website for the publication of information and results of the WESM established in accordance with the WESM Rules.

(WESM-MSM) Means the facility established by the Market Operator on the electronic communication system on which it may publish information which is then made available to and may be accessed by the WESM members.

### **Market Intervention**

(WESM Rules/WESM-MSM) A measure taken by the System Operator when the grid is in alert or emergency state as established in the Grid Code arising from a threat to system security, force majeure event or emergency, or by the Market Operator in relation

to the simulation or implementation of the business continuity or disaster recovery procedures developed in accordance with Clause 6.8.1. During such event, the administered price shall be used for settlements.

### **Market Load**

(WESM Rules) The electricity delivered to a connection point and purchased by a Customer from the spot market.

### **Market Management System**

(WESM-DP) The infrastructure that supports the operations of the WESM and which includes functionalities that support the processes set out in this Market Manual.

(WESM-RSDCP) The infrastructure which is composed of software, hardware and associated interfaces that support the operations of the WESM and which is operated by the Market Operator.

(WESM-LFM) Infrastructure that supports the operations of the WESM and which includes functionalities that support the processes set out in this Market Manual.

### **Market Manual**

(WESM Rules/Retail Rules/WESM-RCM) Refers to specific procedures, systems or protocols for the implementation of the WESM Rules and Retail Rules.

(WESM-DRM/WESM-MSM/WESM-TCMM) Means a manual of specific procedures, systems and protocols for the implementation of the WESM Rules and Retail Rules.

(WESM-RSDCP) Manuals, guidelines or procedures duly approved by the PEM Board to be applied in the operations of the WESM.

### **Market Network Lines**

(WESM Rules) Actual or notional network lines joining market network nodes within the market network model.

### **Market Network Model**

(WESM Rules/Retail Rules) A mathematical representation of the power system, which will be used for the purpose of determining dispatch schedules and energy prices, and preparing market projections.

### **Market Offer**

(WESM Rules) A generation offer, a battery energy storage system offer or a reserve offer for a particular dispatch interval of a particular trading day in the current market horizon, whether formed from a standing offer in accordance with Clause 3.5.10 or revised by the relevant Trading Participant, in accordance with clause 3.5.11.

**Market Operator**

(WESM Rules) The entity responsible for the operation of the spot market governed by the PEM Board in accordance with clause 1.4 which, for the avoidance of doubt, is the AGMO for a period of twelve months from the spot market commencement date and thereafter the entity to which the functions, assets and liabilities of the AGMO are transferred in accordance with section 30 of the Act.

(WESM-MSM) Means the Independent Market Operator of the Philippines (IEMOP), or such other entity that may later be designated as the operator of the WESM.

(WESM-RCM) Refers either to the Autonomous Group Market Operator or the Independent Market Operator, whichever is appropriate.

**Market Operator Board**

(WESM Rules) The Board of Directors of the IMO.

**Market Price**

(WESM Rules) A generic term covering prices for energy and reserve, nodal or zonal, as appropriate.

**Market Projections**

(WESM Rules) Week-ahead, day-ahead or hour-ahead projections of spot market conditions, performed in accordance with Clause 3.7.

**Market Resources**

(WESM-MNMCP) Refers to the objects defined in the Market Network Model to represent generators, battery energy storage systems, pumped-storage units, and loads.

**Market Rules**

(WESM-ECM) This refers collectively to the Market Rules to which this Manual applies.

(WESM-PM) Collectively refers to the WESM Rules, Retail Rules, their implementing manuals, and amendments thereto.

**Market Run**

(WESM Rules) A particular instance of the market dispatch optimization model performed for a particular dispatch interval, or a set of such instances model performed for all the dispatch intervals in a market horizon.

**Market Surveillance Committee or "MSC"**

(WESM Rules) The Committee appointed under clause 1.6.



*(Retail Rules)* Refers to the PEM Committee appointed by the PEM Board to monitor and report on activities in the WESM and those participating or providing services in the WESM.

*(WESM-MSM)* Refers to the WESM Governance Committee tasked under WESM Rules to monitor, assess, and report on the activities and developments in the WESM.

*(WESM-TCMM)* Refers to the WESM Governance Committee appointed by the PEM Board to monitor and report on activities in the spot market in accordance with the WESM Rules.

### **Market Suspension**

*(WESM Rules)* An event wherein the ERC declares the operation of the spot market to be suspended in cases of natural calamities or national and international security emergencies. During such event, the administered price cap shall be used for settlements.

*(WESM-MSM)* Means an event wherein the ERC declares the operation of the spot market to be suspended in cases of natural calamities or national and international security emergencies.

### **Market Trading Nodes**

*(WESM Rules)* Those nodes at which electricity will be either bought or sold from the spot market, defined in accordance with clause 3.2.2 of the WESM Rules.

### **Market Transaction**

*(WESM Rules)* A sale or purchase of electricity, or other services, made through the spot market.

*(WESM-IDC)* Means the sale or purchase of electricity or other services made through the spot market.

### **Mass Memory**

*(WESM-MSP)* An electronic storage circuit where data is stored for display and/or retrieval.

### **Maximum Available Capacity**

*(WESM-DP)* Equal to the registered maximum capacity ( $P_{max}$ ) of the (aggregate) unit less forced unit outages, scheduled unit outages, de-rated capacity due to technical constraints and weather disturbance that cause damage to the unit or that would otherwise limit its ability to inject power to the grid. For co-generation systems, the maximum available capacity is further determined by taking into account the equivalent power of the thermal energy extraction by the energy host and technical constraints.

**Maximum Available Output**

(WESM Rules) The highest MW generation output that a must dispatch generating unit is capable of producing at each instant given the instantaneous and intermittent characteristics of the Renewable Energy Resource which fuels the Generating Unit.

**Maximum Exposure**

(WESM Rules) The maximum exposure of a WESM member shall mean the computed average monthly settlement amount of the billing periods covering 26 March through 25 September prior to the end of the Financial Year multiplied by the factor 35/30 and shall set the level of security deposit that a WESM member is required to maintain.

**Maximum Operating Limit**

(WESM-PCSD) Refers to the maximum MW capability that a generator can obtain for a target time or dispatch interval based on its offer capacity while considering its current state, its ramp-up capability, and over-riding constraints, if there are any.

**Maximum Reserve Capability**

(WESM-RSDCP) The maximum demand in MW that a facility can provide with respect to reserves based on Ancillary Service capability tests.

**Maximum Stable Load or Pmax**

(WESM Rules) The maximum demand in MW that a generating unit, or a generating block or module in case of a combined cycle power plant, can reliably sustain for an indefinite period of time, based on time generator capability tests as provided in the latest Certificate of Compliance.

(WESM-RSDCP) The maximum demand in MW that a generating unit or generating system or module in the case of a combined cycle power plant, can reliably sustain for an indefinite period, based on the generator capability tests. Also the registered maximum capacity.

**Mean Absolute Percentage Error or "MAPE"**

(WESM-FASMD) Mean of the forecast percentage errors of a must dispatch generating unit over a certain period calculated in accordance with Section 4.2.1 of this Manual.

**Mediation**

(WESM-DRM) Refers to a dispute resolution process in which a mediator, selected by the disputing parties from the roster of WESM-Accredited Mediators, facilitates communication and negotiation, and assists the parties in reaching a voluntary agreement regarding a dispute.

**Mediator**

(WESM-DRM) Refers to a person who conducts mediation.

**Meter**

(WESM Rules) A device, which measures and records the consumption or production of electricity.

(WESM-MSP) A device, which measures and records the consumption or production of electricity. This refers to the Revenue Meter unless specified otherwise.

**Meter Trouble**

(RCOA-MSP) Any error associated with metering data.

**Meter Trouble Report**

(RCOA-MSP) A report issued by the Central Registration Body to a Retail Metering Services Provider for the correction of detected metering data errors.

**Metered Quantity**

(WESM Rules) The quantity of electricity sold or purchased from the spot market (as applicable), determined by the Market Operator from metering data.

**Metering**

(WESM Rules) Recording the production or consumption of electrical energy.

**Metering Data**

(WESM Rules) The data obtained or derived from a metering installation.

**Metering Database**

(WESM Rules) The database kept by the Market Operator pursuant to clause 4.7.

**Metering Equipment**

(WESM Rules) The apparatus necessary for measuring electrical real and Reactive Power and Energy, inclusive of a multi-function meter and the necessary instrument potential, current and phase shifting Transformers and all wiring and communication devices as provided.

(WESM-MSP) The apparatus necessary for measuring electrical real and reactive power and energy, inclusive of a multi-function meter and the necessary instrument potential and phase shifting transformers and all wiring and communication devices as provided.

**Metering Installation**

(WESM Rules) The meter and associated equipment and installations installed or to be installed for the collection of metering data required for settlement purposes.

**Metering Point**

(WESM Rules) Location where the Metering Equipment is installed, which should be located at the Market Trading Node.

**Metering Register**

(WESM Rules) A register of information relating to metering installations kept by the Market Operator and forming part of the metering database.

**Metering Services Provider**

(WESM Rules) A person or entity authorized by the ERC to provide metering services and registered with the Market Operator in that capacity in accordance with clause 2.3.6.

(WESM-TCMM) Refers to a person or entity authorized by the ERC to provide metering services and registered with the Market Operator in that capacity in accordance with WESM Rules Clause 2.3.6.

**Minimum Operating Limit**

(WESM-PCSD) Refers to the minimum MW capability that a generator can obtain for a target time or dispatch interval based on its offer capacity while considering its current state, its ramp-down capability, and over-riding constraints, if there are any.

**Minimum Stable Load or Pmin**

(WESM-RSDCP) The minimum demand in MW that a generating unit, or a generating system or module in the case of combined cycle power plant, can reliably sustain for an indefinite period of time, based on generator capability tests. Also, the registered minimum capacity. (This definition is taken from Revised Rules for the Issuance of Certificate of Compliance (COCs) for Generation Companies/Facilities, Section 4 (ERC Resolution No. 9, Series of 2010))

**MMS-Market Participant Interface (MPI)**

(WESM-DP) Refers to the user terminal where Trading Participants can submit bids and offers as well as retrieve or receive information on WESM operations, further described in Section 5 of this Manual.

**Multiple Outage Contingency**

(WESM-DP) An event caused by the failure of two (2) or more components of the grid.

(WESM-SSRG) An event caused by the failure of two (2) or more components of the grid.

**Multi-Ratio Current Transformer**

(WESM-MSP) One from which more than one ratio can be obtained by the use of taps on the secondary winding.

**Must Dispatch**

(WESM Rules) Preference to intermittent RE-based plants, whether or not under FIT system, such as wind, solar, run-of-river hydro, or ocean energy, in the dispatch schedule whenever generation is available pursuant to Section 20 of the Renewable Energy Act.

**Must Dispatch Generating Unit**

(WESM Rules) A Generating Unit or Generating System certified by the DOE as must dispatch generating unit under Clause 2.3.1.5 and is registered as such in the WESM by the Market Operator.

**Must- Stop Unit or "MSU"**

(WESM Rules) A generating unit identified and instructed by the System Operator to reduce the provision of energy due to its non compliance of the Dispatch Schedule to address or prevent possible threat to the System Security requirements of the Grid.

**Must-Run Unit or "MRU"**

(WESM Rules) A generating unit identified and instructed, by the System Operator to either a) come on-line, or b) provide additional energy on a particular dispatch interval but the dispatch of which is said to be out-of-merit, to address system security requirements. For clarity, MRU shall be utilized only after the System Operator has exhausted all available ancillary services. MRUs are classified as follows: a) Scheduled MRU - MRU designated by the System Operator before the dispatch interval and included in the real-time dispatch schedule through the imposition of security limit as defined in the WESM Dispatch Protocol Manual. B) Real-Time MRU - MRU designated by the System Operator within a dispatch interval.

**MW**

(WESM Rules) Mega Watt.

**2.13 N****Nameplate Rating**

(WESM Rules) The maximum continuous output or consumption in MW of an item of equipment as specified by the manufacturer.

**National Grid Corporation of the Philippines or "NGCP"**

(WESM-RSDCP) The corporate vehicle of the consortium which was awarded the concession to assume the transmission functions of the National Transmission Corporation.

**National Power Corporation or "NPC"**

(WESM Rules) The government corporation created under Republic Act No. 6395, as amended.

**National Transmission Corporation or "TRANSCO"**

(WESM Rules) The government-owned and controlled corporation created pursuant to RA 9136 to acquire all transmission assets of the National Power Corporation.

(WESM-MSP) The government-owned and controlled corporation created pursuant to RA 9136 to acquire all transmission assets of the NPC.

**Negative Sequence Unbalance Factor**

(WESM-MSP) The ratio of the magnitude of the negative sequence component of the voltages to the magnitude of the positive sequence component of the voltages, expressed in percent.

**Negotiation**

(WESM-DRM) Refers to a dispute resolution process by which the involved parties voluntarily discuss their differences and attempt to reach an agreement which can be mutually agreed upon by them without the involvement of a third party.

**Net Load Forecast**

(WESM Rules) A forecast, prepared by the Market Operator in accordance with the procedures to be developed under Clause 3.5.4 of the load, to be matched, along with any scheduled load, by generation from scheduled generating units, non-scheduled generating units, must dispatch generating units, and priority dispatch generating units.

**Net Settlement Surplus or Net Settlement Deficit**

(WESM Rules) The settlement surplus or settlement deficit remaining after all market transactions have been accounted for, including the assignment of transmission line rentals to Network Service Providers. This remainder is assumed to be attributable to economic rentals arising from other binding constraints, and accounted for in accordance with clause 3.13.12.

**Network**

(WESM Rules) The apparatus, equipment and plant used to convey, and control the conveyance of, electricity to customers (whether wholesale or retail) excluding any connection equipment. In relation to a Network Service Provider, a network owned, operated or controlled by the Network Service Provider.

**Network Congestion**

(WESM-PDM) The congestion at a line or transformer that is connected in a meshed network.

**Network Constraints**

(WESM Rules) Constraints representing network characteristics, such as limits on transmission line flows to be included in the market dispatch optimization model in accordance with clause 3.6.1.4 (f).

**Network Data**

(WESM-PDM) The electrical parameters used to represent the transmission and sub-transmission systems in the market network model.

**Network Lines**

(WESM Rules) The:

(a) transmission lines;

- (b) distribution lines;
- (c) transformer elements; and
- (d) other plant associated with transmission lines and distribution lines.

**Network Service**

(WESM Rules) Transmission services or distribution services associated with the conveyance, and with controlling the conveyance, of electricity through the network.

**Network Service Provider**

(WESM Rules) A person who engages in the activity of owning, controlling, or operating a transmission or distribution system and who is registered with the Market Operators that capacity under clause 2.3.4.

**Nodal Energy Dispatch Price**

(WESM Rules) The price determined by the Market Operator for a particular market network node and dispatch interval, immediately prior to commencement of that dispatch interval, directly from the market dispatch optimization for that dispatch interval in accordance with Clause 3.10.2. In the case of market projections, the nodal energy price may be determined on a dispatch interval basis (hour-ahead projections) or trading one (1) hour interval basis (day-ahead projections and week ahead projections).

**Nodal Value of Lost Load or "Nodal VoLL"**

(WESM Rules) Means the constraint violation coefficient of the energy balance equations for each node set by the Market Operator in accordance with clause 3.6.2.3.

**Node**

(WESM Rules) A connection point on a network, or junction point within a network model, whether physical, or notional.

**Non-Compliance Report**

(WESM-ECM) A report submitted pursuant to Section 8 of this Manual by a WESM Member that is unable to comply with any of its obligation under the Market Rules or Market Manuals.

**Non-Scheduled Generating Unit**

(WESM Rules) A generating unit or a group of generating units connected at a common point with a nameplate rating and a combined nameplate rating less than the regional thresholds provided in Clause 2.3.1.3.

**Non-Working Day**

(WESM Rules) A day which is not a Working Day.

**Normal Operating State**

(WESM Rules) The operating state defined in Section 7.2.1.1 of the Grid Code.



**Normal State**

(WESM Rules/WESM-DP) The grid operating condition when the power system frequency, voltage, and transmission line and equipment loading are within their normal operating limits, the Operating Margin is sufficient, and the grid configuration is such that any fault current can be interrupted, and the faulted equipment isolated from the grid.

(WESM-SSRG) The grid operating condition when the system frequency, voltage, and transmission line and equipment loading are within their normal operating limits, the operating margin is sufficient, and the grid configuration is such that any fault current can be interrupted and the faulted equipment isolated from the grid.

**Normally Off**

(WESM Rules) A situation in which a load does not exist unless it is bid into the spot market.

**Notice of Investigation**

(WESM-ECM) Formal notice issued by the Enforcement and Compliance Office to a WESM Member to initiate an investigation for possible breach.

**Notice of Provisional Remedial Measure**

(WESM-ECM) A notice in writing issued by the Enforcement and Compliance Office directing a WESM Member to implement a remedial measure pending completion of an investigation.

**Notice of Specified Penalty**

(WESM Rules) Notice issued to a WESM Member found in breach which directs the payment of a financial penalty and/or imposition of a non-financial penalty and/or additional penalties.

(WESM-PM) Notice issued to a WESM Member found in breach which directs the payment of a financial penalty and or a non-financial penalty and or additional penalties.

**2.14 O****Offer**

(WESM-DP) Also refers to a Market Offer.

**Open Access Date, also Retail Competition Commencement Date**

(Retail Rules) The date determined by the ERC that marks the commencement of retail competition in a grid.

**Operating Margin**

(WESM-DP) The available generating capacity in excess of the sum of the system demand plus losses within a specified period of time.



**Operating Margin also known as Gross Operating Margin**

(WESM-SSRG) The available generating capacity in excess of the sum of the system demand plus losses within a specified period.

**Opportunity Cost**

(WESM Rules) The economic loss suffered by some party as a result of losing an opportunity, such as the opportunity to sell energy to the spot market.

**Optical Port**

(WESM-MSP) A communications interface on metering products which allows the transfer of information, while providing electrical isolation and metering security. The communications medium is typically infrared light transmitted and received through the meter cover.

**Other Amendments**

(WESM-RCM) Refers to amendments to WESM Manuals, guidelines other rules and regulations promulgated and implemented by the PEM Board in relation to or in connection with the WESM Rules.

**Out of Merit Dispatch**

(WESM Rules) Dispatch instructions issued by the System Operator that is not in accordance with the WESM Merit Order Table to address System Security.

**Outage**

(WESM Rules) Any full or partial unavailability of equipment or facility.

**Over-Riding Constraints**

(WESM Rules) Constraints imposed in the market dispatch optimization model by the Market Operator, at the recommendation of the System operator, with the intention of over-riding the effect of a Trading Participant's offers or demand bids in accordance with clause 3.5.13.

(WESM-MSM) Means constraints imposed by the Market Operator, as required by the System Operator, relative to the power flow, energy generation of a specific facility in the Grid to address system security threat, mitigate the effects of a system emergency, address the need to dispatch generating units to comply with systems, regulatory and commercial test requirements, in accordance with Clause 3.5.13 of the WESM Rules and this Manual.

**2.15 P****Payment Date**

(WESM Rules) The relevant date on which a Trading Participant shall pay to the Market Operator the settlement amount in accordance with clause 3.14.9.

**PEM Audit Committee or "PAC"**

(WESM Rules) The committee appointed by the PEM Board under Clause 1.4.6 to undertake functions as set out in Clause 1.5.2.

(WESM-DRM) Refers to the auditor appointed by the PEM Board as defined in the WESM Rules and tasked to undertake the functions and activities set out in the PEM Audits Manual.

(WESM-MSM) Refers to the WESM Governance Committee appointed by the PEM Board to conduct audits of the operation of the spot market and undertake the functions and activities set out in the WESM Rules and PEM Audit Market Manual.

(WESM-TCMM) Refers to the auditor appointed by the PEM Board under WESM Rules Clause 1.4.6 to undertake functions set out in WESM Rules Clause 1.5.

**PEM Board**

(WESM Rules) The governing board of directors of the Governance Arm.

(WESM-DRM/WESM-MSM/WESM-TCMM) Refers to the Board of Directors of the PEMC that is responsible for governing the WESM.

(WESM-RCM) Refers to the Board of Directors of the Philippine Electricity Market Corporation (the "PEMC"), and may interchangeably be referred to as the PEMC Board.

**PEMC**

(WESM Rules) The corporation previously incorporated upon the initiative of the DOE composed of all direct WESM members and whose Board of Directors will be the PEM Board.

(WESM-DP/WESM-TCMM) Refers to the Philippine Electricity Market Corporation, a non-stock, non-profit public-private partnership that governs the wholesale electricity spot market (WESM).

(WESM-MSM) Refers to the governance arm of the WESM.

(WESM-PM) Philippine Electricity Market Corporation is the governance arm of the WESM.

**PEMC Charter**

(WESM-DRM/WESM-TCMM) Refers to the Articles of Incorporation and By-Laws of the PEMC, as approved by the Securities and Exchange Commission on 18 November 2003, and as they may be amended from time to time.

**Penalty Interest**

(WESM-PM) Penalty Interest shall mean the prevailing legal rate of interest.

**Percentile 95 of the Forecasting Error**

(WESM-FASMD) Also referred to as Perc95. The value (in %) not exceeding 95% of the forecast percentage errors of the must dispatch generating unit during a certain period (see Section 6, Appendix A of this Manual).

**Person**

(WESM-WGC) A natural person.

**Phasor**

(WESM-MSP) A complex number, associated with sinusoidally varying electrical quantities, such that the absolute value (modulus) of the complex number corresponds to either the peak amplitude or rms value of the quantity, and the phase (argument) to the phase angle at zero time. By extension, the term “phasor” can also be applied to impedance and related complex quantities that are not time-dependent.

**Philippine Competition Commission**

(WESM Rules) An independent quasi-judicial body created pursuant to Republic Act No. 10667.

**Plant**

(WESM Rules) Any equipment involved in generating, utilizing or transmitting electrical energy.

**Power Quality**

(WESM-MSP) The quality of the voltage, including its frequency and resulting current that are measured in the Grid, Distribution System, or any User System.

**Power Sector Assets and Liabilities Management Corporation or PSALM**

(WESM-RSDCP) The corporation created pursuant to Section 49 of Republic Act No. 9136.

**Power System**

(WESM Rules) The integrated system of transmission and distribution networks for the supply of electricity in the Philippines.

**Power, Active (KW)**

(WESM-MSP) The time average of the instantaneous power over one period of the wave.

**Power, Apparent (KVA)**

(WESM-MSP) The product of rms current and rms voltage for any wave form in a two-wire circuit. For sinusoidal quantities, apparent power is equal to the square root of the sum of the squares of the active and reactive powers in both two-wire and polyphase circuits.

**Power, Reactive (KVAR)**

(WESM-MSP) For sinusoidal quantities in a two-wire circuit, reactive power is the product of the voltage, the current, and the sine of the phase angle between them, using the current as reference.

**Preferential Dispatch Units**

(WESM-DP) Must dispatch generating units and priority dispatch generating units.

**Preliminary Statement**

(WESM-BSM) A statement issued by the Market Operator under clause 3.14.4.

**Pricing Error Notice**

(WESM Rules) A notice issued in accordance with clause 3.10.5 advising the market that prices for a particular dispatch interval are unavailable, or invalid.

**Priority Dispatch**

(WESM Rules) Option or preference to all qualified and registered renewable energy plants that are not eligible for Must Dispatch such as biomass, geothermal, and impounding hydro plants in the dispatch schedule.

**Priority Dispatch Generating Unit**

(WESM Rules) A generating unit or Generating System so designated by the Market Operator under Clause 2.3.1.5 and is provided Priority Dispatch.

**Projected Output**

(WESM Rules) The loading level nominated by a Generation Company for its must dispatch generating units or priority dispatch generating units indicating the forecasted output of its must dispatch generating unit or priority dispatch generating unit at the end of a dispatch interval. In the case of geothermal or impounding hydro plant which is classified as priority dispatch generating unit, projected output shall refer to its maximum available capacity, as defined in WESM Rules or Market Manual.

**Projected Quantity**

(WESM-FASMD) Estimated generation of a must dispatch generating unit over a dispatch interval based on its submitted projected output assuming linear ramping calculated in accordance with Section 4.2.4 of this Manual.

**Projection**

(WESM Rules) A set of results derived in accordance with clause 3.7 from a series of market dispatch optimization model runs describing projected market conditions over an hour-ahead, day-ahead or week-ahead market horizon for a particular scenario of net forecast load, and set of assumptions with respect to availability of key system elements.

**Proposal**

(WESM-RCM) Refers to any proposed amendment to the WESM Rules, or to any manual, guidelines, procedures, processes, rules or regulations, made pursuant to this Manual.

**Prudential Requirements**

(WESM Rules) The requirements imposed on a Trading Participant to provide and maintain a security in accordance with clause 3.15.

**Publish**

(WESM Rules) To make available information.

(WESM-RCM) Means to make information available through the market information website and the Governance Arm website.

**Pumped-Storage Unit**

(WESM Rules) A facility or group of facilities that act as load while using energy to pump water to higher elevation reservoirs, and then act like generators by producing electric energy when water is release back to the lower reservoir.

**2.16 Q****Qualified Generating Unit**

(WESM Rules) A Generating Unit tested and certified by the System Operator or any qualified third-party Ancillary Services capability testing entity accredited by the ERC; and monitored by the System Operator to provide specific types of Ancillary Services.

**Qualified Interruptible Load**

(WESM Rules) A Load that is tested, certified and monitored by the System Operator to provide an applicable type of Ancillary Service.

**2.17 R****Ramp Down Rate**

(WESM-RSDCP) The normal rate that a generating unit reduces its power output, expressed in MW per minute.

**Ramp Rate**

(WESM Rules) The rate of change in electricity production or consumption from a generating unit or scheduled load.

**Ramp Up Rate**

(WESM-RSDCP) The normal rate that a generating unit increases its power output, expressed in MW per minute.

**Rated Primary Current**

(WESM-MSP) The current selected for the basis of performance specifications of a current transformer.

**Rated Secondary Current**

(WESM-MSP) The rated current divided by the marked ratio.

**Rated Secondary Voltage**

(WESM-MSP) The rated voltage divided by the marked ratio.

**Rating**

(WESM-MSP) The nameplate voltage, current and frequency for a meter to which it is operating.

**Ratio (Marked)**

(WESM-MSP) The ratio of the rated primary value to the rated secondary value as stated on the nameplate.

**Reactive Energy**

(WESM Rules/WESM-MSP) The integral of the Reactive Power with respect to time, measured in VARh or multiples thereof.

**Reactive Power**

(WESM Rules) The rate at which reactive energy is transferred produced or purchased by a Customer.

**Reactive Support**

(WESM Rules) Unutilized sources of reactive power arranged by the Market Operator to be available to cater for the possibility of unavailability of another source of reactive power or increased requirements for reactive power.

**Real-Time Data**

(WESM-DP) Contains analog measurements (MW and MVAR) of generators and loads and the connection status of breakers and disconnect switches.

**Real-Time Dispatch**

(WESM-DP/WESM-LFM) Otherwise known as RTD. It is the dispatch schedule which determines the target loading of facilities at the end of the dispatch interval. The RTD calculates the ex-ante nodal energy dispatch prices.

**Receiving Node**

(WESM Rules) For a transmission right, the node to which the issuer of the transmission right is deemed to guarantee transfer of electricity, to be advised to the Market Operator in accordance with clause 3.13.

**Recipient**

(WESM-IDC) It is the party that receives confidential information.

**Red Alert**

(WESM-DP) An alert issued by the System Operator when the Contingency Reserve is zero, a generation deficiency exists, or there is critical loading or imminent overloading of transmission lines or equipment.

**Registered Capacity**

(WESM-RSDCP) The prevailing Maximum Stable Load or Pmax and the Minimum Stable Load or Pmin of a generating unit or generating system as registered with the Market Operator or subsequent changes confirmed and implemented by the Market Operator. The Pmax shall be the registered maximum capacity while the Pmin shall be the minimum registered capacity.

**Registered facility**

(Retail Rules) Facility for which a Contestable Customer is issued a certification of contestability by the ERC and is registered with the Central Registration Body, and may consist of the whole of any single building or structure; a part of any single building and structure; two or more adjoining parts of any single building or structure; or the whole of two or more buildings or structures that are on the same lot of land, owned or occupied by the Contestable Customer under one business name registered with the Network Service Provider and used by the Contestable Customer for the same business enterprise.

**Regulating Reserve**

(WESM Rules/WESM-DP/WESM-SSRG) Readily available and dispatchable generating capacity that is allocated exclusively to correct deviations from the acceptable nominal frequency caused by unpredicted variations in demand or generation output.

**Reliability**

(WESM Rules) The probability of a system, device, plant or equipment performing its function adequately for the period of time intended, under the operating conditions encountered.

(WESM-SSRG) The performance of the elements of the bulk electric system that results in electricity being delivered to Customers within accepted standards and in the amount desired. Reliability may be measured by the frequency, duration, and magnitude of adverse effects on the electric supply.

**REM Rules**

(WESM Rules) The REM Rules refers to the rules established by the DOE for the operation of the RE Market and to govern the conduct of the RE Registrar for the purpose of implementing the RPS Rules for both the On-Grid and Off-grid Areas.

**Remedial Measure**

(WESM-ECM) An action or task required to be carried out by a WESM Member to reduce or remove adverse impact of a breach (i.e., mitigation), or prevent the recurrence of a breach (i.e., prevention), or the cessation of an act or activity constituting or causing a breach or an action or task carried out leading to such cessation (i.e., correction).

**Renewable Energy Act**

(WESM Rules) Republic Act No. 9513: An Act Promoting the Development, Utilization and Commercialization of the Renewable Energy Resources and for Other Purposes.

**Renewable Energy Market or REM**

(WESM Rules) The market developed and implemented by PEMC where the trading of Renewable Energy Certificates (RECs) is made.

**Renewable Energy Registrar or the RE Registrar**

(WESM Rules) The unit established in accordance with Republic Act No. 9513 to issue, keep and verify RECs corresponding to energy generated from eligible RE facilities.

**Renewable Energy Resource**

(WESM Rules) An energy resource as defined in Section 4 (uu) of the Renewable Energy Act.

**Renewable Energy Supplier**

(Retail Rules) Refers to any person or entity authorized by the ERC and the DOE to provide or supply electric power from renewable energy resources to the end-users and registered as a Customer pursuant to Clause 2.3.2 of the WESM Rules and Clause 2.4.1.3 of these Retail Rules.

**Replacement Power Arrangement**

(WESM-RSDCP) Agreement entered by a generation company with another generation company for delivery of electricity by the purchasing generation company to its customers when its power plant is on outage or supply deration due to seasonal dependency or resource intermittency.

**Report of Probable Breach**

(WESM-ECM) Written report submitted to the Enforcement and Compliance Office by the Market Operator or the System Operator to notify the Enforcement and Compliance Office of probable breach by a WESM Member for purposes of initiating an investigation.

**Request for Arbitration**

(WESM-DRM) It has the meaning ascribed to it in Section 9 of this Manual.

**Request for Investigation**

(WESM-ECM) Written request submitted to the Enforcement and Compliance Office by any WESM Member, WESM Governance Committee, or any other party, other than the



Market Operator or System Operator, to notify the Enforcement and Compliance Office of possible breach by a WESM Member for purposes of initiating an investigation.

**Request for Mediation**

(WESM-DRM) It has the meaning ascribed to it in Section 8 of this Manual.

**Reserve**

(WESM Rules) Ancillary services that are traded in the WESM.

**Reserve Conformance Standards**

(WESM Rules) Standards that set the criteria and procedures for determining whether the Ancillary Service Providers comply with their reserve schedules, and which are required to be set out in a Market Manual in accordance with clause 3.8.7 of the WESM Rules.

**Reserve Cost Recovery Amount**

(WESM Rules) The amount to be recovered from the System Operator pertaining to the negative of the aggregate sum of the reserve trading amounts of the Trading Participants who supplied for reserves.

**Reserve Cost Recovery Charges**

(WESM Rules) Charges to recover the costs incurred in purchasing reserve, to be determined by a formula approved by the ERC.

**Reserve Cost Recovery Zone**

(WESM Rules) A zone within which reserve cost recovery charges may be recovered to meet each locationally specific requirement.

**Reserve Effectiveness Factor**

(WESM Rules) A performance indicator that measures the reserve facility's adequacy, accuracy, and timeliness in its actual reserve response with respect to the expected operating parameters set for a specific type of reserve.

**Reserve Facility**

(WESM Rules) A facility capable of providing reserves.

**Reserve Facility Category**

(WESM Rules) A particular type of reserve facility, characterized by its technology (e.g. interruptible load, synchronized generation, non-synchronized generation) which is reflected in the type of offer it can make.

**Reserve Offer**

(WESM Rules) A standing offer, or market offer to supply reserves, submitted or revised by a Customer or Generation Company in accordance with clause 3.5.7, 3.5.8, 3.5.10 or 3.5.11 of the WESM Rules.

**Reserve Price**

(WESM Rules) The price for reserve in a particular reserve category in a reserve region per dispatch interval, determined in accordance with clause 3.10.6.

**Reserve Region**

(WESM Rules) A zone of the power system from which a particular reserve category can be supplied to meet a particular locationally specific requirement.

**Reserve Requirement**

(WESM-PDM) The MW level to be met for the various categories of reserves.

**Reserve Requirement Constraint**

(WESM Rules) A mathematical representation of a locationally specific reserve requirement, and included in the market dispatch optimization model in accordance with clause 3.6.1.4 (e).

**Reserve Settlement Quantity**

(WESM Rules) The amount of reserve deemed to have been supplied by a reserve supplier in a particular reserve category in a reserve region per dispatch interval, determined in accordance with clause 3.13.5.

**Reserve Trading Amount**

(WESM Rules) The amount to be paid by, or paid to a Trading Participant, or Network Service Provider in respect of reserves, in accordance with clause 3.13.8.

**Respondent**

(WESM-DRM) means a party to a WESM dispute against whom a claim is made.

**Retail Competition Commencement Date, also Open Access Date**

(Retail Rules) The date determined by the ERC that marks the commencement of retail competition in a grid.

**Retail Competition Participant**

(Retail Rules) A person or entity listed with the Central Registration Body for the purpose of participating in retail competition and open access.

**Retail Customer**

(WESM Rules) An electricity end-user that is qualified to contract electricity supply from Suppliers, in accordance with qualifications issued by the ERC. For avoidance of doubt, this shall refer to Contestable Customers that are allowed to participate in the Retail Competition and Open Access as prescribed in the Act and/or End-Users that are allowed to participate in the Green Energy Option Program as prescribed in the Renewable Energy Act of 2008 or RE Law.

*(Retail Rules)* An electricity end-user that is qualified to contract electricity supply from Suppliers, in accordance with qualifications issued by the ERC either in the capacity of a Contestable Customer or a GEOP End-User as prescribed in the Republic Act No. 9513. For clarity, the term “Retail Customer” shall collectively pertain to “Contestable Customer” and “GEOP End-User” unless the context requires that the term specifically refer to either a “Contestable Customer” or “GEOP End-User”.

#### **Retail Metering Services Provider**

*(Retail Rules)* A person or entity authorized to provide metering services to contestable customers and registered with the Central Registration Body in that capacity in accordance with Chapter 2 of the Retail Rules.

#### **Retail Rules**

*(WESM Rules)* The Rules promulgated by the DOE governing the integration of Retail Competition and Open Access and the Green Energy Option Program in the operations and governance processes of the WESM and the management of the transactions of Suppliers and Retail Customers in the WESM, and the operations of the Central Registration Body.

*(Retail Rules)* The rules promulgated by the DOE governing the management of the transactions of Suppliers and Retail Customers and the operations of the Central Registration Body.

*(WESM-MSM/WESM-RCM)* The rules promulgated by the DOE governing the integration of retail competition in the operations and governance processes of the WESM and the management of transactions of Suppliers and Contestable Customers in the WESM, and the operation of the Central Registration Body.

#### **Retail Supply Contracts**

*(Retail Rules)* Contract between a Supplier and a Retail Customer for the supply of electricity.

#### **Review Document on Over-Riding Constraints**

*(WESM-MSM)* Means the report prepared by the Market Surveillance Committee in accordance with Section 5.5 of this Manual.

#### **Review Report**

*(WESM-MSM)* Means the report prepared by the Market Surveillance Committee and submitted to the PEM Board in accordance with Section 5.7 of this Manual.

#### **Rules Amendment Review Document**

*(WESM-MSM)* Means the document prepared by the Market Surveillance Committee whenever requested by the Rules Change Committee to review a proposed amendment to the WESM Rules, Retail Rules or the Market Manuals.

**Rules Change Committee or "RCC"**

(WESM Rules) The committee of that name established in accordance with clause 8.2 and which acts in accordance with chapter 8.

(WESM-DRM/WESM-TCMM) Refers to the Committee established by WESM Rule 8.2 to review and propose amendments to the WESM Rules.

(WESM-MSM) Refers to the WESM Governance Committee established by WESM Rule 8.2 to review and propose amendments to the WESM Rules.

(WESM-RCM) Refers to the committee created by the PEM Board pursuant to the WESM Rules, and may also be referred to as Committee in this Manual.

**2.18 S****Safety Plan**

(WESM Rules) A plan which shall be developed by certain WESM members in accordance with the Grid Code and Distribution Code, and applicable safety legislation and regulations in the Philippines.

**Scenario**

(WESM Rules) A net load forecast covering a market horizon.

**Scheduled Generating Unit**

(WESM Rules) A generating unit so classified in accordance with clause 2.3.1.2 (a)(1). A generating unit or a group of generating units connected at a common connection point with a nameplate rating or a combined nameplate rating of greater than or equal to the regional thresholds provided in Clause 2.3.1.3.

**Scheduled Generation Company**

(WESM Rules) A Generation Company that is required to play an active role in the spot market by submitting generation offers, and being subject to central dispatch.

**Scheduled Load**

(WESM Rules) A load which is able to respond to dispatch instructions, and has been bid into the spot market using a demand bid and so may be scheduled and dispatched via the scheduling and dispatch procedures.

**Scheduling Point**

(WESM Rules) A designated point in the market network model where dispatch schedules are determined by the Market Dispatch Optimization Model.

**Sector**

(WESM-WGC) Refers to the Generation, Distribution, Transmission, or Supply Sector.

**Security Limits**

(WESM-PDM) The limits imposed by the System Operator on generation and transmission equipment to maintain system security and reliability.

**Security-Constrained Economic Dispatch**

(WESM-PDM) The process of apportioning the total load on a system between the various generating plants to achieve the greatest economy of operation and taking account of the limitations of the power system.

**Self-Scheduled Energy**

(WESM-PDM) Refers to projected outputs of must dispatch and priority dispatch generating units, and nomination of loading levels of non-scheduled generating units.

**Self-Scheduled Nomination**

(WESM-DP) Nominations of loading levels by Non-Scheduled Generation Companies and projected outputs of Generation Companies with must dispatch generating units and priority dispatch generating units.

**Sending Node**

(WESM Rules) For a transmission right, the node from which the issuer of the transmission right is deemed to guarantee transfer of electricity, to be advised to the Market Operator in accordance with Clause 3.13.2 of the WESM Rules.

**Settlement**

(WESM Rules) The activity of producing bills and credit notes for WESM members in accordance with Clause 3.13, and with the processes defined in Clause 3.14.

(WESM-BSM) The activity of producing bills and credit notes for WESM members in accordance with WESM Rules Clause 3.13, and with the processes defined in WESM Rules Clause 3.14.

**Settlement Amount**

(WESM Rules) The amount payable by or to a Trading Participant, or Network Service Provider, in respect of a billing period as determined by the Market Operator under Clause 3.13.13 or 3.13.15 of the WESM Rules.

**Settlement Interval**

(WESM Rules) A 1-hour period commencing on the hour according to the timetable and Clause 3.4.2 of the WESM Rules.

**Settlement Price**

(WESM Rules) An energy or reserve settlement price.

**Settlement Quantity**

(WESM Rules) An energy or a reserve settlement quantity.

**Settlement Statements**

(WESM-BSM) Statements issued by the Market Operator that contains the settlement transactions of a WESM Member. It can either be a preliminary, final or revised statements.

**Settlement Surplus**

(WESM Rules) The settlement surplus remaining after all market transactions have been accounted for and is assumed to be attributable to economic rentals arising from other binding constraints.

**Settlement System**

(WESM Rules) The system, including the computerized system, for conducting settlements.

**Shadow Price**

(WESM Rules) Means the marginal net benefit from a unit relaxation of the capacity limitation of a constraint in the market optimization model.

**Short-Term Load Forecast**

(WESM-LFM) Hourly demand forecasts starting at the next hour up to seven days ahead. It shall be applied to the calculation of the week-ahead projection and day-ahead projection.

**Shutdown**

(WESM-DP) The condition of the equipment when it is de-energized or disconnected from the system.

**Significant Variation**

(WESM-GSV) Pertains to the action of a WESM Member, including the Market Operator and System Operator, or any event that has the potential to influence market prices, to accommodate real system changes or changes that may be associated with gaming and anti-competitive behavior on the part of trading participants.

**Single Outage Contingency (N-1)**

(WESM-SSRG) An event caused by the outage of one component of the grid including:

- a) Loss of a single-circuit transmission line, except those radial circuits which connect loads using a single line or cable;
- b) Loss of one circuit of a double-circuit transmission line including the point-to-point connection of a generating plant to the grid;
- c) Loss of submarine cable;
- d) Loss of a single transformer, except those which connect loads using a single radial transformer;
- e) Loss of a generating unit; and
- f) Loss of compensating devices (i.e. capacitor/reactor/SVC).

**Site-Specific Loss Adjustment (SSLA)**

(Retail Rules) The process of determining the amount of electrical losses between the Metering Point and the market trading node.

(WESM-MSP) Procedure developed for determining the amount of electrical losses between the metering point and the market trading node.

**Snapshot Quantity**

(WESM-MSP/WESM-PDM) The actual instantaneous injection, withdrawal, or line flow of power, in MW, at the end of a dispatch interval.

**Soft Constraints**

(WESM-CVC) Constraints which are allowed to be violated in the market dispatch optimization model such that the optimization process will produce a solution.

**Spot Market**

(WESM Rules) Has the same meaning as the WESM.

**Spot Market Commencement Date**

(WESM Rules) The date on which the spot market commences operation as declared by the DOE.

**Stability**

(WESM-DP) Ability of the dynamic components of the power system to return to a normal or stable operating point after being subjected to some form of change or disturbance.

(WESM-SSRG) The ability of the dynamic components to return to a normal or stable operating point after being subjected to some form of change or disturbance.

**Standing Network Data**

(WESM Rules) Standing data describing a particular network, provided by the relevant Network Service Provider data in accordance with Clause 3.5.2 of the WESM Rules.

**Standing Offer/Bid**

(WESM Rules) A standing offer to sell energy or reserve, or a bid to buy energy, submitted by the relevant Trading Participant in accordance with Clause 3.5.5, 3.5.6, 3.5.7 or 3.5.8 of the WESM Rules, and revised from time to time in accordance with Clause 3.5.9 of the WESM Rules, and effective until over-ridden by submission of a specific market offer in accordance with Clause 3.5.11 of the WESM Rules.

**Start-Up**

(WESM-DP) The synchronization of a generating unit to the grid from its outage state (closing of generator breakers).



**Stator**

(WESM-MSP) An assembly of an induction watt-hour meter, which consists of a voltage circuit, one or more current circuits, so arranged that their joint effect, when energized, is to exert a driving torque on the rotor.

**Status**

(WESM Rules) The actual operating condition of a generation unit or facility, including its current commitment state, generation level, and AGC activation status.

**Substation**

(WESM-MNMCP) Refers to the physical representation of nodes in the power system. They may be composed of several nodes corresponding to the low voltage and high voltage busses.

**Sub-transmission Lines**

(WESM-MNMCP) Refers to the power system lines directly under the control of power distributors and cooperatives.

**Supplier**

(WESM Rules) Any person or entity licensed by the ERC to sell, broker, market or aggregate electricity to End-users, and registered with the Market Operator as a Customer under clause 2.3.2.

(Retail Rules) Refers to any person or entity authorized by the ERC to sell, broker, market or aggregate electricity to the end-users, in the capacity of a Retail Electricity Supplier and/or Renewable Energy Supplier and registered as a Customer pursuant to Clause 2.3.2 of the WESM Rules and Clause 2.4.1.2 and Clause 2.4.2.3 of these Retail Rules.

**Supplier of Last Resort**

(Retail Rules) An entity designated by the ERC to serve Retail Customers following a Last resort supply event in accordance with these Retail Rules.

**Supply**

(WESM Rules) The sale of electricity by a party other than a Generation Company or a Distribution Utility in the franchise area of a Distribution Utility using the wires of such Distribution Utility.

**Supply Customer**

(WESM-RSDCP) Customers or Generation Companies that purchase electricity under any power supply agreement replacement power arrangement or contract with a Generation Company or Retail Electricity Supplier.



**Suspension Notice**

(WESM Rules) A notice issued by the Market Operator under clause 3.15.8 of the WESM Rules.

**Switch Request**

(Retail Rules) A notice sent by a Supplier to the Central Registration Body that it will be serving a Retail Customer.

**System Blackout**

(WESM Rules) The absence of voltage on all or a significant part of the transmission system or within a region following a major supply disruption, after one or more generating systems and a significant number of customers.

**System Integrity Protection Scheme (SIPS)**

(WESM-DP/WESM-SSRG) A protection system that is designed to detect abnormal or predetermined system conditions and take automatic corrective actions other than and/or in addition to the isolation of faulted components to preserve the integrity of the power system or strategic portions thereof.

**System Marginal Price**

(WESM-PDM) The shadow price for which energy is priced.

**System Operator**

(WESM Rules/WESM-TCMM) The party identified as the System operator pursuant to the Grid Code which is the party responsible for generation dispatch, the provision of ancillary services, and operation and control to ensure safety, power quality, stability, reliability and security of the grid.

**System Operator System Advisories**

(WESM-DP) Messages issued by the System Operator depicting particular issues regarding existing or anticipated status of the power system.

**System Security**

(WESM Rules) The safe scheduling, operation and control of the power system on a continuous basis in accordance with the system security and reliability guidelines established under the Grid Code.

(WESM-DP/WESM-SSRG) The continuous operation of a power system in the normal state, ensuring a safe and adequate supply of power to end-users, even when some parts or components of the system are on outage.

**System Security and Reliability Guidelines**

(WESM Rules) The standards governing system security and reliability of the power system, which may include but are not limited to standards for the frequency of the power system in operation and ancillary services (including guidelines for assessing

requirements and utilization), developed by the Market Operator and System operators accordance with the Grid Code.

## 2.19 T

### **Target Loading Level**

(WESM Rules) The loading level determined as an end-of-period target for a scheduled generator or load by the Market Operators accordance with clause 3.8.1(e).

### **Technical Committee or "TC"**

(WESM Rules) The committee of that name established in accordance with Clause 1.7.

(WESM-TCMM) Refers to the committee whose members are appointed by the PEM Board to monitor and review technical matters under and in relation to the WESM Rules, the Grid Code and Distribution Code, in accordance with WESM Rules Clause 1.7.

### **Technical Constraint**

(WESM-DP) Refers to plant equipment-related failure, limitations encountered during start-up/shutdown procedure, effects of ambient temperature and resource-related constraints due to the following: (a) water elevation and diversion requirements for domestic or irrigation use for hydro plants; (b) steam quality (chemical composition, condensable and non-condensable gases, steam pressure and temperature) for geothermal plants; (c) unavailability of fuel resources that are not within the control of the Generation Company for biomass power plants; and (d) steam flow limitations, station load, and electricity demand of its energy host, in the case of the co-generation systems.

### **Test Amperes**

(WESM-MSP) The load current specified by the manufacturer for the main calibration adjustment.

### **Test and Commissioning**

(WESM-RSDCP) Refers to the conduct of procedures to determine and certify that a generating unit was connected to the grid in accordance with the Philippine Grid Code (PGC), Philippine Distribution Code (PDC) and other relevant guidelines and specifications and to determine readiness to deliver energy to Grid or distribution network for the purpose of securing a COC from the ERC.

### **Time Stamp**

(WESM Rules) The means of identifying the time and date at which data is transmitted or received.

### **Time-of-Use**

(WESM-MSP) A selected period of time during which a specified rate will apply to the energy usage or demand, typically designated as A, B, C, and D.

### **Timetable**

(WESM Rules) The timetable prepared by the Market Operator for operation of the spot market in accordance with Clause 3.4.3.

### **Totalizing**

(WESM-MSP) A device used to receive and sum pulses from two or more sources for proportional transmission to another totalizing relay or to a receiver.

### **Trading Amount**

(WESM Rules) The amount to be paid by, or paid to a Trading Participant, or Network Service Provider in respect of energy, reserve, line rentals, or transmission rights calculated in accordance with clauses 3.13.7, 3.13.8, 3.13.9, or 3.13.11 as applicable.

### **Trading Day**

(WESM Rules) The 24-hour period commencing according to the Timetable. Trading interval. A 1-hour period commencing on the hour.

### **Trading Limit**

(WESM Rules) In respect of a Trading Participant at any time means the last trading limit set by the Market Operator for the Trading Participant under clause 3.15.8.

### **Trading Participant**

(WESM Rules/WESM-MSM) A Customer or Generation Company.

(WESM-TCMM) Is a person or entity registered with the Market Operator in accordance with WESM Rules Clause 2.3.3 as either a customer or a generation company.

### **Transformer-Loss Compensation**

(WESM-MSP) A method that adds to or subtracts from the meter registration to compensate for predetermined iron and/or copper losses of transformers.

### **Transition Committee**

(WESM Rules) The committee created pursuant to DOE Department Order (DO) No. 2017-07-0010 entitled "Creating the Transition Committee for the Interim Management of the Philippine Electricity Market Corporation and the Wholesale Electricity Spot Market" with the task to review the WESM structure of the market and make recommendations.

### **Transition Period**

(Retail Rules) The period commencing from retail commencement date until the start of commercial operations of retail competition in the WESM, as declared by the ERC.

### **Transition Period**

(WESM-FASMD) The period referred to in Section 4.5 of this Manual.

**Transmission Line**

(WESM Rules) Means a power line that is part of a transmission network.

**Transmission Loss Factor**

(WESM-PDM) The scaling factors applied on the nodal energy dispatch prices to account for the network loss associated with the delivery or consumption of energy at different locations in the system.

**Transmission Network**

(WESM Rules) A network operating at nominal voltages of 220 kV and above plus:  
(a) any part or a network operating at nominal voltages between 66kV and 220kV that operates in parallel to and provides support to the higher voltage transmission network;  
(b) any part of a network operating at nominal voltages between 66 kV and 220kV that does not operate in parallel to and provide support to the higher voltage transmission network but is deemed by the Government to be part of the transmission network.

**Transmission Right**

(WESM Rules) The right to financial compensation based on differences between nodal energy dispatch prices at different market trading nodes as notified under Clause 3.13.3, and settled in accordance with Clause 3.13.12.

**Transmission System**

(WESM Rules) The transmission network together with the connection assets associated with the transmission network, which is connected to another transmission or distribution system.

**Type**

(WESM Rules) Has the same meaning as reserve facility category.

**2.20 U****Unconstrained Solution**

(WESM-PDM) A co-optimized solution of the market dispatch optimization model that does not take into consideration the thermal limits of lines and transformers.

**Unrestrained Load**

(WESM Rules) Means the unscheduled load which might have been expected by the Market Operator, at any particular point in time, with no load shedding and assuming scheduled loads normally off.

**Unrestrained net load forecast**

(WESM-LFM) Also refers to unrestrained load.

**User**

(WESM-MSP) A person or entity that uses the Grid or Distribution System and related facilities. Also, a person or entity to whom the Grid Code or Distribution Code applies.

**2.21 V****Variable Renewable Energy (VRE) Aggregated Generation Forecast**

(WESM Rules) A short term forecast, performed by the System Operator, covering at least the following twenty-four (24) hours, of the total aggregated generation expected to be produced by Generation Companies that is authorized by the ERC to operate wind farms and photovoltaic generation systems in each interconnected system as defined under the Grid Code.

**Very Short-Term Load Forecast**

(WESM-LFM) Demand forecasts for each dispatch interval starting at the next dispatch interval up to the next two hours. It shall be applied to the calculation of the hour-ahead projection and real-time dispatch.

**Vital Loads**

(WESM Rules) Loads defined as sensitive by the Trading Participants.

**Voltage**

(WESM Rules) The electronic force or electric potential between two points that give rise to the flow of electricity.

**Voltage Collapse**

(WESM-SSRG) An event that occurs when an electric system does not have adequate reactive support to maintain voltage stability. Voltage collapse may result in outage of system elements and may include interruption in service to Customers.

**Voltage Control**

(WESM-DP/WESM-SSRG) Any actions undertaken by the System Operator or user to maintain the voltage of the grid within the limits prescribed by the Philippine Grid Code such as, but not limited to, adjustment of generator reactive output, adjustment in transformer taps, or switching of capacitors or reactors.

**Voltage Fluctuation**

(WESM-MSP) The systematic variations of the voltage envelope or random amplitude changes where the RMS value of the voltage is between 90 percent and 110 percent of the nominal value.

**Voltage Instability**

(WESM-DP) A condition that results in grid voltages that are below the level where voltage control equipment can return them to the normal level.

**Voltage Sag**

(WESM-DP) A short-duration voltage variation where the RMS value of the voltage decreases to between 10 percent and 90 percent of the nominal value.

**Voltage Transformer**

(WESM-MSP) A device that scales down primary voltage supplied to a meter while providing electrical isolation.

**2.22 W****Weather Area**

(WESM-LFM) A specific location where there is available weather data.

**Week Ahead Projections**

(WESM Rules) The projections performed for the week-ahead market horizon by the Market Operators accordance with Clause 3.7.1.

**WESM**

(WESM Rules) The electricity market established by the DOE in accordance with the Act.

**WESM Compliance Officer**

(WESM-ECM) Person designated by WESM Members, System Operator, Market Operator, Metering Services Provider and any other WESM service providers within their respective organizations pursuant to and the perform the functions set out in WESM Rules Clause 7.2.9.

**WESM Consultation Guidelines**

(WESM-RCM) Refers to the guidelines duly promulgated by the PEM Board.

**WESM Dispute**

(WESM-DRM) means a dispute of a category and between or among parties mentioned in Section 3.1 of the Dispute Resolution Manual, or ones relating to or in connection with transactions in the WESM within the context of Rule 7.3.1.1 of the WESM Rules.

**WESM Governance Committees**

(WESM-DRM/WESM-MSM) Refers to the working groups created by the PEM Board as pursuant to Clause 1.4.6 of the WESM Rules.

(WESM-RCM) Refers to the Committees created by the PEM Board pursuant to the WESM Rules.

**WESM Member**

(WESM Rules) A person who is registered with the Market Operator in accordance with Clauses 2.3 and 2.4.

(WESM-DRM) Means a person or entity registered with the MO in accordance with WESM Rules 2.3 and 2.4, which includes Trading Participants (customers, generation companies and suppliers), Metering Services Providers, Network Service Providers, Ancillary Services Providers and the SO.

(WESM-MSM) Means the detailed rules that govern the administration and operation of the WESM.

(WESM-RCM) Refers to any duly registered member of the WESM.

(WESM-TCMM) Means a person who is registered with the Market Operator in accordance with WESM Rules Clauses 2.3 and 2.4, and that includes Trading Participants, Metering Services Providers, Network Service Providers, Ancillary Services Providers and the System Operator.

#### **WESM Merit Order Table (WMOT)**

(WESM Rules) For purposes of dispatch protocol under the WESM, defined based on the Grid Code with an addition of unscheduled generating units arranged based on price offers; the WMOT is based on a single market.

#### **WESM Objectives**

(WESM-DRM) Refers to the objectives of the spot market as defined in Clause 1.2.5. of the WESM Rules.

(WESM-TCMM) Refers to the objectives of the spot market as defined in WESM Rules Clause 1.2.5.

#### **WESM Participant**

(WESM Rules) All entities under Clause 2.2.1 that are authorized by the ERC to participate in the WESM in accordance with the Act.

(WESM-DRM) Means a WESM Member or an Intending WESM Member participating in a transaction in the WESM.

#### **WESM Penalty Manual**

(WESM Rules/WESM-ECM) The Market Manual that set outs the schedule of possible breaches and the corresponding penalties or sanctions that can be imposed, and the manner of carrying out such sanctions.

(WESM-ECM) The Market Manual that set outs the schedule of possible breaches and the corresponding penalties or sanctions that can be imposed, and the manner of carrying out such sanctions.

**WESM Rules**

(WESM Rules) The detailed rules that govern the administration and operation of the WESM.

(WESM-DRM) Denote the WESM Rules.

(WESM-RCM) Refers to the Wholesale Electricity Spot Market Rules promulgated by the Department of Energy, and any amendments to those Rules.

(WESM-TCMM) Refers to the WESM Rules.

**WESM-Accredited Arbitrator, WESM-Accredited Mediator and WESM-Accredited ADR Support Service Center**

(WESM-DRM) have the meaning ascribed to them, respectively, in Sections 6 of this Manual.

**Wholesale Aggregator**

(WESM-RSDCP) Any person or entity, other than a Generation Company issued a Certificate of Registration by the ERC to sell electricity to Distribution Utilities.

**Working Day**

(WESM Rules) A day (excluding Saturdays and Sundays) on which banks and financial institutions are open in the city or municipality where the principal offices of the Market Operator are located.

(Retail Rules) Any day other than a Saturday, Sunday or a regular or special holiday declared in the city or municipality where the Central Registration Body holds its principal offices.

**2.23 Z****Zero Sequence Unbalance Factor**

(WESM-MSP) The ratio of the magnitude of the zero sequence components of the voltages to the magnitude of the positive sequence component of the voltages, expressed in percent.

**Zonal Energy Price**

(WESM Rules) The price determined in accordance with Clause 3.10.3 for each Customer pricing zone under Clause 3.2.3.



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| <b>SECTION 3   AMENDMENTS AND PUBLICATION</b> |
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### **3.1 AMENDMENTS AND PUBLICATION**

- 3.1.1    This document shall be amended in line with the changes to WESM and Retail Rules and Manuals as approved through the rules change process of the WESM.
- 3.1.2    This document, as it may be amended from time to time, shall be included in the publication of Compendium of all WESM and Retail Market Documents on the Governance Arm website for information of the stakeholders.