## ELECTRICITY INDUSTRY ACT

## ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY MARKET) REGULATIONS 2004

### WHOLESALE ELECTRICITY MARKET RULES

# Power System Operation Procedure Glossary Of Terms

**Commencement:** This Market Procedure is to have effect from 8:00am (WST) on the same date as the Wholesale Electricity Market Rule, in which this procedure is made in accordance with, commences.

#### Market Procedures Published by the Minister

I, FRANCIS LOGAN, Minister for Energy for the State of Western Australia, under regulation 9(2) of the *Electricity Industry (Wholesale Electricity Market) Regulations* 2004 hereby approve the publication of the Power System Operation Glossary Of Terms Procedure contained in this document.

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### **1. RELATIONSHIP WITH MARKET RULES**

This Glossary provides a definition of the terms used in the Power System Operating Procedures. Where a term might inadvertently have a meaning different from a definition in the Market Rules, the latter definition will prevail.

## 2. GLOSSARY OF TERMS USED IN THE POWER SYSTEM OPERATING PROCEDURES

**Automatic Generation Control** Equipment operated by System Management, which sends signals to Generating facilities participating in the AGC scheme to automatically adjust their output so as to maintain frequency or restore frequency within the **Normal Operating Frequency Band**.

**Ancillary Services Performance Report** Having the same meaning as the term Ancillary Services Report in Market Rule 3.11.11.

Ancillary Services Procurement Plan Having the same meaning as the term Ancillary Service plan in Market Rule 3.11.7.

**Ancillary Service Provider** Is a Rule Participant that is not a Market Participant or Network Operator, that has contracted or intends to contract with System Management for the supply of an Ancillary Service.

**Continuous maximum generation output**: means the maximum output generated at the generator terminals less the station load and auxiliary loads that are consumed by the generating unit (and power station) in generating that output.

**Commissioning Test** means a test specified under section 6 of the Power System Operation Procedure –Commissioning and Testing, for the purpose of testing the ability of a generating system to operate reliably at different levels of output.

**Curtailment Alert Notice** is a notice sent out by System Management to a Demand Customer alerting the Demand Customer that System Management expects to issue a Demand Instruction to the Demand Customer requiring a particular Curtailable Load to be activated within the next few hours.

**Direction** means an instruction given to a Market Participant or Network Operator consequent upon a Dispatch Advisory or other power specified in the Market Rules or the Power System Operation Procedures, which is not a Dispatch Instruction or Dispatch Order, and requires a specific action by a Participant or Network Operator

**Dispatch Merit Order** is the merit order list provided by IMO to System Management setting out the combined price ranking for Curtailable Loads and non-EGC generating facilities, for increasing system load and decreasing system load.

**Dispatch Instruction** means an instruction issued by System Management to a Market Participant other than EGC directing that Participant to vary the MW output or consumption of one of Facilities from the level it otherwise would have operated at.

**Dispatch Order** An instruction issued by System Management to an EGC generating facility

**Dispatch Plan** A plan prepared by System Management setting out for a Trading Day, the estimated output expected for each generating facility and Curtailable Load.

**EGC** means Electricity Generation Corporation

**EGC Dispatch Plan** means the Dispatch Plan produced by System Management for each Trading Interval in a Trading Day and showing the order in which System Management expect to dispatch EGC Generation Facilities.

**Equipment:** means one or more items of equipment owned by a Market Generator, Network Operator or Market Customer that forms part of a registered facility.

**Equipment Limit**: Any (technical) limit on the operation of a Facility's equipment that is provided as Standing Data for the Facility to System Management by the IMO in accordance with Market Rule 2.34.1(b).

**Equipment Test** means a test or programme of tests, as specified within section 8 of the Power System Operation Procedure –Commissioning and Testing, of either generating systems, Curtailable Loads or Interruptible loads that form part of whole of a Facility.

**Facility:** For the purpose of the Power System Operating Procedures, having the meaning of a grouping of either generating, transmission, Curtailable Load or Interruptible Load equipment at a specified site.

Financial Year means the 12 month financial period beginning the 1 July of each year

**Fuel determination** is a Declaration made by a Market Generator relating to a particular Generation Facility, and stipulates whether the supply fuel to be used at the at the Facility is a Liquid fuel or a Non-Liquid Fuel.

Generator: An item of equipment whose purpose is the generation of electricity

**Intermittent Generator** is a Non-Scheduled Generator that cannot be scheduled because its output level is dependent upon factors beyond the control of its operator (eg wind), but the operator can be instructed to reduce output from the generating system.

**Minimum Frequency Keeping Capacity** is the minimum quantity of Frequency Keeping Capacity to meet the Load Following Service standard [refer to MR 3.10]

**MT PASA** is the Medium Term Projected Assessment of System Adequacy

**MT PASA Capacity Planning Margin** is the spare generation capacity available over the MT PASA planning period, after the forecast SWIS peak system load has been met, all planned outages and forced outage allowance been taken into account, demand management capability has been utilised, and all security standards and ancillary service requirements have been satisfied.

**Non–scheduled generator**: means a generator system that can be self scheduled by its operator ( with the exception that System Management can require it to decrease its output subject to its physical capability).

**Normal operating frequency band** is the normal operating frequency band of 49.8 to 50.2 Hertz specified in the Technical Rules for the SWIS system

**Normal operating frequency excursion band**. is the maximum frequency excursion band specified in the Technical Rules for the SWIS system of 48.75 to 51 Hertz that applies in the event of a single contingency event

**Opportunistic Maintenance** means an equipment outage arranged within finally two days of when the outage is to take place, which meets the conditions in the Outage Procedure for Opportunistic Maintenance.

**Outage** the state of an item of equipment when it is not available to perform its intended function

**Outage Plan:** has the meaning given to it in Market Rule 3.18.5, and for the purpose of the Power System Operating Procedure – Facility Outages, is a plan submitted by a Market Participant or Network Owner to System Management containing the details of a proposed equipment outage.

**Outage schedule** means a schedule prepared and managed by System Management containing all Outage Plans accepted by System Management.

Participant means either a Market Participant or Network Operator

**Planned Outage** is an outage that formerly was a Scheduled Outage, but has been approved by System Management in the final 2 days prior to outage commencement, and is now planned to proceed, subject to final power system conditions.

**Rule Participant** means a Market Participant, Network Operator, System Management or the IMO.

**Scheduled Generator** means a generating system whose MW output can be controlled by its operator to increase or decrease the quantity of energy it generates.

**Scheduled Outage:** means an outage that has been accepted by System Management for inclusion in System Management's Outage Schedule

**Security Limit**: means any technical limit on the operation of the SWIS as a whole, or a region of the SWIS, necessary to maintain the Power System Security, including both static and dynamic limits.

ST PASA is the Short Term Projected Assessment of System Adequacy

**SMMITS** System Management Market Information Technology System—System Management's data storage and retrieval system that links the systems operated by System Management, including its EMS system, with the IMO and Market Participants.

**SWIS Dispatch Plan** means the Dispatch Plan produced by System Management for each Trading Interval in a Trading Day and showing the order that System Management expect to schedule EGC and non-EGC Generation and Demand Management facilities over the Trading Day.

**SWIS Merit Order** means the combined merit order list prepared by System Management for all EGC and Non-EGC facilities for increasing and decreasing system load.

**SWIS Operating Standards** (MR 3.1) - refers to frequency, frequency time error and voltage standards in the SWIS Technical Rules.

**SWIS Security Criteria** refers to the security guidelines that apply to the SWIS, and are detailed in Appendix I of the Power System Operating Procedure- Security

**SWIS System Load** means the total SWIS load as measured at the Generation Facility connection points to the SWIS transmission network.

**SWIS System Load Forecast** is the forecast of total SWIS load measured at generation Facility connection points on the transmission network.

**Switching programme:** a technical plan agreed by System Management and a Network Operator or Generator to confirm the switching, isolating and earthing steps needed to make the equipment safe to work. [The switching process is part of the technical access rules, and outside the Market process].

**System Load** is the demand in MW or MWh placed on the total SWIS generation system, and is equal to the demand created by SWIS connected consumers on the SWIS plus distribution and transmission losses.

**Technical Rules** means the technical Rules made under chapter 12 of the *Electricity Networks Access Code 2004* (Access Code).

**Voltage Order** means a direction given by System Management to an EGC or Non-EGC Generation Facility requiring a specific action of that Generating Facility relating to the reactive output or voltage control of the Facility.

WEMS is the IMO's Wholesale Electricity Market System