

**ELECTRICITY INDUSTRY ACT 2004**  
**ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY - MARKET)**  
**REGULATIONS 2004**  
**Wholesale Electricity Market Rules**

**IMO AMENDING RULES RC\_2012\_07 MADE ON 15 May 2013**  
**These Amending Rules commence at 08.00am on 20 May 2013**

The following clauses are amended (~~deleted wording~~, new wording):

2.27.1. ~~By 1 June of each year~~ Network Operators must, in accordance with this section 2.27, calculate and provide to the IMO Loss Factors for:

(a) each connection point in their Networks at which any of the following is connected:

i. a Scheduled Generator;

ii. a Non-Scheduled Generator;

iii. an Interruptible Load;

iv. a Dispatchable Load; or

v. a Non-Dispatchable Load equipped with an interval meter; and

(b) in the case of Western Power, the Notional Wholesale Meter.

~~(a) a Scheduled Generator;~~

~~(b) a Non-Scheduled Generator;~~

~~(c) a Non-Dispatchable Load;~~

~~(d) an Interruptible Load; or~~

~~(e) [Blank]~~

~~(f) a Dispatchable Load.~~

2.27.24A. A Market Participant may request, during the process of obtaining a relevant Arrangement for Access, that the relevant Network Operator determine and provide to the IMO, Loss Factors to apply to a ~~facility or a Non-Dispatchable Load Facility~~ Facility where there are no Loss Factors applying to the connection point at which the ~~facility or the Non-Dispatchable Load Facility~~ Facility will be connected.

2.27.3. Loss Factors must reflect transmission and distribution losses and each Loss Factor must be expressed as the product of a Transmission Loss Factor and a Distribution Loss Factor.

2.27.4. Subject to clause 2.27.5(d), for each Network Operator the IMO must, in consultation with that Network Operator, develop a classification system to assign each of the connection points in the Network Operator's Network identified under

clause 2.27.1(a) to a Transmission Loss Factor Class and a Distribution Loss Factor Class, where:

- (a) the assignment of a connection point to a Loss Factor Class is based on characteristics indicative of the expected transmission or distribution system losses (as applicable) for the connection point;
- (b) each connection point in a Loss Factor Class is assigned the same Transmission Loss Factor or Distribution Loss Factor (as applicable); and
- (c) connection points on the transmission system are assigned to a Distribution Loss Factor Class with a Distribution Loss Factor equal to one.

2.27.52. In calculating Loss Factors, Network Operators must apply the following principles:

- ~~(a) Loss Factors are static and apply to each connection point until new Loss Factors are calculated in accordance with clause 2.27.1 or 2.27.4(d);~~
- (a) Transmission Loss Factors must notionally represent the marginal transmission system losses for a connection point relative to the Reference Node, averaged over all Trading Intervals in a year, weighted by the absolute value of the net demand at that connection point during the Trading Interval;
- (b) Distribution Loss Factors must notionally represent the average distribution system losses for a connection point over a year;
- (c) Loss Factors must be calculated using:
  - i. generation and load meter data from the preceding 12 months; or
  - ~~ii. for a new facility or a Non-Dispatchable Load Facility, any other relevant data provided to the Network Operator by the Market Participant and as agreed with the Network Operator and the IMO;~~
  - iii. for Transmission Loss Factors, an appropriate network load flow software package; and
- ~~(d) Loss Factors must include transmission and distribution losses;~~
- (e) a specific Loss Factor must be calculated for each:
  - i. Scheduled Generator;
  - ii. Non-Scheduled Generator;
  - ~~iii. [Blank]~~
  - iv. Interruptible Load;
  - iv. Dispatchable Load; and
  - vi. Non-Dispatchable Load above ~~1000kVA~~ 7000 kVA peak consumption;

- (f~~e~~) ~~the same Loss Factor will apply to all Non-Dispatchable Loads less than 1000kVA peak consumption, and will be determined on an averaged basis. Western Power must assign the Notional Wholesale Meter to:~~
  - i. a Transmission Loss Factor Class that represents system wide average marginal losses over Western Power's transmission system; and
  - ii. a Distribution Loss Factor Class that represents the average losses incurred over Western Power's distribution system by Non-Dispatchable Loads not equipped with an interval meter; and
- (f) the Transmission Loss Factors calculated for each Transmission Loss Factor Class and the Distribution Loss Factors calculated for each Distribution Loss Factor Class are static, and apply to each connection point in the relevant Loss Factor Class until the time published by the IMO under clause 2.27.8 for the application of an updated Transmission Loss Factor or Distribution Loss Factor to that Loss Factor Class.

~~2.27.2A6. For the purpose of these Market Rules, where a Loss Factor must be applied to a Notional Wholesale Meter value then the loss factor described in clause 2.27.2(f) is to apply. Each year by 1 June each Network Operator must, in accordance with the Market Procedure for Determining Loss Factors, recalculate the Loss Factors for its connection points and provide the IMO with updated Transmission Loss Factors and Distribution Loss Factors (as applicable) for each Loss Factor Class in the Network Operator's classification system.~~

~~2.27.37. The IMO must publish the Loss Factors Transmission Loss Factors and Distribution Loss Factors provided by a Network Operator in accordance with clause 2.27.6 within two Business Days as soon as practicable after receiving them from all Network Operators.~~

~~2.27.3A8. Once all When Transmission Loss Factors and Distribution Loss Factors are published in accordance with clause 2.27.3 2.27.7 or where Transmission Loss Factors or Distribution Loss Factors are changed in accordance with clauses 2.27.4(e) 2.27.15(e) or 2.27.5 2.27.16 the IMO must publish the time from which the Loss Factor or new Transmission Loss Factors or Distribution Loss Factors will apply, where this must be from the commencement of a Trading Day.~~

~~2.27.3B9. In setting the time from which a Transmission Loss Factor or Distribution Loss Factor or Loss Factors will apply in accordance with clause 2.27.3A 2.27.8 the IMO must allow sufficient time for Market Rule Participants to identify and update Standing Data any submission or forecast data that is dependent on Loss Factors.~~

2.27.10. A Network Operator must develop new Loss Factor Classes if required to implement the classification system prescribed by the IMO for that Network Operator. If a Network Operator develops a new Loss Factor Class then it must:

- (a) calculate the initial Transmission Loss Factor or Distribution Loss Factor (as applicable) for the new Loss Factor Class in accordance with the Market Procedure for Determining Loss Factors; and
- (b) provide to the IMO details of the new Loss Factor Class and its initial Transmission Loss Factor or Distribution Loss Factor as soon as practicable but before a connection point is assigned to the new Loss Factor Class.

2.27.11. The IMO must publish a new Transmission Loss Factor or Distribution Loss Factor provided by a Network Operator in accordance with clause 2.27.10(b) within two Business Days after receiving it from the Network Operator.

2.27.12. A Network Operator must determine the Transmission Loss Factor Class and Distribution Loss Factor Class for each new connection point in its Network identified under clause 2.27.1(a), in accordance with the classification system prescribed by the IMO for that Network Operator.

2.27.13. A Network Operator must re-determine the Loss Factor Classes for a connection point in its Network identified under clause 2.27.1(a) if a change occurs to the connection point that might alter its applicable Loss Factor Classes under the classification system prescribed by the IMO for that Network Operator.

2.27.14. When a Network Operator determines a Loss Factor Class for a connection point under clause 2.27.12 or changes a Loss Factor Class for a connection point under clause 2.27.13, the Network Operator must provide to both the IMO and the relevant Market Participant the new Loss Factor Class for the connection point and the Trading Day from which it takes effect, as soon as practicable but before the information is required for use in calculations under the Market Rules.

2.27.15. A Market Participant may apply to the IMO for a ~~re-assessment~~ reassessment of any Transmission Loss Factor or Distribution Loss Factor applying to a Scheduled Generator, Non-Scheduled Generator, Interruptible Load, Dispatchable Load or Non-Dispatchable Load registered to that Market Participant. ~~The following process will apply to every application:~~ The following requirements apply to each application for reassessment.

- (a) ~~the~~ The Market Participant must apply to the IMO in writing within 15 Business Days of receiving the notification of the Loss Factors, stating the Loss Factors that it believes to be in error and its reasons for believing that the Loss Factors should take some other value; apply for reassessment in accordance with the Market Procedure for Determining Loss Factors.
- (b) ~~upon receiving such an application, the IMO must:~~ The IMO must process an application for reassessment and where required conduct an audit of the relevant Loss Factor calculation in accordance with the Market Procedure for Determining Loss Factors.

- ~~i. within two Business Days notify the relevant Network Operator that the IMO intends to carry out an audit of the Loss Factor calculation; and~~
  - ~~ii. within 25 Business Days audit the Loss Factor calculation.~~
- (c) ~~the~~ The relevant Network Operator must cooperate with the an audit of the Loss Factor calculation conducted by the IMO under clause 2.27.15(b) by providing reasonable access to the data and calculations used in producing the Loss Factor.
- (d) ~~Where the an audit reveals an error in the Loss Factor calculation of a~~ Transmission Loss Factor or Distribution Loss Factor for a Loss Factor Class, the IMO must direct the Network Operator to recalculate the Transmission Loss Factor or Distribution Loss Factor, and may instruct the Network Operator to recalculate other Transmission Loss Factors or Distribution Loss Factors provided by that Network Operator.
- (e) ~~Where the IMO directs the Network Operator to recalculate a~~ Transmission Loss Factor or Distribution Loss Factor for a Loss Factor Class, then the Network Operator must do so, and must provide the recalculated Transmission Loss Factor or Distribution Loss Factor to the IMO. The recalculated Transmission Loss Factor or Distribution Loss Factor is substituted for the value previously applied with effect from the time published by the IMO in accordance with clause 2.27.3A 2.27.8.
- ~~(f) Where an audit reveals an error in the assignment of a connection point to a Loss Factor Class, the IMO must direct the relevant Network Operator to correct the error and re-determine the Loss Factor Class for the connection point in accordance with the classification system prescribed by the IMO for that Network Operator.~~
- ~~(g) Where the IMO directs a Network Operator to re-determine a Loss Factor Class for a connection point, then the Network Operator must do so, and must as soon as reasonably practicable provide to the IMO and the relevant Market Participant the revised Loss Factor Class and the Trading Day from which it should apply.~~
- ~~(h) The costs of an audit conducted by the IMO in response to an application for reassessment, including any costs incurred by the Network Operator and any costs, not otherwise included in the IMO's budget, incurred by the IMO, are payable by the Market Participant who made the application for reassessment, unless the audit reveals:~~
  - ~~i. an error of more than 0.0025 in the calculation of a Transmission Loss Factor or Distribution Loss Factor; or~~
  - ~~ii. an incorrect assignment of a Connection Point to a Loss Factor Class,~~in which case all costs are payable by the relevant Network Operator.

2.27.516. Where a Network Operator fails to provide the IMO with a Transmission Loss Factor or Distribution Loss Factor in accordance with clause ~~2.27.4~~ 2.27.6 or ~~2.27.4(d)~~ 2.27.15(d), the IMO must continue to use the equivalent Transmission Loss Factor or Distribution Loss Factor from the previous year until such time as the Network Operator has provided the IMO with the new Transmission Loss Factor or Distribution Loss Factor and that Transmission Loss Factor or Distribution Loss Factor has taken effect. The recalculated Transmission Loss Factor or Distribution Loss Factor is substituted for the value previously applied with effect from the time published by the IMO in accordance with clause ~~2.27.3A~~ 2.27.8.

2.27.617. The IMO must, with the assistance of Network Operators, document the standards, methodologies, classification systems and procedures to be used in determining the Loss Factors in the Market Operations Procedure for Determining Loss Factors and Network Operators must follow that documented Market Procedure when determining the Loss Factors.

2.27.18. The IMO may at any time review the effectiveness of the processes used by a Network Operator for Loss Factor calculation in meeting the Wholesale Market Objectives.

2.27.19. The IMO may request, and a Network Operator must provide, any information relating to the methodologies, models, software, data sources and internal procedures used by the Network Operator for Loss Factor calculation that the IMO considers relevant to a review conducted under clause 2.27.18.

9.3.4A. The IMO must determine a single Metered Schedule for a Trading Interval for those Non-Dispatchable Loads without interval meters or with meters not read as interval meters that are served by Synergy where:

- (a) the Metered Schedule equals the Notional Wholesale Meter value for that Trading Interval;
- (b) the Notional Wholesale Meter value for a Trading Interval equals negative one multiplied by:
  - i. the sum of the Metered Schedules with positive quantities for that Trading Interval; plus
  - ii. the sum of the Metered Schedules with negative quantities for that Trading Interval;

where the Metered Schedules referred to in clauses 9.3.4A(b)(i) and 9.3.4A(b)(ii) exclude the Metered Schedule for the Notional Wholesale Meter.

**Notional Wholesale Meter:** A notional interval meter ~~quantity associated with a Market Customer's aggregate consumption not metered by Trading Interval. This value will be an estimate produced by the IMO, representing Non-Dispatchable Loads without interval meters that are served by Synergy.~~

**Distribution Loss Factor:** A factor representing the average electrical losses incurred when electricity is transmitted through a distribution network.

**Distribution Loss Factor Class:** A group of one or more connection points with common characteristics assigned a common Distribution Loss Factor.

**Loss Factor: Means:**

(a) Aa factor representing network losses defining the annual average marginal network loss between any given node and the Reference Node where the Loss Factor at the Reference Node is 1, expressed as the product of a Transmssion Loss Factor and a Distribution Loss Factor and determined in accordance with clause 2.27.2 2.27.5, and includes the Portfolio Loss Factor; and

(b) in relation to the Verve Energy Balancing Portfolio, the Portfolio Loss Factor.

**Loss Factor Class:** A Transmission Loss Factor Class or a Distribution Loss Factor Class.

**Transmission Loss Factor:** A factor representing the average marginal electrical losses incurred when electricity is transmitted through a transmission network.

**Transmission Loss Factor Class:** A group of one or more connection points with common characteristics assigned a common Transmission Loss Factor.