

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

**IMO AMENDING RULES RC\_2010\_33 MADE ON 16 May 2011  
These Amending Rules commence at 08.00am on 1 November 2011**

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

1. Spinning Reserve Service;
2. Load Following Service;
3. Load Rejection Reserve Service;
4. System Restart Service; or
5. Dispatch Support Service;

ii. for each Trading Interval of the Trading Month the quantity of Ancillary Service to a precision of 0.001 units ~~(where no specific unit of measure will be assumed)~~, where the unit of measure is:

1. MWh for Spinning Reserve Service;
2. MWh for Load Following Service;
3. MWh for Load Rejection Reserve Service;
4. as determined by System Management for System Restart Service; or
5. as determined by System Management for Dispatch Support Service; and

iii. either:

1. a total monthly payment for the Ancillary Service in dollars and whole cents; or
2. a price in dollars and whole cents per unit of the quantity described in (ii) per Trading Interval.

9.9.1. The Ancillary Service settlement amount for Market Participant p for Trading Month m is:

$$\begin{aligned}
 \text{ASSA}(p,m) = & \text{Electricity Generation Corporation AS Provider Payment}(p,m) \\
 & + d(p,i) \times \text{ASP\_Payment}(i,m) \text{ ASP\_Payment}(p,m) \\
 & - \text{Load\_Following\_Share}(p,m) .8(\text{Co})3\text{rs}:7005 \text{ Twn}810 \text{ Twu}:7005 \text{ T2}( \text{ta}6.5(\text{yml}l\text{arty\_L}
 \end{aligned}$$

ASP\_Payment(ip,m) is the total payment to Market Participant p for Contracted Ancillary Services in Trading Month m, determined in accordance with clause 9.9.3;

ASP\_Balance\_Payment(m) is the amount determined in accordance with clause 9.9.3A for Trading Month m;

Load\_Following\_Share(p,m) is the share of the Cost\_LF(m) allocated to Market Participant p in Trading Month m, where this is to be determined by the IMO using the methodology described in clause 3.14.1;

Reserve\_Cost\_Share(p,m) is defined in clause 9.9.2(b);

Consumption\_Share(p,m) is the proportion of consumption associated with Market Participant p for Trading Month m determined by the IMO in accordance with clause 9.3.7;

Capacity\_LF(m) is the total Load Following ~~service~~ Service capacity

$$\begin{aligned}
& ) \\
& + \text{Sum}(i \in \text{ASP\_LFPayment}(i,m)) \\
& \text{c CAS\_LF, ASP\_LFPayment}(c,m)
\end{aligned}$$

- (b) the Spinning Reserve ~~Cost Share~~ cost share for Market Participant p, which is a Market Generator, for Trading Month m:

$$\begin{aligned}
\text{Reserve\_Cost\_Share}(p,m) = & \\
& 0.5 \times (\text{Margin\_Peak}(m) \times \text{Sum}(d \in \text{D}, t \text{ Peak, MCAP}(d,t)) \\
& \times \text{Reserve\_Share}(p,t) \\
& \times (\text{Capacity\_R\_Peak}(m) - \text{Sum}(i \in \text{ASP\_SRQ}(i,t)) \\
& \text{c CAS\_SR, ASP\_SRQ}(c,t) - 0.5 \times \text{LFR}(m))) \\
& + 0.5 \times (\text{Margin\_Off-Peak}(m) \times \text{Sum}(d \in \text{D}, t \text{ Off-Peak, MCAP}(d,t)) \\
& \times \text{Reserve\_Share}(p,t) \\
& \times (\text{Capacity\_R\_Off-Peak}(m) - \text{Sum}(i \in \text{ASP\_SRQ}(i,t)) \\
& \text{c CAS\_SR, ASP\_SRQ}(c,t) - 0.5 \times \text{LFR}(m))) \\
& + \text{Sum}(t \in \text{Peak and Off\_Peak T}, \text{Reserve\_Share}(p,t) \\
& \times \text{Sum}(i \in \text{ASP\_SRPayment}(i,m)) \\
& \text{c CAS\_SR, ASP\_SRPayment}(c,m) / \text{TITM})
\end{aligned}$$

- (c) the total Spinning Reserve ~~Availability Cost~~ availability cost for Trading Month m:

$$\begin{aligned}
\text{Availability\_Cost\_R}(m) = & \\
& \text{Sum}(p \in \text{P}, \text{Reserve\_Cost\_Share}(p,m))
\end{aligned}$$

- (d) the total Load Following ~~Availability Cost~~ availability cost for Trading Month m:

$$\begin{aligned}
\text{Availability\_Cost\_LF}(m) = & \\
& \text{Availability\_Cost}(m) - \text{Availability\_Cost\_R}(m)
\end{aligned}$$

Where

t denotes a Trading Interval in Trading Month m;

T is the set of Trading Intervals in Trading Month m;

c denotes a Contracted Ancillary Service;

CAS\_SR is the set of Contracted Spinning Reserve Services;

CAS\_LF is the set of Contracted Load Following Services;

P is the set of all Market Participants;

ASP\_SRQ(i,t) - ASP\_SRQ(c,t) is the quantity provided by System Management in accordance with clause 3.22.3(b)(ii) for Contracted Spinning Reserve Service c of Spinning Reserve provided by Ancillary Service Provider i in Trading Interval t multiplied by 2, in units of MW (this beMonth m; t mu9o7.58 13ET363.itv prinnivi2934ary

~~ASP\_LFPayment(i,m)~~ ASP\_LFPayment(c,m) is defined in clause 9.9.4  
9.9.3;

TITM is the number of Trading Intervals in ~~the~~ Trading Month m  
(excluding any Trading Intervals prior to Energy Market  
Commencement);

Reserve\_Share(p,t) is the share of the Spinning Reserve ~~service~~ Service  
payment costs allocated to Market Participant p in Trading Interval t,  
where this is to be determined by the IMO using the methodology  
described in clause 3.14.2;

Margin\_Peak(m) is the reserve availability payment margin applying for  
Peak Trading Intervals for Trading Month m as specified by the IMO  
under clause 3.22.1(c);

Margin\_Off-Peak(m) is the reserve availability payment margin applying  
for Off-Peak Trading Intervals for Trading Month m as specified by the  
IMO under clause 3.22.1(d);

Capacity\_R\_Peak(m) is the capacity necessary to cover the Ancillary  
Services Requirement for Spinning Reserve for Peak Trading Intervals  
for Trading Month m as specified by the IMO under clause 3.22.1(e);

Capacity\_R\_Off-Peak(m) is the capacity necessary to cover the Ancillary  
Services Requirement for Spinning Reserve for Off-Peak Trading  
Intervals for Trading Month m as specified by the IMO under clause  
3.22.1(f);

LFR(m) is the capacity necessary to cover the Ancillary Services  
Requirement for Load Following for Trading Month m as specified by the  
IMO under clause 3.22.1(fA);

~~MCAP(d,t) has the meaning given in clause 9.8.1 and =0 if MCAP~~  
~~(d,t) < 0~~ MCAP(t) is the greater of zero and the Marginal Cost  
Administered Price for Trading Interval t calculated in accordance with  
clause 6.14.2;

~~Peak denotes the set of Trading Intervals occurring during Peak Trading~~  
~~Intervals, where "t" refers to a Trading Interval during a Trading Day;~~  
is the set of Peak Trading Intervals in Trading Month m; and

~~Off-Peak denotes the set of Trading Intervals occurring during Off-Peak~~  
~~Trading Intervals, where "t" refers to a Trading Interval during a Trading~~  
~~Day; and~~ is the set of Off-Peak Trading Intervals in Trading Month m.

~~D denotes the set of Trading Days within Trading Month m, where "d" is~~  
~~used to refer to a member of that set.~~

- 9.9.3. The value of ASP\_Payment(i,m) for ~~Ancillary Service Provider~~ Rule Participant i  
in Trading Month m is the sum of:

- (a) the sum over all ~~Ancillary Service Contracts for Spinning Reserve Contracted Spinning Reserve Services c provided by Rule Participant i~~ of ~~ASP\_SRPayment(i,c,m), the payment under that contract;~~
- (b) the sum over all ~~Ancillary Service Contracts for Load Following Contracted Load Following Services c provided by Rule Participant i~~ of ~~ASP\_LFPayment(i,c,m), the payment under that contract;~~
- (c) the sum over all Ancillary Service Contracts for Load Rejection Reserve

9.9.3B. The value of Cost\_LR\_Shortfall(m) for Trading Month m is:

$$\begin{aligned} \text{Cost\_LR\_Shortfall}(m) = & \\ & \frac{\text{Max}(0, \text{Sum}(c \text{ CAS\_LR, ASP\_LRPayment}(c,m))}{+ \text{Sum}(c \text{ CAS\_BS, ASP\_BSPayment}(c,m))} \\ & \underline{\quad \quad \quad - \text{Cost\_LR}(m)} \end{aligned}$$

where

c denotes a Contracted Ancillary Service;

CAS\_LR is the set of Contracted Load Rejection Reserve Services;

CAS\_BS is the set of Contracted System Restart Services;

Cost\_LR(m) is the amount specified by the IMO for Trading Month m under clause 3.22.1(g)(i) for Load Rejection Reserve Service and System Restart Service, and Dispatch Support Services except those provided through clause 3.11.8B, and

each of the terms ASP\_LRPayment(c,m) and ASP\_BSPayment(c,m) is determined in accordance with clause 9.9.4.

9.9.4. ~~For each Ancillary Service Provider i and each Ancillary Service Contract~~  
Contracted Ancillary Service c, the payments ASP\_SRPayment(i,c,m) for  
Spinning Reserve Service, ASP\_LFPayment(i,c,m) for Load Following Service,  
ASP\_LRPayment(i,c,m) for Load Rejection Reserve Service,  
ASP\_BSPayment(i

$CP(d,t)$ , is the non-compliance cost applicable in Trading Interval  $t$  of ~~Trading Day  $d$~~  as specified in clause 9.10A.2;

$NCQ(p,d,t)$  is the MWh quantity of non-compliance for Market Participant  $p$  for Trading Interval  $t$  of ~~Trading Day  $d$~~  as specified by System Management in accordance with clause ~~7.13.1(cC)~~; 7.13.1A(a); and

$ABS[NCQ(p,d,t)]$  means the mathematical absolute value of  $NCQ(p,d,t)$ ;

~~$D$  denotes the set of Trading Days within Trading Month  $m$ , where “ $d$ ” is used to refer to a member of that set.~~

~~$T$  denotes the set of all Trading Intervals in Trading Day  $d$ , where “ $t$ ” is used to refer to a member of that set.~~

- 9.11.1. The Reconciliation Settlement amount for Market Participant  $p$  for Trading Month  $m$  is:

$$\begin{aligned} RSA(p,m) = & (-1) \times \text{Consumption\_Share}(p,m) \times \\ & (\text{Sum}(q_{P,d} \text{ } D,t \text{ } T, BSA(q,d,t)) \\ & + \text{Sum}(q_{P,m}, NCC(q,m)) \\ & + \text{Cost\_LR\_Shortfall}(m)) \end{aligned}$$

Where

$\text{Consumption\_Share}(p,m)$  is the proportion of consumption associated with Market Participant  $p$  for Trading Month  $m$  determined by the IMO in accordance with clause 9.3.7;



**Contracted Spinning Reserve Service:** A Spinning Reserve Service provided by a Rule Participant under an Ancillary Service Contract.

**Contracted System Restart Service:** A System Restart Service provided by a Rule Participant under an Ancillary Service Contract.

**Dispatch Support Service:** Has the meaning given in clause 3.9.9.

**Spinning Reserve Service:** Has the meaning given in clause 3.9.2.

**System Restart Service:** ~~The Ancillary Service described~~ Has the meaning given in clause 3.9.8.