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

IMO AMENDING RULES RC_2007_36 MADE ON 1 MAY 2008
These Amending Rules commence at 08.00am on 1 June 2008

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

Clause 4.26.1

4.26.1.   If a Market Participant holding Capacity Credits fails to comply with its Reserve
Capacity Obligations applicable to any given Trading Interval then the Market
Participant must pay a refund to the IMO calculated in accordance with the
following provisions.

REFUND TABLE

Dates	1 April to 1 October	1 October to 1 December	1 December to 1 February	1 February to 1 April
Business Days Off-Peak Trading Interval Rate ($ per MW shortfall per Trading Interval)	0.25 x Y	0.25 x Y	0.5 x Y	0.75 x Y
Business Days Peak Trading Interval Rate ($ per MW shortfall per Trading Interval)	1.5 x Y	1.5 x Y	4 x Y	6 x Y
Non-Business Days Off-Peak Trading Interval Rate ($ per MW shortfall per Trading Interval)	0.25 x Y	0.25 x Y	0.5 x Y	0.75 x Y
Non-Business Days Peak Trading Interval Rate ($ per MW shortfall per Trading Interval)	0.75 x Y	0.75 x Y	1.5 x Y	2 x Y
Maximum Participant Refund	The total value of the Capacity Credit payments paid or to be paid under these Market Rules to the relevant Market Participant for the 12 Trading Months commencing at the start of the Trading Day of the previous 1 October assuming the IMO acquires all of the Capacity Credits held by the Market Participant and the cost of each Capacity Credit so acquired is determined in accordance with clause 4.28.2(b), (c) and (d) (as applicable).			

> Where:
>
> For an Intermittent Facility that has been commissioned: Y equals 0
>
> For all other facilities, including Intermittent Facilities that have not been commissioned: Y equals the greater of the Reserve Capacity Price and 85% of the Maximum Reserve Capacity Price for the relevant Reserve Capacity Auction, expressed as a $ per MW per Trading Interval figure. This is determined by dividing the Monthly Reserve Capacity Price by the number of Trading Intervals in the relevant month.

Clause 4.26.1A (new)

4.26.1A.   The IMO must calculate the Forced Outage refund for each Facility ("**Facility Forced Outage Refund**") as the lesser of:

(a)   the sum over all Trading Intervals t in Trading Month m of the product of:

i   the Off-Peak Trading Interval Rate or Peak Trading Interval Rate determined in accordance with the Refund Table applicable to Trading Interval t; and

ii   the Forced Outage Shortfall in Trading Interval t,

where the Forced Outage Shortfall for a Facility is equal to its Forced Outage in that Trading Interval measured in MW; and

(b)   the total value of the Capacity Credit payments associated with the relevant Facility paid or to be paid under these Market Rules to the relevant Market Participant for the 12 Trading Months commencing at the start of the Trading Day of the most recent 1 October, assuming the IMO acquires all of the Capacity Credits associated with that Facility and the cost of each Capacity Credit so acquired is determined in accordance with clause 4.28.2(b), (c) and (d) (as applicable), less all Facility Forced Outage Refunds applicable to the Facility in previous Trading Months falling in the same Capacity Year.

Clause 4.26.1B (new)

4.26.1B.   The IMO must calculate the Forced Outage refund for each Market Participant ("**Participant Forced Outage Refund**") as the sum of the Facility Forced Outage Refunds for each Facility registered to the relevant Market Participant.

Clause 4.26.2

4.26.2.   The IMO must determine the net STEM shortfall ("**Net STEM Shortfall**") ~~capacity shortfall ("Capacity Shortfall")~~ in Reserve Capacity supplied by each Market Participant p holding Capacity Credits in each Trading Interval t of

Trading Day d and Trading Month m ~~relative to its Reserve Capacity Obligation Quantity~~ as:

$$SF(p,m,d,t) = Max(RTFO(p,d,t), RCOQ(p,d,t) - A(p,d,t)) + Max(0, B(p,d,t) - C(p,d,t)) \underline{- RTFO(p,d,t)}$$

Where

$A(p,d,t) = Min(RCOQ(p,d,t), CAPA(p,d,t));$

$B(p,d,t) = Min(RCOQ(p,d,t) - RTFO(p,d,t), DSQ(p,d,t));$

$C(p,d,t) = Min(DSQ(p,d,t), MSQ(p,d,t));$

$RCOQ(p,d,t)$ is the total Reserve Capacity Obligation Quantity of Market Participant p's unregistered facilities that have Reserve Capacity Obligations, plus the sum over all of the Registered Facilities registered to Market Participant p of the product of the factor described in clause 4.26.2B as it applies to the Registered Facility and the Facility's Reserve Capacity Obligation Quantity in Trading Interval t of Trading Day d;

$CAPA(p,d,t)$ is for Market Participant p and Trading Interval t of Trading Day d:

(a)   equal to $RCOQ(p,d,t)$ for a Trading Interval where the STEM auction has been suspended by the IMO in accordance with clause 6.10;

(b)   subject to paragraph (a), for the case where Market Participant p is not the Electricity Generation Corporation, the sum of:

   i.   the sum of the Reserve Capacity Obligation Quantities in Trading Interval t of that Market Participant's Interruptible Loads and Curtailable Loads; plus

   ii.   the MW quantity calculated by doubling the net MWh quantity of energy sent out by Facilities registered by that Market Participant during that Trading Interval calculated as the Net Contract Position less the shortfall as indicated by the applicable Resource Plan; plus

   iiA   if a STEM submission does not exist for that Trading Interval, the MW quantity calculated by doubling the total MWh quantity of energy to be consumed by that Market Participant including demand associated with any Curtailable Load or Interruptable Load, but excluding demand associated with any Dispatchable Load during that Trading Interval as indicated by the applicable Resource Plan; plus

   iii.   the MW quantity calculated by doubling the total MWh quantity covered by the STEM Offers which were not scheduled and the STEM Bids which were scheduled in

the relevant STEM Auction, determined by the IMO for that Market Participant under clause 6.9 for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus

    iv.   double the total MWh quantity to be provided as Ancillary Services as specified by the IMO in accordance with clause 6.3A.2(e)(i) for that Market Participant corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus

    v.   the greater of zero and $(BSFO(p,d,t) - RTFO(p,d,t))$; and

(c)   subject to paragraph (a), for the case where Market Participant p is the Electricity Generation Corporation, the sum of:

    i   the sum of the Reserve Capacity Obligation Quantities in Trading Interval t of that Market Participant's Interruptible Loads and Curtailable Loads; plus

    ii   the MW quantity calculated by doubling the total MWh quantity of the Net Contract Position quantity of that Market Participant for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus

    iii   the MW quantity calculated by doubling the total MWh quantity of the STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction, determined by the IMO for that Market Participant under clause 6.9 for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus

    iv.   double the total MWh quantity to be provided as Ancillary Services as specified by the IMO in accordance with clause 6.3A.2(e)(i) for the Electricity Generation Corporation corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus

    v.   the greater of zero and $(BSFO(p,d,t) - RTFO(p,d,t))$.

$BSFO(p,d,t)$ is the total MW quantity of Forced Outage associated with Market Participant p before the STEM Auction for Trading Interval t of Trading Day d, where this is the sum over all the Market Participant's Registered Facilities of the lesser of the Reserve Capacity Obligation Quantity of the Facility for Trading Interval t and the MW Forced Outage of the Facility for Trading Interval t as provided to the IMO by System Management in accordance with clause 7.3;

RTFO(p,d,t) is the total MW quantity of Forced Outage associated with Market Participant p in real-time for Trading Interval t of Trading Day d, where this is the sum over all the Market Participant's Registered Facilities of the lesser of the Reserve Capacity Obligation Quantity of the Facility for Trading Interval t and the MW Forced Outage of the Facility for Trading Interval t as provided to the IMO by System Management in accordance with clause 7.13.1(e);

DSQ(p,d,t) is a MW quantity calculated by doubling the MWh value of the sum over all of the Facilities registered by Market Participant p of each Facility's Dispatch Schedule for Trading Interval t of Trading Day d;

MSQ(p,d,t) is a MW quantity calculated by doubling the MWh value of the sum over all of the Facilities registered by Market Participant p of the greater of zero and each Facility's Metered Schedule for Trading Interval t of Trading Day d corrected for Loss Factor adjustments applicable to that Facility so as to be a sent out quantity.

Clause 4.26.3

4.26.3   For each Market Participant holding Capacity Credits, the IMO must determine the amount of the refund ("**Capacity Cost Refund**") to be applied for Trading Month m ~~in respect of a Capacity Shortfall as defined in clauses 4.26.2 during that Trading Month~~. The Capacity Cost Refund is the lesser of:

(a)   the Maximum Participant Refund determined in accordance with the Refund Table, less all Capacity Cost Refunds applicable to the Market Participant in previous Trading Months falling in the same Capacity Year as Trading Month m; and

(b)   the Participant Forced Outage Refund plus the sum over all Trading Intervals t in Trading Month m of the Net STEM Refund,

where the Net STEM Refund is the product of:

   i.   the Off-Peak Trading Interval Rate or Peak Trading Interval Rate determined in accordance with the Refund Table applicable to Trading Interval t; and

   ii.   the Net STEM ~~Capacity~~ Shortfall in Trading Interval t.

Chapter 11 (Glossary)

~~**Capacity Shortfall:** Has the meaning given in clause 4.26.2.~~

Facility Forced Outage Refund: Has the meaning given in clause 4.26.1A.

Forced Outage Shortfall: Has the meaning given in clause 4.26.1A.

Net STEM Refund: Has the meaning given in clause 4.26.3.

Net STEM Shortfall: Has the meaning given in clause 4.26.2.

Participant Forced Outage Refund: Has the meaning given in clause 4.26.1B.