

APPENDIX M – COMPENSATION ARISING FROM MARKET ENERGY PRICE REVISION

M.1 PURPOSE AND DEFINITIONS

M.1.1 This Appendix sets forth the criteria and calculations for compensation referred to in section 10.2.10 of Chapter 6. Unless otherwise indicated, the criteria and calculations described in this Appendix shall be applied for each *dispatch period* and to each *generation registered facility*.

M.1.2 In this Appendix, the following definitions apply:

$RMEP^m$ = revised *market energy price* (in \$/MWh) at *MNN* *m* for the relevant *dispatch period*, determined in accordance with section 10 of Chapter 6

IEQ^m = injection *energy* quantity (in MWh) for *GRF* *m* for the *settlement interval* corresponding to the relevant *dispatch period*, based on the *metering data* submitted by the *market support services licensee* for the purposes of the *final settlement statement* in accordance with section B.3.1 of Appendix 7B

OQ^m = *GRF* *m*'s scheduled *energy* output (in MW) for the relevant *dispatch period*, being:

its scheduled *energy* output in the *real-time dispatch schedule* that is deemed to be *dispatch instructions* issued by the *PSO* for the relevant *dispatch period*, or

if the *PSO* did not use the *real-time dispatch schedule* as the *dispatch instructions* or if the *real-time dispatch schedule* was not available, the highest *energy* output level that *GRF* *m* was instructed for the relevant *dispatch period*

spq = index of a specific *price-quantity pair* in an *energy offer*

pq = index of a *price-quantity pair* in an *energy offer*, ordered in ascending order of price

$Q^{m,pq}$ = quantity of a *price-quantity pair* pq of the *energy offer* of *GRF* *m* for the relevant *dispatch period*

$P^{m,pq}$ = price of a *price-quantity pair* pq for the *energy offer* of *GRF* m for the relevant *dispatch period*

$$\sum_{pq=1}^{spq-1} Q^{m,pq} = 0, \text{ for } spq = 1$$

$COMP^{m,pq}$ = compensation payable in relation to a *price-quantity pair* pq of the *energy offer* of *GRF* m for the relevant *dispatch period*

$COMP^m$ = compensation payable to *GRF* m for the relevant *dispatch period*

M.2 CRITERIA FOR COMPENSATION

M.2.1 A *generation registered facility* is eligible for compensation referred to in section 10.2.10 of Chapter 6 for a given *dispatch period* if the revised *market energy price* at the *market network node* associated with the *generation registered facility*:

M.2.1.1 is lower than that in the *real-time price schedule*; or

M.2.1.2 in the event that no *real-time price schedule* was produced, is lower than the price in the *price-quantity pair* spq of its *energy offer* that satisfies the following conditions:

a. $\sum_{pq=1}^{spq-1} Q^{m,pq} < OQ^m$; and

b. $\sum_{pq=1}^{spq} Q^{m,pq} \geq OQ^m$.

M.3 CALCULATION OF COMPENSATION AMOUNT

M.3.1 The reference quantity, RQ^m , for a given *dispatch period* in respect of a *generation registered facility*:

M.3.1.1 which was at all relevant times operating under *AGC*, would be $(IEQ^m \times 2)$; and

M.3.1.2 in all other cases, would be the minimum of $(IEQ^m \times 2)$ and OQ^m .

M.3.2 For each *generation registered facility* which meets the criteria in section M.2.1, the compensation amount as described in section 10.2.10 of Chapter 6 for that *dispatch period* shall be calculated as follows:

$$\text{COMP}^m = \sum_{pq=1}^{10} \text{COMP}^{m,pq}$$

M.3.3 For the purposes of section M.3.2, the compensation amount for each *price-quantity pair* spq of the *energy offer* of a *generation registered facility* shall be calculated as follows:

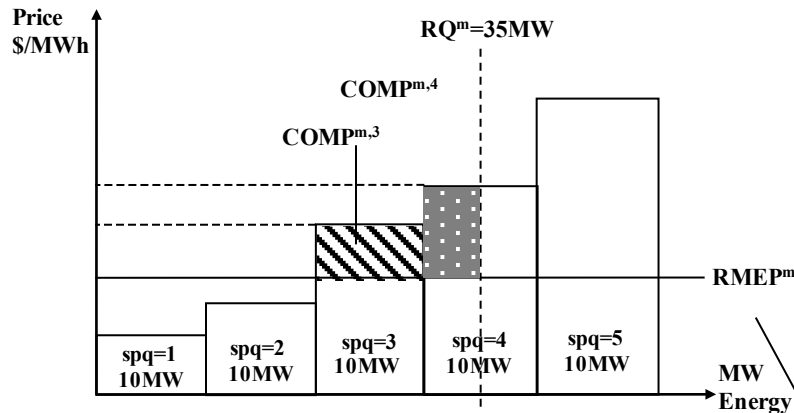
$$\text{M.3.3.1} \quad \text{If } \sum_{pq=1}^{spq-1} Q^{m,pq} \geq RQ^m, \text{ then } \text{COMP}^{m,spq} = 0$$

M.3.3.2 Otherwise,

$$\text{COMP}^{m,spq} = \max[(P^{m,spq} - \text{RMEP}^m), 0] \times \left[\min\left(\sum_{pq=1}^{spq} Q^{m,pq}, RQ^m\right) - \sum_{pq=1}^{spq-1} Q^{m,pq} \right] \times 0.5$$

Explanatory Note:

The following example illustrates the compensation calculation, assuming GRF m meets the criteria under section M.2.1.



$$\text{COMP}^{m,1} = 0 \text{ (Based on section M.3.3.2, since } P^{m,1} \leq \text{RMEP}^m)$$

$$\text{COMP}^{m,2} = 0 \text{ (Based on section M.3.3.2, since } P^{m,2} \leq \text{RMEP}^m)$$

$$\begin{aligned} \text{COMP}^{m,3} &= \max[(120 - 100), 0] \times [\min(30, 35) - 20] \times 0.5 \\ &= 20 \times 10 \times 0.5 = \$100 \text{ (Based on section M.3.3.2)} \end{aligned}$$

$$\text{COMP}^{m,4} = \max[(130 - 100), 0] \times [\min(40, 35) - 30] \times 0.5$$

$$= 30 \times 5 \times 0.5 = \$75 \text{ (Based on section M.3.3.2)}$$

$\text{COMP}^{m,5} = 0$ (Based on section M.3.3.1, since $\sum_{pq=1}^{5-1} Q^{m,pq} = 40$, which is more than RQ^m)

Hence, total compensation payable to GRF m is:

$$\text{COMP}^m = \text{COMP}^{m,1} + \text{COMP}^{m,2} + \text{COMP}^{m,3} + \text{COMP}^{m,4} + \text{COMP}^{m,5}$$

$$= \$0 + \$0 + \$100 + \$75 + \$0$$

$$= \$175$$

M.3.4 For each request for compensation under section 10.2.10 of Chapter 6 that is received by the *EMC*, the *EMC* may request that the *PSO* provide the following data to the *EMC* in respect of the *generation registered facility* for the *dispatch period* that the compensation request relates:

M.3.4.1 whether the *generation registered facility* was at all relevant times operating under *AGC*; and

M.3.4.2 if the *generation registered facility* was not at all relevant times operating under *AGC*, provide the *dispatch instruction* relating to the highest *energy* output level (in MW) that is issued by the *PSO* to the *generation registered facility*.

The *PSO* shall provide the aforementioned data within 3 *business days* of the *EMC*'s request.