SECTION T: SETTLEMENT AND TRADING CHARGES (Version 9 including Approved Modifications yet to be implemented)

Amend paragraph 2.3 to read as follows:

- 2.3.1 In respect of each Settlement Period, for each BM Unit, the Transmission Loss Multiplier shall be calculated as follows:
 - (a) for all BM Units belonging to Trading Units which in the Settlement Period are delivering Trading Units:

$$TLM_{ii} = 1 + TLF_{ii} + TLMO^{+}_{i}$$

(b) for all BM Units belonging to Trading Units which in the Settlement Period are offtaking Trading Units:

$$TLM_{ii} = 1 + TLF_{ii} + TLMO_{i}^{-}$$

where:

$$TLMO_{i}^{+} = -\{\alpha(\Sigma^{+} QM_{ii} + \Sigma^{-}QM_{ii}) + \Sigma^{+} (QM_{ii} * TLF_{ii} + QHED_{ii})\} / \Sigma^{+} QM_{ii};$$

$$\underline{\text{TLMO}}_{i}^{-} = -\{(1 - \alpha)(\Sigma^{-}QM_{ij} + \Sigma^{+}QM_{ij}) + \Sigma^{-}(QM_{ij} * \underline{\text{TLF}}_{ij} + Q\underline{\text{HED}}_{ij})\}/\Sigma^{-}QM_{ij};$$

QHED_{ij} is the value determined in accordance with paragraph 4.5.1;

- Σ^+ represents the sum over all BM Units belonging to Trading Units that are delivering Trading Units in the Settlement Period;
- Σ represents the sum over all BM Units belonging to Trading Units that are offtaking Trading Units in the Settlement Period.

Add new paragraphs 2.4, 2.5 and 2.6 as follows:

2.4 Applicable Loss Factors

- 2.4.1 The Applicable Loss Factor for a Settlement Period for:
 - (a) BM Units (including Interconnector BM Units) registered before 1 April 2004 and all Supplier BM Units shall be calculated by the SAA; and
 - (b) BM Units (including Interconnector BM Units) registered on or after 1 April 2004 shall be calculated by BSCCo.
- 2.4.2 The Applicable Loss Factor each Settlement Period shall be calculated as follows:
 - (a) in the case of those BM Units referred to in paragraph 2.4.1(a):
 - (i) for all BM Units belonging to Trading Units which in the Settlement Period are delivering Trading Units:

$$ALF^{+}_{ij} = - \left\{ \alpha (\Sigma^{+} QM_{ij} + \Sigma^{-}QM_{ij}) \right\} / \Sigma^{+} QM_{ij};$$

(ii) for all BM Units belonging to Trading Units which in the Settlement Period are offtaking Trading Units:

$$\underline{ALF}_{ij} = - \{(1 - \alpha)(\Sigma^{+}QM_{ij} + \Sigma^{-}QM_{ij})\}/\Sigma^{-}QM_{ij};$$

- (b) in the case of those BM Units referred to in paragraph 2.4.1(b) whether belonging to Trading Units which in the Settlement Period are delivering or offtaking Trading Units, ALF⁺_{ij} and ALF_{ij} shall equal the TLF, prevailing at the time of registration of the relevant BM Unit, for the Zone in which the BM Unit lies (as identified in the network mapping statement prepared and maintained by BSCCo (in accordance with Annex T-2) at the time of registration).
- 2.4.3 For the purposes of this paragraph 2 and Annex T-3, where the same Plant and Equipment has been comprised in one or more BM Units registered in accordance with paragraph K3.3, provided such registrations have had continuous and consecutive effect, the date of registration of the BM Unit shall be the date on which the first BM Unit comprising the Plant and Equipment was effective.

2.5 F-Factors

<u>In respect of each Settlement Period, for each BM Unit, the F-Factor shall be calculated as follows:</u>

- (a) BM Units (excluding Interconnector BM Units):
 - (i) for all BM Units belonging to Trading Units which in the Settlement Period are delivering Trading Units:

$$\underline{F^+_{ij}} = \underline{HED_i} * \underline{HL^+_{ij}}$$

(ii) for all BM Units belonging to Trading Units which in the Settlement Period are offtaking Trading Units:

$$\underline{\mathbf{F}}_{ij} = \mathbf{HED}_i * \mathbf{HL}_{ij}$$

- (b) for Supplier BM Units:
 - (i) for all BM Units belonging to Trading Units which in the Settlement Period are delivering Trading Units:

$$\underline{F^{+}_{ij}} = \underline{HL^{+}_{gj} QM^{+}_{ij}} / \underline{\Sigma_{g} QM^{+}_{ij}}$$

(ii) for all BM Units belonging to Trading Units which in the Settlement Period are offtaking Trading Units:

$$F_{ij} = HL_{gi}^{T}QM_{ij}/\Sigma_{g}QM_{ij}$$

where:

- Σ_{σ} QM⁺_{ii} is the sum of Exports from all BM Units in the relevant GSP Group;
- Σ_{g} QM_{ii} is the sum of Imports from all BM Units in the relevant GSP Group;
- (c) for Interconnector BM Units:
 - (i) for Production Interconnector BM Units:

$$F_{ij}^{+} = HL_{zi}^{+} (AC_{ij} / \Sigma_{z}^{+} AC_{ij}) * HED_{i}$$

and
$$F_{ij} = 0$$
;

(ii) for Consumption Interconnector BM Units:

$$\frac{F_{ij} = HL_{zi}^{T} (AC_{ij} / \Sigma_{z}^{T} AC_{ij}) * HED_{i}}{\text{and } F+_{ii} = 0;}$$

where:

z represents the Interconnector that Interconnector BM unit i belongs to;

 $\underline{\Sigma}_{z}^{+}$ AC_{ii} is the total capacity allocated to Production Interconnector BM Units by the Interconnector Administrator of Interconnector z in period j;

 Σ_z AC_i is the total capacity allocated to Consumption Interconnector BM Units by the Interconnector Administrator of Interconnector z in period j:

and further where in paragraphs (a), (b) and (c) HL^{+}_{ij} and HL^{-}_{ij} are the quantities determined in respect of the Settlement Period for the BM Unit accordance with Annex T-3.

2.6 **Hedging Flag**

- 2.6.1 In respect of a BM Unit that is comprised only of CVA Metering Systems (including an Interconnector BM Unit) for a Settlement Period the Hedging Flag shall be the value notified by the relevant Party pursuant to Section K3.2.3 or paragraph 2.6.3.
- 2.6.2 Following notification by a Party of the Hedging Flag in respect of such BM Unit (including an Interconnector BM Unit) to the CRA pursuant to Section K3.2.3 or paragraph 2.6.3 the Hedging Flag for the BM Unit may not change.
- 2.6.3 The Lead Party for a BM Unit (including an Interconnector BM Unit) registered pursuant to Section K3.2.3 at the date on which the Approved Modification pursuant to which this paragraph 2.6 is effective is implemented shall notify the CRA of the value of the Hedging Flag by not later than 1 April 2004, (and in the absence of such notification the BM Unit shall be treated as having a Hedging Flag value of 0).
- 2.6.4 On registration of a BM Unit which conprises the same Plant and Apparatus as is comprised in a BM Unit which ceases to be registered immediately prior to the effective date of registration of the BM Unit, the Hedging Flag of the BM Unit shall be the same as the Hedging Flag of the earlier registered BM Unit.

Amend paragraph 4.5.1 to read as follows:

- 4.5.1 In respect of each Settlement Period and each Energy Account, the Credited Energy Volume for each BM Unit to be allocated to the corresponding Energy Account of the Subsidiary Party and of the Lead Party will be determined as follows:
 - (a) in the case of the corresponding Energy Account of each Subsidiary Party:

$$\begin{aligned} &QCE_{iaj} = \underline{UQCE_{jaj}} + \underline{AQHED_{jaj}}; \\ &\underline{where}; \\ &\underline{UQCE_{jaj}} = \{(QM_{ij} - QBO_{ij}) * (QMPR_{iaj}/100) + QMFR_{iaj}\} * TLM_{ija} \end{aligned}$$

$$\underline{AQHED_{iai} = QHED_{ii} * (QMPR_{iai}/100);}$$

$$QHED_{ij} = (ALF^{+}_{ij} - TLF_{ij}) F^{+}_{ij} + (ALF_{ij} - TLF_{ij}) F_{ij};$$

and values of QCE_{iaj} are then rounded towards zero to the nearest kWh;

(b) in the case of the corresponding Energy Account of the Lead Party:

$$QCE_{iai} = UQCE_{iai} + AQHED_{iai}$$

where:

$$\frac{\text{UQCE}_{\text{iaj}}}{\text{UQCE}_{\text{iaj}}} = (QM_{\text{ij}} * \text{TLM}_{\text{ij}}) - \sum_{a} QCE_{\text{iaj}}$$

$$AQHED_{iai} = QHED_{ii} - \sum_{a} AQHED_{iai}$$
; and

$$QHED_{ii} = (ALF_{ii}^{+} - TLF_{ii}) F_{ii}^{+} + (ALF_{ii} - TLF^{ij}) F_{ii}$$
; and

where Σ_a represents the sum over all Energy Accounts for Subsidiary Parties of the Lead Party (not including Energy Accounts for the Lead Party itself).

Add new Annex T-3 as follows:

ANNEX T-3

HEDGING LOADS

- 1. **Introduction**
- 1.1 This Annex T-3 sets out the basis for calculating the Hedging Load for a BM Unit for a Settlement Period for the purposes of Section T2.5.
- 2. **Hedging Load**
- 2.1 The Hedging Load for a BM Unit registered before 1 April 2004 shall be calculated as follows:

$$HL_{ij}^+ = \sum_{ni} \max (QM_{ij}, 0) / N * Y_i$$
; and

$$\underline{HL}_{ii} = \underline{\Sigma}_{ni} \min (QMij, 0)/N * Y_i$$

2.2 The Hedging Load for a BM Unit registered on or after 1 April 2004 shall be as follows:

| [Plant Type] | \mathbf{HL}^{+} | HL. |
|------------------|---------------------------------|----------|
| Onshore wind | <u>GC_{ii} * 0.289</u> | <u>0</u> |
| generator | | |
| <u>Biofue</u> l | <u>GC_{ii} * 0.623</u> | <u>0</u> |
| generator | | |
| Hydro-electric | <u>GC_{ii} * 0.0815</u> | <u>0</u> |
| <u>generator</u> | | |
| Open Cycle | <u>GC_{ii} * 0.0815</u> | <u>0</u> |
| Gas Turbine | | |
| generator | | |

P109 Modification Report Annex 2c - Changes to Section T

| Combined Cycle Gas Turbine | <u>GC_{ii}</u> * 0.3618 | 0 |
|----------------------------|---------------------------------|----------------------------------|
| generator | | |
| Demand | <u>0</u> | <u>DC_{ij}</u> * 0.4706 |
| Station Demand | 0 | <u>DC</u> _{ij} * 0.0664 |

are determined at the time at which the BM Unit was registered pursuant to Section K3.2.3 or Section T2.6.3.

2.3 The Hedging Load for a Supplier BM Unit shall be calculated as follows:

$$HL_{gi}^+ = \Sigma_g \Sigma_{ni} \max (QM_{ii}, 0) / N * Y_i;$$
and

$$\underline{HL}_{gi} = \underline{\Sigma}_{g} \underline{\Sigma}_{ni} \min (QM_{ii}, 0) / N * Y_{i}$$

2.4 The Hedging Load for an Interconnector BM Unit shall be calculated as follows:

$$HL_{zi}^+ = \sum_z \sum_{n_i} \max(QM_{ii}, 0) / N * Y_i$$

$$\underline{HL}_{zi} = \Sigma_z \Sigma_{ni} \min (QM_{ii}, 0) / N * Y_i$$

2.5 For the purposes of paragraphs 2.1, 2.3 and 2.4:

 $\underline{\Sigma}_{\underline{n}}$ is the sum over all relevant Settlement Periods in the relevant three month period in which the Settlement Period falls;

N is the number of Settlement Periods in the same three month period as the given Settlement Period;

the three month period's are those commencing 1 December 2001, 1 March 2002, 1 June 2002 and 1 September 2002; and

Y_i has the value shown in the table in paragraph 2.6.

2.6 For the purposes of this Annex T-3:

| BSC Year | BM Units Other than Supplier BM Units | Supplier BM Units |
|--------------------|--|-------------------|
| <u>2004 - 2005</u> | 1 | 1 |
| <u>2005 –2006</u> | 1 | 0.93 |
| <u>2006 – 2007</u> | 1 | 0.86 |
| <u>2007 – 2008</u> | 1 | 0.79 |
| <u>2008 – 2009</u> | 1 | 0.71 |
| <u>2009 – 2010</u> | 1 | 0.64 |
| <u>2010 – 2011</u> | 1 | 0.57 |
| <u>2011 – 2012</u> | 1 | 0.50 |

P109 Modification Report Annex 2c - Changes to Section T

| <u>2012 – 2013</u> | 1 | 0.43 |
|--------------------|---|------|
| <u>2013 – 2014</u> | 1 | 0.36 |
| <u>2014 – 2015</u> | 1 | 0.29 |
| <u>2015 – 2016</u> | 1 | 0.21 |
| <u>2016 – 2017</u> | 1 | 0.14 |
| <u>2017 – 2018</u> | 1 | 0.07 |
| <u>2018 – 2019</u> | 0 | 0 |

| P109 Modification Report Annex 2c – Changes to Section T | | | | | |
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