Modifications to the Market Support Services Code

No.	Modification Ref. No.	Section[1]	Original Text	Modification[2]	Reasons
1	MSSC/2007/1	1.3.1	New definition.	“non-injecting embedded generation facility” means an embedded generation facility approved for classification as non-injecting by the Authority under the Market Rules.	Defined term to be used in sections 6.1.3, 6.5.6 and 11.1.1
2	MSSC/2007/2	1.3.1	New definition.	“classified associated load” means the load being directly supplied by a non-injecting embedded generation facility.	Defined term to be used in section 6.1.3, 6.1.5 and 8.3.4
3	MSSC/2007/3	1.3.1	“embedded generation facility” means, in respect of a consumer, a generation facility associated with the site behind the meter or meters measuring the consumer's net withdrawal of energy from the transmission system;	“embedded generation facility” means a generation facility that has been classified as such in accordance with section 4.4 of Chapter 7 of the Market Rules.	Revised to be consistent with the definition used under the Market Rules.
4	MSSC/2007/4	1.3.1	New definition.	“generation settlement facility” or “GSF” means a generation facility that has been registered for	Defined term to be used in Sections 6.1 and 11.1.1

[1] Reference to the section of the code where change has been made in the version dated on Jan 2005 as published on the web.
[2] The code modifications will take effect from 9 April 2008.

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				<u>settlement purposes only in accordance with section 5.4 of Chapter 2 of the Market Rules;</u>	
5	MSSC/2007/5	1.3.1	"*generation registered facility*" means a generation facility that has been registered as a registered facility, as that term is defined in the market rules, with the Market Company to provide one or more of energy, reserve, regulation or contracted ancillary services, as those terms are defined in the market rules	"generation registered facility" <u>or "GRF"</u> means a generation facility that has been registered as a registered facility, as that term is defined in the market rules, with the Market Company to provide one or more of energy, reserve, regulation or contracted ancillary services, as those terms are defined in the market rules	Defined term to be used in Sections 6.1.2, 6.1.4 and 11.1.1
6	MSSC/2007/6	1.3.1	"site-specific adjustment factors" means a loss factor applied to a Pool meter to account for the notional metering point being on the high voltage side of the transformer whereas the physical metering point is on the low voltage side of the transformer or a loss factor, as a result of connection at busbars of different voltages, applied to a generation registered or settlement facility larger than 1MW that provides power directly to a consumer;	"site-specific adjustment factors" means a loss factor applied to a Pool meter to account for the notional metering point being on the high voltage side of the transformer whereas the physical metering point is on the low voltage side of the transformer or a loss factor, as a result of connection at busbars of different voltages, applied to a generation registered <u>facility</u> or a <u>generation</u> settlement facility ~~larger than 1MW~~ that provides power directly to a consumer;	Revised to remove reference to >1MW generation

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7	MSSC/2007/7	6.1.2 Equation 6.1(a)	$ESC_B^r = \left[\sum_h^B \left(USEP_h + HEUC_h + ME\right.\right.$	$ESC_B^r = \sum_h^B \left[\left(USEP_h + HEUC_h + AFP_h\right) \bullet E\right.$ Where: $E_h^{net,r}$ = Net kWh of electricity used in half-hour *h* by consumer *r*, determined in accordance with equation 6.1(d)	Rewrite equation 6.1(a) to cater for the fact MEUC will now be charged on a net basis for loads of classified non-injecting embedded generators. Note: All definitions of the other terms in equation 6.1(a) remain unchanged.
			Original Text As Above $ESC_B^r = \left[\sum_h^B \left(USEP_h + HEUC_h + MEUC_h + AFP_h\right) \bullet E_h^r \bullet TLF^r\right]$ **Modification As Above** $ESC_B^r = \sum_h^B \left[\left(USEP_h + HEUC_h + AFP_h\right) \bullet E_h^r + \left(MEUC_h \bullet E_h^{net,r}\right)\right] \bullet TLF^r$		
8	MSSC/2007/8	Equation 6.1(b)	$E_h^{eg,r}$ = 0, if there is no embedded generation facility larger than 1 MW that provides power directly to consumer *r*'; or Energy in kWh generated in half-hour *h* by any embedded	$E_h^{eg,r}$ = 0, if there is no embedded generation facility that is a GRF or GSF and that provides power directly to consumer *r*; or Energy in kWh generated in half-hour *h* by any embedded generation	Revised to accommodate embedded generators <1MW.

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			generation facility that is a *GRF* or *GSF* that provides power directly to consumer *r* as recorded by the meters measuring the embedded generation facility's direct supply of electricity to consumer r ADJ^r = 0, if there is no embedded generation facility larger than 1 MW that provides power directly to consumer r; or If there is an embedded generation facility larger than 1 MW that provides power directly to consumer r, a site-specific adjustment factor, as a result of connection at busbars of different voltages, that equilibrates the quantities measured at the meter measuring that embedded generation facility's direct supply of electricity to consumer r and the meter or meters measuring consumer r's net withdrawal from the transmission system or the internal electrical system of the	facilit<u>ies</u> that is a GRF or GSF that provides power directly to consumer r as recorded by the meters measuring the embedded generation facility's direct supply of electricity to consumer r ADJ^r = 0, if there is no embedded generation facility <u>that is a GRF or GSF and</u> that provides power directly to consumer *r*; or If there is an embedded generation facility <u>that is a GRF or GSF</u> that provides power directly to consumer r, a site-specific adjustment factor, as a result of connection at busbars of different voltages, that equilibrates the quantities measured at the meter measuring that embedded generation facility's direct supply of electricity to consumer r and the meter or meters measuring consumer *r*'s net withdrawal from the transmission system or the internal electricity system of the building	

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			building		
9	MSSC/2007/9	6.1.3 Equation 6.1(d)	New formula.	$E_h^{net,r} = E_h^r - \alpha_h^r \bullet E_h^{c-eg,r} \bullet ADJ^r$ Where: $\alpha_h^r = \frac{E_h^r}{\sum_r^{r \in A_r} E_h^r}$ A_r is the set of all classified associated loads associated with all accounts of a particular consumer *r* (i.e. A_r = (r,…)). $E_h^{c-eg,r}$ = 0, if there is no classified non-injecting embedded generation that is a GRF or GSF and that provides power directly to consumer *r*; or Energy in kWh generated in half-hour *h* by all classified non-injecting embedded generation facilities that provide power directly to	Introduce equation 6.1(d) to define the term $E_h^{net,r}$

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				consumer *r* as recorded by the meters measuring the embedded generation facility's direct supply of electricity to consumer *r*	
10	MSSC/2007/10	6.1.4	A Market Support Services Licensee shall be responsible for calculating a factor, TLF^r, that adjusts for transmission losses and unaccounted for energy for use in equations 6.1(a) and 6.1(c). The factor shall be calculated in accordance with such methodology and on such schedule as may be specified by the Authority. TLF^r may vary amongst consumers based on the voltage at which the consumer is connected to the transmission system and on such other factors as may be determined by the Authority.	A Market Support Services Licensee shall be responsible for calculating ~~a~~ the factors, TLF^r, TLF^p *and* TLF^{grf} that adjusts for transmission losses and unaccounted for energy for use in equations ~~6.1(a), and 6.1(c),~~ in the Metering and Market Support Services Codes. The factors shall be calculated in accordance with such methodology and on such schedule as may be specified by the Authority. *TLF* may vary amongst consumers and metering points based on the voltage at which the consumer or metering point is connected to the transmission system and on such other factors as may be determined by the Authority. Where: TLF^r= Transmission loss factor for consumer *r* at each voltage level	To make it more explicit that the MSS Licensee shall calculate the transmission loss factors for consumers as well as pool and generation facilities

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				TLF^{p} = Transmission loss factor for each pool meter TLF^{grf} = Transmission loss factor for GRF at each voltage level	
11	MSSC/2007/11	6.1.5	New section.	For the purposes of calculating the net energy value in equation 6.1(d) the Market Support Service Licensee shall only consider the set of classified associated loads associated with consumer r where the consumer has given the Market Support Service Licensee at least 15 business days notification of such classified associated loads and where, if there is more than one associated load, the loads are supplied through a single Market Participant.	To define the circumstance under which MSSL will associate multiple EG and loads together
12	MSSC/2007/12	6.5.6	New section.	A Market Support Services Licensee shall list the item "cumulative electricity usage (kWh) during the billing period" as described in sections 6.5.1-6.5.4, on both a gross and a net load basis for those accounts that contain non-injecting embedded generation facilities.	Rules change: oblige both gross and net electricity usage to be itemised.

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13	MSSC/2007/13	8.3.4	New bullet point (e).	(e) For a service transaction request referred to in section 8.1.1(a) through 8.1.1(d) for an account of a set of classified associated loads, immediately prior to the nominated transaction date there exists a service transaction request for each account associated with the set of classified associated loads nominating the same Market Participant settlement account and transaction date for each of the classified associated loads	To prevent multiple loads associated with an EG from being split across different market participants.
14	MSSC/2007/14	11.1.1	(i) The output of any embedded generation facility larger than 1 MW that provides energy directly to the consumer's installation.	(i) The output of any embedded generation facility ~~larger than 1 MW~~ that is a GRF or GSF and that provides energy directly to the customer's installation~~.~~	To cover EG <1MW that are registered in the wholesale market.
15	MSSC/2007/15	11.1.1	New bullet point (o).	(o) Where a consumer has presented a valid copy of approval from the Authority stating that their embedded generation facility has been classified as a non-injecting embedded generation facility, the Market Support Services Licensee shall maintain a record of such an approval, along with details of the	Rule change: oblige the injecting/non-injecting statues of an embedded generator to be recorded

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				embedded generation facilities covered by the approval and the approval number as issued by the Authority.	