<table>
<thead>
<tr>
<th>Rule modification title</th>
<th>Registration of Non-exporting Embedded Intermittent Generation Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitted By :</td>
<td>Market Administration Team</td>
</tr>
<tr>
<td>Company:</td>
<td>Energy Market Company</td>
</tr>
<tr>
<td>Date:</td>
<td>31 July 2017</td>
</tr>
<tr>
<td>Telephone No.</td>
<td>67793000</td>
</tr>
<tr>
<td>Rules Version/ Chapter/ Section</td>
<td>Market Rules (Version 1 January 2018): Chapters 2, 3, 5, 7 and 8</td>
</tr>
<tr>
<td></td>
<td>Market Manuals:</td>
</tr>
<tr>
<td></td>
<td>• Application form for Market Participant Registration</td>
</tr>
<tr>
<td></td>
<td>• Application form for Generation Facility Registration by a Market Participant</td>
</tr>
<tr>
<td></td>
<td>• Application form for Commissioning Generation Facility Registration by a Market Participant</td>
</tr>
<tr>
<td></td>
<td>• Application form for Registration of Non-exporting Embedded Intermittent Generation Facility by a Market Participant (NEW)</td>
</tr>
<tr>
<td>Description of Market Rules</td>
<td>Please refer to Annex 1 for the proposed modifications to the market rules, and Annexes 2 to 5 for the proposed modifications to the respective market manuals.</td>
</tr>
<tr>
<td>Reasons for amendment</td>
<td>The proposed modifications to the market rules and market manuals are to give effect to the EMA’s final determination paper on “Enhancements to the Regulatory Framework for Intermittent Generation Sources (IGS) in the NEMS” dated 25 July 2017, where non-exporting embedded IGS are allowed to be registered in Singapore Wholesale Electricity Market (SWEM) via a streamlined registration process for the payment of fixed market-related charges in advance.</td>
</tr>
<tr>
<td>Impact of proposed amendment on MP, MO, PSO and general public</td>
<td>Embedded IGS below 10 MWac who will not be selling any electricity back to the market, are allowed to be registered as a Non-exporting Embedded Intermittent Generation Facility (NEIGF). A NEIGF is required to pay the relevant fixed market-related charges (e.g. AFP charge) to EMC in advance based on historical rates instead of settling it daily with EMC. Correspondingly, certain registration requirements, such as maintaining a clearing bank account, providing credit support and executing the MP-MSSL agreement, are waived for MPs who solely register NEIGFs. Please refer to Annex 6 for the calculation methodology and payment schedule for the fixed market-related charge.</td>
</tr>
<tr>
<td>EMC’s Comments</td>
<td>The proposed modifications are made pursuant to the EMA’s directive made under Section 46(2)(b) of the Electricity Act. The proposed modifications were published for comments on 29 January 2018. The EMA approved the proposed modifications on 7 March 2018, and the proposed modifications will take effect on 8 March 2018.</td>
</tr>
</tbody>
</table>
Annex 1
Proposed Modifications to the Market Rules
<table>
<thead>
<tr>
<th>Existing Market Rules (1 Jan 2018)</th>
<th>Proposed Rule Changes (Deletions represented by strikethrough text and additions represented by double-underlined text)</th>
<th>Reasons for Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chapter 2 - Participation</strong></td>
<td><strong>Chapter 2 - Participation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>1.1 INTRODUCTION</strong></td>
<td><strong>1.1 INTRODUCTION</strong></td>
<td></td>
</tr>
<tr>
<td>1.1.1 This Chapter sets forth:</td>
<td>1.1.1 This Chapter sets forth:</td>
<td></td>
</tr>
<tr>
<td>…</td>
<td>…</td>
<td></td>
</tr>
<tr>
<td>1.1.1.4 the terms and conditions upon which the registration of a registered facility or a generation settlement facility may be cancelled or transferred at the request of a market participant;</td>
<td>1.1.1.4 the terms and conditions upon which the registration of a registered facility or a generation settlement facility or a non-exporting embedded intermittent generation facility may be cancelled or transferred at the request of a market participant;</td>
<td>To include a reference to a non-exporting embedded IGF as the terms and conditions for cancellation and transfer also applies to non-exporting embedded IGFS.</td>
</tr>
<tr>
<td><strong>1.2 MARKET PARTICIPANT REGISTRATION AND MARKET SUPPORT SERVICES LICENSEE AUTHORISATION</strong></td>
<td><strong>1.2 MARKET PARTICIPANT REGISTRATION AND MARKET SUPPORT SERVICES LICENSEE AUTHORISATION</strong></td>
<td></td>
</tr>
<tr>
<td>1.2.1 No person, other than a market support services licensee, shall participate in the wholesale electricity markets or cause or permit any physical service to be conveyed into, through or out of the transmission system unless:</td>
<td>1.2.1 No person, other than a market support services licensee, shall participate in the wholesale electricity markets or cause or permit any physical service to be conveyed into, through or out of the transmission system unless:</td>
<td></td>
</tr>
<tr>
<td>…</td>
<td>…</td>
<td></td>
</tr>
<tr>
<td>1.2.1.1 that person has been registered by the EMC as a market participant pursuant to this section 1.2 and section 3; and</td>
<td>1.2.1.1 that person has been registered by the EMC as a market participant pursuant to this section 1.2 and section 3; and</td>
<td></td>
</tr>
<tr>
<td>To include the new type of facility registration for a non-exporting embedded IGF.</td>
<td>To include the new type of facility registration for a non-exporting embedded IGF.</td>
<td></td>
</tr>
</tbody>
</table>
### Existing Market Rules
(1 Jan 2018)

1.2.1.2 subject to sections 5.1.2 to 5.1.8, the facility to or from which the *physical service* is to be so conveyed has been registered by the EMC as a *registered facility*, as a *commissioning generation facility*, or as a *generation settlement facility* pursuant to section 5.2, 5.3 or 5.4 as the case may be.

### Proposed Rule Changes
(Deletions represented by strikethrough text and additions represented by double-underlined text)

1.2.1.2 subject to sections 5.1.2 to 5.1.8, the facility to or from which the *physical service* is to be so conveyed has been registered by the EMC as a *registered facility*, as a *commissioning generation facility*, or as a *generation settlement facility* or as a *non-exporting embedded intermittent generation facility* pursuant to section 5.2, 5.3, 5.4 or 5.4B, as the case may be.

### Reasons for Modification

<table>
<thead>
<tr>
<th>4 WITHDRAWAL BY A MARKET PARTICIPANT OR MARKET SUPPORT SERVICES LICENSEE</th>
<th>4 WITHDRAWAL BY A MARKET PARTICIPANT OR MARKET SUPPORT SERVICES LICENSEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.1 Provided that the <em>market participant</em> has requested that the EMC cancel or transfer the registration of any applicable <em>registered facilities</em> or <em>generation settlement facilities</em> pursuant to section 6, a <em>market participant</em> that wishes to cease being a <em>market participant</em> shall provide a written notice to the EMC to that effect. The notice shall specify the date of the <em>trading day</em> upon which the <em>market participant</em> intends to cease to participate in the <em>wholesale electricity markets</em> or to cause or permit any <em>physical service</em> to be conveyed into, through or out of the <em>transmission system</em>. The <em>trading day</em> specified shall not be earlier than the <em>trading day</em> on which:</td>
<td>4.1.1 Provided that the <em>market participant</em> has requested that the EMC cancel or transfer the registration of any applicable <em>registered facilities</em> or <em>generation settlement facilities</em> or <em>non-exporting embedded intermittent generation facility</em> pursuant to section 6, a <em>market participant</em> that wishes to cease being a <em>market participant</em> shall provide a written notice to the EMC to that effect. The notice shall specify the date of the <em>trading day</em> upon which the <em>market participant</em> intends to cease to participate in the <em>wholesale electricity markets</em> or to cause or permit any <em>physical service</em> to be conveyed into, through or out of the <em>transmission system</em>. The <em>trading day</em> specified shall not be earlier than the <em>trading day</em> on which:</td>
</tr>
<tr>
<td>To include a reference to a non-exporting embedded IGF such that the registration of a market participant can only withdraw its registration after its facilities (including non-exporting embedded IGFs) have been cancelled or transferred.</td>
<td></td>
</tr>
<tr>
<td>Existing Market Rules (1 Jan 2018)</td>
<td>Proposed Rule Changes (Deletions represented by strikethrough text and additions represented by double-underlined text)</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4.1.1.1 the registration of the last of the market participant's applicable registered facilities or generation settlement facilities is to be cancelled by the EMC, determined in accordance with section 6.1; or 4.1.1.2 the registration of the last of the market participant's applicable registered facilities or generation settlement facilities is to be transferred by the EMC, determined in accordance with section 6.2.</td>
<td>4.1.1.1 the registration of the last of the market participant's applicable registered facilities or generation settlement facilities or non-exporting embedded intermittent generation facility is to be cancelled by the EMC, determined in accordance with section 6.1; or 4.1.1.2 the registration of the last of the market participant's applicable registered facilities or generation settlement facilities or non-exporting embedded intermittent generation facilities is to be transferred by the EMC, determined in accordance with section 6.2.</td>
</tr>
</tbody>
</table>

5 FACILITIES REGISTRATION

5.1 REQUIREMENT FOR REGISTRATION

5.1.1 No person, other than a market support services licensee, shall participate in the real-time markets or cause or permit any physical service to be conveyed into, through or out of the transmission system unless:

5.1.1.1 that person is registered as a market participant pursuant to section 1.2 and section 3; and

5.1.1 No person, other than a market support services licensee, shall participate in the real-time markets or cause or permit any physical service to be conveyed into, through or out of the transmission system unless:

5.1.1.1 that person is registered as a market participant pursuant to section 1.2 and section 3; and

To include the new type of facility registration for a non-exporting embedded IGF.
| Existing Market Rules  
(1 Jan 2018) | Proposed Rule Changes  
(Deletions represented by strikethrough text and additions represented by double-underlined text) | Reasons for Modification |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1.1.2 subject to sections 5.1.2 to 5.1.8, the facility to or from which the physical service is to be so conveyed has been registered by the EMC as a registered facility, as a commissioning generation facility, or as a generation settlement facility pursuant to section 5.2, 5.3 or 5.4 as the case may be.</td>
<td>5.1.1.2 subject to sections 5.1.2 to 5.1.9, the facility to or from which the physical service is to be so conveyed has been registered by the EMC as a registered facility, as a commissioning generation facility, or as a generation settlement facility or as a non-exporting embedded intermittent generation facility pursuant to section 5.2, 5.3 or 5.4 or 5.4B as the case may be.</td>
<td>To clarify that section 5.1.7 is subject to this section 5.1.3, where registration is not required for a generation facility having a name-plate rating of less than 1 MW.</td>
</tr>
<tr>
<td>5.1.3 Unless otherwise provided in section 5.1.4, 5.1.5, 5.1.6 or 5.1.7, a person that intends to participate in the real-time markets or cause or permit a physical service to be conveyed into, through or out of the transmission system from a generation facility having a name-plate rating of less than 1 MW shall not be required to register that generation facility as a registered facility or a generation settlement facility. No such generation facility shall be subject to dispatch by the PSO, unless that generation facility is registered as a generation registered facility.</td>
<td>5.1.3 Unless otherwise provided in section 5.1.4, 5.1.5, 5.1.6 or 5.1.7, a person that intends to participate in the real-time markets or cause or permit a physical service to be conveyed into, through or out of the transmission system from any generation facility that is not an intermittent generation facility, which together with all other generation facilities that are not</td>
<td>To clarify that the requirement in section 5.1.4 applies to a generation facility</td>
</tr>
</tbody>
</table>
| **Existing Market Rules**  
(1 Jan 2018) | **Proposed Rule Changes**  
(Deletions represented by strikethrough text and additions represented by double-underlined text) | **Reasons for Modification** |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>intermittent generation facilities</em> at the same generating station (if any) have an aggregate name-plate rating of 10 MW or more, shall register all the generation facilities of such generating station as one or more <em>generation registered facilities</em> in accordance with Appendix 2B.</td>
<td>all <em>other generation facilities</em> that are not <em>intermittent generation facilities</em> at the same generating station (if any) have an aggregate name-plate rating of 10 MW or more, shall register all the <em>generation facilities</em> of such generating station as one or more <em>generation registered facilities</em> in accordance with Appendix 2B.</td>
<td>which is not an IGF.</td>
</tr>
</tbody>
</table>

5.1.5 Unless otherwise provided in section 5.1.6, a person that intends to participate in the *real-time markets* or cause or permit a *physical service* to be conveyed into, through or out of the *transmission system* from any *generation facility*, which together with all other *generation facilities* that are not *intermittent generation facilities* at the same generating station (if any) have an aggregate name-plate rating of 1 MW or more but less than 10 MW, shall register all the *generation facilities* of such generating station as one or more *generation settlement facilities* in accordance with Appendix 2B. | 5.1.5 Unless otherwise provided in section 5.1.6, a person that intends to participate in the *real-time markets* or cause or permit a *physical service* to be conveyed into, through or out of the *transmission system* from any *generation facility* that is not an *intermittent generation facility*, which together with all other *generation facilities* that are not *intermittent generation facilities* at the same generating station (if any) have an aggregate name-plate rating of 1 MW or more but less than 10 MW, shall register all the *generation facilities* of such generating station as one or more *generation settlement facilities* in accordance with Appendix 2B. | To clarify that the requirement in section 5.1.5 applies to a generation facility which is not an IGF. |

5.1.7 Notwithstanding sections 5.1.3 to 5.1.6, a person that intends to participate in the *real-time markets* or cause or permit a *physical service* to be conveyed into, through or out of the *transmission system* from one or more *intermittent generation facilities* shall register such *intermittent generation facilities* as one or more *generation settlement facilities*, unless such registration requirements are waived by the | 5.1.7 Notwithstanding sections 5.1.3 to 5.1.6, a person that intends to participate in the *real-time markets* or cause or permit a *physical service* to be conveyed into, through or out of the *transmission system* from one or more *intermittent generation facilities* shall register such *intermittent generation facilities* as one or more *generation settlement facilities*, unless such registration requirements are waived by the | To clarify that this section 5.1.7 is subject to section 5.1.3, where registration is not required for a generation facility having a name- |
<table>
<thead>
<tr>
<th>Existing Market Rules (1 Jan 2018)</th>
<th>Proposed Rule Changes</th>
<th>Reasons for Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authority.</td>
<td>Authority, not required pursuant to section 5.1.3, or if section 5.1.9 applies.</td>
<td>plate rating of less than 1 MW. To clarify that section 5.1.7 does not apply if the facilities are registered under 5.1.9.</td>
</tr>
<tr>
<td>[New Section]</td>
<td>5.1.9 A person that intends to participate in the real-time markets or cause or permit a physical service to be conveyed into, through or out of the transmission system from an embedded intermittent generation facility having a name-plate rating of less than 10 MW, may register such generation facility as a non-exporting embedded intermittent generation facility.</td>
<td>To allow an embedded intermittent generation facility of name-plate rating less than 10 MW to register as a non-exporting embedded intermittent generation facility (IGF) instead of a generation settlement facility.</td>
</tr>
<tr>
<td><strong>5.1A REGISTRATION PROCESS</strong></td>
<td><strong>5.1A REGISTRATION PROCESS</strong></td>
<td><strong>To add a new type of facility registration for non-ex</strong></td>
</tr>
<tr>
<td>5.1A.1 Each applicable market participant shall apply for: 5.1A.1.1 the registration of its facility as a registered facility and the registration</td>
<td>5.1A.1 Each applicable market participant shall apply for: 5.1A.1.1 the registration of its facility as a registered facility and the registration</td>
<td></td>
</tr>
<tr>
<td>Existing Market Rules (1 Jan 2018)</td>
<td>Proposed Rule Changes (Deletions represented by strikethrough text and additions represented by double-underlined text)</td>
<td>Reasons for Modification</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------------------------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>of a <em>market participant</em> as the <em>dispatch coordinator</em> for such facility in accordance with section 5.2;</td>
<td>of a <em>market participant</em> as the <em>dispatch coordinator</em> for such facility in accordance with section 5.2;</td>
<td>embedded IGF.</td>
</tr>
<tr>
<td>5.1A.1.2 the registration of its facility as a <em>generation settlement facility</em> in accordance with section 5.4; or</td>
<td>5.1A.1.2 the registration of its facility as a <em>generation settlement facility</em> in accordance with section 5.4;</td>
<td></td>
</tr>
<tr>
<td>5.1A.1.3 the registration of its facility as a <em>commissioning generation facility</em> and, if the facility is required or intended to be registered as a <em>generation registered facility</em>, the registration of a <em>market participant</em> as the <em>dispatch coordinator</em> for such facility, in accordance with section 5.3,</td>
<td>5.1A.1.3 the registration of its facility as a <em>commissioning generation facility</em> and, if the facility is required or intended to be registered as a <em>generation registered facility</em>, the registration of a <em>market participant</em> as the <em>dispatch coordinator</em> for such facility, in accordance with section 5.3; or</td>
<td></td>
</tr>
<tr>
<td>as the case may be, and in accordance with the process described in the applicable <em>market manual</em>.</td>
<td>5.1A.1.4 the registration of its facility as a <em>non-exporting embedded intermittent generation facility</em> in accordance with section 5.4B.</td>
<td></td>
</tr>
<tr>
<td>as the case may be, and in accordance with the process described in the applicable <em>market manual</em>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[New sections]</td>
<td><strong>5.4B REGISTRATION OF NON-EXPORTING EMBEDDED INTERMITTENT GENERATION</strong></td>
<td>To insert a new section 5.4B which applies to the</td>
</tr>
</tbody>
</table>
| **Existing Market Rules**  
(1 Jan 2018) | **Proposed Rule Changes**  
(Deletions represented by strikethrough text and additions represented by double-underlined text) | **Reasons for Modification** |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FACILITIES</strong></td>
<td></td>
<td>registration of non-exporting embedded IGFs.</td>
</tr>
</tbody>
</table>
| Explanatory note: A market participant may apply for its embedded intermittent generation facility with name-plate rating of less than 10MW to be registered as a non-exporting embedded intermittent generation facility, instead of a generation settlement facility which entails daily settlement. The market participant of a non-exporting embedded intermittent generation facility is allowed to pay the relevant market-related charges (“fixed market-related charge”) in advance. This charge is intended to reflect the charges that would have been payable if such facility were to be a non-exporting generation settlement facility that is classified as an embedded generation facility.  

The methodology to determine the fixed market-related charge, together with the payment schedule, shall be approved by the Authority and published by the EMC. | | To include provision for a MP to register its generation facility as a non-exporting embedded IGF if such facility is less than 10 MW. |
| 5.4B.1 A market participant may apply to register a generation facility as a non-exporting embedded intermittent generation facility, if such facility is an embedded intermittent generation facility with name-plate rating of less than 10 MW. It shall be understood by the applying market participant that there will be no payment to market | | To make clear that there will be no payment to MPs in relation to non-exporting embedded IGFs. |
### Existing Market Rules (1 Jan 2018)

### Proposed Rule Changes
(Deletions represented by strikethrough text and additions represented by double-underlined text)

<table>
<thead>
<tr>
<th>Reason for Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>To set out the requirements that need to be satisfied for registration of a non-exporting embedded IGF.</td>
</tr>
</tbody>
</table>

5.4B.2 The **EMC** shall register a **generation facility** as a **non-exporting embedded intermittent generation facility** if:

5.4B.2.1 the applying **market participant** submits:

a. the registration information required by this section 5.4B; and

b. a copy of the **connection agreement** entered into with the **transmission licensee** with respect to the facility;

5.4B.2.2 the applying **market participant** confirms that the facility is an embedded **intermittent generation facility** with name-plate rating of less than 10 MW;

5.4B.2.3 the **PSO**, upon referral of the application for registration by the **EMC**, advises the **EMC** that the facility for which registration is sought poses no threat to the **reliability** or security of the **PSO controlled system**;

participants in respect of any **non-exporting embedded intermittent generation facility**, whether or not any electricity is injected into the transmission system.
<table>
<thead>
<tr>
<th>Existing Market Rules (1 Jan 2018)</th>
<th>Proposed Rule Changes (Deletions represented by strikethrough text and additions represented by double-underlined text)</th>
<th>Reasons for Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.4B.2.4 the EMC is satisfied on reasonable grounds that the applying market participant has operational control and authority over the generation facility;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.4B.2.5 the EMC, after consulting with the PSO, is satisfied on reasonable grounds that the facility is capable of operating as described in the registration information or as otherwise provided by the market rules, any applicable market manual or the system operation manual;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.4B.2.6 the applying market participant certifies to the EMC that all of the facilities and equipment to which its application for registration relates comply with all applicable technical requirements (other than those referred to in section 8.2) set forth in these market rules, any applicable market manual or the system operation manual applicable to all market participants, the class of market participant of which the applying market participant forms part and the wholesale electricity market in which the applying market participant wishes to participate;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Market Rules (1 Jan 2018)</td>
<td>Proposed Rule Changes (Deletions represented by strikethrough text and additions represented by double-underlined text)</td>
<td>Reasons for Modification</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>5.4B.2.7 the applying market participant certifies to the EMC that it has adequate qualified employees or other personnel and organisational and other arrangements that are sufficient to enable the applying market participant to perform all of the functions and obligations applicable to market participants under these market rules, any applicable market manual or the system operation manual, the class of market participant of which the applying market participant forms part and the wholesale electricity market in which the applying market participant wishes to participate in respect of all of the facilities and equipment to which its application for registration relates;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.4B.2.8 the applying market participant successfully completes such testing and permits such inspection as the EMC may reasonably require for the purposes of testing or inspecting whether all of the facilities and equipment to which its application for registration relates meet all applicable technical requirements (other than those referred to in section 8.2) set forth in these market rules, any applicable market manual or the system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing Market Rules (1 Jan 2018)</td>
<td>Proposed Rule Changes (Deletions represented by strikethrough text and additions represented by double-underlined text)</td>
<td>Reasons for Modification</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>operation manual applicable to all market participants, the class of market participant of which the applying market participant forms part and the wholesale electricity market in which the applying market participant wishes to participate; and</td>
<td>5.4B.2.9 the applying market participant has paid the fixed market-related charge applicable to such generation facility to the EMC in accordance with the payment schedule approved by the Authority and published by the EMC.</td>
<td>To set out the information required for registration of a non-exporting embedded IGF.</td>
</tr>
<tr>
<td>5.4B.3 The information required for registration as a non-exporting embedded intermittent generation facility shall, subject to any lesser information requirements that may be specified in the applicable market manual in respect of the registration of a given class or size of facility, include:</td>
<td>5.4B.3.1 the identity of the owner and the operator of the facility; 5.4B.3.2 information demonstrating that the facility meets the connection-related requirements;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To set out the information required for registration of a non-exporting embedded IGF.
| Existing Market Rules  
(1 Jan 2018) | Proposed Rule Changes  
(Deletions represented by strikethrough text and additions represented by double-underlined text) | Reasons for Modification |
|-----------------|-------------------------------------------------------------|-------------------------|
| 5.4B.3.3 the location of the facility; and  
5.4B.3.4 such data as may be required by the PSO  
so as to satisfy the PSO that the operation of the facility will not have an unacceptable impact on the reliability or security of the PSO controlled system. | To require an MP of one or more non-exporting embedded IGFs to pay the fixed market-related charge to the EMC in accordance with the payment schedule approved by the Authority and published by the EMC. |
| 5.4B.4 A market participant shall pay the fixed market-related charge applicable to each of its non-exporting embedded intermittent generation facility to the EMC in accordance with the payment schedule approved by the Authority and published by the EMC. | |
| 5.6 PUBLICATION OF FACILITY DATA | 5.6 PUBLICATION OF FACILITY DATA | |
| [New section] | 5.6.4 The EMC shall establish, maintain, update and publish a list containing the following information in respect of each non-exporting embedded intermittent generation facility: | To require that the EMC publish a list containing information of non-exporting |
### Existing Market Rules
(1 Jan 2018)

<table>
<thead>
<tr>
<th>Proposed Rule Changes</th>
<th>Reasons for Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.6.4.1 the identity of the market participant under which such non-exporting embedded intermittent generation facility is registered; 5.6.4.2 the identity of such non-exporting embedded intermittent generation facility; and 5.6.4.3 the name-plate rating of such non-exporting embedded intermittent generation facility.</td>
<td>embedded IGFs.</td>
</tr>
</tbody>
</table>

#### 6.3 APPLICABILITY TO GENERATION SETTLEMENT FACILITY

| 6.3.1 All references in section 6 to a registered facility shall also include references to a generation settlement facility. | To amend title of this section to reflect its revised scope. |

#### 8.3 CERTIFICATION, TESTING AND INSPECTION

<p>| 8.3.1 All references in section 6 to a registered facility shall also include references to a generation settlement facility and a non-exporting embedded intermittent generation facility. | To include a reference to a non-exporting embedded IGF such that the terms and conditions for cancellation and transfer of registered facilities also apply to non-exporting embedded IGFs. |</p>
<table>
<thead>
<tr>
<th>Existing Market Rules (1 Jan 2018)</th>
<th>Proposed Rule Changes (Deletions represented by strikethrough text and additions represented by double-underlined text)</th>
<th>Reasons for Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FOR REGISTRATION OF FACILITIES</strong></td>
<td><strong>FOR REGISTRATION OF FACILITIES</strong></td>
<td></td>
</tr>
<tr>
<td>[New section]</td>
<td>8.3.3 Each market participant shall, as a condition of obtaining the registration of a facility as a non-exporting embedded intermittent generation facility pursuant to section 5.4B:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8.3.3.1 provide the certifications referred to in sections 5.4B.2.6 and 5.4B.2.7; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8.3.3.2 successfully complete the testing and permit the inspection referred to in section 5.4B.2.8.</td>
<td></td>
</tr>
<tr>
<td>Chapter 7 - Settlement</td>
<td>Chapter 7 - Settlement</td>
<td></td>
</tr>
<tr>
<td>2 SETTLEMENT DATA</td>
<td>2 SETTLEMENT DATA</td>
<td></td>
</tr>
<tr>
<td>2.1 RESPONSIBILITIES</td>
<td>2.1 RESPONSIBILITIES</td>
<td></td>
</tr>
<tr>
<td>2.1.2 The EMC shall establish procedures whereby each market participant and market support services licensee shall provide to the EMC such information as may be required by the EMC to establish and maintain a settlement account for it, such that:</td>
<td>2.1.2 The EMC shall establish procedures whereby each market participant and market support services licensee shall provide to the EMC such information as may be required by the EMC to establish and maintain a settlement account for it, such that:</td>
<td></td>
</tr>
<tr>
<td>2.1.2.1 each settlement account is associated with a single market participant or market support services licensee, in the sense that that market participant or market support services licensee is</td>
<td>2.1.2.1 each settlement account is associated with a single market participant or market support services licensee, in the sense that that market participant or market support services licensee is</td>
<td>To stipulate that EMC is not required to establish a settlement account for a market participant which only has non-exporting embedded IGFs.</td>
</tr>
</tbody>
</table>

To require a market participant of a non-exporting embedded IGF to meet the technical requirements stipulated under section 5.4B of Chapter 2.
| **Existing Market Rules**  
| **(1 Jan 2018)** | **Proposed Rule Changes**  
<p>| <strong>(Deletions represented by strikethrough text and additions represented by double-underlined text)</strong> | <strong>Reasons for Modification</strong> |
| --- | --- | --- |
| financially responsible for the <em>settlement</em> payments made into or from that <em>settlement account</em>; and | financially responsible for the <em>settlement</em> payments made into or from that <em>settlement account</em>; and |  |
| <strong>2.1.2.2</strong> each <em>market participant</em> and each <em>market support services licensee</em> is associated with a single <em>settlement account</em>, in the sense that the <em>settlement</em> payments made with respect to that <em>market participant</em> or <em>market support services licensee</em> are accounted for, invoiced and made through that <em>settlement account</em>, except that, where a <em>market participant</em> or <em>market support services licensee</em> has embedded generation facilities, the <em>market participant</em> or <em>market support services licensee</em> will be associated with a separate <em>settlement account</em> for each of its <em>EGF groups</em>, provided always that, where the <em>market participant</em> or <em>market support services licensee</em> only has one <em>EGF group</em>, and has no other generation facility that has not been assigned to such <em>EGF group</em> and no other <em>load facility</em> which <em>load</em> has not been assigned as the associated <em>load of</em> such <em>EGF group</em>, then such <em>market participant</em> or <em>market support services licensee</em> shall be associated only with a single <em>settlement account</em>. | <strong>2.1.2.2</strong> each <em>market participant</em> and each <em>market support services licensee</em> is associated with a single <em>settlement account</em>, in the sense that the <em>settlement</em> payments made with respect to that <em>market participant</em> or <em>market support services licensee</em> are accounted for, invoiced and made through that <em>settlement account</em>, except that, |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |</p>
<table>
<thead>
<tr>
<th>Existing Market Rules (1 Jan 2018)</th>
<th>Proposed Rule Changes</th>
<th>Reasons for Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>group, then such market participant or market support services licensee shall be associated only with a single settlement account, and</td>
<td>2.1.2.4 where a market participant is registered as a market participant for the sole purpose of registering one or more generation facilities as one or more non-exporting embedded intermittent generation facilities, the EMC is not required to establish and maintain a settlement account for such market participant.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4 RECOVERY OF NON-SETTLEMENT-INTERVAL COSTS</th>
<th>4 RECOVERY OF NON-SETTLEMENT-INTERVAL COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 THE MONTHLY ENERGY UPLIFT CHARGE</td>
<td>4.1 THE MONTHLY ENERGY UPLIFT CHARGE</td>
</tr>
<tr>
<td>4.1.1 Prior to the beginning of each calendar month, the EMC shall calculate for that calendar month the monthly amount for compensation and other payments (MACP), which shall be the sum of:</td>
<td>4.1.1 Prior to the beginning of each calendar month, the EMC shall calculate for that calendar month the monthly amount for compensation and other payments (MACP), which shall be the sum of:</td>
</tr>
<tr>
<td>… Less the aggregate of:</td>
<td>… Less the aggregate of:</td>
</tr>
<tr>
<td>… 4.1.1.6 the amount received by the EMC in the form of financial penalties imposed by the market surveillance and compliance panel</td>
<td>… 4.1.1.6 the amount received by the EMC in the form of financial penalties imposed by the market surveillance and compliance panel</td>
</tr>
<tr>
<td>To require EMC to include the amount of relevant charges received from MPs of non-exporting embedded IGFs in the MACP.</td>
<td></td>
</tr>
<tr>
<td>Existing Market Rules (1 Jan 2018)</td>
<td>Proposed Rule Changes (Deletions represented by strikethrough text and additions represented by double-underlined text)</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>under these <em>market rules</em> and financial penalties imposed by the automatic financial penalty scheme under section 3.6.3 of Chapter 5 and Appendix 5E or under section 3.7.3 of Chapter 5 and Appendix 5D; and 4.1.1.7 the amount of insurance monies received by the <em>EMC</em> for any compensation claims awarded against the <em>EMC</em> under these <em>market rules</em>.</td>
<td>under these <em>market rules</em> and financial penalties imposed by the automatic financial penalty scheme under section 3.6.3 of Chapter 5 and Appendix 5E or under section 3.7.3 of Chapter 5 and Appendix 5D; and 4.1.1.7 the amount of insurance monies received by the <em>EMC</em> for any compensation claims awarded against the <em>EMC</em> under these <em>market rules</em>; and 4.1.1.8 the amount of fixed <em>market-related charge</em> received by the <em>EMC</em> under sections 5.4B.2 and 5.4B.4 of Chapter 2.</td>
</tr>
</tbody>
</table>

[New section] 5.17A **APPLICABILITY TO MARKET PARTICIPANTS OF NON-EXPORTING EMBEDDED INTERMITTENT GENERATION FACILITIES**

[New section] 5.17A.1 The provisions of sections 5.1 to 5.16 shall not apply to a *market participant* that is registered as a *market participant* for the sole purpose of registering one or more *generation facilities* as one or more *non-exporting embedded intermittent generation facilities*. All references in those sections to a *market participant* shall be deemed to exclude a reference to a *market participant* that is registered as a *market participant* for the sole purpose of registering one or more *generation facilities* as one or more *non-exporting embedded intermittent generation facilities*. To state that the provisions related to a market participant’s bank account (as set out in section 5.1 to 5.16) do not apply to a market.
<table>
<thead>
<tr>
<th>Existing Market Rules (1 Jan 2018)</th>
<th>Proposed Rule Changes (Deletions represented by strikethrough text and additions represented by double-underlined text)</th>
<th>Reasons for Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>registered as a market participant for the sole purpose of registering one or more generation facilities as one or more non-exporting embedded intermittent generation facilities.</td>
<td>participant which only has non-exporting embedded IGFs.</td>
<td></td>
</tr>
</tbody>
</table>

**Chapter 8 - Definitions**

[New Definitions]

<table>
<thead>
<tr>
<th>[New Definitions]</th>
<th>Chapter 8 - Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1.XXX non-exporting embedded intermittent generation facility means a generation facility that has been registered in accordance with section 5.4B of Chapter 2.</td>
<td></td>
</tr>
<tr>
<td>1.1.XXX fixed market-related charge means the amount, as calculated in accordance with the methodology approved by the Authority, that is payable by a market participant (a) in respect of each of its non-exporting embedded intermittent generation facilities; or (b) as a condition of obtaining the registration of a generation facility as a non-exporting embedded intermittent generation facility, as the case may be.</td>
<td></td>
</tr>
</tbody>
</table>

**Peripheral changes**

<table>
<thead>
<tr>
<th>Chapter 3 - Administration, supervision &amp; Enforcement</th>
<th>Chapter 3 - Administration, supervision &amp; Enforcement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 INTRODUCTION</td>
<td>1 INTRODUCTION</td>
</tr>
<tr>
<td>1.1 SCOPE OF CHAPTER AND INTERPRETATION</td>
<td>1.1 SCOPE OF CHAPTER AND INTERPRETATION</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

To subject non-exporting...
### Existing Market Rules (1 Jan 2018)

1.1.3 Any reference in this Chapter to a registered facility shall be deemed to include a reference to a generation settlement facility that has been registered by the EMC pursuant to section 5.4 of Chapter 2.

### Proposed Rule Changes

(Deletions represented by strikethrough text and additions represented by double-underlined text)

1.1.3 Any reference in this Chapter to a registered facility shall be deemed to include a reference to a generation settlement facility that has been registered by the EMC pursuant to section 5.4 of Chapter 2 and a non-exporting embedded intermittent generation facility that has been registered by the EMC pursuant to section 5.4B of Chapter 2.

### Reasons for Modification

Embedded IGFs to the relevant provisions in Chapter 3 (e.g. dispute over EMC’s denial of a request to transfer a facility and revocation of registration of a facility).

---

<table>
<thead>
<tr>
<th>Chapter 5 - System Operation</th>
<th>Chapter 5 - System Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>7 OUTAGE AND TESTING CO-ORDINATION</strong></td>
<td><strong>7 OUTAGE AND TESTING CO-ORDINATION</strong></td>
</tr>
<tr>
<td><strong>7.1 INTRODUCTION</strong></td>
<td><strong>7.1 INTRODUCTION</strong></td>
</tr>
<tr>
<td>7.1.6 The following outages of the following generation facilities do not need to be reported to or scheduled with the PSO pursuant to sections 7.2 to 7.5 unless the generation facility has been designated by the PSO as affecting the reliability of the PSO controlled system:</td>
<td>7.1.6 The following outages of the following generation facilities do not need to be reported to or scheduled with the PSO pursuant to sections 7.2 to 7.5 unless the generation facility has been designated by the PSO as affecting the reliability of the PSO controlled system:</td>
</tr>
<tr>
<td>7.1.6.1 outage of a non-registered generation facility;</td>
<td>7.1.6.1 any outage of a non-registered generation facility;</td>
</tr>
<tr>
<td>7.1.6.2 any outage of a generation registered facility having a name-plate rating of less than 10 MW or any outage of a generation</td>
<td>7.1.6.2 any outage of a generation registered facility having a name-plate rating of less than 10 MW or any outage of a generation</td>
</tr>
</tbody>
</table>

To state that outages of non-exporting embedded IGFs are not required to be reported to or scheduled with the PSO.
<table>
<thead>
<tr>
<th>Existing Market Rules (1 Jan 2018)</th>
<th>Proposed Rule Changes (Deletions represented by strikethrough text and additions represented by double-underlined text)</th>
<th>Reasons for Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>settlement facility;</td>
<td>settlement facility, or a non-exporting embedded intermittent generation facility;</td>
<td></td>
</tr>
<tr>
<td>…</td>
<td>…</td>
<td></td>
</tr>
</tbody>
</table>
Annex 2
Proposed Modifications to “Application Form for Market Participant Registration”
Application form for Market Participant Registration

including explanatory notes
IMPORTANT: Please read this carefully before completing this form. Italicised words and expressions used herein (but not otherwise defined herein) shall have the same meanings respectively ascribed to them in the Singapore Electricity Market Rules.

Why do you need to complete this form?
Under the market rules, if you are not a market support services licensee, you are not permitted to participate in the wholesale electricity markets or to cause or permit any physical service to be conveyed into, through or out of the transmission system unless you have been registered by the EMC as a market participant, and your facility to or from which the physical service is to be so conveyed has been registered by the EMC, in accordance with the market rules.

The EMC is licensed by the Energy Market Authority (the “Authority”) to operate the wholesale electricity markets in Singapore. One of the EMC’s responsibilities is to manage the registration of market participants in the wholesale electricity markets. You must complete and submit this form to apply to be registered as a market participant if you wish to participate in the wholesale electricity markets and/or convey any physical services into, through or out of the transmission system.

If you have a facility and you intend to, or you are required under the market rules to, register that facility, then you must complete a separate form as applicable and as the EMC may prescribe under an applicable market manual to apply to register such facility.

Why did EMC develop this form?
The EMC has developed this form for applicants to apply for registration as market participants as described in the market rules. You should read the relevant sections of the market rules prior to completing this form. Please also read the EMC’s disclaimer at the end of this form.

What if EMC needs further information and clarification?
The EMC shall, within 10 business days of its receipt of this form (unless the EMC agrees with you to a longer period), request in writing any further information or clarification required by the EMC to process your application. It is important that you respond promptly to the EMC’s requests in writing. If the EMC does not receive the requested information or clarification to its satisfaction within 15 business days from the date of its request (unless the EMC agrees with you to a longer period), then your application shall be deemed to have been withdrawn and you shall be required to submit a new application if you still wish to apply for registration as a market participant.

All communications between you and the EMC in respect of such further information or clarification shall be in writing.

When will you know the outcome of your application?
The EMC will notify you in writing of the outcome within 20 business days of the receipt of (i) this form; or (ii) all further information and clarification requested by the EMC, whichever is the later (unless the EMC agrees with you to a longer period). If your application is denied, the notification will identify why this was the case. If the EMC is satisfied that you may be conditionally registered as a market participant under the market rules, the EMC will also notify you of the same. A duly and accurately completed form will expedite the EMC’s processing of your application.

Is there an application fee for your application to register as a market participant?
There is no application fee payable for your application to register as a market participant.
Summary of registration requirements for registration as a market participant

The key requirements in the process for the registration as a market participant are outlined in the table below:

<table>
<thead>
<tr>
<th></th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Meet the EMC’s prudential requirements You must ensure that adequate prudential cover has been provided in accordance with the market rules and the applicable market manual if required, before you start transacting in the real-time markets or causing or permitting a physical service to be conveyed into, through or out of the transmission system.</td>
</tr>
<tr>
<td>B</td>
<td>Execute agreement with the PSO You must have executed the PSO/MP agreement.</td>
</tr>
<tr>
<td>C</td>
<td>Execute agreement with the MSSL and meet metering requirements You must have executed the market participant - market support services licensee agreement, if required by the EMC. If required by the EMC to execute the market participant - market support services licensee agreement, you must secure the market support services licensee's written confirmation to the EMC that the market support services licensee is ready to submit all settlement data required under the market rules to the EMC. However, if you only intend to be registered as a market participant for the sole purpose of registering one or more generation facilities as one or more non-exporting embedded intermittent generation facilities, you are not required to execute the market participant - market support services licensee agreement.</td>
</tr>
<tr>
<td>D</td>
<td>Electricity licence(s) You must have valid and relevant electricity licence(s) or be exempt from the requirement to obtain such electricity licence(s) from the Authority.</td>
</tr>
<tr>
<td>E</td>
<td>Meet the EMC’s technical requirements You must satisfy all applicable technical requirements under the market rules. The EMC may require tests to be conducted on, and inspection of, your facilities and equipment to ensure that you meet these requirements. Successful completion of these tests, and permitting the conduct of such inspections, are conditions for your registration as a market participant. (See section E—F of this form for more information on such technical requirements.)</td>
</tr>
<tr>
<td>F</td>
<td>Maintain a market participant bank account You must designate a bank account, opened and maintained with such bank or financial institution as is required in section 5.16.10 of Chapter 7 of the market rules, as your market participant bank account. You must also arrange for the EMC to be given all necessary authorisations to directly debit and credit, and to instruct such bank or financial institution to directly debit and credit, this market participant bank account for the fulfilment of financial obligations arising under the market rules. However, if you only intend to be registered as a market participant for the sole purpose of registering one or more generation facilities as one or more non-exporting embedded intermittent generation facilities, you are not required to maintain such market participant bank account.</td>
</tr>
</tbody>
</table>

Conditional registration as a market participant

You must satisfy all the key registration requirements described in A, B, C, D, E and F above to be registered as a market participant. If you satisfy only the key registration requirements described in A and B above, the EMC may conditionally register you as a market participant. Such conditional registration will allow you to commence the process of registration of your facilities. However, please note that you must satisfy all the registration requirements before a) you can be registered as a market participant and b) your facilities can be registered.
The EMC will advise you of your conditional registration status and will notify you of a deadline for satisfying all your remaining unsatisfied requirements for registration as a market participant. This deadline is referred to in the market rules as the "conditional registration deadline". You must satisfy all your remaining unsatisfied requirements for registration as a market participant by the conditional registration deadline. If you fail to do so, your conditional registration as a market participant will lapse on the fifth business day from that conditional registration deadline. Please note that a conditional registration does not grant you any rights as a market participant.

How can you obtain more information?
In addition to this form and the market rules, you may obtain more information by contacting the EMC Market Administration Team by telephone at +65 6779 3000. Alternatively, you may visit the EMC website at www.emcs.g.com.
Please print clearly. Illegible writing or incomplete forms may delay the processing of your application.

A. REGULATORY DETAILS

1. Authorised activities relating to electricity under your electricity licence(s):

   Note: You may check one or more of the following boxes indicating the type of activities authorised under your electricity licence(s).

   - [ ] generate electricity
   - [ ] retail electricity
   - [ ] transmit electricity
   - [ ] transmit electricity for or on behalf of a transmission licensee
   - [ ] import electricity
   - [ ] export electricity
   - [ ] trade in wholesale electricity market

   Electricity licence number(s): ________________________________________________

   State activities exempted from licensing requirement: ____________________________

   Exemption order number(s): ________________________________________________

2. Will you be registering any facility?  [ ] Yes  [ ] No

3. Are you a contestable consumer?  [ ] Yes  [ ] No

B. APPLICANT DETAILS

4. Name of Applicant (in full): ________________________________________________

   ________________________________________________

5. Identification Number¹: ________________________________________________

6. GST Registration Number (if any): ___________________________________________

7. Registered Address: _______________________________________________________

   Mailing Address: ___________________________________________________________

¹ This refers to the Applicant’s ACRA registration number, Unique Entity Number or NRIC number, as the case may be.
C. CONTACTS

11. Market Operations Manager

<table>
<thead>
<tr>
<th>Full Name &amp; Designation</th>
<th>Manager</th>
<th>Alternate contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Telephone / Mobile Phone Nos.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Email Address</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Fax Nos.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Market Trading Manager

<table>
<thead>
<tr>
<th>Full Name &amp; Designation</th>
<th>Manager</th>
<th>Alternate contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Telephone / Mobile Phone Nos.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Email Address</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Fax Nos.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
13. **Finance / Accounts Manager**

<table>
<thead>
<tr>
<th></th>
<th>Manager</th>
<th>Alternate contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Name &amp; Designation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Telephone / Mobile Phone Nos.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Email Address</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Fax Nos.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. **Settlements Manager**

<table>
<thead>
<tr>
<th></th>
<th>Manager</th>
<th>Alternate contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Name &amp; Designation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Telephone / Mobile Phone Nos.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Email Address</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Fax Nos.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. **IT Systems Manager**

<table>
<thead>
<tr>
<th></th>
<th>Manager</th>
<th>Alternate contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Name &amp; Designation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Telephone / Mobile Phone Nos.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Email Address</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Fax Nos.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
D. PRUDENTIAL DETAILS

The forms of credit support presently permitted under the market rules are as follows:

a. **Guarantee or letter of credit:** Credit support, which is provided in the form of a guarantee or letter of credit must be provided by a financial institution which satisfies the criteria prescribed in Appendix 1 of this application form, must be an obligation in writing and must be governed by Singapore laws, as stated in sections 7.6.2.1 and 7.6.3.1 of Chapter 2 of the market rules. In the case of a guarantee, the guarantee must be executed as a deed and in the form and terms set out in Appendix 2 of this application form. In the case of a letter of credit, the letter of credit must comply with the requirements of sections 7.6.2.1 and 7.6.3.1(c) of Chapter 2 of the market rules.

b. **Cash deposits:** Credit support which is provided in the form of cash deposits, must be made with, or assigned to, the EMC by or on behalf of the market participant as stated in sections 7.6.2.3 and 7.6.3.3 of Chapter 2 of the market rules and must comply with the requirements of sections 7.6.2.3 and 7.6.3.3 of Chapter 2 of the market rules.

c. **Singapore Government Treasury bills:** Credit support which is provided in the form of Singapore Government Treasury bills, as stated in sections 7.6.2.4 and 7.6.3.3 of Chapter 2 of the market rules, must be assigned to the EMC by or on behalf of the market participant. Market participants should permit drawings and claims by the EMC up to the full amount of such Singapore Government Treasury bills. Such Treasury bills shall be valued as cash at their current market value less 2% to take into account the potential eroding effects of interest rate increases. Credit support which is provided in the form of Singapore Government Treasury bills must comply with the requirements of sections 7.6.2.4 and 7.6.3.3 of Chapter 2 of the market rules.

16. Do you intend to settle any load in the wholesale electricity markets as a market participant?
   - [ ] Yes
   - [ ] No

17. Computation of initial credit support amount (if required):

   Please provide us with your computation of the initial amount of credit support required, under the market rules and the applicable market manual. In particular, please refer to section 7 of Chapter 2 of the market rules and the Market Operations - Prudential Requirements market manual.

18. What is your intended type of credit support?
   - [ ] Guarantee
   - [ ] Letter of credit
   - [ ] Cash deposits
   - [ ] Singapore Government Treasury bills
   - [ ] We/I do not need to provide any initial credit support
E. MARKET PARTICIPANT BANK ACCOUNT REQUIREMENT

19. Do you intend to be registered as a market participant for the sole purpose of registering one or more generation facilities as one or more non-exporting embedded intermittent generation facilities?
   □ Yes        □ No (go to Q20)

20. Account number of the market participant bank account: ________________________________

E.F. TECHNICAL REQUIREMENTS

Important notes for this section:

You must satisfy the following conditions as part of the registration requirements:

   a) certify to the EMC that you meet the technical requirements as set out in the market rules and in this section E.F; and
   b) obtain proper access permission (users and systems IP) from the EMC through completion of the NEMS Systems User Account and IP Address Administration Form (as may be prescribed by the EMC).

You must ensure that the following electronic communication facilities and equipment are available:

1. At least one personal computer that is equipped with and capable of using an internet browser application and Microsoft Windows Operating System software (and of such version) acceptable to the EMC (guidelines on this can be found at www.emcsg.com).

2. If you intend to convey a physical service into, through or out of the transmission system through a registered facility, at least one personal computer that is equipped with and capable of using an internet browser application and Microsoft Windows Operating System software (and of such version) acceptable to the EMC that is functionally capable of being used for the exchange of information pertaining to standing offers, offer variations, and of interfacing with the EMC’s electronic communications system.

3. A connection to the internet (which will allow the aforesaid personal computer(s) to establish connection with Energy Market Company Application web pages or with the EMC’s interfaces for the exchange of messages/files).

4. Proper digital certificates for e-invoicing and backup offer submission (where applicable) via secure email (guideline can be found in www.emcsg.com).

1921. Do you confirm that you meet all above technical requirements?
   □ Yes        □ No (go to Q20)  
2022. If you are unable to meet some or all of the technical requirements at the date of your application, please specify which requirements you are unable to meet, and when you expect to be able to meet them.

________________________________________________________________________________
________________________________________________________________________________

© Energy Market Company Pte Ltd
20 February 2017
You must attach the following documents to your application form:

- An original copy of your most current business profile report, obtained from the Accounting and Corporate Regulatory Authority of Singapore.

- A certified true copy of your certificate of incorporation, notice of incorporation, or certificate of confirmation of incorporation issued by, or under the hand and seal of, the Registrar of Companies evidencing that you have been duly incorporated under the Companies Act (Chapter 50) of Singapore, and a certified true, and up-to-date, copy of your memorandum and articles of association.

- A certified true copy of the resolutions of your board of directors (substantially in the form and terms prescribed in Appendix 3 of this application form) approving (among other things) your application for registration as a market participant and your participation in the wholesale electricity markets.

- A certified true copy of your electricity licence(s) obtained from the Authority (if any).

- A certified true copy of your duly executed PSO/MP agreement.

- A certified true copy of your duly executed market participant - market support services licensee agreement, if required by the EMC.

- A certified true copy of your audited financial statements for the last 3 years (if such financial statements have been prepared).

- Your computation of your initial credit support amount (if required).

- Your credit support (if required).

- A certified true copy of your duly executed “Third Party Authorisation” Form of the bank or financial institution at which your market participant bank account is maintained, authorising the EMC to directly debit and credit, and to instruct that bank or financial institution to directly debit and credit, your market participant bank account for the fulfilment of financial obligations arising under the market rules (if required to have a market participant bank account).

- A duly completed NEMS Systems User Account and IP Address Administration Form (as may be prescribed by the EMC), if required by the EMC.

* Applicants which are not corporations should contact the EMC for guidance on the equivalent/alternative document(s) (if any) which the EMC may require.
**G.H. COVENANT AND DECLARATION**

We/I, the undersigned applicant, having read and fully understood the *market rules*, the terms of this form, the applicable *market manuals*, the *system operation manual*, the *Electricity Act*, and any other applicable laws, codes, rules, procedures or policies that are relevant to or regulate the *wholesale electricity markets* (collectively the ‘Regulations’), and/or having had the benefit of relevant independent legal advice, hereby apply to be registered as a *market participant* under the *market rules*.

We/I hereby agree to be bound by, and to comply with, all the Regulations which may be applicable to us/me, our/my registration application herein and our/my registration and participation in the *wholesale electricity markets*.

We/I further hereby declare that the information provided by us/me (or on our/my behalf) in or in connection with this form is true, complete and accurate and not misleading or omitting any material particular (to the best of our/my knowledge, information and belief after having carried out all necessary due diligence to determine the same) and hereby covenant to be subject to any sanctions, penalties or orders as may be imposed by the relevant authorities/parties under the Regulations, in the event that such information is found to be untrue, misleading or inaccurate in any material particular.

We/I hereby undertake to immediately notify the *EMC* of any change to any information provided in relation to the application for registration herein.

We/I further hereby covenant to be legally bound by the relevant dispute resolution provisions under the *market rules* and any applicable *market manual*, in the event that this application for registration as a *market participant* is denied and a dispute arises from such unsuccessful application.

We/I confirm and acknowledge that the information provided by us/me (or on our/my behalf) in or in connection with this form may need to be disclosed, communicated or exchanged by the *EMC* to or with other parties, including but not limited to the *Authority*, the *PSO* and a *market support services licensee*, as necessary, desirable or expedient for the purposes of processing this form under the Regulations and we/I hereby consent to such disclosure, communication or exchange.

Signed for and on behalf of ________________________________ (Name of Applicant)

Signature:  ______________________________________

Name of officer:  __________________________________

Position/designation:  __________________________________

Date:  ____________________________________________
EMC’S DISCLAIMER

Energy Market Company Pte Limited ("EMC") has produced this publication for use in connection with the Singapore Electricity Market. This publication is not a substitute for and should not be read in lieu of the Singapore Electricity Market Rules or any other applicable laws, codes, rules, procedures, manuals or policies that are relevant to or regulate the Singapore Electricity Market or the electricity industry. The contents of this publication do not constitute legal or business advice and should not be relied upon as a substitute for obtaining such advice.

EMC, its directors and employees, subsidiaries, associates and affiliates make no representations, endorsements or warranties of any kind whatsoever in relation to the contents of this publication, and in no event shall EMC, its directors and employees, subsidiaries, associates and affiliates be liable to any party for any damages, claims, expenses or losses of any kind arising from or in connection with any use of or reliance on the accuracy, availability, currency, title, non-infringement, quality, reliability, suitability and completeness of the contents of this publication.

Any modifications or amendments to this publication shall be made in accordance with the relevant provisions of the Singapore Electricity Market Rules.
APPENDIX 1

Criteria to be satisfied by a financial institution providing credit support

- The financial institution must be a local or foreign bank rated “A” or better by Standard & Poor’s (S&P) (S&P Website: www.standardpoor.com)
DATE: [__________]

ENERGY MARKET COMPANY PTE LTD
4 Shenton Way
#03-01 SGX Centre 2
Singapore 068807

Dear Sirs,

BANKER'S GUARANTEE NO.[number] FOR S$[state amount in numbers]

1. Pursuant to your obtaining an electricity licence authorising you to operate any wholesale electricity market in Singapore and your entering into the Market Rules under the Electricity Act, Chapter 89A of Singapore (the “Rules”) which set out and govern the trading of electricity in Singapore, we, [name of guarantor financial institution], having our registered office at [address], hereby guarantee and undertake unconditionally and irrevocably to you the due payment of any and all sum or sums payable under the Rules by [name of market participant] (the “Principal”) and will pay to you immediately on your first written demand or respective written first demands in respect of each such sum demanded provided that our total liability under this Guarantee shall not exceed in aggregate SINGAPORE DOLLARS [state amount in words] (the “Maximum Sum”).

2. Every such of your written demand shall be accompanied by your signed statement reading as follows:-

"WE, ENERGY MARKET COMPANY PTE LTD, hereby certify to you that the amount of S$ [state amount in numbers] represents and covers the current outstanding obligations due and payable to us by [name of market participant] pursuant to the Rules."

This Guarantee shall not be affected by any time, arrangement or other indulgence which you may grant to the Principal, or with any other person which might operate to diminish or discharge the liability of or otherwise provide a defence to a surety.

3. You shall have the right to demand payment at any time under this Guarantee to be made in SINGAPORE DOLLARS subject to the Maximum Sum. This Guarantee shall remain in full force and effect until all sums whatsoever payable by the Principal under the Rules are fully paid.

4. Without prejudice to the provisions in clauses 1 to 3 above, upon your written demand for payment as aforementioned, we shall:-

a. in respect of any demand made before 12.00 noon local time at our office on any banking day, accept and honour your demand on or before 3.00 pm, local time of the same day;

b. in respect of any demand made after 12.00 noon local time at our office but on or before 5.00 pm local time at our office, accept and honour your demand on or before 11.00 am local time of the next banking day following presentation of your demand;

by paying you in funds immediately available the full amount of your demand.

5. We agree that any written demand furnished by you to us under clause 2 shall be conclusive evidence that the said sum or sums referred to therein is/are due and payable to you by the Principal. We further agree that this Guarantee shall be effective from [date] to [date] (hereinafter called the “expiry date”). Demands, if any, must be made in writing and received by us at our [Banker’s Guarantee Section] at [address]
on or before the expiry date. Thereafter this Guarantee shall automatically cease to have any effect whatsoever, whether or not it is returned to us for cancellation.

6. You may make more than one claim under this Guarantee so long as the claims are made in accordance with the terms set out herein and the total amount of the claims does not exceed the Maximum Sum.

7. This Guarantee is non-assignable.

8. This Guarantee shall be governed by and construed in all respects in accordance with the laws of the Republic of Singapore and all parties hereby agree to submit to the exclusive jurisdiction of the Courts of Singapore.

SIGNED, SEALED AND DELIVERED for and on behalf of the GUARANTOR [name of guarantor financial institution in capital letters] by its Attorney(s):

_________________________  ___________________________
[name]                      [name]
[designation]               [designation]
acting under a Power of Attorney dated [date] (a copy of which was deposited in the Registry, Supreme Court, Singapore on the [ ] day of [ ] [20] and registered as No.[registration number] of [20])

in the presence of:

___________________________
[Signature]
[Name of witness]
[Address]

© Energy Market Company Pte Ltd
20 February 2017 2003, 20XX
APPENDIX 3
SAMPLE BOARD RESOLUTION

CERTIFIED TRUE EXTRACT OF RESOLUTIONS OF
THE BOARD OF DIRECTORS OF ___________________________

We, the undersigned, hereby certify to the Energy Market Company Pte Ltd (the "EMC"), that:

[at a meeting of the Board of Directors of ___________________________ (the "Company"), a company having its registered office at __________________________, duly convened and duly held on ______________ 20____ at ____________________________________________, the following resolutions were duly passed and adopted and have been entered in the minute book of the Company and are now in full force and effect.]

OR

[the following resolutions in writing have been duly passed and adopted pursuant to Article _____ of the Articles of Association of ___________________________ (the "Company"), a company having its registered office at __________________________, and have been entered in the minute book of the Company and are now in full force and effect.]

"RESOLVED THAT:

1. the Company shall participate in the wholesale electricity markets operated and maintained by the EMC, in accordance with the Singapore Electricity Market Rules and the market manuals for the time being issued (and as may be amended) by the EMC (collectively, the "market rules"), and such participation be and is hereby approved;

2. the Company apply to the EMC (the "MP Registration Application") for registration as a market participant ("Registration") in accordance with the market rules and such application for Registration be and is hereby approved;

3. the Company shall, if and when necessary, apply to the EMC for the registration, termination of registration, or request for and/or accept a transfer of the registration, of any one or more of its facilities in accordance with the market rules;

4. it be noted and agreed that upon submission of the Company’s MP Registration Application to the EMC (and whether or not Registration is eventually granted by the EMC), the Company shall be bound by and shall comply with the market rules as may be applicable (i) to the Company’s MP Registration Application, and (ii) if Registration is eventually granted by the EMC, to the Company’s Registration and participation in the wholesale electricity markets;

5. [each of [●] and [●] singly] / [both of [●] and [●] jointly]* (the “Authorised Officers”) be and [is/are]* hereby authorised to sign, execute and deliver the MP Registration Application and such other supporting or required documents for and on behalf of the Company and to agree, as such person(s) may deem fit, to any amendment or variation thereof as may be required by the EMC;

6. in pursuance of the foregoing, [each/both]* of the Authorised Officers [singly/jointly]* be and [is/are]* hereby authorised to sign, execute and deliver such other documents, and to do all such other acts and things, as may be necessary, desirable or expedient in pursuance of, in relation to, or in connection with the Company’s MP Registration Application, Registration and participation in the wholesale electricity markets;

*Delete where inapplicable or inappropriate

The full name of each Authorised Officer (as set out in his/her NRIC or passport) should be stated in these resolutions. If it is desired to state an office/designation without stating the name of any specific person in these resolutions, the EMC will only accept persons holding the offices of a director or a company secretary of the Company as Authorised Officers.
markets; and if any document is required to be executed under the common seal of the Company, the affixing of the common seal of the Company in accordance with the Company's Articles of Association be and is hereby authorised; and

7. any Authorised Officer be and is hereby authorised to deliver a certified true copy of these resolutions to the EMC in connection with the Company's MP Registration Application.”

CERTIFIED AS A TRUE EXTRACT BY

Signature: ________________________________________________
Name: ________________________________________________
Designation: ___________________________________________
Date: _________________________________________________
Annex 3
Proposed Modifications to “Application form for Generation Facility Registration by a Market Participant”
Application form for Generation Facility Registration by a Market Participant

including explanatory notes
IMPORTANT: Please read this carefully before completing this form. Italicised words and expressions used herein (but not otherwise defined herein) shall have the same meanings respectively ascribed to them in the Singapore Electricity Market Rules.

Why do you need to complete this form?
Under the market rules, if you are not a market support services licensee, you are not permitted to participate in the real-time markets or to cause or permit any physical service to be conveyed into, through or out of the transmission system unless you have been registered by the EMC as a market participant, and your facility to or from which the physical service is to be so conveyed has been registered by the EMC as a registered facility, a commissioning generation facility, or a generation settlement facility or a non-exporting embedded intermittent generation facility in accordance with the market rules.

The EMC is licensed by the Energy Market Authority (the “Authority”) to operate the wholesale electricity markets (to which the real-time markets form a part) in Singapore. One of the EMC’s responsibilities is to manage the registration of facilities in the wholesale electricity markets. You must complete and submit this form to apply to have a facility registered by the EMC if you wish to convey any physical services into, through or out of the transmission system and that facility is required or permitted to be registered under the market rules.

Why did EMC develop this form?
The EMC has developed this form for applicants to apply for the relevant facility registration described in the market rules. You should read the relevant sections of the market rules prior to completing this form. Please also read the EMC’s disclaimer at the end of this form.

Who is eligible to apply for registration?
You must be registered as a market participant before you are eligible to apply for registration of your facilities.

However, if you are only granted conditional registration as a market participant, you may also apply for registration of your facilities, but your facilities will not be registered unless you become registered as a market participant within the relevant conditional registration deadline.

What are the types of generation facility registration?
The three four types of generation facility registration are:

- Generation registered facility
- Generation settlement facility
- Commissioning generation facility (you need to complete a separate form for this type of registration)
- Non-exporting embedded intermittent generation facility (you need to complete a separate form for this type of registration).

This application form is to be used for application for registration of either a generation registered facility or a generation settlement facility only. If you wish to register your facility as a commissioning generation facility or a non-exporting embedded intermittent generation facility, please use the Application form for Commissioning Generation Facility Registration by a Market Participant or Application form for Registration of Non-exporting Embedded Intermittent Generation Facility by a Market Participant, respectively.

Generation Registered Facility

If all the generation facilities (other than intermittent generation facilities) at the same generating station together have an aggregate name-plate rating of 10 MW or more, all such generation facilities must be registered as either a single generation registered facility or two or more generation registered facilities in accordance with the market rules. The foregoing shall not apply to intermittent generation facilities.

A generation registered facility is subject to dispatch by the PSO. A generation registered facility shall at all times have a valid standing offer for each physical service that it intends to provide in the real-time markets.

© 2003, 2015-20XX Energy Market Company Pte Ltd
Generation Settlement Facility

A generation settlement facility is registered for the delivery of energy only and is not subject to dispatch by the PSO.

If all the generation facilities (other than intermittent generation facilities) at the same generating station together have an aggregate name-plate rating of 1 MW or more but less than 10 MW, all such generation facilities must be registered as either a single generation settlement facility or two or more generation settlement facilities in accordance with the market rules. But if any of such generation facility is intended to be subject to dispatch by the PSO, that generation facility must be registered as a generation registered facility instead. The foregoing shall not apply to intermittent generation facilities.

Intermittent Generation Facilities as Generation Settlement Facilities

If you intend to participate in the real-time markets or cause or permit a physical service to be conveyed into, through or out of the transmission system from one or more intermittent generation facilities, such intermittent generation facilities (regardless of their respective or aggregate name-plate ratings) must be registered as one or more generation settlement facilities, unless such registration requirements are waived by the Authority or you intend to register such intermittent generation facilities as non-exporting embedded intermittent generation facilities.

When will you know the outcome of your application?
The EMC will notify you in writing of the outcome within 30 business days of the EMC being satisfied that your application meets all the requirements for generation facility registration under the market rules, the applicable market manuals and the system operation manual. If your application is declined, the notification will identify why this was the case. A duly and accurately completed form will expedite the EMC’s processing of your application.

What should you do if you have more than one facility to register?
Please fill in a separate form for each application for registration of a generation registered facility or a generation settlement facility. You can download additional copies of the form from the EMC’s website at www.emcsg.com.

Is there an application fee for your application to register your facility?
There is no application fee payable for your application to register your facility.
**Summary of registration requirements for a generation registered facility**

The key requirements in the process for the registration of a *generation registered facility* are outlined in the table below:

<table>
<thead>
<tr>
<th>A</th>
<th>Meet the EMC’s requirements</th>
<th>You must ensure that</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• your facilities and equipment meet all applicable technical requirements set forth in the <em>market rules</em>, any applicable <em>market manuals</em> or the <em>system operation manual</em>; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• you are able to perform all the functions and obligations applicable to you under the <em>market rules</em>, the <em>market manuals</em> or the <em>system operation manual</em>.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If your facility is located outside of Singapore, the EMC may impose additional requirements for the registration of your facility. You cannot change your designated <em>dispatch coordinator</em> for your <em>registered facility</em> without the prior approval of the EMC.</td>
</tr>
<tr>
<td>B</td>
<td>Meet the PSO’s requirements</td>
<td>You must complete the PSO’s <em>Data Form for Generation Facility Registration</em>, meeting all the applicable technical requirements and attaching any required documents during submission.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The registration of your facility is subject to the PSO advising the EMC that such facility poses no threat to the reliability or security of the PSO controlled system.</td>
</tr>
<tr>
<td>C</td>
<td>Meet metering requirements</td>
<td>You must secure the <em>market support services licensee’s written confirmation</em> to the EMC that the <em>market support services licensee</em> is ready to submit all relevant <em>settlement data</em> required under the <em>market rules</em> for your facility to the EMC.</td>
</tr>
<tr>
<td>D</td>
<td>Prepare and attach required documents</td>
<td>You must duly complete this application form in respect of your facility and provide all required supporting documents with your application, including the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A certified true copy of your duly executed <em>connection agreement</em> with the <em>transmission licensee</em> for your facility.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A certified true copy of your duly executed <em>market participant - market support services licensee agreement</em> with the <em>market support services licensee</em> for your facility, if required by the EMC.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• An original duly completed and executed Certificate and Undertaking (substantially in the form and terms prescribed in Appendix B of this application form) for your facility.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• An original duly completed Data Form for Generation Facility Registration required by the PSO (as described in Appendix C of this application form) for your facility.</td>
</tr>
<tr>
<td>E</td>
<td>Standing Offer Data</td>
<td>You must comply with section D below.</td>
</tr>
<tr>
<td>F</td>
<td>Registration as a <em>generation registered facility</em></td>
<td>Your facility will be registered as a <em>generation registered facility</em> if the EMC is satisfied that your facility meets all the requirements for such facility registration under the <em>market rules</em>, the applicable <em>market manuals</em> or the <em>system operation manual</em>. The EMC will notify you of the terms and conditions of the registration in an official notice to you. If your application is declined, the EMC will write to you stating the reasons.</td>
</tr>
</tbody>
</table>
### Summary of registration requirements for a generation settlement facility

The key requirements in the process for the registration of a generation settlement facility are outlined in the table below:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>**A</td>
<td>Meet the EMC’s requirements**</td>
</tr>
<tr>
<td></td>
<td>• your facility meets all applicable technical requirements set forth in the market rules, any applicable market manuals or the system operation manual; and</td>
</tr>
<tr>
<td></td>
<td>• you are able to perform all the functions and obligations applicable to you under the market rules, the market manuals or the system operation manual.</td>
</tr>
<tr>
<td>**B</td>
<td>Meet the PSO’s requirements**</td>
</tr>
<tr>
<td></td>
<td>• The registration of your facility is subject to the PSO advising the EMC that such facility poses no threat to the reliability or security of the PSO controlled system.</td>
</tr>
<tr>
<td>**C</td>
<td>Meet metering requirements**</td>
</tr>
<tr>
<td>**D</td>
<td>Prepare and attach required documents**</td>
</tr>
<tr>
<td></td>
<td>• A certified true copy of your duly executed connection agreement with the transmission licensee for your facility.</td>
</tr>
<tr>
<td></td>
<td>• A certified true copy of your duly executed market participant - market support services licensee agreement with the market support services licensee for your facility.</td>
</tr>
<tr>
<td></td>
<td>• An original duly completed and executed Certificate and Undertaking (substantially in the form and terms prescribed in Appendix B of this application form) for your facility.</td>
</tr>
<tr>
<td></td>
<td>• An original duly completed Data Form for Generation Facility Registration required by the PSO (as described in Appendix C of this application form) for your facility.</td>
</tr>
<tr>
<td>**E</td>
<td>Registration as a generation settlement facility**</td>
</tr>
</tbody>
</table>

### How can you obtain more information?

In addition to this form and the market rules, you may obtain more information by contacting the EMC Market Administration Team by telephone at +65 6779 3000. Alternatively, you may visit the EMC’s website at [www.emcsq.com](http://www.emcsq.com).
Please print clearly. Illegible writing or incomplete forms may delay the processing of your application.

A. APPLICANT DETAILS

Name of Applicant (in full): __________________________________________________________

Identification Number\(^1\): __________________________________________________________

Registered Address: __________________________________________________________________

B. REGULATORY DETAILS

1. Authorised activities relating to electricity under your electricity licence(s):

   Note: You may check one or more of the following boxes indicating the type of activities authorised under your electricity licence(s).
   - [ ] generate electricity
   - [ ] retail electricity
   - [ ] transmit electricity
   - [ ] transmit electricity for or on behalf of a transmission licensee
   - [ ] import electricity
   - [ ] export electricity
   - [ ] trade in wholesale electricity market

   Electricity licence number(s): ______________________________________________________

   State activities exempted from licensing requirement: _________________________________

   Exemption order number(s): ______________________________________________________

2. What type of facility registration are you applying for?

   - [ ] generation registered facility
   - [ ] generation settlement facility

3. Derogation requested:

   - [ ] Yes
   - [ ] No

4. Wholesale Electricity settlement account: ____________________________________________

\(^1\) This refers to the Applicant’s ACRA registration number, Unique Entity Number or NRIC number, as the case may be.
C. FACILITY DETAILS

5. Name of the facility: ____________________________________________________________

6. Name of owner of the facility: __________________________________________________

7. Location of the facility: _________________________________________________________

8. Meter ID number(s): ____________________________________________________________
(Please also complete Appendix A of this application form.)

9. Dispatch coordinator for the facility: _____________________________________________
(This is only applicable if the facility is to be registered as a generation registered facility.)

10. Contacts of the dispatch coordinator for the facility: ________________________________
(This is only applicable if the facility is to be registered as a generation registered facility.)

<table>
<thead>
<tr>
<th>Main Contact</th>
<th>Alternate contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Name &amp; Designation</td>
<td></td>
</tr>
<tr>
<td>Business Contact Nos.</td>
<td></td>
</tr>
<tr>
<td>Business Email Address</td>
<td></td>
</tr>
<tr>
<td>Business Hand phone Nos.</td>
<td></td>
</tr>
<tr>
<td>Business Fax Nos.</td>
<td></td>
</tr>
</tbody>
</table>

11. Physical service intended to be provided from the facility:

☐ Energy

☐ Reserve (☐ Primary ☐ Contingency)

☐ Regulation

(In the case of a facility to be registered as a generation settlement facility, please tick “energy” only.)

12. Other authorisations/approvals granted by the Authority
(For facilities other than intermittent generation facilities.)

- Approval for classification of your facility as an embedded generation facility for the purposes of net treatment on non-reserve charges:
  ☐ Yes ☐ No
  (If the answer to the above is no, is such approval being sought? ☐ Yes ☐ No)

- Approval for your facility to be assigned to an EGF group to be, or an EGF group which has been, granted price neutralisation:
  ☐ Yes ☐ No
  (If the answer to the above is no, is such approval being sought? ☐ Yes ☐ No)
13. **Intermittent generation facilities**
(For registration of *generation settlement facility* that is comprised of one or more *intermittent generation facilities.*)

- Is your facility comprised of one or more *intermittent generation facilities?* □ Yes □ No
  
  *(If yes, is your facility comprised only of *intermittent generation facilities?* □ Yes □ No)*

- Is your facility comprised only of embedded *intermittent generation facilities?* □ Yes □ No

**D. STANDING OFFER DATA**

(This section is only applicable if your facility is to be registered as a *generation registered facility.*)

Please provide a *standing offer* for each *physical service* to be provided from your facility to be registered as a *generation registered facility*. Each such *standing offer* for your facility must be submitted to the *EMC* in the data format required by and in accordance with the *EMC*’s Market Operations Market Manual on Standing Offers, Standing Bids, Offer Variations, Bid Variations and Standing Capability Data (Chapter 6 Market Rules).

**E. GENERATION FACILITY REGISTRATION**

**(FOR SUBMISSION TO THE PSO)**

Please complete the *PSO Data Form for Generation Facility Registration* which is described in *Appendix C* of this application form. All relevant sections in the form must be duly completed. The duly completed form must be sent to the *EMC* together with all supporting documentation.
F. CHECKLIST OF SUPPORTING DOCUMENTS REQUIRED

You must attach the following documents to your application form:

☐ A certified true copy of your duly executed connection agreement with the transmission licensee for your facility.

☐ A certified true copy of your duly executed market participant - market support services licensee agreement with the market support services licensee for your facility, if required by the EMC.

☐ An original duly completed and executed Certificate and Undertaking (substantially in the form and terms prescribed in Appendix B of this application form) for your facility.

☐ An original duly completed Data Form for Generation Facility Registration required by the PSO (as described in Appendix C of this application form) for your facility.

==================================================================================

FOR EMC OFFICIAL USE

1. Assigned MNN number(s) for this facility: ____________________________________________

INFORMATION PROVIDED BY THE MSSL TO THE EMC

2. Respective RQM (as defined by MSSL) ID Number(s): ________________________________

2.1. Location of the facility: ___________________________________________________________
G. COVENANT AND DECLARATION

We/I, the undersigned applicant, having read and fully understood the market rules, the terms of this application form, the applicable market manuals, the system operation manual, the Electricity Act, and any other applicable laws, codes, rules, procedures or policies that are relevant to or regulate the wholesale electricity markets (collectively the 'Regulations'), and/or having had the benefit of relevant independent advice, hereby apply to register our/my facility either as a generation registered facility or a generation settlement facility as stated in this application form.

We/I hereby agree to be bound by, and to comply with, all the Regulations which may be applicable to us/me, our/my registration application herein, our/my facility and our/my participation in the relevant wholesale electricity markets.

We/I further hereby declare that the information provided by us/me (or on our/my behalf) in or in connection with this registration application is true, complete and accurate and not misleading or omitting any material particular (to the best of our/my knowledge, information and belief after having carried out all necessary due diligence to determine the same) and hereby covenant to be subject to any sanctions, penalties or orders as may be imposed by the relevant authorities/parties under the Regulations, in the event that such information is found to be untrue, misleading or inaccurate in any material particular.

We/I hereby undertake to immediately notify the EMC of any change to any information provided in relation to our/my application for registration herein.

We/I further hereby covenant to be legally bound by the relevant dispute resolution provisions under the market rules and any applicable market manual, in the event that this registration application is denied and a dispute arises from such unsuccessful application.

We/I confirm and acknowledge that the information provided by us/me (or on our/my behalf) in or in connection with this registration application may need to be disclosed, communicated or exchanged by the EMC to or with other parties, including but not limited to the Authority, the PSO and a market support services licensee, as necessary, desirable or expedient for the purposes of processing this registration application under the Regulations and we/I hereby consent to such disclosure, communication or exchange.

Signed for and on behalf of: ____________________________

(Name of Applicant)

Signature: _________________________________________

Name of officer: ____________________________________

Position/designation: _________________________________

Date: _____________________________________________

© 2003, 2015-20XX Energy Market Company Pte Ltd
H. EMC’S DISCLAIMER

Energy Market Company Pte Ltd ("EMC") has produced this publication for use in connection with the Singapore Electricity Market. This publication is not a substitute for and should not be read in lieu of the Singapore Electricity Market Rules or any other applicable laws, codes, rules, procedures, manuals or policies that are relevant to or regulate the Singapore Electricity Market or the electricity industry. The contents of this publication do not constitute legal or business advice and should not be relied upon as a substitute for obtaining such advice.

EMC, its directors and employees, subsidiaries, associates and affiliates make no representations, endorsements or warranties of any kind whatsoever in relation to the contents of this publication, and in no event shall EMC, its directors and employees, subsidiaries, associates and affiliates be liable to any party for any damages, claims, expenses or losses of any kind arising from or in connection with any use of or reliance on the accuracy, availability, currency, title, non-infringement, quality, reliability, suitability and completeness of the contents of this publication.

Any modifications or amendments to this publication shall be made in accordance with the relevant provisions of the Singapore Electricity Market Rules.
### Appendix A: Metering Details

<table>
<thead>
<tr>
<th>S/No</th>
<th>Generation Facility Name</th>
<th>Meter Type (Main, Check or Auxiliary)</th>
<th>Meter Serial Number</th>
<th>Station Load Meter Name (Please show tagging, if any)</th>
<th>Station Load Meter Serial Number</th>
<th>Market Network Node (assigned by the EMC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**
Please tag the station loads (if any) to the generation facility.
Appendix B

SAMPLE CERTIFICATE AND UNDERTAKING
[To be set out on the applicant’s letterhead.]

CERTIFICATE AND UNDERTAKING

To: Energy Market Company Pte Ltd
 (hereinafter referred to as the “EMC”)

We/I, [state name of applicant], refer to our/my Application Form for Generation Facility Registration by a Market Participant dated [state date] for the registration of [identify the relevant generation facility here] ("the Facility") as a [generation registered facility / generation settlement facility] under the market rules and the applicable market manuals of the EMC ("the Application").

Pursuant to the Application, we/I hereby confirm, certify and undertake to the EMC (with a view to the EMC relying upon our/my confirmations, certifications and undertakings herein in considering our/my Application) that:

1) we/I have (and we/I will continue to have through to, on and from the registration of the Facility by the EMC) operational control and authority over the Facility for the purposes of the market rules;

2) all our/my facilities and equipment to which the Application relates meet all applicable technical requirements under the market rules, the applicable market manuals and the system operation manual; and

3) we/I have adequate qualified personnel and organisational and other arrangements that are sufficient to enable us/me to perform all of our/my functions and obligations applicable to us/me as market participants under the market rules, the applicable market manuals and the system operation manual, including reliable services during normal and emergency situations, in respect of our/my participation in the wholesale electricity market.

Our/my confirmations, certifications and undertakings herein shall be governed by and construed in accordance with the laws of the Republic of Singapore. All italicised expressions used herein shall have the same meanings as respectively ascribed to them in the Singapore Electricity Market Rules of the EMC.

Signed for and on behalf of ____________________________________________
(Name of Applicant)

Signature: ____________________________________________

Name: ____________________________________________

Designation: ____________________________________________

Date: ____________________________________________

* Delete where inapplicable.
Appendix C

Power System Operator (PSO) Data Form for Generation Facility Registration

- For registration of a generation registered facility, please use Appendix 3A of the form.
- For registration of a generation settlement facility, please use Appendix 3C of the form.
- For registration of an intermittent generation facility (PV), please use Appendix 3D of the form.
- Please note that the form may be amended, updated or replaced from time to time and you should ensure that you obtain and use the most up-to-date version available at the above website at the time of your application.
Annex 4
Proposed Modifications to “Application form for Commissioning Generation Facility Registration by a Market Participant”
Application form for Commissioning Generation Facility Registration by a Market Participant

including explanatory notes
IMPORTANT: Please read this carefully before completing this form. Italicised words and expressions used herein (but not otherwise defined herein) shall have the same meanings respectively ascribed to them in the Singapore Electricity Market Rules.

Why do you need to complete this form?
Under the market rules, if you are not a market support services licensee, you are not permitted to participate in the real-time markets or to cause or permit any physical service to be conveyed into, through or out of the transmission system unless you have been registered by the EMC as a market participant, and your facility to or from which the physical service is to be so conveyed has been registered by the EMC as a registered facility, a commissioning generation facility or a non-exporting embedded intermittent generation facility in accordance with the market rules.

The EMC is licensed by the Energy Market Authority (the “Authority”) to operate the wholesale electricity markets (to which the real-time markets form a part) in Singapore. One of the EMC’s responsibilities is to manage the registration of facilities in the wholesale electricity markets. You must complete and submit this form to apply to have a facility registered by the EMC if you wish to convey any physical services into, through or out of the transmission system and that facility is required or permitted to be registered under the market rules.

Why did EMC develop this form?
The EMC has developed this form for applicants to apply for the relevant facility registration described in the market rules. You should read the relevant sections of the market rules prior to completing this form. Please also read the EMC’s disclaimer at the end of this form.

Who is eligible to apply for registration?
You must be registered as a market participant before you are eligible to apply for registration of your facilities.

However, if you are only granted conditional registration as a market participant, you may also apply for registration of your facilities, but your facilities will not be registered unless you become registered as a market participant within the relevant conditional registration deadline.

What are the types of generation facility registration?
The three four types of generation facility registration are:

- Generation registered facility (you need to complete a separate form for this type of registration)
- Generation settlement facility (you need to complete a separate form for this type of registration)
- Non-exporting embedded intermittent generation facility (you need to complete a separate form for this type of registration)
- Commissioning generation facility.

You should register your generation facility as a commissioning generation facility:

a) if the facility is required or intended to be registered as a generation registered facility; or

b) if the facility is required or intended to be registered as a generation settlement facility, and is required to cause or permit any physical service to be conveyed into, through or out of the transmission system,

on a transitional basis for the purpose of permitting the facility to convey a physical service into, through or out of the transmission system or of participating in the real-time markets during the period in which it is undergoing the commissioning tests.

As a general rule, the registration of your generation facility as a commissioning generation facility shall expire on the earlier of (a) the expected completion date of the final commissioning test date specified in your commissioning test plans submitted to and approved by the PSO pursuant to section 5.3.4 of Chapter 2 of the market rules; or (b) upon the registration of the facility as a generation registered facility or generation settlement facility. However, if you wish to change the expected completion date of the final commissioning test for your facility, you must submit a request together with the revised commissioning test plan to the PSO no later than five business days before the expected completion date of the final commissioning test. The PSO will inform you of the outcome of your request no later than four business days following the PSO’s receipt of your request.
This application form is to be used for application for registration of a *commissioning generation facility* only. Subsequently, if you wish to proceed with the application of your facility as a *generation registered facility* or a *generation settlement facility*, you should use the Application form for Generation Facility Registration by a Market Participant.

**When will you know the outcome of your application?**
The *EMC* will notify you in writing of the outcome within 30 *business days* of the *EMC* being satisfied that your application meets all the requirements for *commissioning generation facility* registration under the *market rules*, the applicable *market manuals* and the *system operation manual*. If your application is declined, the notification will identify why this was the case. A duly and accurately completed form will expedite the *EMC*’s processing of your application.

**What should you do if you have more than one facility to register?**
Please fill in a separate form for each application for registration of a *commissioning generation facility*. You can download additional copies of the form from the *EMC*’s website at [www.emcsg.com](http://www.emcsg.com).

**Is there an application fee for your application to register your facility?**
There is no application fee payable for your application to register your facility.
Summary of registration requirements for a commissioning generation facility

The key requirements in the process for the registration of a commissioning generation facility are outlined in the table below:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| **A** | **Meet the EMC’s requirements** | You must ensure that  
- your facilities and equipment meet all applicable technical requirements set forth in the market rules, any applicable market manuals or the system operation manual; and  
- you are able to perform all the functions and obligations applicable to you under the market rules, the market manuals or the system operation manual.  
If you wish to subsequently register your facility as a generation registered facility, you shall identify your proposed dispatch coordinator. You cannot change your designated dispatch coordinator for your facility without the prior approval of the EMC. |
| **B** | **Meet the PSO’s requirements** | You must complete the PSO’s Data Form for Generation Facility Registration, meeting all the applicable technical requirements and attaching any required documents during submission. |
| **C** | **Meet metering requirements** | You must secure the market support services licensee’s written confirmation to the EMC that the market support services licensee is ready to submit all relevant settlement data required under the market rules for your facility to the EMC. |
| **D** | **Prepare and attach required documents** | You must duly complete this application form in respect of your facility and provide all required supporting documents with your application, including the following:  
- A certified true copy of your duly executed connection agreement with the transmission licensee for your facility.  
- A certified true copy of your duly executed market participant - market support services licensee agreement with the market support services licensee for your facility, if required by the EMC.  
- An original duly completed and executed Certificate and Undertaking (substantially in the form and terms prescribed in Appendix B of this application form) for your facility.  
- An original duly completed PSO Data Form for Generation Facility Registration required by the PSO (as described in Appendix C of this application form) for your facility. |
| **E** | **Standing Offer Data** | If your facility is to be registered as a generation registered facility subsequently, you must comply with section D below. For the avoidance of doubt, if your facility is to be registered as a generation settlement facility subsequently, you are not required to comply with section D below. |
| **F** | **Registration as a commissioning generation facility** | Your facility will be registered as a commissioning generation facility if the EMC is satisfied that your facility meets all the requirements for such facility registration under the market rules, the applicable market manuals or the system operation manual. The EMC will notify you of the terms and conditions of the registration in an official notice to you. If your application is declined, the EMC will write to you stating the reasons. |
How can you obtain more information?

In addition to this form and the *market rules*, you may obtain more information by contacting the *EMC* Market Administration Team by telephone at +65 6779 3000. Alternatively, you may visit the *EMC’s* website at [www.emcsg.com](http://www.emcsg.com).
Please print clearly. Illegible writing or incomplete forms may delay the processing of your application.

A. APPLICANT DETAILS

Name of Applicant (in full): ____________________________________________________________

Identification Number¹: ______________________________________________________________

Registered Address: __________________________________________________________________

B. REGULATORY DETAILS

1. Authorised activities relating to electricity under your electricity licence(s):
   
   **Note:** You may check one or more of the following boxes indicating the type of activities authorised under your electricity licence(s).
   
   - [ ] generate electricity
   - [ ] retail electricity
   - [ ] transmit electricity
   - [ ] transmit electricity for or on behalf of a transmission licensee
   - [ ] import electricity
   - [ ] export electricity
   - [ ] trade in wholesale electricity market

   Electricity licence number(s): _________________________________________________________

   State activities exempted from licensing requirement: _________________________________

   Exemption order number(s): _________________________________________________________

2. What is the name-plate rating of the facility?
   
   - [ ] 1 MW or more but less than 10 MW
   - [ ] 10 MW or more

3. Please indicate the type of generation facility registration you will subsequently be applying for.
   
   - [ ] generation registered facility
   - [ ] generation settlement facility

4. Derogation requested: □ Yes □ No

5. Wholesale Electricity settlement account: ____________________________________________

¹ This refers to the Applicant’s ACRA registration number, Unique Entity Number or NRIC number, as the case may be.
C. FACILITY DETAILS

6. Name of the facility: _________________________________________________________

7. Name of owner of the facility: _____________________________________________

8. Location of the facility: ____________________________________________________

9. Meter ID number(s): ________________________________________________________
   (Please also complete Appendix A of this application form.)

10. Dispatch coordinator for the facility: _________________________________________
     (This is only applicable if the facility is to be registered as a generation
         registered facility subsequently.)

11. Contacts of the dispatch coordinator for the facility:
     (This is only applicable if the facility is to be registered as a generation
         registered facility subsequently.)

<table>
<thead>
<tr>
<th></th>
<th>Main Contact</th>
<th>Alternate contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Name &amp; Designation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Contact Nos.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Email Address</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Hand phone Nos.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Fax Nos.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Physical service intended to be provided from the facility:

   □ Energy
   □ Reserve (□ Primary □ Contingency)
   □ Regulation

13. Expected start date of commissioning tests: ________________________________

    Expected completion date of final commissioning test: _______________________

14. Other authorisations/approvals granted by the Authority
    (For facilities other than intermittent generation facilities.)

    ▪ Approval for classification of your facility as an embedded generation facility
      for the purposes of net treatment on non-reserve charges:
      □ Yes □ No

    (If the answer to the above is no, is such approval being sought?
      □ Yes □ No)

    ▪ Approval for your facility to be assigned to an EGF group to be, or an EGF group
      which has been, granted price neutralisation:
15. **Intermittent generation facilities**
(For registration of commissioning generation facility that is comprised of one or more intermittent generation facilities.)

- Is your facility comprised of one or more intermittent generation facilities? □ Yes □ No
  (If yes, is your facility comprised only of intermittent generation facilities? □ Yes □ No)
- Is your facility comprised only of embedded intermittent generation facilities? □ Yes □ No

**D. STANDING OFFER DATA**
(This section is only applicable if your facility is to be registered as a generation registered facility subsequently.)

Please provide a standing offer for each physical service to be provided from your facility to be registered as a commissioning generation facility. Each such standing offer for your facility must be submitted to the EMC in the data format required by and in accordance with the EMC's Market Operations Market Manual on Standing Offers, Standing Bids, Offer Variations, Bid Variations and Standing Capability Data (Chapter 6 Market Rules).

**E. GENERATION FACILITY REGISTRATION**
**(FOR SUBMISSION TO THE PSO)**

Please complete the PSO Data Form for Generation Facility Registration which is described in Appendix C of this application form. All relevant sections in the form must be duly completed. The duly completed form must be sent to the EMC together with all supporting documentation.
F. CHECKLIST OF SUPPORTING DOCUMENTS REQUIRED

You must attach the following documents to your application form:

☐ A certified true copy of your duly executed connection agreement with the transmission licensee for your facility.

☐ A certified true copy of your duly executed market participant - market support services licensee agreement with the market support services licensee for your facility, if required by the EMC.

☐ An original duly completed and executed Certificate and Undertaking (substantially in the form and terms prescribed in Appendix B of this application form) for your facility.

☐ An original duly completed PSO Data Form for Generation Facility Registration required by the PSO (as described in Appendix C of this application form) for your facility.

FOR EMC OFFICIAL USE

1. Assigned MNN number(s) for this facility: ________________________________________________

INFORMATION PROVIDED BY THE MSSL TO THE EMC

2. Respective RQM (as defined by MSSL) ID Number(s): _____________________________________

2.1. Location of the facility: ______________________________________________________________
G. COVENANT AND DECLARATION

We/I, the undersigned applicant, having read and fully understood the market rules, the terms of this application form, the applicable market manuals, the system operation manual, the Electricity Act, and any other applicable laws, codes, rules, procedures or policies that are relevant to or regulate the wholesale electricity markets (collectively the ‘Regulations’), and/or having had the benefit of relevant independent advice, hereby apply to register our/my facility as a commissioning generation facility as stated in this application form.

We/I hereby agree to be bound by, and to comply with, all the Regulations which may be applicable to us/me, our/my registration application herein, our/my facility and our/my participation in the relevant wholesale electricity markets.

We/I further hereby declare that the information provided by us/me (or on our/my behalf) in or in connection with this registration application is true, complete and accurate and not misleading or omitting any material particular (to the best of our/my knowledge, information and belief after having carried out all necessary due diligence to determine the same) and hereby covenant to be subject to any sanctions, penalties or orders as may be imposed by the relevant authorities/parties under the Regulations, in the event that such information is found to be untrue, misleading or inaccurate in any material particular.

We/I hereby undertake to immediately notify the EMC of any change to any information provided in relation to our/my application for registration herein.

We/I further hereby covenant to be legally bound by the relevant dispute resolution provisions under the market rules and any applicable market manual, in the event that this registration application is denied and a dispute arises from such unsuccessful application.

We/I confirm and acknowledge that the information provided by us/me (or on our/my behalf) in or in connection with this registration application may need to be disclosed, communicated or exchanged by the EMC to or with other parties, including but not limited to the Authority, the PSO and a market support services licensee, as necessary, desirable or expedient for the purposes of processing this registration application under the Regulations and we/I hereby consent to such disclosure, communication or exchange.

Signed for and on behalf of ______________________________

(Name of Applicant)

Signature: ____________________________________________

Name of officer: _______________________________________

Position/designation: ___________________________________

Date: ________________________________________________

© 2003, 2017-20XX Energy Market Company Pte Ltd
H. EMC’S DISCLAIMER

Energy Market Company Pte Ltd (“EMC”) has produced this publication for use in connection with the Singapore Electricity Market. This publication is not a substitute for and should not be read in lieu of the Singapore Electricity Market Rules or any other applicable laws, codes, rules, procedures, manuals or policies that are relevant to or regulate the Singapore Electricity Market or the electricity industry. The contents of this publication do not constitute legal or business advice and should not be relied upon as a substitute for obtaining such advice.

EMC, its directors and employees, subsidiaries, associates and affiliates make no representations, endorsements or warranties of any kind whatsoever in relation to the contents of this publication, and in no event shall EMC, its directors and employees, subsidiaries, associates and affiliates be liable to any party for any damages, claims, expenses or losses of any kind arising from or in connection with any use of or reliance on the accuracy, availability, currency, title, non-infringement, quality, reliability, suitability and completeness of the contents of this publication.

Any modifications or amendments to this publication shall be made in accordance with the relevant provisions of the Singapore Electricity Market Rules.
### Generation Facility Registration

**Appendix A : Metering Details**

<table>
<thead>
<tr>
<th>S/No</th>
<th>Generation Facility Name</th>
<th>Meter Type (Main, Check or Auxiliary)</th>
<th>Meter Serial Number</th>
<th>Station Load Meter Name (Please show tagging, if any)</th>
<th>Station Load Meter Serial Number</th>
<th>Market Network Node (assigned by the EMC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**

Please tag the station loads (if any) to the generation facility.
Appendix B

SAMPLE CERTIFICATE AND UNDERTAKING
[To be set out on the applicant's letterhead.]

CERTIFICATE AND UNDERTAKING

To: Energy Market Company Pte Ltd
(hereinafter referred to as the “EMC”)

We/I, [state name of applicant], refer to our/my Application Form for Commissioning Generation Facility Registration by a Market Participant dated [state date] for the registration of [identify the relevant generation facility here] (“the Facility”) as a commissioning generation facility under the market rules and the applicable market manuals of the EMC (“the Application”).

Pursuant to the Application, we/I hereby confirm, certify and undertake to the EMC (with a view to the EMC relying upon our/my confirmations, certifications and undertakings herein in considering our/my Application) that:

1) we/I have (and we/I will continue to have through to, on and from the registration of the Facility by the EMC) operational control and authority over the Facility for the purposes of the market rules;

2) all our/my facilities and equipment to which the Application relates meet all applicable technical requirements under the market rules, the applicable market manuals and the system operation manual; and

3) we/I have adequate qualified personnel and organisational and other arrangements that are sufficient to enable us/me to perform all of our/my functions and obligations applicable to us/me as market participants under the market rules, the applicable market manuals and the system operation manual, including reliable services during normal and emergency situations, in respect of our/my participation in the wholesale electricity market.

Our/my confirmations, certifications and undertakings herein shall be governed by and construed in accordance with the laws of the Republic of Singapore. All italicised expressions used herein shall have the same meanings as respectively ascribed to them in the Singapore Electricity Market Rules of the EMC.

Signed for and on behalf of ____________________________________________
(Name of Applicant)

Signature: ____________________________________________________________

Name: ______________________________________________________________

Designation: __________________________________________________________

Date: _________________________________________________________________

* Delete where inapplicable.
Appendix C

Power System Operator (PSO) Data Form for Generation Facility Registration

- For registration of a generation facility which is required or intended to be registered as a generation registered facility, please use Appendix 3A of the form.
- For registration of a generation facility which is required or intended to be registered as a generation settlement facility, please use Appendix 3C of the form.
- For registration of an intermittent generation facility (PV), please use Appendix 3D of the form.
- Please note that the form may be amended, updated or replaced from time to time and you should ensure that you obtain and use the most up-to-date version available at the above website at the time of your application.
Annex 5
Application form for Registration of Non-exporting Embedded Intermittent Generation Facility by a Market Participant (NEW)
Application form for Registration of Non-exporting Embedded Intermittent Generation Facility by a Market Participant

including explanatory notes.
IMPORTANT: Please read this carefully before completing this form. Italicised words and expressions used herein (but not otherwise defined herein) shall have the same meanings respectively ascribed to them in the Singapore Electricity Market Rules.

Why do you need to complete this form?
Under the market rules, if you are not a market support services licensee, you are not permitted to participate in the real-time markets or to cause or permit any physical service to be conveyed into, through or out of the transmission system unless you have been registered by the EMC as a market participant, and your facility to or from which the physical service is to be so conveyed has been registered by the EMC as a registered facility, a commissioning generation facility, a generation settlement facility or a non-exporting embedded intermittent generation facility in accordance with the market rules.

The EMC is licensed by the Energy Market Authority (the “Authority”) to operate the wholesale electricity markets (to which the real-time markets form a part) in Singapore. One of the EMC’s responsibilities is to manage the registration of facilities in the wholesale electricity markets. You must complete and submit this form to apply to have a facility registered by the EMC if you wish to convey any physical services into, through or out of the transmission system and that facility is required or permitted to be registered under the market rules.

Why did EMC develop this form?
The EMC has developed this form for applicants to apply for the relevant facility registration described in the market rules. You should read the relevant sections of the market rules prior to completing this form. Please also read the EMC’s disclaimer at the end of this form.

Who is eligible to apply for registration?
You must be registered as a market participant before you are eligible to apply for registration of your facilities.

However, if you are only granted conditional registration as a market participant, you may also apply for registration of your facilities, but your facilities will not be registered unless you become registered as a market participant within the relevant conditional registration deadline.

What are the types of generation facility registration?
The four types of generation facility registration are:

- Generation registered facility (you need to complete a separate form for this type of registration)
- Generation settlement facility (you need to complete a separate form for this type of registration)
- Commissioning generation facility (you need to complete a separate form for this type of registration)
- Non-exporting embedded intermittent generation facility

You may register your generation facility as a non-exporting embedded intermittent generation facility:

a) if the facility is an embedded intermittent generation facility with name-plate rating of less than 10 MW; and
b) if you do not intend to receive any payment for the facility, whether or not any electricity is injected into the transmission system.

The market participant of a non-exporting embedded intermittent generation facility shall pay the fixed market-related charge in accordance with the payment schedule and methodology published on the EMC website at www.emcsing.com.

When will you know the outcome of your application?
The EMC will notify you in writing of the outcome within 30 business days of the EMC being satisfied that your application meets all the requirements for generation facility registration under the market rules, the applicable market manuals and the system operation manual. If your application is declined, the notification will identify why this was the case. A duly and accurately completed form will expedite the EMC’s processing of your application.
What should you do if you have more than one facility to register?
Please fill in a separate form for each application for registration of a non-exporting embedded intermittent generation facility. You can download additional copies of the form from the EMC website at www.emcsq.com.

Is there an application fee for your application to register your facility?
There is no application fee payable for your application to register your facility.
Summary of registration requirements for a non-exporting embedded intermittent generation facility

The key requirements in the process for the registration of a non-exporting embedded intermittent generation facility are outlined in the table below:

<table>
<thead>
<tr>
<th>A</th>
<th>Meet pre-registration requirements</th>
<th>You must ensure that</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• your facilities and equipment meet all applicable technical requirements set forth in the market rules, any applicable market manuals or the system operation manual; and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• you are able to perform all the functions and obligations applicable to you under the market rules, the market manuals or the system operation manual.</td>
</tr>
<tr>
<td>B</td>
<td>Meet the PSO’s requirements</td>
<td>• You must complete the PSO’s Data Form for Generation Facility Registration, meeting all the applicable technical requirements and attaching any required documents during submission.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The registration of your facility is subject to the PSO advising the EMC that such facility poses no threat to the reliability or security of the PSO controlled system.</td>
</tr>
<tr>
<td>C</td>
<td>Pay relevant market-related charges</td>
<td>You must pay to the EMC the fixed market-related charge applicable to your generation facility in accordance with the payment schedule published by the EMC.</td>
</tr>
<tr>
<td>D</td>
<td>Prepare and attach required documents</td>
<td>You must duly complete this application form in respect of your facility and provide all required supporting documents with your application, including the following:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• A certified true copy of your duly executed connection agreement with the transmission licensee for your facility.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• An original duly completed and executed Certificate and Undertaking (substantially in the form and terms prescribed in Appendix A of this application form) for your facility.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• An original duly completed Data Form for Generation Facility Registration required by the PSO (as set out in Appendix B of this application form) for your facility.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Calculation of your estimated fixed market-related charge applicable to your facility.</td>
</tr>
<tr>
<td>E</td>
<td>Registration as a non-exporting embedded intermittent generation facility</td>
<td>Your facility will be registered as a non-exporting embedded intermittent generation facility if the EMC is satisfied that your facility meets all the requirements for such facility registration under the market rules, the applicable market manuals or the system operation manual. The EMC will notify you of the terms and conditions of the registration in an official notice to you. If your application is declined, the EMC will write to you stating the reasons.</td>
</tr>
</tbody>
</table>

How can I find more information?
In addition to this form and the market rules, you may obtain more information by contacting the EMC Market Administration Team by telephone +65 6779 3000. Alternatively, you may visit the EMC website at www.emcsq.com.
Please print clearly. Illegible writing or incomplete forms may delay the processing of your application.

A. APPLICANT DETAILS

Name of Applicant (in full): ________________________________________________________________

Identification Number\(^1\): ___________________________________________________________________

Registered Address: ______________________________________________________________________

B. REGULATORY DETAILS

1. Authorised activities relating to electricity under your electricity licence(s):

   Note: You may check one or more of the following boxes indicating the type of activities authorised under your electricity licence(s).

   - [ ] generate electricity
   - [ ] retail electricity
   - [ ] transmit electricity
   - [ ] transmit electricity for or on behalf of a transmission licensee
   - [ ] import electricity
   - [ ] export electricity
   - [ ] trade in wholesale electricity market

   Electricity licence number(s): _____________________________________________________________

   State activities exempted from licensing requirement: __________________________________________

   Exemption order number(s): _____________________________________________________________

2. Derogation requested: [ ] Yes [ ] No

3. Wholesale Electricity settlement account (if any):

   _____________________________________________________________________________________

\(^1\) This refers to the Applicant’s ACRA registration number, Unique Entity Number or NRIC number, as the case may be.
C. FACILITY DETAILS

4. Name of the facility: ________________________________________________________________

5. Name of owner of the facility: ________________________________________________________

6. Location of the facility: ________________________________________________________________

7. Name-plate rating of your facility (in MWac): ____________________________________________

8. Is your facility an embedded *intermittent generation facility*? ☐ Yes ☐ No

9. Expected start date of registration: _________________________________________________

D. GENERATION FACILITY REGISTRATION (FOR SUBMISSION TO THE PSO)

Please complete the *PSO Data Form for Generation Facility Registration* which is described in Appendix B of this application form. All relevant sections in the form must be duly completed. The duly completed form must be sent to the *EMC* together with all supporting documentation.

E. CHECKLIST OF SUPPORTING DOCUMENTS REQUIRED

You must attach the following documents to your application form:

☐ A certified true copy of your duly executed *connection agreement* with the *transmission licensee* for your facility.

☐ An original duly completed and executed Certificate and Undertaking (substantially in the form and terms prescribed in Appendix A of this application form) for your facility.

☐ An original duly completed Data Form for Generation Facility Registration required by the *PSO* (as set out in Appendix B of this application form) for your facility.

☐ Calculation of your estimated *fixed market-related charge* that is applicable to your facility.

==================================================================================================
F. COVENANT AND DECLARATION

We/I, the undersigned applicant, having read and fully understood the market rules, the terms of this application form, the applicable market manuals, the system operation manual, the Electricity Act, and any other applicable laws, codes, rules, procedures or policies that are relevant to or regulate the wholesale electricity markets (collectively the ‘Regulations’), and/or having had the benefit of relevant independent advice, hereby apply to register our/my facility as a non-exporting embedded intermittent generation facility as stated in this application form.

We/I hereby agree to be bound by, and to comply with, all the Regulations which may be applicable to us/me, our/my registration application herein, our/my facility and our/my participation in the relevant wholesale electricity markets.

We/I further hereby declare that the information provided by us/me (or on our/my behalf) in or in connection with this registration application is true, complete and accurate and not misleading or omitting any material particular (to the best of our/my knowledge, information and belief after having carried out all necessary due diligence to determine the same) and hereby covenant to be subject to any sanctions, penalties or orders as may be imposed by the relevant authorities/parties under the Regulations, in the event that such information is found to be untrue, misleading or inaccurate in any material particular.

We/I hereby undertake to immediately notify the EMC of any change to any information provided in relation to our/my application for registration herein.

We/I further hereby covenant to be legally bound by the relevant dispute resolution provisions under the market rules and any applicable market manual, in the event that this registration application is denied and a dispute arises from such unsuccessful application.

We/I confirm and acknowledge that the information provided by us/me (or on our/my behalf) in or in connection with this registration application may need to be disclosed, communicated or exchanged by the EMC to or with other parties, including but not limited to the Authority, the PSO and a market support services licensee, as necessary, desirable or expedient for the purposes of processing this registration application under the Regulations and we/I hereby consent to such disclosure, communication or exchange.

Signed for and on behalf of ________________________________________________ (Name of Applicant)

Signature: ________________________________________________________________

Name of officer: __________________________________________________________

Position/designation: ______________________________________________________

Date: ________________________________________________________________
G. EMC’S DISCLAIMER

Energy Market Company Pte Ltd ("EMC") has produced this publication for use in connection with the Singapore Electricity Market. This publication is not a substitute for and should not be read in lieu of the Singapore Electricity Market Rules or any other applicable laws, codes, rules, procedures, manuals or policies that are relevant to or regulate the Singapore Electricity Market or the electricity industry. The contents of this publication do not constitute legal or business advice and should not be relied upon as a substitute for obtaining such advice.

EMC, its directors and employees, subsidiaries, associates and affiliates make no representations, endorsements or warranties of any kind whatsoever in relation to the contents of this publication, and in no event shall EMC, its directors and employees, subsidiaries, associates and affiliates be liable to any party for any damages, claims, expenses or losses of any kind arising from or in connection with any use of or reliance on the accuracy, availability, currency, title, non-infringement, quality, reliability, suitability and completeness of the contents of this publication.

Any modifications or amendments to this publication shall be made in accordance with the relevant provisions of the Singapore Electricity Market Rules.
CERTIFICATE AND UNDERTAKING

To: Energy Market Company Pte Ltd
(hereinafter referred to as the “EMC”)

We/I, [state name of applicant], refer to our/my Application Form for Registration of Non-Exporting Embedded Intermittent Generation Facility by a Market Participant dated [state date] for the registration of [identify the relevant generation facility here] (“the Facility”) as a non-exporting embedded intermittent generation facility under the market rules and the applicable market manuals of the EMC (“the Application”).

Pursuant to the Application, we/I hereby confirm, certify and undertake to the EMC (with a view to the EMC relying upon our/my confirmations, certifications and undertakings herein in considering our/my Application) that:

1) we/I have (and we/I will continue to have through to, on and from the registration of the Facility by the EMC) operational control and authority over the Facility for the purposes of the market rules;

2) all our/my facilities and equipment to which the Application relates meet all applicable technical requirements under the market rules, the applicable market manuals and the system operation manual;

3) we/I have adequate qualified personnel and organisational and other arrangements that are sufficient to enable us/me to perform all of our/my functions and obligations applicable to us/me as market participants under the market rules, the applicable market manuals and the system operation manual, including reliable services during normal and emergency situations, in respect of our/my participation in the wholesale electricity market;

4) we/I understand that we/I will not receive any payment for any electricity injected into the transmission system from the Facility; and

5) the Facility is an embedded intermittent generation facility with name-plate rating of less than 10 MW.

We further undertake to immediately notify the EMC if any of our above confirmations, certifications or undertakings ceases to be true, accurate or complete in any respect, or if we cease to be in full compliance with all of our above undertakings.

Our/my confirmations, certifications and undertakings herein shall be governed by and construed in accordance with the laws of the Republic of Singapore. Save as otherwise herein defined, all italicised expressions used herein shall have the same meanings as respectively ascribed to them in the Singapore Electricity Market Rules of the EMC.

Signed for and on behalf of ____________________________________________
(Name of Applicant)

Signature: __________________________________________

Name: __________________________________________

Designation: __________________________________________

Date: __________________________________________
APPENDIX B

Power System Operator (PSO) Data Form for Generation Facility Registration

- The facility registration form is available for download from the EMA website at www.ema.gov.sg/NEMS_Activities.aspx. Please use the Facility Registration Form for Intermittent Generation Facility.

- Please note that the form may be amended, updated or replaced from time to time and you should ensure that you obtain and use the most up-to-date version available at the time of your application.
Annex 6
Calculation Methodology and Payment Schedule for the Fixed Market-Related Charge
Calculation Methodology and Payment Schedule for the Fixed Market-Related Charge

1. Introduction

Under Chapter 2 Sections 5.4B.2.9 and 5.4B.4 of the market rules, the market participant (“MP”) of an existing or potential non-exporting embedded intermittent generation facility (“NEIGF”) is required to pay the applicable fixed market-related charge (“FMRC”) in advance. The FMRC is intended to reflect an estimation of the charges that would have been payable if the MP were to register its embedded intermittent generation facility as an embedded Generation Settlement Facility.

This amount shall be calculated in accordance with the methodology approved by the Energy Market Authority (“EMA”), and paid in accordance with the payment schedule approved by the EMA and published by the Energy Market Company (“EMC”).

This paper describes the calculation methodology as well as the payment schedule for the FMRC.

2. Fixed Market-Related Charge Calculation Methodology

Currently, the FMRC that is applicable to each NEIGF only consists of the estimated regulation charge.¹

Therefore, the FMRC (in $) for each NEIGF m for each half-year period p shall be calculated in accordance with the following formula:

\[ FMRC_p^m = WAFP_p \times ESGQ_p^m \]

Where:

- \( m \) = a NEIGF
- \( p \) = a half-year period
- \( WAFP_p \) = weighted average of allocated regulation price (AFP) (in $/MWh) for NEIGFs in the half-year period \( p \)
- \( ESGQ_p^m \) = estimated solar generation quantity (in MWh) of NEIGF \( m \) in the half-year period \( p \)

The following subsections explain how the WAFP and ESGQ are computed.

2.1 Weighted Average of Allocated Regulation Price (WAFP) Computation

2.1.1 Data Range Used in WAFP Computation

The WAFP is computed half-yearly based on historical data of a moving half-year window as stipulated in Table 1 below:

---

¹ Please note that the FMRC may consist of other charges in the future, as may be approved by the EMA.
Table 1: WAFP Calculation Data Range

<table>
<thead>
<tr>
<th>Half-yearly Registration Period that WAFP applies for NEIGFs registered in Year x</th>
<th>Data range used in WAFP calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1 Jan to 30 Jun of year x</td>
<td>AFP for 1 May year x-1 to 31 Oct year x-1</td>
</tr>
<tr>
<td>2 1 Jul to 31 Dec of year x</td>
<td>AFP for 1 Nov year x-1 to 30 Apr year x</td>
</tr>
</tbody>
</table>

2.1.2 WAFP Computation Methodology

The WAFP is calculated by taking the average of historical AFP, weighted by the solar generation factor (SGF) provided by the EMA for the corresponding trading interval, in the most recent six-month period in accordance with the data range stipulated in Table 1.

The WAFP (in $/MWh) for each half-year period p shall be determined in accordance with the following formula:

$$WAFP_p = \frac{\sum_d \sum_h AFP_h^d \times SGF_h}{D \times \sum_h SGF_h} \times 2$$

Where:

- \(h\) = a half-hour trading interval in the Singapore Wholesale Electricity Market (“SWEM”)
- \(p\) = a half-year period
- \(d\) = a trading day in the data range used for WAFP calculation of the half-year period \(p\) in accordance with Table 1
- \(\sum_d\) = sum over all trading days \(d\) in the data range used for WAFP calculation of the half-year period \(p\) in accordance with Table 1
- \(\sum_h\) = sum over all trading intervals \(h\) in a trading day
- \(AFP_h^d\) = allocated regulation price (AFP) for trading interval \(h\) in trading day \(d\)
- \(SGF_h\) = solar generation factor, representing estimated energy output (in MWh) of an intermittent generation facility of 1MWac for trading interval \(h\), as set out in the most recent Estimated Solar Generation Profile provided to EMC by EMA
- \(D\) = number of trading days in the data range used for WAFP calculation of the half-year period \(p\) in accordance with Table 1

The factor of 2 is to reflect that AFP is charged on a gross basis where both the generation and self-consumption of electricity by the NEIGF are subject to regulation payments.

---

2 For example, when calculating the WAFP for the period of 1 Jan 2018 to 30 Jun 2018, \(D\) denotes the number of trading days in the data range used for the calculation, i.e., from 1 May 2017 to 30 Oct 2017, which is 184 days.
2.2 Estimated Solar Generation Quantity (ESGQ) Computation

For each NEIGF, the total amount of solar generation is estimated using the ISC of the NEIGF and the SGF.

The ESGQ (in MWh) for each NEIGF $m$ for each half-year period $p$ shall be determined in accordance with the following formula:

$$ESGQ^m_p = ISC^m \times \sum_h SGF^h \times T^m_p$$

Where:
- $m$ = a NEIGF
- $p$ = a half-year period
- $h$ = a half-hour trading interval in the SWEM
- $\sum_h$ = sum over all trading intervals $h$ in a trading day
- $ISC^m$ = installed solar capacity (in MWac) of the NEIGF $m$
- $SGF^h$ = solar generation factor, representing estimated energy output (in MWh) of an intermittent generation facility of 1MWac for trading interval $h$, as set out in the most recent Estimated Solar Generation Profile provided to EMC by EMA
- $T^m_p$ = number of trading days in the half-year period $p$ during which the NEIGF $m$ is subject to FMRC. For a registered NEIGF, it is the number of trading days in the upcoming half-year period; for a new NEIGF where the registration is being sought after, it is the number of trading days that it is expected to be registered in the half-year period.

A worked example of the ESGQ calculation based on an installed solar capacity (ISC) of 1 MWac and 181 trading days in the half-year period (T) could be found in Appendix 1.

3. Payment Schedule for the Fixed Market-Related Charge

EMC will update the WAFP and the Estimated Solar Generation Profile for each half-year period in accordance with Table 2 below:

<table>
<thead>
<tr>
<th>Half-year period</th>
<th>Date that EMC will update WAFP and Estimated Solar Generation Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Jan to 30 Jun of year $x$</td>
<td>On or before 20 Nov of year $x$-1</td>
</tr>
<tr>
<td>1 Jul to 31 Dec of year $x$</td>
<td>On or before 20 May of year $x$</td>
</tr>
</tbody>
</table>
The FMRC, as defined in the market rules, is the amount payable by a MP (i) in respect of each of its NEIGFs or (ii) as a condition of obtaining the registration of a generation facility as a NEIGF, as the case may be.

For the registration of a generation facility as a new NEIGF,

<table>
<thead>
<tr>
<th>Payment due date for FMRC</th>
<th>Registration period covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 business days before the date that the facility intends to be registered</td>
<td>From the date that the facility intends to be registered to the end of the current half-year period</td>
</tr>
</tbody>
</table>

For a registered NEIGF,

<table>
<thead>
<tr>
<th>Payment due date for FMRC</th>
<th>Registration period covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 business days before 31 Dec of current year</td>
<td>Jan to Jun of next year</td>
</tr>
<tr>
<td>3 business days before 30 Jun of current year</td>
<td>Jul to Dec of current year</td>
</tr>
</tbody>
</table>
Appendix 1: Illustration of ESGQ Calculation using Estimated Solar Generation Profile

Worked example

Assuming that the Estimated Solar Generation Profile is as follows:

<table>
<thead>
<tr>
<th>Period (h)</th>
<th>Solar Generation Factor (SGF)</th>
<th>Period (h)</th>
<th>Solar Generation Factor (SGF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>25</td>
<td>0.312744</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>26</td>
<td>0.312057</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>27</td>
<td>0.302075</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>28</td>
<td>0.290609</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>29</td>
<td>0.27371</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>30</td>
<td>0.249619</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>31</td>
<td>0.221705</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>32</td>
<td>0.188338</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>33</td>
<td>0.157245</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td>34</td>
<td>0.125898</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>35</td>
<td>0.094378</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>36</td>
<td>0.0621</td>
</tr>
<tr>
<td>13</td>
<td>0</td>
<td>37</td>
<td>0.033557</td>
</tr>
<tr>
<td>14</td>
<td>0.00017</td>
<td>38</td>
<td>0.012075</td>
</tr>
<tr>
<td>15</td>
<td>0.007562</td>
<td>39</td>
<td>0.001379</td>
</tr>
<tr>
<td>16</td>
<td>0.029769</td>
<td>40</td>
<td>0</td>
</tr>
<tr>
<td>17</td>
<td>0.065075</td>
<td>41</td>
<td>0</td>
</tr>
<tr>
<td>18</td>
<td>0.107088</td>
<td>42</td>
<td>0</td>
</tr>
<tr>
<td>19</td>
<td>0.150198</td>
<td>43</td>
<td>0</td>
</tr>
<tr>
<td>20</td>
<td>0.191488</td>
<td>44</td>
<td>0</td>
</tr>
<tr>
<td>21</td>
<td>0.22989</td>
<td>45</td>
<td>0</td>
</tr>
<tr>
<td>22</td>
<td>0.259963</td>
<td>46</td>
<td>0</td>
</tr>
<tr>
<td>23</td>
<td>0.285839</td>
<td>47</td>
<td>0</td>
</tr>
<tr>
<td>24</td>
<td>0.302934</td>
<td>48</td>
<td>0</td>
</tr>
</tbody>
</table>

\[ \sum_{h} SGF_h = 4.267465 \]

The ESGQ of an NEIGF with installed solar capacity (ISC) of 1 MWac for the half-year period from 1 Jan 2018 to 30 Jun 2018, is calculated as below:

\[ ESGQ = 1 \text{ MWac} \times 4.267465 \times 181 \text{ days} = 772.411 \text{ MWh} \]