



CONSULTATION PAPER

REVIEW OF POLICY ON GENERATION WITH LESS THAN 1MW IN INSTALLED CAPACITY

Closing date for submissions of comments and feedback:

16 August 2010

Note: There will be no extension of deadline beyond 16 August 2010, 5 pm

13 JUL 2010

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1 Introduction

- 1.1 In the National Electricity Market of Singapore (NEMS), which is essentially a real-time electricity trading pool, electricity is being sold and bought every half hour. Generation companies compete to sell electricity into the NEMS while retailers buy electricity from the NEMS and offer packages to sell electricity to contestable consumers.
- 1.2 Any person who engages in electricity generation is required to hold a Generation Licence unless exempted. Currently, a company is exempted, i.e. not required to hold a Generation Licence, if the company generates electricity by means of a generating unit with generation capacity of less than 10MW. However, a company is required to hold a Wholesaler (Generation) Licence issued by EMA if it generates electricity by means of one or more generating units with individual name-plate rating of 1MW or more but less than 10MW and the generating unit(s) is connected to the power grid.
- 1.3 All Generation and Wholesaler (Generation) Licensees are required to register with the Energy Market Company (EMC) as market participants and comply with the Market Rules. A company that generates electricity by means of one or more generating units of individual name-plate rating of less than 1MW and wishes to be paid for the electricity it exports into the grid is also required to register with the EMC as a market participant, although it is not required to hold an electricity licence.
- 1.4 Since 2007, to facilitate the adoption of solar energy, EMA has allowed a simplified “credit treatment” for residential consumers to get paid for solar PV power exported to the grid without having to register with the EMC and participate in the electricity market. These residential consumers are paid at the rate of “regulated tariff less grid charges” for the amount of electricity exported. This simplified administrative arrangement was given only to residential consumers i.e. households, on the consideration that their solar PV capacity is small, and therefore unlikely to cause distortions to the electricity market.

- 1.5 Non-residential consumers who install PV panels and want to get paid for solar PV energy exported to the grid will need to register with the EMC as a Market Participant and comply with the Market Rules. They will be paid by the electricity market for their total solar generation output and will pay their electricity retailer or the market or SP Services for their total electricity consumption/load.
- 1.6 Their total generation output will be subject to market charges, i.e. Energy Market Company (EMC) fee, Power System Operation (PSO) fee, and regulation charges¹. In addition, they would also need to install Time of Day (TOD) meters for measuring gross generation, provide a dedicated communication link for meter reading and have a recording device for each main and check TOD meters capable of storing all half-hourly measured quantities for up to 30 days.
- 1.7 To support solar test-bedding efforts, EMA had extended the simplified credit treatment to HDB's solar test-bedding projects in July 2009 subject to the following conditions:
- a) Project is funded by the Singapore Government;
 - b) Project is for testing-bedding purposes based on national interest; and
 - c) There is a specific defined scope for the project, e.g. number of blocks/buildings, completion date for the installation of the PV panel.

2 Review of Policy

- 2.1 EMA is considering extending the simplified credit treatment given to residential consumers to non-residential consumers with any generation plant (including solar PV generation) of capacity of less than 1MW. This extended treatment would encompass both contestable and non-contestable consumers.

¹ Moving forward when the new embedded generation rules are implemented, only their net generation (i.e. total generation less own consumption) will be subjected to the EMC and PSO fees. For regulation charge, this will still be applied on the total generation subject to a cap of 5MWh.

- 2.2 For non-contestable consumers, it is proposed that SP services will continue to credit their monthly electricity bill for the electricity exported to the grid based on the “regulated tariff less grid charges”.
- 2.3 For contestable consumers, it is proposed that retailers/SP Services could have an arrangement with their customers in the form of an adjustment to reduce their customers’ electricity bills to compensate for the electricity they export to the grid.

3 Reason for the review of the policy

- 3.1 There is a growing demand by non-residential consumers to install solar PV systems and request for the simplified “credit treatment” to get paid for solar PV power exported to the grid without having to register with the electricity market. To provide more flexibility to such consumers, we have reviewed the existing policy and propose to further relax the rules by granting the simplified “credit treatment” to consumers as long as the capacity of their power plant, including solar PV systems, is less than 1 MW regardless of whether they are residential or non-residential consumers.
- 3.2 Currently, generators with total installed capacity of less than 1MW are exempted from holding any generation licences as they do not pose any technical or commercial threat on the system if they fail to operate. For this reason, it is proposed that the simplified credit treatment for residential consumers be extended to non-residential consumers with generation capacity² of less than 1MW. Such consumers need not be Market Participants and would be compensated by their retailers or SP Services for the electricity exported to the grid. Consumers with generation capacity of 1MW or more would still be required to hold a licence and participate in the market.

² It is proposed that this treatment be extended to all types of generation sources including PV. Generators would be required to provide EMA with their historical generation output data (kW & kWh) for energy statistics monitoring & performance assessment.

4 Requests for comments and feedback

4.1 EMA invites comments and feedback to the proposals in this Consultation Paper, as well as any proposals on how and at what price to pay contestable consumers with less than 1MW in installed capacity for the electricity exported to the grid.

4.2 Please submit all feedback, in writing, to Mr Henry Wong (henry_wong@ema.gov.sg) or Ms Sharon Chuo (sharon_chuo@ema.gov.sg). Alternatively, you may send the submissions by post/fax to:

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4.3 Please note that any anonymous submissions will not be considered. EMA reserves the right to make public all or parts of any written submissions made in response to this Consultation Paper and to disclose the identity of the source. Any part of the submission, which is considered by respondents to be confidential, should be clearly marked and placed as an annex. EMA will take this into account regarding disclosure of the information submitted.