

(Unofficial Translation)

## **Regulations for the Purchase of Power from Very Small Renewable Energy Power Producers**

### **Definitions**

“Very Small Renewable Energy Power Producer (VSREPP)” means

a generator of the private sector, state agencies, state-owned enterprises or general public, with his own generating unit, whose power generating process is as described in Section B and who sells no more than 1 MW of electrical power to a Distribution Utility.

“Distribution Utility” means

Metropolitan Electricity Authority (MEA) and/or  
Provincial Electricity Authority (PEA)

“Regulations for Synchronization of Generators with Net Output under 1 MW to the Distribution Utility System (“Technical Regulations”) means

regulations that govern synchronization of generators of very small power producers with net output under 1 MW to the system of the Distribution Utility.

### **A. Objectives of Power Purchase from Very Small Renewable Energy Power Producers**

1. To promote the participation of VSREPPs in electricity generation;
2. To promote efficient use of domestic natural resources and reduce dependency on the use of commercial fuels for electricity generation, which decreases spending of foreign currencies on imported fuels and lessens environmental impacts;
3. To open up an opportunity for remote areas to participate in electricity generation;
4. To alleviate the government’s budgetary burden to invest in electricity generation and distribution systems.

### **B. Characteristics of the Power Generating Processes of the VSREPPs**

Distribution Utilities will purchase electricity from qualified VSREPPs whose generating processes fall into one of the following categories:

1. **Electricity generated from renewable energy sources** such as wind, photovoltaics, mini or micro-hydroelectricity and biogas (excluding the use of oil, natural gas, coal and nuclear power).
2. **Electricity generated from the following fuels:**
  - 2.1 agricultural waste or residues, or residues from agricultural or industrial production processes;
  - 2.2 products converted from agricultural waste or residues, or residues from agricultural or industrial production processes;
  - 2.3 municipal waste;
  - 2.4 dendrothermal (wood from fuel tree plantation).
3. **Electricity generated from steam** left over from agricultural or industrial production processes that use fuels listed under items 1 or 2.

Any VSREPP using fuels listed above may use commercial fuels such as oil, natural gas and coal as supplementary fuels. However, the accumulated thermal energy contributed from the commercial fuels in any given year must not exceed 25% of the total thermal energy used in electricity generation during that year.

### **C. Electrical System Standards of the VSREPPs**

A VSREPP who wishes to generate and sell electricity to a Distribution Utility must comply with the safety and interconnection standards as stipulated in the Regulations for Synchronization of Generators with Net Output under 1 MW to the Distribution Utility System (“Technical Regulations”).

### **D. Procedures and Criteria for Consideration of Power Purchase from VSREPPs**

1. A prospective VSREPP who wishes to sell electricity to a Distribution Utility must submit a completed application form for sale of electricity and connection to the Distribution Utility’s system at the district office of MEA or at the provincial office of PEA where the VSREPP plans to make the connection to sell electricity.
2. The respective Distribution Utility will consider purchasing power from the VSREPP based on the details provided in the completed application form.
3. The Distribution Utility will notify the applicant in writing whether the application is accepted within 45 days after the utility receives all the required information specified in the application form. The utility will then provide the applicant with details of estimated interconnection costs within 15 days from the date of acceptance notification.
4. The VSREPP must then sign a power purchase agreement with the Distribution Utility within 60 days from the date of acceptance notification. If the VSREPP does not sign the agreement within 60 days, the application submitted will be considered void.

The VSREPP who has signed the power purchase agreement can power into the grid only after the Distribution Utility has checked whether the interconnection as well as the installed connection equipment meets the standards specified in the application form. The Distribution Utility shall complete the checking within 15 days after the VSREPP indicates to the utility its desire to be connected to the system, unless the VSREPP is a new customer of the utility — in which case the utility’s existing regulations for new customers will apply.

### **E. Conditions for Purchasing Power from VSREPPs**

Conditions for purchasing power from VSREPPs are as follows:

1. The Distribution Utilities are sole purchasers of power.
2. The Distribution Utilities will purchase power from generators whose generating processes are as described in Section B.
3. The amount of net power each VSREPP dispatches into the distribution system at the connection point may not exceed 1 MW. The Distribution Utility will, however, consider capability and security of the distribution system in determining the level of net power acceptable on a case by case basis, in accordance with the Technical Regulations.
4. For security of the distribution system, the Distribution Utilities reserve the right to check and/or request a VSREPP to check, correct and adjust the VSREPP’s generation and interconnection equipment related to the distribution system whenever it is deemed necessary.

## **F. Power Purchasing Point and Connection Point**

1. A “**Purchasing Point**” means the point at which the meter that measures the amount of power sold by a VSREPP to a Distribution Utility is located.
2. A “**Connection Point**” means the point at which a VSREPP’s system is connected to a Distribution Utility’s system. The location of this point is to be determined by the Distribution Utility and may be the same point of the purchasing point.

Distribution Utilities will purchase power from a VSREPP at the purchasing point.

## **G. Costs to Be Incurred for VSREPPs**

A VSREPP shall be responsible for the following costs:

1. **Costs of system interconnection** comprising the costs of upgrading the distribution system from the connection point to the VSREPP’s generation system, costs of a meter, costs of protective equipment (unless the generation system already has embedded protective features) and costs of testing equipment. VSREPPs connected to the low-voltage distribution system are exempted from paying the costs of interconnection study by the Distribution Utilities.

A VSREPP shall pay for the entire costs of connection before the Distribution Utility starts the connection process.

2. **Costs of equipment checking** comprising the costs of checking a VSREPP’s generation and interconnection equipment pursuant to Section E.4 (regardless of whether the checking is done in accordance with the Distribution Utility’s regulations or at the request of the VSREPP), and the incurred operating costs that are additional to the utility’s normal operating costs. A VSREPP is required to be responsible for the costs of equipment checking only in the case where the utility finds, after checking, that there is a problem attributable to the VSREPP.

A VSREPP shall pay the costs of equipment checking to the Distribution Utility within 30 days from the date it receives a bill from the utility.

## **H. Criteria in Determining the Tariff Rates for Selling and Purchasing of Power to/from VSREPPs**

The criteria in determining the tariff rates for selling and purchasing of power to/from VSREPPs are developed based on the following principles:

1. For a (monthly) billing period in which a VSREPP consumes more electricity than it generates (net energy consumption), the Distribution Utility will charge the VSREPP only for the net amount of electricity consumed at the retail base tariff rate that is applicable to the VSREPP’s customer category plus the retail Ft (automatic adjustment) charge for that month.
2. For a billing period in which a VSREPP consumes less electricity than it generates (net energy generation), the Distribution Utility will buy the net amount of electricity generated by the VSREPP at the average bulk supply tariff rate that the Electricity Generating Authority of Thailand sells to the two Distribution Utilities plus the average wholesale Ft charge for that month.

For VSREPPs that have a TOU meter(s) and wish to sell electricity using the TOU tariff rate, the Distribution Utilities will purchase the electricity at the bulk supply tariff rate (which depends on the time of use) plus the average wholesale Ft charge for that month.

The VSREPPs shall still pay for other non-energy components of the total electricity tariffs in accordance with the VSREPPs' respective customer categories.

#### **I. Settlement Conditions**

1. For a billing period in which a VSREPP has net energy consumption, the Distribution Utility will record the amount of consumption and issue a bill to the VSREPP. The VSREPP must pay the electricity bill for the billing period to the utility within 15 days from the date of receipt of the bill.
2. For a billing period in which a VSREPP has net energy generation, the Distribution Utility will record the amount of net electricity generation (credit) and issue a bill showing the credit payable to the VSREPP. Once the accumulated credit of the VSREPP reaches Baht 3,000, the VSREPP may request the payment from the utility. The Distribution Utility must pay the due amount to the VSREPP within 30 days from the date of receipt of the written request for payment from the VSREPP.

#### **J. Damages to the Power System**

VSREPPs and the Distribution Utilities must install protective equipment to prevent damages to the power system in compliance with the Technical Regulations.

If damages occur as a result of faulty equipment or other reasons attributable to either party, that party must be responsible for the costs of the damages.

#### **K. Problems Arising from Compliance with the Regulations and Power Purchase Agreements**

##### **1. Problem Arising from Compliance with the Regulations**

VSREPPs who encounter problems from compliance with the Regulations or who wish to file a petition or an appeal against the implementation pursuant to the Regulations can submit the petition to the National Energy Policy Council (NEPC) by addressing it to the Chairman of the National Energy Policy Council, National Energy Policy Office, 121/1-2 Petchaburi Road, Ratchathewi District, Bangkok 10400. The decision made by the NEPC shall be treated as final.

##### **2. Problem Arising from Compliance with Power Purchase Agreements**

VSREPPs who encounter problems from compliance with the power purchase agreements or who wish to file a petition or an appeal against the implementation pursuant to the power purchase agreements may submit the petition to Arbitration. If a decision cannot be reached by Arbitration, the matter shall be referred to a Thai court for a final decision.

#### **L. Amendments to the Regulations**

Any amendments to the Regulations shall be made only with the approval of the National Energy Policy Council.