

(Unofficial Translation)

Proclamation of the Energy Regulatory Commission
On Criteria for Service and Determination of Rates for Green Electricity Service
(Utility Green Tariff) B.E. 2566

Whereas, it is deemed appropriate to establish criteria for service and determine rates for green electricity service (Utility Green Tariff) for the provision of electricity services that are essential public services of the state, under the policies and guidelines for rate setting as resolved by the National Energy Policy Committee at its 7/2022 meeting (meeting number 162) on 7 November 2022.

By virtue of Section 11 and Section 95 of the Energy Industry Act B.E. 2550, in conjunction with the resolutions of the Energy Regulatory Commission at its 28/2566 meeting (meeting number 586) on 14 June 2023, and the 52/2566 meeting (meeting number 880) on 22 November 2023, the Commission shall issue the regulation as follows:

Article 1 This proclamation shall be called "Proclamation of the Energy Regulatory Commission on Criteria for Service and Determination of Rates for Green Electricity Service (Utility Green Tariff) B.E. 2566."

Article 2 This proclamation shall be effective from the day following the publication in the Royal Gazette onwards.

Article 3 In this proclamation;

"Green electricity" means electricity generated from renewable energy sources certified by Renewable Energy Certificates.

"Utility Green Tariff" means the price of green electricity per unit, compensation, or conditions for green electricity service provision, including other fees that the Obligated Entities charges energy consumers.

"Obligated Entities" means the energy business licensees designated by the Energy Regulatory Commission to be responsible for providing and proposing tariffs for green electricity services in this proclamation.

"Electricity consumers" means the end-users of electricity as categorized in the electricity tariff structure and electricity consumers under the Royal Decree on consumers of the Electricity Generating Authority of Thailand, who express a desire to use green electricity services.

"ERC" means the Energy Regulatory Committee.

Article 4 The Utility Green Tariff in the retail electricity tariff structure shall be determined in two formats as follows:

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(1) Utility Green Tariff of existing renewable energy (RE) power plants in the electricity system. Under this rate, the Renewable Energy Certificates (RECs) of existing state-owned power plants as of the effective date of this proclamation, will be used in providing green electricity in conjunction with the provision of electrical energy services, and electricity consumers do not have to specify the source of electricity and REC when requesting services. There will be an additional service charge (Premium) in addition to the normal electricity tariff, which covers the cost of REC, including other components as may be determined by the ERC in the future.

(2) Utility Green Tariff of new RE power plants or existing RE power plants in the electricity system as of the effective date of this proclamation, both state-owned and private. Under this rate, the provision of electrical energy and REC comes from the same source and electricity consumers must specify a portfolio of power plants when requesting services; the Tariff will be determined based on the cost of electricity services and REC of each portfolio, including other components as may be determined by the ERC in the future.

Article 5 In establishing the rates for green electricity services according to Clause 4 , the Obligated Entities shall propose the structure, components, calculation formulas, and service provision conditions for green electricity services based on the criteria for setting rates for green electricity services specified in the annex to this announcement, taking into account the following principles:

(1) Reflection of the true costs of providing green electricity services under internationally accepted standards, with clear and transparent tariff calculation

(2) Allocation of the costs of services that covers public costs and that is fair to all electricity consumers, without unjust or discriminatory practices against energy consumers or those who wish to use energy

Article 6 The Obligated Entities shall propose rates for green electricity services and draft electricity service agreements as specified in the annex to this announcement to the ERC for approval.

Article 7 The Electricity Generating Authority of Thailand, Metropolitan Electricity Authority, and Provincial Electricity Authority, as the energy business licensees who are the provider of electricity as basic infrastructure public services of the state, shall be the Obligated Entities for complying with this proclamation.

Article 8 The Chairman of the Commission shall have charge and control of the execution of this regulation and the ERC shall make the final decision on execution according to this proclamation.

Proclaimed on 8th December B.E. 2023

Smerjai Suksumek

Chairman of the Energy Regulatory Commission

ANNEX

Proclamation of the Energy Regulatory Commission On Criteria for Service and Determination of Rates for Green Electricity Service (Utility Green Tariff) B.E. 2566

1. Criteria for Determining Utility Green Tariff with Unspecified Sources (UGT1)

1.1 Define UGT1 as an electricity tariff pursuant to the notification of the normal electricity tariff structure, including the electricity tariff according to the automatic tariff adjustment formula (F_t), plus a "Premium," which consists of two parts—one for the cost of Renewable Energy Certificate (REC) of the existing state-owned power plants in the system (P_{REC}) and the other for the administrative cost (P_A).

UGT1 = Normal electricity bill (including F_t) + Premium

Premium (P) = REC Market Price (P_{REC}) + Administrative cost (P_A)

P_{REC} = Market price of REC

P_A = Administrative cost and operating remuneration of each Power Utility relating to REC

1.2 Terms of Service

1.2.1 An electricity user who wants to use the UGT service can choose to receive the service in blocks of which the size is specified by the Obligated Entities in the Electricity Supply Agreement (ESA) between the electricity consumer and the Obligated Entity that is his service provider, e.g. 100 kWh per block, or choose to use renewable electricity at the amount equal to his electricity consumption each month (100%).

1.2.2 Application for the UGT service and the service duration will be as defined in the ESA.

1.2.3 The Obligated Entities who provide green electricity services will deliver electricity with REC to UGT1 electricity consumers according to the amount they subscribed for each month, but must not exceed the amount of electricity consumed each month. The applicant will not be able to choose the proportion of each type of renewable energy or specify the source of renewable energy generation.

1.3 The Premium is considered regulated revenue and the Premium tariff setting shall be reviewed at the end of the calendar year to be applied in the following year to reflect the true costs of service and efficient operations as well as to promote renewable energy use.

2. Criteria for Determining Utility Green Tariff with Specified Sources (UGT2)

2.1 Define the UGT2 structure at the wholesale level as not being a time-of-use tariff, consisting of (1) Fixed Rate, i.e. Generation Charge (G), Transmission Charge (T) and Administrative Charge at the wholesale level (A_W); and (2) Variable Rate, i.e. Policy Expense at the wholesale level (PE_W) and Adjustment Factor at the wholesale level (AF_W), which are adjustments to the G values of each portfolio at the wholesale level (AF_W).

$$\text{UGT2 (Wholesale)} = \text{Fixed Rate (Wholesale)} + \text{Variable Rate (Wholesale)}$$

$$\text{Fixed Rate (Wholesale): } F_W = G + T + A_W$$

$$\text{Variable Rate (Wholesale): } V_W = PE_W + AF_W$$

Where:

- G Generation Charge is determined by (1) the costs of electricity and REC procured from renewable power plants in each portfolio, taking into account the transmission loss, which is determined by the targeted loss rate for the transmission system (t); and (2) the cost of capacity and energy that the power system has to provide in order to support reliable green energy delivery to the customers.
- T Transmission Charge is determined by the allowed revenue of the transmission system business, referring to transmission charges in the wholesale electricity tariff structure, which is reviewed periodically according to the regulatory period of the base tariff structure.
- A_W Administrative Charge (Wholesale) is determined by wholesale costs of different portfolio administration and management fee, which is reviewed periodically according to the regulatory period of the base tariff structure.
- PE_W Policy Expense (Wholesale) is determined by expenses arising from implementation of government policies at the wholesale level, which is adjusted every 4 months according to the F_t adjustment round.
- AF_W Adjustment Factor (Wholesale) is determined by the difference between the actual green energy purchase cost, plus the cost of capacity & energy services from the power system for each portfolio; and the pre-determined costs of G at the wholesale level, which is adjusted every 4 months according to the F_t adjustment round.

2.2 Define the UGT2 structure at the retail level as not being a time-of-use tariff, consisting of (1) Fixed Rate, i.e. the costs of procuring energy in relation to Fixed Rate (Wholesale), Distribution Charge (D) and Administrative Charge at the retail level (A_R); and (2) Variable Rate, i.e. Policy Expense at the retail level (PE_R) and Adjustment Factor at the retail level (AF_R), which are adjustments to the G values of each portfolio at the retail level (AF_R).

$$\text{UGT2 (Retail)} = \text{Fixed Rate (Retail)} + \text{Variable Rate (Retail)}$$

$$\text{Fixed Rate (Retail); } F_R = F_W(1+d) + D + A_R$$

$$\text{Variable Rate (Retail); } V_R = V_W(1+d) + PE_R + AF_R$$

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Where:

- d Distribution Loss Rate is determined by the targeted loss rate for the distribution system
- D Distribution Charge is determined by the allowed revenue of the distribution system business, referring to distribution system charges in the retail electricity tariff structure, which is reviewed periodically according to the regulatory period of the base tariff structure.
- A_R Administrative Charge (Retail) is determined by the costs of providing retail services, including the costs of different portfolio administration at the retail level and operating remuneration, which is reviewed periodically according to the regulatory period of the base tariff structure.
- PE_R Policy Expense (Retail) is determined by expenses arising from implementation of government policies at the retail level, which is adjusted every 4 months according to the F_t adjustment period.
- AF_R Adjustment Factor (Retail) is determined by the difference between the actual green energy purchase cost, plus the cost of capacity & energy services from the power system for each portfolio at the retail level, and the pre-determined costs of G, which is adjusted every 4 months according to F_t adjustment period.

In this connection, the same conditions of Power Factor charges in the wholesale and retail electricity tariff structures also apply to UGT2.

2.3 Terms of Service

2.3.1 UGT2 is an optional tariff for Large General Service (Category 4) and Specific Business Service (Category 5) customers with a maximum 15-minute integrated capacity demand from 1,000 kW up, or with the average energy consumption in the last 3 consecutive months of over 250,000 kWh per month.

2.3.2 Subscription for service duration is 10-25 years and subject to conditions as specified in the Electricity Supply Agreement (ESA).

2.3.3 The Obligated Entities will deliver electricity with REC to the subscribed electricity customers according to the conditions specified in the ESA.

2.3.4 The Utilities' revenues from UGT2 are regulated revenues.

3. UTility Green Tariff Proposal

3.1 The Electricity Generation Authority of Thailand (EGAT) shall be the Obligated Entities to submit proposals for the wholesale Premium under UGT1; and the Fixed Rate (Wholesale) for each portfolio under UGT2 at the initial stage and for each period of the base tariff structure review; and to propose the Variable Rate (Wholesale) for each portfolio under UGT2 at the initial stage and every 4 months according to the F_t adjustment period.

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The proposals have to contain all of the assumptions, information and calculation details, including the draft Wholesale Electricity Supply Agreements (Wholesale ESA).

3.2 The Metropolitan Electricity Authority (MEA) and the Provincial Electricity Authority (PEA) shall be the Obligated Entities to submit proposals for the retail Premium under UGT1; and the Fixed Rate (Retail) for each portfolio under UGT2 at the initial stage and for each period of the base tariff structure review; and to propose the Variable Rate (Retail) for each portfolio under UGT2 at the initial stage and every 4 months according to the F_t adjustment period. The proposals have to contain all of the assumptions, information and calculation details, including the draft Retail Electricity Supply Agreements (Retail ESA).