

No: .../2017/TT-BCT

Hanoi, / / 2017

CIRCULAR

Regulating Solar Power Project Development and Standardized Power Purchase Agreement for Solar Power Projects

Pursuant to the Electricity Law No. 28/2004/QH11 dated 03/12/2014; Law on amendment, supplementation of some articles of the Electricity Law dated 20/11/2012;

Pursuant to the Government's Decree No. 95/2012/NĐ-CP dated 12/11/2012 stipulating the functions, duties, rights and organizational structure of the Ministry of Industry and Trade;

Pursuant to Decision No.11/2017/QĐ-TTg by the Prime Minister dated 11/04/2017 on supporting mechanism for the development of solar power projects in Vietnam;

On the proposal of the Power and Renewable Energy Agency;

The Minister of Industry and Trade (MOIT) hereby issues the Circular regulating solar power project development and Standardized Power Purchase Agreement for solar power projects.

CHAPTER I

GENERAL PROVISIONS

Article 1. Scope of regulation

This Circular regulates the development of grid-connected solar power project, rooftop solar project and promulgates the Standardized Power Purchase Agreement for grid-connected solar power projects and the Standardized Power Purchase Agreement for rooftop solar project in Vietnam (hereby shortly named as Standardized Power Purchase Agreement).

Article 2. Applicable entities

This Circular applies to organisations and individuals participating in the development of solar power projects in Vietnam and other relevant organisations and individuals.

Article 3. Interpretations of Terms

In this Circular, the following terms shall be construed as follows:

1. 1. Electricity Purchaser is the Electricity Corporation of Vietnam (EVN) or its authorized subsidiaries.

2. Electricity Sellers are organization, individual who obtain electricity operation license with regards to electricity generation from grid-connected solar PV plants; organization, individual who own rooftop solar projects and would like to sell surplus generated electricity to the Electricity Buyer.

3. Commercial Operation Date (COD) is the date when part or whole of the grid-connected solar PV plant is ready to sell electricity to the Buyer and fulfills the following requirements: (i) the power plant has completed basic experiments for part or the whole of the grid-connected solar PV plant and grid connection equipment; (ii) the solar PV plant was granted electricity operation license with regards to electricity generation; (iii) the Electricity Seller and Buyer agreed on record of meter reading to start payment

4. Wp, KWp, MWp are DC power measurement unit of PV panels manufactured at standard conditions and published by the manufacturer.

5. Theoretical solar power potential is the solar power potential determined on the basis of theoretical solar irradiation.

6. Technical solar power potential is the solar power potential that could be exploited for the commissioning and operation of solar power project given the current conditions of engineering and technology.

7. Commercial solar power potential is the solar power potential that could be exploited effectively and bring proper economic profits to the project investors.

CHAPTER II

PLANNING AND DEVELOPING SOLAR POWER PROJECTS

Article 4. National solar power development plan

The national solar power development plan: will be developed only once, the update, revision and supplementation of this Master plan in the future will be done in accordance with the development, revision and supplementation of the national power development plan. Formulation, approval and issuance of the national solar development plan are regulated at Article 5 of the Decision number 11/2017/QĐ-TTg dated April 11th 2017 by the Prime Minister approving the support mechanism for grid-connected solar PV projects in Vietnam (in short Decision 11)

Article 5. Provincial solar power development plan

Solar power development plan of province and central cities (hereinafter called as Provincial solar power development plan): will be developed for provinces which have big potential of solar PV and at only one time, the update, revision and supplementation of this Master plan in the future will be done in accordance with the development, revision and supplementation of the provincial power development plan. Provincial solar power development plan is a planning project to identify total theoretical, technical and commercial solar power potential, distribution of these solar power potential in the whole provincial areas, in each planning phase until 2020 with vision to 2030. The Provincial solar power development plan is developed at once and will be supplemented and revised in accordance with the Provincial power development plan.

Article 6. Contents of a Provincial Solar Power Development Plan

Outline of the provincial solar power development plan (hereinafter called as Master plan) is regulated at Annex 1 issued with this Circular

Article 7. Processes and procedures on formulation, submission and appraisal of a Provincial Solar power Development Plan

1. Development of a detailed outline and selection of consultants

a) On the basis of the budget allocated for the planning work, the Department of Industry and Trade (DOIT) shall prepare the detailed outline and budget estimation to submit to the provincial or state-city People's Committee (hereby referred to as the provincial People's Committee) for approval.

b) The DOIT shall select qualified consulting firms to develop the plan following the approved detailed outline and budget estimation for submission to the DOIT for approval.

2. Develop and submit the provincial solar power development plan

a) The selected consulting firm formulates and proposes the plan in accordance with the approved outline and assigned time frame.

b) During the formulation process, the consulting firm shall provide intermediate reports for commenting by related public authorities in order to finalize the proposed plan.

c) The DOIT is responsible for collecting opinions from related agencies, the provincial power companies and regional power corporations. Within fifteen (15) working days from the date of receiving request for commenting, relevant agencies and organizations shall study and provide written feedbacks to the DOIT and the consulting firm.

d) DOIT submits the Master Plan to Provincial People Committee for approval to be submitted to MOIT for final approval ;

đ) Dossier of a provincial solar power development plan to submit to the MOIT for approval shall comprise of:

- Submission from the provincial People's Committee requesting approval.
- Ten (10) sets of the complete proposed plan and one (01) CD/DVD/USB containing the proposed plan and related documents (explanation, Appendices, data, figures, feedbacks from relevant agencies and other relevant documents).
- Ten (10) sets of the proposed plan's executive summary report.
- Written comments from relevant agencies and local authorities
- Explanations, further opinions received from other agencies of concern.

Article 8. Appraisal, approval and issuance of the provincial solar power development plan.

1. Appraisal and submission of the Provincial Solar Power Development Plan for approval.

a) The Power and Renewable energy Agency is in charge of appraising the Master plan. If necessary, the Power and renewable energy Agency may engage consultants for investigating, defending for appraisal work;

b) Within five (05) working days from the date of receiving complete and eligible dossiers, the Power and renewable energy Agency shall send official request to relevant agencies and local authorities for their opinions on the contents of the Master plan (if needed);

c) Within fifteen (15) working days from the date of receiving aforementioned request, relevant agencies and local authorities shall provide their opinions in writings to the MOIT's competent unit assigned.

d) Within ten (10) working days from the date of receiving written feedbacks from relevant agencies and local authorities, the Power and renewable energy Agency shall complete and submit the appraisal report to the Minister of Industry and Trade for consideration and approval.

đ) In case of needs for supplementation and revision of the proposed Master plan (if any), within five (05) working days, the Power and renewable energy Agency shall send an official request to the Provincial People Committee asking the selected consulting firm to revise and supplement this master plan accordingly;

e) Within fifteen (15) working days from the date of receiving the complete Master plan, the Power and Renewable energy Agency shall finalize the appraisal report and submit to the Minister of Industry and Trade for approval;

2. The Provincial People Committee is in charge of issuing and publishing the Provincial solar power development plan on the Provincial electronic platform .

3. Budget for the appraisal and publication of the provincial solar power development plan shall be allocated in accordance with current regulations.

Article 9. Supplement and inclusion of solar power projects into the solar power development plan.

1. For solar power project which has not been included in one of these approved Master plans: provincial solar power development plan; national solar power development plan; provincial power development plan; national power development plan, the MOIT will consider, approve the supplement and inclusion of the solar power project which has the installed capacity less than or equal to 50MW; submit the dossier of the solar power plant which has the installed capacity greater than 50MW to the Prime Minister for approval.

2. Process and procedures for supplement and inclusion of solar power project into the provincial or national solar power development plan is similar to the process and procedures of supplement and inclusion of power project into the provincial or national power development plan

3. Beside content regulated for supplement and inclusion into the provincial or national power development plan, dossier of solar power project for supplement and inclusion into the provincial or national solar power development plan shall comprise of the followings:

a) Solar radiation potential at the project site;

b) Project description: location, scale and total construction areas, construction works belonging to the project; content of sectoral planning and provincial construction planning;

c) Necessity for project investment and construction, advantageous and disadvantageous conditions;

d) Preliminary implementation plan including: technical and technological plan and capacity; technical infrastructure connection; equipment installation plan; implementation workplan and project management type; general plan on compensation and rehabilitation and technical infrastructure construction support plan (if any);

d) Total investment capital of the project: capital arrangement plan, capital source and disbursement plan; economic and financial analysis, social impact of the project;

e) Basic information of the investor: legal status document; business registration, key human resource, project implementation plan, financial and technical capabilities including list of relevant implemented projects (consisting of industrial and power projects), if any.

Article 10. Grid-connected solar power project

1. Investors are eligible to develop solar power projects which have been included in the approved provincial/national solar power development plans and provincial/national power development plans.

2. The contents of a solar power investment project must comply with the current regulations on management of investment in construction works and the following requirements

a) Assessment of the impact of the grid connection plan of the project on the local power system;

b) Providing equipment connected to the SCADA or dispatching system in order to provide forecast information on generated electricity by hour to the Load Dispatch Center in charge of system dispatching ;

3. Equity ownership ratio of grid-connected solar power project can not be lower than 20% of the total investment capital

4. Long-term land use area must not exceed 1,2 ha/01 MWp

Article 11. Investment in solar rooftop projects.

1. For rooftop solar projects with capacity < 1 MWp

The investors register the connection with the provincial/ municipal power company the main information such as: planned capacity, technical specifications of the PV panels, the inverters. To ensure the safety of the power grid, the inverters must have anti-islanding function and fulfill technical requirements of voltage and frequency as current regulations..

2. For rooftop solar projects with capacity \geq 1 MWp, the investors shall implement the application procedure to have the projects included into the solar power development plan and power development plan in accordance with Article 9 of this Circular.

3. The provincial power company coordinate with the investor for the installation of the two-way meter and recording the monthly consumed and generated solar PV electricity. Cost of the two-way meter will be born by the Provincial power company

4. The solar rooftop projects shall apply the Standard Power Purchase Agreement as stipulated in the Annex 3 issued with this Circular.

Article 12. Revision of Point 1 Article 41 of Circular 39/2015/TT-BCT as below

1. Capacity connection

a) Total installed capacity of the solar power systems into the low voltage line of the low voltage transformers can not exceed the installed capacity of that transformer

b) Solar power system which has capacity below 03 kVA can connect to the one (01) phase or three (03) phases low voltage grid;

c) Solar power system which has capacity from equal to and above 03 kVA can connect to the three (03) phases low voltage grid

Article 13. Requirement on the electricity operation license

Grid-connected solar power projects, rooftop solar projects which has capacity equal to or above one (01) MW must be granted with the electricity operation license and comply with regulations of Circular 12/2017/TT-BCT dated July 31st, 2017 of the MOIT

Article 14. Requirements on construction safety and environmental protection

1. Investment in development of a solar power project must comply with current regulations and technical specifications on safety of construction works and environmental protection.

2. Electricity seller is responsible for dismantling of the construction work of the solar power project, returning the land after the completion of the project in accordance with current regulation and norms of construction work safety and environmental protection.

CHAPTER III

ELECTRICITY TARIFF FOR SOLAR POWER PROJECTS

Article 15. For grid connected solar power projects

1. The Electricity Purchaser shall be responsible for purchasing the entire electricity generated from grid-connected solar power projects with purchasing tariff at the point of delivery (excluding VAT) as regulated at Clause 1 Article 12 of Decision 11

2. The purchasing tariff stipulated as in Clause 1 is only applicable for solar power projects with commercially operational date before 30 June 2019 and within 20 years from the commercial operation date.

3. Solar power projects applying purchasing tariff regulated at clause 1 of this Article shall not be entitled to other price support mechanisms for electricity output of the projects as prescribed in other regulations.

4. The costs of purchasing power from solar power projects prescribed in clause 1 of this Article shall be fully calculated in input parameters of EVN's annual plan on power selling tariffs.

Article 16. For rooftop solar power projects

1. The rooftop solar power projects shall benefit net-metering mechanism by using bi-directional power meters. In a billing cycle, if the generated electricity is larger than consumption, it must be transferred to next cycle. At the end of the year or when the PPA is terminated, excessive generated electricity shall be sold to the Electricity Purchaser at tariff regulated at clause 2 of this article.

2. Purchasing tariff at the electricity delivery point (excluding VAT) is 2,086 VND/kWh (equivalent to 9.35 US cents/kWh according to the VND/USD central exchange rate published by the State Bank of Vietnam on April 10th 2017 being 22,316 VND/USD).

3. The purchasing tariff for next year will be adjusted in accordance with the VND/USD central exchange rate published by the State Bank of Vietnam of the last working day of the previous year.

4. The purchasing tariff stipulated as in Clause 2 and 3 is only applicable for rooftop solar power projects with commercially operational date before 30 June 2019 and within 20 years from the commercial operation date.

5. Solar power projects applying purchasing tariff regulated at clause 1 of this Article shall not be entitled to other price support mechanisms for electricity output of the projects as prescribed in other regulations.

6. The costs of purchasing power from solar power projects prescribed in clause 1 of this Article shall be fully calculated in input parameters of EVN's annual plan on power selling tariffs.

7. Regulations on tax and fees of rooftop solar power projects applying net-metering scheme is in accordance with guidance and instruction from the Ministry of Finance

CHAPTER IV

STANDARDIZED POWER PURCHASE AGREEMENT FOR SOLAR POWER PROJECTS

Article 17. Standardized Power Purchase Agreement (SPPA) for grid-connected solar power projects.

It is compulsory for grid-connected and rooftop solar power projects to apply the SPPA for power purchase between the electricity purchaser and seller.

Article 18. Contents of the Standardized Power Purchase Agreement for solar power projects

1. Contents of the Standardized Power Purchase Agreement for grid-connected solar power projects are stipulated in Appendix 2 issued with this Circular.

2. Contents of the Standardized Power Purchase Agreement for rooftop solar power projects are stipulated in Appendix 3 issued with this Circular. Standardized Power Purchase Agreement under Annex 3.1 is applicable to rooftop solar power project investors who are electricity consumers as household customers or non-household customer but **using single tariff meter**; Standardized Power Purchase Agreement under Annex 3.2 is applicable to rooftop solar power project investors who are electricity consumers as commercial or manufacturing customers applying electricity tariff in accordance with daily consuming time **and three-tariff meter**.

3. Electricity sellers and purchasers are permitted to supplement the contents of the SPPA to clarify each party's responsibilities and rights without changing the basic contents of the SPPA issued with this Circular.

CHAPTER V

ORGANIZATION OF IMPLEMENTATION

Article 19. Responsibilities of the State administrative agencies:

1. The Power and Renewable energy Agency is responsible for:

- a) Assisting the power Sellers and the Purchasers in dispute resolutions in regards to the Standardized Power Purchase Agreement upon request by either party.
- b) Dissemination, guidance and inspection of the implementation of this Circular.

2. The PPC is responsible for monitoring, supervising the investment of solar power projects in accordance with the approved provincial/national solar power development plan and in compliance with the provisions prescribed in this Circular.

Article 20. Responsibilities of relevant organizations and individuals

1. Vietnam Electricity Corporation (EVN) is responsible for :

a) To sufficiently calculate purchasing costs of electricity from solar power projects and integrate these costs as input parameters for EVN's annual plan on power selling tariffs to submit to competent authority for approval.

b) To issue administrative procedures on registering and receiving dossiers requesting for installation of rooftop solar power project; on accepting, signing of SPPA applicable to rooftop solar power projects;

c) To negotiate, sign and implement contract with the Electricity seller in accordance with the SPPA regulated at Article 18 and purchasing tariff applicable to rooftop solar power projects regulated at Clause 15, 16 of this Circular;

2. The Electricity seller's responsibilities:

a) To negotiate, enter into and implement a contract with the Electricity purchaser in accordance with the SPPA and electricity purchasing tariffs as prescribed in article 15, 16 of this Circular;

b) To install power reading meters which comply with current regulations for electricity billing purpose;

c) To comply with regulations issued by MOIT on operating and dispatching the power systems, the power transmission systems and the power distribution systems.

Article 21. Transitional provision

1. For solar power projects which have been put into commercial operation before June 1st, 2017, Electricity seller and purchaser are responsible for negotiating and signing the revised Annex in accordance with regulations of this Circular, which come into effect on June 1st, 2017.

2. In case the commercial operation dates (COD) of solar power projects are between June 1st, 2017 and the effective date of this Circular, these projects are entitled to sign the SPPA at the commencement date of the projects' COD.

Article 21. Enforcement effect

1. This Circular takes effect from/.../ 2017

2. In case of difficulties emerged during the implementation, the Power and Renewable energy Agency shall coordinate with relevant agencies and report to the MOIT for consideration, amendment and supplementation of this Circular./.

Recipients:

- Prime Minister, Deputy Prime Ministers;
- Office of Party Secretary General;
- Ministries, Ministerial-level agencies, Government agencies;
- People's Committees of provinces and state cities;
- Official Gazette;
- Website of the Government
- Website of the Department of Industry and Trade, Power and Renewable energy Agency
- Ministry of Justice (Department of Examination of Legal Normative Document)
- Departments of Industry and Trade of provinces and State cities;
- Vietnam Electricity
- Power corporations
- Archives: Secretariat, General Directorate of Energy, Legislation

THE MINISTER

Trần Tuấn Anh

GIZ translation - for reference only