MINISTRY OF INDUSTRY AND TRADE	SOCIALIST REPUBLIC OF VIETNAM
-------	Independence - Freedom - Happiness

No. 16/2017/TT-BCT	*Hanoi, September 12, 2017*

CIRCULAR

ON PROJECT DEVELOPMENT AND MODEL POWER PURCHASE AGREEMENTS APPLIED TO SOLAR POWER PROJECTS

Pursuant to the Law on Electricity No. 28/2004/QH11 dated December 03, 2004; Law on Amendments to certain articles of the Law on Electricity dated November 20, 2012;

Pursuant to the Government's Decree No. 98/2017/ND-CP dated August 18, 2017 on functions, tasks, power and organizational structure of the Ministry of Industry and Trade;

Pursuant to the Decision No. 11/2017/QD-TTg dated April 11, 2017 by the Prime Minister on mechanism for encouragement of solar power project development in Vietnam;

At the proposal of the Director of the General Directorate of Energy,

The Minister of Industry and Trade promulgates a Circular on project development and model Power Purchase Agreements applied to solar power projects.

Chapter I

GENERAL PROVISIONS

Article 1. Scope

This Circular deals with development of grid-connected photovoltaic (PV) power projects and the model Power Purchase Agreement (PPA) thereof, rooftop PV power projects and the PPA thereof.

Article 2. Regulated entities

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

Article 3. Definitions

1. "the buyer" is EVN or any of its authorized affiliate that is looking for purchasing electricity.

2. "the seller" is an entity having a license for generating electricity from grid-connected PV power plants; or entity executing a rooftop PV power project and wishing to provide excess electricity for the buyer.

3. “commercial operation date” means the day on which part of or the entire grid-connected PV power plant is able to sell electricity to the buyer and satisfies the following requirements: (i) the power plant has test run part of or the entire grid-connected PV power plant and point connecting equipment; (ii) the grid-connected PV power plant has obtained the license for generating electricity; (iii) the seller and the buyer has reached an agreement on gauges to make the payment.

4. “Wp, KWp, MWp" are units of direct current power of a photovoltaic panel that is manufactured with regulated standards and published by its manufacturer.

5. “theoretical solar power potential" means the solar power potential determined according to theoretical solar radiation.

6. “technical solar power potential" means the solar power potential that may be used for construction and execution of solar power projects based on technical conditions and state-of-the-art technology.

7. “economic solar power potential” means the solar power potential that may help to execute projects effectively and bring healthy profits to the investor.

Chapter II

SOLAR POWER PLANNING AND DEVELOPMENT

Article 4. National solar power development planning

The national solar power planning shall be made once and revised according to the national power planning The national solar power development planning shall be prepared, approved and published according to provisions of Article 5 of the Decision No. 11/2017/QD-TTg dated April 11, 2017 by the Prime Minister on mechanism for encouragement of solar power project development in Vietnam (hereinafter referred to as “Decision No. 11/2017/QD-TTg”).

Article 5. Provincial solar power development planning

The solar power development planning of provinces/central-affiliated cities (hereinafter referred to as "provincial solar power development planning") shall be made for any province having enormous solar power potential and made once and revised according to the provincial power planning. The provincial solar power development planning is the project to determine the total theoretical, technical and economic solar power potential, allocate solar potential in the province, in each investment period by 2020, for the vision by 2030. It shall be made once and revised at the same time with the provincial power planning.

Article 6. Contents of provincial solar power development planning

The provincial solar power development planning scheme (hereinafter referred to as “planning scheme") is provided in Appendix No. 1 attached hereto.

Article 7. Procedures for developing and submitting the provincial solar power planning

1. Detailed scheme and selection of consulting services

a) Based on the planned budget for planning preparation, each provincial Department of Industry and Trade shall make a detailed project, estimate funding and submitted it to the provincial People's Committee for approval;

b) The provincial Department of Industry and Trade shall assign qualified consulting organization(s) to prepare the planning on the basis of the scheme and cost estimate that have been approved and submit the planning to the provincial People's Committee for approval.

2. Making and submission of provincial solar power development planning

a) The selected consulting organization shall make the planning scheme according to the approved scheme and deadline;

b) In the course of making the planning scheme, the consulting organization shall make intermediary reports to send enquiry forms to relevant authorities and complete the planning scheme;

c) The provincial Department of Industry and Trade shall send enquiry forms to relevant authorities, power companies and regional power corporations involving in the planning scheme to obtain their comments. Within fifteen (15) days from the day receiving enquiry forms, the receiving organizations shall send their responses to the provincial Department of Industry and Trade and the consulting organization;

d) The provincial Department of Industry and Trade shall report the planning scheme to the provincial People's Committee for approval in order to report it to the Ministry of Industry and Trade;

dd) An application for the planning scheme of provincial solar power development planning sent to the Ministry of Industry and Trade shall include:

- A written approval of the planning made by the provincial People's Committee;

- Ten (10) physical copies of the planning scheme and one (1) CD/USB storing the report on planning scheme and attachments (Notes, appendices, data, figures, responses made by relevant authorities and other written references);

- Ten (10) copies of the brief report on the planning scheme;

- Written comments made by relevant authorities;

- A written explanation and responses provided by relevant authorities.

Article 8. Assessment, approval and publishing of information about provincial solar power development planning

1. Assessment and approval of provincial solar power development planning

a) The General Directorate of Energy shall process the planning scheme and may hire inspection consulting or opponent consulting services if necessary.

b) Within five (5) working days from the day on which the valid application is received, the General Directorate of Energy shall send enquiry forms to receiving organizations on the planning scheme (if required);

c) Receiving organizations shall send their responses to the General Directorate of Energy within fifteen (15) working days from the day on which enquiry forms on planning scheme are received;

d) Within ten (10) working days after receiving written responses sent by relevant authorities, the General Directorate of Energy shall complete the assessment report and submit it to the Minister of Industry and Trade;

dd) If there is any revision to the planning scheme, the General Directorate of Energy shall report such revision to the provincial People's Committee within five (5) working days;

e) Within ten (15) working days from the day on which the complete planning scheme is received, the General Directorate of Energy shall complete the assessment report and submit it to the Minister of Industry and Trade for approval.

2. The provincial People's Committee shall publish information about the provincial solar power development planning on its website.

3. Funding for assessment and publishing of information about provincial solar power development planning shall be provided in accordance with regulations of relevant law.

Article 9. Revision and inclusion of solar power projects to power development planning

1. If the solar power project has not included on the list of any of the approved planning such as provincial or national solar power development planning, provincial or national power development planning, the Minister of Industry and Trade shall consider approving addition to planning of the project with a capacity of 50 MW or under; or submit such addition to the Prime Minister for approval of the project with a capacity of over 50 MW.

2. Procedures for adding the solar power project to the provincial or national solar power development planning shall be carried out in line with procedures for addition of the project to the provincial or national power development planning.

3. Apart from provisions of additional documents on provincial or national power planning, the following details shall be added:

a) Solar radiation potential of the area where the project is located;

b) Project description: Location, scale and construction area of the work and its items of the project; local power planning and construction planning;

c) The importance of the project, advantages and disadvantages;

d) Preliminary measures including: Technical, technological and capacity plans; technical connection plan; equipment installation plan; execution progress and how to manage the project; general plan for compensation for relocation and plan for technical infrastructure construction support (if any);

dd) The total investment of the project; ability to provide capital, sources of capital and provide capital according to the progress; assessment and analysis of efficiency and social effects of the project;

e) General information about the investor: Documents on legal status, business registration certificate, key personnel, experience of project execution, financial and technological capacity together with the list of executed projects (including industrial projects and power projects) if any.

Article 10. Grid-connected PV power projects

1. The investor shall only invest in the solar power project included in any of the following approved planning: provincial or national solar power development planning; or provincial or national power development planning.

2. The content of the solar power project shall comply with regulations on investment management of construction works and include the following contents:

a) Influence of the plan for connecting solar power plan with the local power system;

b) Availability of devices connecting to the supervisory control and data acquisition (SCADA) system or moderate information to update moderation controllers on forecasts of hourly electricity generation.

3. The owner’s equity rate of grid-connected PV power projects shall be at least twenty percent (20 %) of the total investment.

4. The long-term area for use shall not exceed 1.2 ha/MWp.

Article 11. Rooftop PV power projects

1. Rooftop PV power projects having a capacity of under 1 (one) MW

The investor shall register the connecting terminal with a provincial power company and provide general information about expected capacity, specifications of solar panels and the power inverter. In order to ensure safety for the electricity grid system, the power inverter shall have the anti-grid function when the electricity grid has no power and meets the prescribed voltage and frequency standards.

2. In case of the rooftop PV power project having a capacity of 1 (one) MW or over, the investor shall follow procedures for inclusion of the solar power development planning in power development planning specified in Article 9 herein.

3. The provincial power company shall cooperate with the investor in installing two-way electric meters and record the monthly electricity consumed and generated. The cost of investing in two-way electric meters shall be covered by the provincial power company.

4. Rooftop PV power projects shall apply the model PPA provided in Appendix No. 3 attached hereto.

Article 12. Amendments to Clause 1 Article 41 of the Circular No. 39/2015/TT-BCT

"1. Connecting terminal capacity

a) Total installed capacity of the solar power systems connected to the low voltage level of the substation shall not exceed the installed capacity of such substation;

b) The solar power system having a capacity of less than 3 KWp shall be connected to the single-phase or three-phase low voltage electricity grid;

c) The solar power system having a capacity of 3 KWp or over shall be connected to the three-phase low voltage electricity grid."

Article 13. Required licenses for generating electricity

A grid-connected PV power project or rooftop PV power project having a capacity of 1 (one) MW or over must obtain the license for generating electricity and comply with the Circular No. 12/2017/TT-BCT dated July 31, 2017 by the Ministry of Industry and Trade.

Article 14. Required construction work and environmental safety

1. The investment in solar power projects shall comply with regulations on construction work and environmental safety.

2. The seller shall demolish and return the ground or clear the solar power plant after the solar power project ends according to regulations on construction work and environmental safety.

Chapter III

ELECTRICITY PRICING OF SOLAR POWER PROJECTS

Article 15. Electricity pricing of grid-connect PV power projects

1. The buyer shall purchase all electricity generated from the grid-connected PV power project at the selling price at the delivery point (VAT exclusive) according to provisions of Clause 1 Article 12 of the Decision No. 11.

2. The selling price mentioned in Clause 1 shall only apply to the grid-connected PV power plant whose commercial operation date starts before June 30, 2019 and shall apply for 20 years from the commercial operation date.

3. Solar power projects that already apply the electricity selling prices specified in Clause 1 this Article shall not receive subsidies for electricity generated by the projects according to other regulations.

4. The payments for electricity generated by the solar power projects specified in Clause 1 this Article shall be included in the input parameter of the annual electricity pricing plan of the EVN.

Article 16. Electricity pricing of rooftop PV power projects

1. Rooftop PV power projects shall apply the net-metering mechanism using the two-way electric meter system. In a billing cycle, if the amount of electricity generated from rooftop PV power projects is greater than the amount consumed, the excess amount shall be transferred to the next billing cycle. At the end of year or the termination of the PPA, the excess amount of generated electricity shall be sold to the buyer at the selling price specified in Clause 2 this Article.

2. The selling price of electricity at the place of electricity delivery (VAT exclusive) shall be VND 2,086/kWh (equivalent to U.S. cent 9.35/kWh, according to the central exchange rate of VND over USD quoted by the State Bank of Vietnam on April 10, 2017, which is VND 22,316/USD).

3. The electricity price of the following year shall be adjusted according to the central exchange rate of VND over USD quoted by the State Bank of Vietnam on the last working day of the previous year.

4. The selling price mentioned in Clauses 2 and 3 shall only apply to any rooftop PV power plant having the commercial operation date before June 30, 2019 and shall apply for 20 years from the commercial operation date.

5. Rooftop PV power projects that already apply the electricity selling prices specified in this Article shall not receive subsidies for electricity generated by the projects according to other regulations.

6. The payments for electricity generated by the rooftop PV power projects specified in this Article shall be included in the input parameter of the annual electricity pricing plan of the EVN.

7. Taxes and charges on rooftop PV power projects according to the net-metering mechanism shall be imposed applying guidelines of the Ministry of Finance.

Chapter IV

MODEL PPAS APPLIED TO SOLAR POWER PROJECTS

Article 17. Model PPAs applied to solar power projects

The seller and the buyer shall use the model PPA applied to the grid-connected PV power project or the rooftop PV power project when selling and purchasing electricity.

Article 18. Contents of model PPAs applied to solar power projects

1. The model PPA applied to the grid-connected PV power project is provided in Appendix No. 2 attached hereto.

2. The model PPA applied to the rooftop PV power project shall be made according to Appendix No. 3 attached hereto. The model PPA provided in Appendix No. 3.1 shall apply to the investor of the rooftop PV power project that uses electricity for domestic or non-domestic purposes with the single-price power meter; the model PPA provided in Appendix No. 3.2 shall apply to the investor of the rooftop PV power project that uses electricity for daily business purposes with the three-price power meter.

3. The seller and the buyer shall be entitled to add details to the model PPA to clarify rights and duties of both parties provided that the basic contents of the model PPAs attached hereto remain unchanged.

Chapter V

IMPLEMENTATION

Article 19. Duties of state authorities

1. Duties of the General Directorate of Energy

a) Assist the buyer and the seller in settling issues related to the model PPA at the request of either each party or both parties;

b) Disseminate, instruct and inspect the implementation of this Circular.

2. Provincial People's Committees shall monitor and supervise investment in local solar power projects according to provincial and national solar power development planning that has been approved and suitable for provisions stated herein.

Article 20. Duties of relevant organizations and individuals

1. Duties of the EVN

a) Include all payments for electricity generated by solar power projects and include input parameters in the plan for annual electricity pricing plan of the EVN and submit it to a competent authority for approval;

b) Issue procedures for registration and reception of applications for installation of rooftop PV power; procedures for commissioning and conclusion of the model PPA;

c) Negotiate, conclude and execute the agreement with the seller in accordance with the model PPA specified in Article 18 and the electricity selling price applied to solar power projects stipulated in Articles 15 and 16 herein;

d) Comply with regulations on the balance of power systems, power transmission and distribution systems promulgated by the Ministry of Industry and Trade.

2. Duties of the seller

a) Negotiate, conclude and execute the agreement with the buyer according to the model PPA specified in Article 18 and the electricity selling price applied to solar power projects prescribed in Articles 15 and 16 herein;

b) Install an electricity meter used for electricity bill payment;

c) Comply with regulations on the balance of power systems, power transmission and distribution systems promulgated by the Ministry of Industry and Trade.

Article 21. Transitional clause

1. The seller and the buyer shall negotiate and conclude an appendix of revisions specified herein as from June 01, 2017 in case of a solar power project that has been operated prior to June 01, 2017.

2. The solar power project having a commercial operation date from June 01, 2017 to the effective date of this Circular shall be executed according to the specimen PPA from the day on which the project is put into commercial operation.

Article 22. Effect

1. This Circular comes into force from October 26, 2017.

2. Any issues arising in the course of implementation shall be reported to the Minister of Industry and Trade by the General Directorate of Energy and relevant authorities.

MINISTER

Tran Tuan Anh

APPENDIX NO. 2

MODEL PPA APPLIED TO GRID-CONNECTED PV POWER PROJECTS
(Attached to the Circular No. 16/2017/TT-BCT dated September 12, 2017 by the Minister of Industry and Trade)

CONTENTS

MODEL POWER PURCHASE AGREEMENT

APPLIED TO THE GRID-CONNECTED PV POWER PROJECT

FOR

(Name of the project) SOLAR POWER PROJECT

BETWEEN

[NAME OF THE SELLER]

as "the Seller"

and

[NAME OF THE BUYER]

as "the Buyer"

(Attached to the Circular No. ...../2017/TT-BCT dated ....., 2017 by the Minister of Industry and Trade)

CONTENTS

SOCIALIST REPUBLIC OF VIETNAM
Independence - Freedom – Happiness

POWER PURCHASE AGREEMENT

Pursuant to the Law on Electricity dated December 03, 2004; Law on Amendments to certain articles of the Law on Electricity dated November 20, 2012;

Pursuant to the Commercial Law dated June 14, 2005;

Pursuant to the Decision No. 11/2017/QD-TTg dated April 11, 2017 by the Prime Minister on mechanism for encouragement of solar power project development in Vietnam;

Pursuant to the Circular No. …./2017/TT-BCT dated ……., 2017 by the Minister of Industry and Trade on the project development and the model Power Purchase Agreement applied to solar power projects;

Pursuant to demands for electricity purchase and sale of both parties,

Today, on (month, day, year) ....., at .....

We are:

The Seller: _____

Address: _____

Telephone: _____Fax: _____

Tax identification No.: _____

Account No.: _____ opened at Bank _____

Represented by: _____

Position: _____ (Authorized by _____ under the Power of Attorney No. _____ dated _____)

(hereinafter referred to as "**the Seller**"); and

The Buyer: _____

Address: _____

Telephone: _____Fax: _____

Tax identification No.: _____

Account No.: _____ opened at Bank _____

Represented by: _____

Position: _____ (Authorized by _____ under the Power of Attorney No. _____ dated _____)(hereinafter referred to as "**the Buyer**").

Both Parties agree to conclude the Power Purchase Agreement to sell and purchase electricity from the [name of the project] solar power plant having the total installed capacity of [capacity of the project] built and operated by the Seller at [location of the project] with the following terms and conditions:

Article 1. Definitions

For the purposes of this Agreement, the terms below shall be construed as follows:

1. **"Party or both Parties"** are the Seller or the Buyer or both Parties or the unit receiving the rights and obligations of one Party or Parties in this Agreement.

2. **"connecting terminal"** is the location where the line of the electricity Seller is connected to the power system of the electricity Buyer as agreed in Appendix A of this Agreement.

3. **"delivery point"** is the point where the metering equipment of sold power of the electricity Seller.

4. **"sold and purchased power"** is the power generated from the power plant under the possibly greatest generation capacity of the plant minus the power amount for self-use and the loss of power plant at the delivery point calculated by kWh and sold under agreement of the Seller and delivered to the Buyer in accordance with the provisions in Appendix B of this Agreement.

5. **"Agreement"** is comprised of this document and the accompanying Appendices.

6. **"Average inter-bank trading interest rate"** is the average *inter-bank* trading interest rate of 01-month term quoted by the State Bank of Vietnam at the time of payment.

7. **"agreementual year"** is the year calculated by solar year of 12 (twelve) months beginning from the first day of January and ending on the last day of December of such year, except in case for the first Agreementual year beginning from the date of commercial operation and ending on the last date of December of such year. The last Agreementual year ends on the last date of Agreement duration.

8. **"payment due date"** is the time limit of 15 (fifteen) days from the date the Buyer receives the Seller's voucher of electricity bill payment.

9. **"commercial operation date"** means the day on which the partial or entire grid-connected solar power plant is ready to sell electricity to the Buyer and meets the following requirements: (i) the power plant has completed conducting initial experiments on the partial or entire grid-connected solar power plant and connecting terminal equipment; (ii) the grid-connected solar power plant has obtained the license for generating electricity; (iii) both parties have taken the meter reading to make the payment.

10. **"power plant"** consists of all generating equipment, protective equipment, connecting equipment other relevant auxiliary equipment; land used for electricity works and ancillary works for power production under this Agreement of the Seller.

11. **"technical regulations and standards of electricity sector"** are regulations, standards and practices applied in electricity sector issued by the competent organizations of Vietnam or regulations and standards issued by the international organizations or the countries in the region consistent with regulations of law, proposals of equipment manufacturers taking into account the conditions of materials, resources, fuel and engineering acceptable for the electricity sector of Vietnam at the certain time.

12. **"regulations on national power system operation"** are the Circulars and Procedure providing for the standards of power system operation, conditions and procedures for connection to power grid, dispatch of operation of power system, power metering in the power distribution and transmission system.

13. **"case of emergency"** means a sudden event or situation that can disrupt the power supply services to the Buyer's customers, including the cases of causing major failure in the national power system which can threaten lives and assets or affect the technical capacity of power plant.

Article 2. Electricity delivery, sale and operation

1. Electricity delivery

a) From the commercial operation date, the Seller agrees to deliver and sell power to the Buyer and the Buyer agrees to buy the Seller's power in accordance with the provisions of this Agreement.

b) The Buyer shall purchase all electricity generated on the Buyer's grid at the buying price specified in Clause 2 of this Article.

c) The Seller shall enjoy the benefits related to the environment in accordance with regulations of law and international agreements.

2. Electricity selling price

a) The Buyer shall purchase all electricity generated from the grid-connected PV power project with the selling price on the date of electricity delivery (excluding VAT) according to provisions of Clause 1 Article 12 of the Decision No. 11.

b) The selling price mentioned in Section a) shall only apply to the grid-connected PV power plant whose commercial operation date starts before June 30, 2019 and shall apply for 20 years from the commercial operation date.

c) Solar power projects that already apply the electricity selling prices specified in Section a) shall not receive subsidies for electricity generated by the projects according to other regulations.

3. Electricity sale

The Seller agrees to operate the power plant with the available capacity of the equipment and in line with the technical regulations and standards of electricity sector. The Seller shall not have to take legal responsibility for the Buyer's direct damages because the Seller does not sufficiently supply the sold and purchased power in case of no fault of the Seller. Where there is no written consent of the Buyer but the Seller has reduced the sold and purchased power for the purpose of selling electricity to the third party or for other purposes without production of sold and purchased power, the Seller shall not be exempted from legal responsibility.

4. Operation plan

a) Before or on the date of performance of this Agreement, the Seller shall provide the Buyer with the chart of annual power generation capacity on the busbar of the plant by each month in line with the basic design of the power plant and provide the charts of generation capacity based on the biomass data of the previous years;

b) Before November 30 every year. The Seller shall provide the Buyer with the annual power production plan, including:

- Operation plan of months in a year (electricity and its available capacity);

- Maintenance and repair schedule of generating units in a year (if any).

c) The Seller shall provide information on maintenance and repair plan and generating unit mobilization plan for the unit dispatching the power system (at dispatching level having the authority to control) in accordance with regulation of law on operation of national power system.

5. Downtime

The Seller shall notify the Buyer of the estimated downtime schedule and downtime for scheduled or unscheduled repair according to regulations on the national power system operation.

6. Electricity grid operation

a) The Buyer and the Seller shall operate and maintain the power grid and the equipment connected to the power plant within the scope of asset management in accordance with the Regulation on distribution power grid and transmission power grid under the connection voltage level of the plant, the regulations and standards of electricity sector and Regulation on operation of power system to ensure the sale and purchase of power under the Agreement.

b) The Buyer shall discuss and reach an agreement with the Seller on balance of load and voltage stability for the distribution power grid to ensure the maximum load capacity of distribution power grid and transmission power grid.

7. Disruption in electricity receipt and purchase

The Buyer shall not have to fulfill its obligations or receive the power in the following cases:

a) The Seller's power plant has been operated and maintained not in accordance with regulations on operation of national power system and regulations and standards of electricity sector;

b) During the time the Buyer installs the equipment, repair, replace, assess or test the power grid directly related to the connection of the Seller's power plant;

c) The transmission or distribution power grid connected to the Buyer's power grid with breakdown or the equipment of power grid directly connected to the Buyer's transmission or distribution power grid with breakdown;

d) d) The Buyer's power grid needs to be supported for restoration after the breakdown in accordance with regulations on operation of national power system and regulations and standards of electricity sector.

8. Disruption in electricity delivery and sale

The Seller can stop or reduce the power amount sold and delivered to the Buyer in case of installation of equipment, repair, replacement, assessment, inspection or repair of power plant that affect directly the power delivery to the Buyer.

Before stopping or reducing the amount of power delivered to the Buyer, the Seller shall give a notice the Buyer 10 (ten) days in advance. In this notice, there shall be the reason, estimated starting time and disrupting time of power delivery.

9. Cooperation

The Buyer shall minimize the time to reduce or stop the receipt of power in cases specified in Clause 7 of this Article. Except for emergency cases, when temporarily reducing or stopping the receipt of power, the Buyer shall give a notice the Seller 10 (ten) days in advance, stating the reasons and expected starting time and disruption time. In case of necessity, the Buyer shall transfer the dispatching orders on operation received from the power system dispatching system related to the plant operation to the Seller and the Seller shall follow such orders, except that they change the mobilization characteristics of the plant.

10. Capacity coefficient

The Seller agrees to operate the power plant in synchronization with the Buyer's power grid to deliver power at the delivery point, at the voltage level and capacity coefficient from 0.85 (corresponding to the reactive power) to 0.90 (corresponding to the reactive power) as specified in Appendix A. The Seller's power plant shall be operated with the defined capacity coefficient under the regulations on distribution power grid at the delivery point to the Buyer.

11. Synchronous operation

The Seller shall inform the Buyer in writing at least thirty (30) days before the first synchronization of generating units in the Seller's power plants to the Buyer's power grid. The Seller shall cooperate with the Buyer in the first synchronization and the subsequent synchronizations.

12. Standards

The Seller and the Buyer shall comply with regulations on electricity delivery and receipt under regulations on distribution grids and regulations on electricity metering and other legislative documents related to the electricity sector.

13. Change of the commercial operation date

From 06 (six) months to 12 (twelve) months before the commercial operation day specified in Appendix A, the Seller shall officially confirm the change of commercial operation day. The Parties shall cooperate with each other and the Buyer shall not make refusal if having plausible reasons.

Article 3. Connection, metering and operation of the power plant

1. Responsibility at the delivery point

The Seller shall invest and install the equipment for transmission and delivery of power to the Buyer at the delivery point. The Buyer shall coordinate with the Seller to carry out this installation.

2. Connection

a) The Seller shall invest, build, operate and maintain the connecting equipment for connecting the plant with the transmission or distribution power grid in accordance with regulation on transmission or distribution power grid and other relevant regulations. The Seller shall bear all costs of upgrading the metering system at the substation specified in Appendix A of this Agreement.

b) The Buyer has the right to review the design and verify the completeness of protective equipment. The Buyer has the right to review the design and verify the completeness of protective equipment. The Buyer shall inform the Seller of the written assessment result within 30 (thirty) days) after receiving all technical documents related to the design. The Buyer shall inform in writing all design errors found. The Seller shall carry out all modifications and addition proposed by the Buyer in accordance with the regulations of law on operation of national power system and the technical regulations and standards of electricity sector.

3. Connection standards

The equipment of the Seller and the Buyer shall be installed, operated and connected under the Regulation on distribution power grid.

4. Inspection of implementation of connection standards

When there is a prescribed prior notice, each party has the right to inspect the connecting equipment of the other party to ensure the compliance with regulations of law on operation of national power system. This inspection does not affect the activities of the inspected party. Where the inspected party's equipment does not meet the operation and maintenance conditions, the inspecting party shall inform the inspected party of the points to be calibrated. The inspected party shall take the necessary remedial measures upon requirement for reasonable correction from the inspecting party.

5. Metering

a) The seller's responsibilities:

- Install and maintain the main and backup metering equipment used to meter the power and make invoice;

- Provide the location to install the metering equipment if such location is in the power plant.

b) Requirements for metering equipment:

- In accordance with the regulations on metering and other relevant regulations;

- Being able to store and record the active and reactive power under two ways;

- Being able to transmit data to locations as required by the Buyer;

- Being sealed with lead and able to record and store large data.

6. Record of the meter reading

Each month (or according to the metering cycle agreed by both party), the Buyer and the Seller shall take the meter reading simultaneously.

After having informed, the Buyer goes into the power plant or the place installed with metering equipment to take the meter reading, check the meter and do other activities related to the fulfillment of obligations under this Agreement. The Buyer's entering the plant shall ensure no effect on the Seller's normal operation. Electricity employees or inspectors appointed by the Buyer shall comply with the safety regulations and rules of the plant upon entering the plant.

7. Inspection of metering equipment

a) The testing and inspection of metering equipment or confirmation of precision of metering equipment shall be done under the regulations on power metering by the competent or authorized organization. Inspection shall be carried out before using metering equipment for the first time to record electrical engineer for sale generated by the power plant. All metering equipment shall be sealed with lead and locked after inspection and the Buyer has the right to witness this process.

b) All metering equipment of sale power of power plant shall be inspected annually in accordance with regulation on electricity metering. In case of necessity, either party can recommend the inspection of precision of any metering equipment and the inspection costs shall be paid by the recommending party. The result of inspection of metering equipment shall be informed to the other party upon requirement. Where the metering equipment has the error greater than the permitted limit in metering regulations, the Seller shall correct or replace and return the excessive paid amount to the Buyer plus the interest of the excessive paid amount based on the basic interest and cost of inspection of power metering. Each party shall be informed in advance and shall appoint its employee to participate in the unsealing and inspection and seal with lead the meter. Where one party the meter is broken down or is not active, such party shall inform the other party immediately and the party having the meter shall test and repair it.

8. Transfer of electricity ownership

At the power delivery point, the electricity ownership shall be transferred from the Seller to the Buyer. At this point, the Buyer has the right to own, control and take responsibility for the amount of power received. The power is transmitted by the 3-phase alternating current *50Hz with the voltage level specified in* Appendix A of this Agreement.

9. Operation of the power plant

The Seller shall operate the power plant in accordance with the Regulation on distribution power grid, the Regulation of electricity sector and other relevant regulations.

Article 4. Billing and payment

1. Billing

Each month (or according to the metering cycle agreed on by both party), the Buyer and the Seller shall read the meter simultaneously on the agreed date to define the amount of power delivered and received in a month. The Seller shall take the meter readings under the prescribed form with confirmation of the Buyer's representative and send the result of meter reading in writing (or by fax with later official letter or the copy sent by mail) to the Buyer within 10 (ten) working days after taking the meter reading.

2. Payment

a) The Buyer shall make payment of electricity bill to the Seller no later than the due date of payment specified in Clause 9 Article 1 and according to the selling price mentioned in Clause 2 Article 2 of this Agreement.

b) Where the Buyer does not make payment within the above time limit, it shall pay the interest of late payment penalty for all amount of late payment. The interest of late payment penalty is calculated by the *average inter-bank* trading interest rate of 01-month term calculated from the date after the date of due payment.

c) Where the Buyer does not read the meter simultaneously as stipulated in Clause 1 of this Article, the Buyer still have fulfill its payment obligations to the Seller of the amount of power delivered.

d) The Seller shall make payments to the Buyer for the distribution electricity price stated in the Agreement (if any).

3. Estimation of amount of power sold

Where there is no necessary data to define the amount of power or the payment owed by the Buyer to the Seller, except for the cases specified in Clause 4 of this Article, the Seller shall estimate such data and modify the payment in line with the reality in the subsequent payment times.

4. Order of application and replacement of meter readings

To define the amount of power the Buyer has received and accepted in a payment period, the taking of meter readings, making of invoice and payment shall be based on the estimated data as follows:

a) The readings of main meter in the power plant in the payment period shall have the correct level in accordance with the provisions in Clause 8 Article 3 of this Agreement;

b) The readings of backup meter in the power plant when the backup meter is used to meter the amount of power delivered shall have the correct level in accordance with the provisions in Clause 8 Article 3 of this Agreement;

c) When all meters do not record the correct amount of electricity delivered and received, it is required to estimate the electricity delivered and received according to the monthly medium data (if any) of the power plant in the same payment period of the year preceding the Agreementual year and shall reasonably adjusted for the stage of making of invoice according to the data available affecting the power generation of power plant such as parameter of biomass, performance of generating unit, number of operational hours, operational time of generating unit and self-used amount of power (generally called "operational parameters") during the time of breakdown of meter.

When there is not reliable data, it is required to estimated the amount of power delivered and received according to the average monthly amount of power of the power plant of 06 (six) payment period right before the breakdown of meter (or less if the power plant has not yet been operated for 06 (six) months and shall be modified according to the downtime or operational parameters.

5. Invoice dispute

a) Where one party does not agree with the whole or avoidable cost tariff part of invoice about the electricity or the paid amount, such party has the right to give avoidable cost tariff written notice to the other party before the date of due payment. After receiving the notice but the Parties fail to reach an agreement, the duration for one or both parties to lodge their dispute is 01 (one) year after the Buyer receives the valid invoice.

b) Where the settlement of dispute is in accordance with the provisions in Clauses 1 and 2 Article 8 of this Agreement and the Seller win in a dispute, the Buyer shall make payment of amount in dispute plus the interest calculated at the base interest rate with monthly compound interest from the date of due payment to the date of payment of amount in dispute. If the Buyer is right, the Seller shall return the amount in dispute received plus the interest calculated at the base rate, monthly compound interest from the date of receiving the payment to the date of payment of amount in dispute. All payments in this item shall be made within 15 (fifteen) days from the date of final decision on Dispute resolution in accordance with the provisions of Article 8 of this Agreement.

Article 5. Force majeure events

1. Force majeure events

Force majeure events are unexpected irreparable circumstances regardless of remedial measures and ability taken, including:

a) Natural disaster, fire, explosion, flood, tsunami, epidemic or earthquake;

b) Riot, rebel, war, protest, sabotage, embargo, siege, blockade, any act of war or community hostility whether the war has been declared or not.

2. Actions against force majeure events

In case of a force majeure event, the party invoking the force majeure event shall:

a) Quickly send the written notice to the other party of the force majeure event stating the reasons and presenting evidence demonstrating the force majeure event and giving out the estimated time and the impact of force majeure event on the ability to fulfill its obligations;

b) Make the best efforts to fulfill obligations under the Agreement;

c) Quickly take necessary acts to take actions against the force majeure event and provide evidence to demonstrate the reasonable effort to take remedial measures for the force majeure event;

d) Take necessary measures to minimize harm to the parties in the Agreement;

dd) Quickly give notice to all parties of termination of force majeure event.

3. Consequence of force majeure events

Where after taking all measures specified in Clause 2 of this Article but failing to fulfill one part or the whole of its obligations under this Agreement due to the force majeure event, the breaching party shall be exempted from the responsibility related to the failure to fulfill its obligations under the Agreement due to the force majeure event.

4. Duration of force majeure events

If due to the force majeure event and either party fails to fulfill its obligations under its obligations under this Agreement within 01 (one) year, the other party has the right to unilaterally terminate the Agreement after 60 (sixty) days from the date of giving the written notice, except that such obligations are fulfilled within 60 days mentioned above.

Article 6. Term of the Agreement

This Agreement shall comes into force from the day on which authorized representatives of Parties officially conclude and terminate after 20 (twenty) years from the commercial operation date, unless it is granted extension or terminated before the Agreement term as mentioned in provisions of the Agreement. After the termination of the Agreement, the contents of this Agreement continues to be valid for a period of time necessary for the parties that are obliged to continue to make the invoice for the last time; modify invoice, make payment and complete their rights and obligations under this Agreement.

Article 7. Breach of agreement, indemnification and termination of the Agreement

1. The Seller's acts of breach of Agreement

a) The Seller fails to implement the date of commercial operation as specified in Appendix A within 03 (three) months, except for the force majeure event;

b) The Seller fails to implement or follow the contents of Agreement within 60 (sixty) days after receiving the Buyer's written notice.

Where the Seller or the Seller's lending Party has tried to take remedial measures for its acts of breach within 60 (sixty) days mentioned above but such measures are not able to be

completed within such duration, the Seller or the Seller's lending Party may extend the duration of remedial measures to a maximum of 01 (one) year from the date of written notice of the Seller's acts of breach. The Seller shall continue to complete its remedial measures for breach in the shortest possible time, except for the cases specified in Article 5 of this Agreement;

c) The Seller denies the validity of a part or the entire Agreement;

d) The Seller breaches the Seller's commitments under Article 11 of this Agreement.

2. The Buyer's acts of breach of Agreement

a) The Buyer fails to implement or follow the contents of Agreement within 60 (sixty) days after receiving the Seller's written notice.

Where the Buyer or the Buyer's lending Party has tried to take remedial measures for its acts of breach within 60 (sixty) days mentioned above but such measures are not able to be completed within such duration, the Buyer or the Buyer's lending Party may extend the duration of remedial measures to a maximum of 01 (one) year from the date of written notice of the Buyer's acts of breach. The Buyer shall continue to complete its remedial measures of breach in the shortest possible time, except for the cases specified in Article 5 of this Agreement;

b) The Buyer fails to make the non-dispute payment under the Agreement when due and such failure of payment continues to last over 90 (ninety) days without plausible reasons;

c) The Buyer denies the validity of part of or the entire Agreement;

d) The Buyer breaches the Buyer's commitments under Article 10 of this Agreement.

3. Procedures for remedial measures and actions against Agreement breach

In case of breach of Agreement, the aggrieved party shall send a written notice to the violating party which shall cooperate in settle the breach of Agreement.

4. Indemnification

a) The violating party shall indemnify for acts of breach of Agreement that caused damage to the aggrieved party. The indemnification value shall include the actual and direct value of loss which the aggrieved party shall suffer caused by the offending party and the direct benefits which the aggrieved party shall receive in case of no act of breach;

b) The aggrieved party shall demonstrate its loss and loss degree due to the acts of breach and the direct benefits which the aggrieved party should have received if there were not the acts of breach.

5. Suspension of Agreement performance

Where the breach of Agreement cannot be solved under Clause 4 of this Article, the aggrieved party may continue to require the violating party to take actions against such acts

of breach or may suspend the Agreement performance by sending a notice to the violating party. After the aggrieved party chooses to suspend the Agreement performance according to the conditions of this Agreement, the parties shall not have to fulfill their Agreement obligations, except for cases specified in Clause 1 of this Article and the aggrieved party has the right to require the violating party to make indemnification.

Where the Seller is the aggrieved party and chooses to suspend the Agreement performance, the value of indemnification is calculated by the value of electricity actually generated of the Seller during a period of one year earlier by the time of suspension of Agreement performance.

Article 8. Dispute settlement

1. Dispute settled by negotiation

Where there is any dispute between the parties in this Agreement, the party lodging the dispute shall inform the other party in writing of the contents of dispute and requirements within the prescribed statute of limitations. The parties shall negotiate and settle their dispute within 60 (sixty) days after receiving the notice from the party lodging the dispute. The dispute related to payment of electricity bills shall be settled within 15 (fifteen) days after receiving the notice from the party lodging the dispute.

In case of failure to reach an agreement as defined above, the parties have the right to send a written request to the General Directorate of Energy for assistance to resolve the problems.

This mechanism of dispute resolution is not applicable to the disputes which are not generated directly from this Agreement between a party in the Agreement and a third party.

2. Dispute settled according to regulations of law

Where the disputes cannot be resolved through negotiation or mediation in accordance with the provisions in Clause 1 of this Article or one of the parties fail to comply with the result of negotiation or mediation, one or the parties may require the resolution of dispute in accordance with the provisions in Circular No. 40/2010/TT-BCT dated December 13, 2010 of the Minister of Industry and Trade defining the order and procedures for dispute settlement in the electricity market or another dispute resolution body selected by both parties for their dispute resolution in accordance with the relevant regulations of law.

Article 9. Trust, transfer and restructuring

1. Trust and transfer

Where this Agreement is entrusted or transferred for performance, regulations on rights and obligations stated in this Agreement shall continue to be valid to the legal representative or authorized representative of the parties.

Where the Seller transfers or entrusts the Agreement performance, it shall obtain the Buyer's written approval. If the entrusted part of the Seller has the value equivalent to the value of equipment which can be operated, it is the valid trust under this Agreement.

The entrusting or transferring party shall inform in writing immediately the other party of the trust or transfer.

2. Restructuring

Where the restructuring of electricity sector affects the Seller or the Buyer's rights and obligations in this Agreement, the performance of Agreement shall be transferred to the receiving units. The Buyer shall certify and ensure in writing concerning the units' receiving the fulfillment of obligations of power purchase or distribution and other interests and obligations under this Agreement.

3. Chosen participation in electricity market

The Seller has the right to choose to participate in the electricity market in accordance with the regulations on competitive electricity market. In this case, the Seller shall inform in writing 120 (one hundred and twenty) days in advance to the Buyer, the Electricity Regulatory Authority and unilaterally terminates the Agreement after completing the prescribed notification obligations.

Article 10. Other agreements

1. Revision to the Agreement

Revision and inclusion of this Agreement shall be made in writing agreed on by both Parties according to the Circular No. ..../2017/TT-BCT dated …….., 2017 by the Minister of Industry and Trade on the project development and the model PPAs applying to solar power projects.

2. Cooperation responsibility

The Seller is obliged to implement the legal procedures related to the power plant. The Buyer shall cooperate with the Seller to have the necessary permit, approval and permission from the competent state authorities related to the location of the plant, fuel and control of natural resources, investment, transmission or electricity sale, possession and operation of power plant, including the additional documents or archived documents and perform other necessary and reasonable activities to implement the agreements of the Parties.

3. Applicable law

Interpretation and performance of this Agreement shall comply with regulations of Vietnam law.

4. Waiver of rights

Failure to exercise the Parties' rights under this Agreement at any time shall not affect the exercise of rights under the Agreement later. The parties have agreed that the statement of failure to exercise the rights of one party for any commitment or condition under the Agreement or any breach of Agreement shall not be deemed that such party waives the similar rights later.

5. Independence of contents of the Agreement

Where there is any content in this Agreement said to be inconsistent with the regulations of law or invalid as judged by the Court, the other contents of Agreement remain valid, if the remaining parts reflect all contents without need of invalidated part.

6. Notices

All notices, invoices or other necessary information discussions during the performance of Agreement shall specify the date of preparation and relation to the Agreement and shall be made in writing and sent by fax or postal services. If sent by fax, the original shall be sent later by the postal services with prepaid postage. The notices, invoices or other information discussions shall be sent to the following addresses:

a) The Seller: General Director, _____, _____

_____, _____, Vietnam;

b) The Buyer: _____,

_____, _____, Vietnam;

c) In notices, the Parties may specify the address of another sender or recipient in the form specified in this Clause.

d) Each notice, invoice or information discussion sent by mail, delivered and transmitted by the above ways shall be deemed as delivered and received at the time it is delivered to the receiver's address or at the time of refused receipt by the recipient at the above address.

7. Confidentiality

The Buyer agrees to keep the information of plant confidential specified in the Appendix of Agreement, except that such information has announced before by the Seller or the General Directorate of Energy.

8. Complete Agreement

This Agreement is the last complete agreement reached by contracting Parties and replaces negotiated contents, information and correspondence that are related to this Agreement before it is concluded.

9. Clearance and return of the ground

The seller shall demolish or return the ground or clear the solar power plant after the solar power project ends according to regulations on construction work and environmental safety.

Article 11. Commitments to performance

Both Parties shall commit to execute this Agreement as follows:

1. Each Party shall be legally established to run their business in Vietnam.

2. Conclusion and performance of this Agreement shall be carried out by both Parties under requirements and contents of the license for generating electricity granted by the competent authority and regulations of relevant law.

3. Either Party shall not have any legal or administrative act that obstructs or affects the other Party's performance.

4. Conclusion and performance of this Agreement carried out by either Party shall not violate any provisions or part of a document of another agreement to which such Party is a party.

This Agreement is made into 10 (ten) copies and 4 appendices attached hereto with the same validity and being an integral part of this Agreement. Each Party shall keep 4 (four) copies, the Seller shall send 1 (one) copy of the PPA to the General Directorate of Energy and the remaining copy to the Electricity Regulatory Authority of Vietnam.

FOR THE SELLER	FOR THE BUYER
(Position)	*(Position)*
(Signature and seal)	*(Signature and seal)*
(Full name)	*(Full name)*

APPENDIX A

AGREEMENT ON THE CONNECTING TERMINAL SYSTEM
(Applied separately to each project based on specifications of the project, including single-line diagrams of connecting terminal equipment, lists of characteristics of metering systems, voltage and connecting terminal requirements)

APPENDIX B

SPECIFICATIONS OF THE POWER PLANT

Part A. General specifications

1. Name of the power plant: .....

2. Location: .....

3. Rated capacity: .....

4. Capacity sold to the Buyer: min ..... kW; max .....

5. Capacity used by the power plant: min ..... kW; max .....

6. Expected produced energy/year: .....kW

7. Completion date of construction: .....

8. Expected commercial operation date: .....

9. Voltage generated on distribution grids: V

10. Terminals connected to distribution grids: .....

11. Location to install metering equipment: .....

Part B. Operating parameters of specific technologies

1. Type of panel: .....

2. Electricity generating technology: .....

3. Operating design characteristics: .....

APPENDIX C

REQUIREMENTS PRIOR TO THE COMMERCIAL OPERATION DATE
(Commitments to the commercial operation date, agreements on testing procedures, commissioning and put the plant into operation, etc.)

APPENDIX D

OTHER AGREEMENTS

APPENDIX NO. 3

MODEL PPA APPLIED TO ROOFTOP PV POWER PROJECTS
(Attached to the Circular No. 16/2017/TT-BCT dated September 12, 2017 by the Minister of Industry and Trade)

APPENDIX NO. 3.1

ROOFTOP PV POWER PURCHASE
(Attached to the Power Purchase Agreement No. … dated ……., 20… between

(name of the power company) ….. and ….
for domestic or non-domestic purposes applying one-price electric meters)

Pursuant to the Decision No. 11/2017/QD-TTg dated April 11, 2017 by the Prime Minister on mechanism for encouragement of solar power project development in Vietnam;

Pursuant to demands for electricity purchase and sale of both parties,

Today, on (month, day, year) ....., at .....

We are:

Party A (the power company): _____

Address: _____

ID card/passport No. ..... Date of issue: ..... Place of issue: .....; Email: ..... Telephone: _____ Fax: _____

Tax identification No.: _____

Account No.: _____ opened at Bank _____

_____

Represented by: _____

Position: _____ (Authorized by _____ under the Power of Attorney No. _____ dated _____)

Party B (the investor of the rooftop PV power project): _____

Address: _____

Telephone: _____Fax: _____

Tax identification No.: _____

Account No.: _____ opened at Bank _____

_____

Represented by: _____

Position: _____ (Authorized by _____ under the Power of Attorney No. _____ dated _____)

Both Parties agree to conclude the Appendix of the Power Purchase Agreement (PPA) to sell and purchase rooftop PV solar power according to the net-metering mechanism using two-way electric meter system with the following contents:

Article 1. Net-metering mechanism

1. Electricity calculated in the t^{th} electric meter recording cycle:

a) In the cycle for recording the electric meter, if electricity generated from the rooftop PV power project executed by Party B plus excess electricity in the previous $(t-1)^{th}$ cycle is less than electricity consumed in tth Party B's cycle, the electricity used to pay electricity bills of Party B shall be determined as follows:

$$SL_t = SL_{TTt} - SL_{MTt} - DSL_{t-1}$$

In which:

SL_{TTt}: Electricity consumed in the cycle t by Party B (kWh);

SL_{MTt}: Electricity transmitted to the grid in the cycle t by Party B (kWh);

DSL_{t-1}: Excess electricity generated in the cycle t-1;

t: Electric meter recording cycle.

b) In the cycle for recording the electric meter, if electricity generated from the rooftop PV power project executed by Party B plus excess electricity in the previous $((t-1)^{th})$ cycle is more than electricity consumed in t^{th} Party B's cycle, the excess electricity generated in the t^{th} electric meter recording cycle shall be determined as follows:

$$DSL_t = SL_{MTt} + DSL_{t-1} - SL_{TTt}$$

2. Electricity bills (VAT exclusive)/electric meter recording cycle t determined according to the electricity calculated to pay in such cycle in accordance with provisions of Clause 1 with the corresponding electricity selling price shall be determined as follows:

/

In which:

/: Electricity retail price regulated by a competent state authority (VND/kWh);

3. Periodically, within 3 working days from the day on which the electric meter recording cycle ends, both parties shall and record and ensure the consistency of the electricity consumed, transmitted to the grid and excess electricity to Party B in each cycle as follows:

No.	Excess electricity generate by	Electricity consumed by Party B in	Electricity transmitted to the grid by	Excess electricity generate by

	Party B in the previous cycle (t-1) ($DSL_{k,t-1}$)	the cycle t ($SL_{TTk,t}$)	Party B in the cycle t ($SL_{MTk,t}$)	Party B in the cycle t ($DSL_{k,t}$)
(1)	**(2)**	**(3)**	**(4)**	**(5)=(4)+(2)-(3); (5) > 0**
1				
2				

4. When the last electric meter recording cycle ends at the end of year or the PPA terminates, excess electricity generated shall be paid in line with the price specified in Clause 1 Article 12 of the Decision No. 11/2017/QD-TTg.

Article 2. Rights and obligations of Party A

- Install two-way electric meters (for delivery and receipt) to calculate electricity consumed and transmitted to the grid by Party B (unless otherwise agreed on by both parties).

- Cooperate with Party B in recording, ensuring the consistency and following the electricity consumed, transmitted to the grid and excess electricity generated and electricity generation revenue earned by Party B in each cycle.

- When the last electric meter recording cycle ends at the end of year or the PPA terminates, Party A shall calculate excess electricity generated and make payments to Party B in line with the price specified in Clause 1 Article 12 of the Decision No. 11/2017/QD-TTg. Within 5 working days from the day on which both parties consent and sign to confirm the electricity consumed, transmitted to the grid in the cycle and excess electricity generated stipulated in Section 3 Article 1.

Article 3. Rights and obligations of Party B

- Comply with technical regulations on solar power; control the electrical energy quality according to provisions of Clause 1 Article 15 of the Decree No. 137/2013/ND-CP; Articles 40 and 41 of the Circular No. 39/2015/TT-BCT or amended or replaced documents, unless otherwise agreed on by both parties.

- Cooperate with Party A in recording, ensuring the consistency and following the electricity consumed, transmitted to the grid, excess electricity generated and revenue earned from electricity generation by Party B.

Article 4. Other agreements

……

Article 5. Implementation provisions

1. In addition to the above-mentioned articles, other contents in the PPA used for domestic purposes dated ....., 20... between (name of the power company) ..... and …… shall remain unchanged.

2. This Appendix enters into force from (month, day, year) ..... and is an integral part of the PPA used for domestic purposes dated ....., 20... between (name of the power company) ..... and …….

3. Either party that wishes to terminate such Appendix or make any revision to its terms during the execution shall notify the other party 15 days in advance.

Party B	**Party A**
(Signature and full name)	*(Signature, full name and seal)*

APPENDIX A

REQUIREMENTS FOR INSTALLED CAPACITY AND SPECIFICATIONS OF ELECTRIC METERS AND ROOFTOP PV POWER PURCHASE

(Attached to the Power Purchase Agreement for domestic, public service and business purposes applying one-price electric meters)

1. Total installed capacity …….. MW

If the total installed capacity is under 1 MW, the investor of the rooftop PV power project shall re-sign Appendix A of this Agreement with the power company.

If the total installed capacity is 1 MW or over, the investor of the rooftop PV power project shall follow procedures for changing the capacity scale according to provisions of Clause 2 Article 11 herein and re-sign Appendix A of this Agreement with the power company.

2. Requirements for specifications of electric meters

APPENDIX B

DELIVERED ELECTRICITY METERED BY THE ELECTRIC METER FROM THE ROOFTOP PV POWER PROJECT TABLE

Unit: kWh

No.	**Excess electricity generate by Party B in the previous cycle (t-1) ($DSL_{k,t-1}$)**	**Electricity consumed by Party B in the cycle t ($SL_{TTk,t}$)**	**Electricity transmitted to the grid in the cycle t (SL. $_{MTk,t}$)**	**Excess electricity generate by Party B in the cycle t ($DSL_{k,t}$)**
(1)	**(2)**	**(3)**	**(4)**	**(5)=(4)+(2)-(3);**

				(5) > 0
1st cycle				
…				
…				
nth cycle				
Annual financial statement				

Party B	**Party A**
(Signature and full name)	*(Signature and full name)*

APPENDIX NO. 3.2

ROOFTOP PV POWER PURCHASE

(Attached to the Power Purchase Agreement No. … dated ……., 20… between (name of the power company) ….. and ….
for business purposes applying the electricity price according to the daily use with three-price electric meters)

Pursuant to the Decision No. 11/2017/QD-TTg dated April 11, 2017 by the Prime Minister on mechanism for encouragement of solar power project development in Vietnam;

Pursuant to demands for electricity purchase and sale of both parties,

Today, on (month, day, year) ....., at .....

We are:

Party A (the power company): _____

Address: _____

ID card/passport No. ..... Date of issue: ..... Place of issue: .....; Email: .....

Telephone: _____Fax: _____

Tax identification No.: _____

Account No.: _____ opened at Bank _____

_____

Represented by: _____

Position: _____ (Authorized by _____ under the Power of Attorney No. _____ dated _____)

Party B (the investor of the rooftop PV power project): _____

Address: _____

Telephone: _____Fax: _____

Tax identification No.: _____

Account No.: _____ opened at Bank _____

_____

Represented by: _____

Position: _____ (Authorized by _____ under the Power of Attorney No. _____ dated _____)

Both Parties agree to conclude the Appendix of the Power Purchase Agreement (PPA) to sell and purchase rooftop PV solar power according to the net-metering mechanism using two-way electric meter system with the following contents:

Article 1. Net-metering mechanism

1. Electricity calculated in the t^{th} electric meter recording cycle:

a) In the cycle for recording the electric meter, if electricity generated from the rooftop PV power project executed by Party B plus excess electricity in the previous $(t-1)^{th}$ cycle is less than electricity consumed in t^{th} Party B's cycle, the electricity to pay electricity bills to Party B shall be determined as follows:

$$DSL_{k,t} = SL_{TTk,t} - SL_{MTk,t} - DSL_{k,t-1}$$

In which:

$SL_{TTk,t}$: Electricity consumed at hour k in cycle t by Party B (kWh);

$SL_{MTk,t}$: Electricity transmitted to the grid at hour k in cycle t by Party B (kWh);

$DSL_{k,t-1}$: Excess electricity generated in the cycle t-1;

t: Electric meter recording cycle.

k: Normal/peak/off-peak hour.

b) In the cycle for recording the electric meter, if electricity generated from the rooftop PV power project executed by Party B plus excess electricity in the previous ((t-1)th) cycle calculated according to normal/peak/off-peak hour higher than electricity consumed in normal/peak/off-peak hour in the cycle by Party B, the excess electricity generated in normal/peak/off-peak hour in the tth electric meter recording cycle shall be determined as follows:

$$DSL_{k,t} = SL_{MTk,t} + DSL_{k,t-1} - SL_{TTk,t}$$

In the cycle for recording the electric meter, if electricity generated from the rooftop PV power project in the peak hour is higher than that consumed by Party B, excess electricity shall be fully compensated in the normal hour. If electricity generated from the rooftop PV power project in the normal hour and excess electricity that has not fully compensated in the peak hour are higher than electricity consumed in the normal hour by Party B, excess electricity shall be compensated in the off-peak hour. If electricity generated from the rooftop PV power project in the off-peak hour and excess electricity that has not fully compensated in the normal hour are higher than electricity consumed in the off-peak hour by Party B, excess electricity shall be compensated in the normal hour of the next cycle.

2. Electricity bills (VAT exclusive)/ in the electric meter recording cycle t determined according to the electricity calculated to pay in such cycle in accordance with provisions of Clause 1 with the corresponding electricity selling price shall be determined as follows:

/

In which:

/: The retail price of electricity in the normal/peak/off-peak hour corresponding to each purpose of use prescribed by a competent state authority (VND/kWh);

3. Periodically, when the electric meter recording cycle ends, both parties shall record and ensure the consistency of electricity consumed, transmitted to the grid and excess electricity generated in such cycle by Party B as follows:

No.	**Excess electricity generate by Party B in the previous cycle (t-1) ($DSL_{k,t-1}$)**	**Electricity consumed by Party B in the cycle t ($SL_{TTk,t}$)**	**Electricity transmitted to the grid in the cycle t ($SL_{MTk,t}$)**	**Excess electricity generate by Party B in the cycle t ($DSL_{k,t}$)**
(1)	**(2)**	**(3)**	**(4)**	**(5)=(4)+(2)-(3); (5) > 0**
1				
2				
3				

4. When the last electric meter recording cycle ends at the end of year or the PPA terminates, excess electricity generated shall be paid in line with the price specified in Clause 1 Article 12 of the Decision No. 11/2017/QD-TTg.

Article 2. Rights and obligations of Party A

- Install three-price and two-way electric meters (for delivery and receipt) to calculate electricity consumed and transmitted to the grid by Party B (unless otherwise agreed on by both parties).

- Cooperate with Party B in recording, ensuring the consistency and following the electricity consumed in each cycle, transmitted to the grid and excess electricity generated and revenue earned from electricity generation by Party B in each normal/peak/off-peak hour.

- When the last electric meter recording cycle ends at the end of year or the PPA terminates, Party A shall calculate excess electricity generated and make payments to Party B in line with the price specified in Clause 1 Article 12 of the Decision No. 11/2017/QD-TTg.

Article 3. Rights and obligations of Party B

- Comply with technical regulations on solar power; control the electrical energy quality according to provisions of Clause 1 Article 15 of the Decree No. 137/2013/ND-CP; Articles 40 and 41 of the Circular No. 39/2015/TT-BCT or amended or replaced documents, unless otherwise agreed on by both parties.

- Cooperate with Party A in recording, ensuring the consistency and following the electricity consumed in each cycle, transmitted to the grid and excess electricity generated and revenue earned from electricity generation by Party B in each normal/peak/off-peak hour.

Article 4. Other agreements

……

Article 5. Implementation provisions

1. In addition to the above-mentioned articles, other contents in the PPA used for …….. purposes dated ....., 20... between (name of the power company) ..... and …….. shall remain unchanged.

2. This Appendix enters into force from (month, day, year) ..... and is an integral part of the PPA used for …… purposes dated ....., 20... between (name of the power company) ..... and …….

3. Either party wishes to terminate such Appendix or make any revision to its terms during the execution shall notify the other party 15 days in advance.

Party B **Party A**

(Signature and full name) *(Signature and full name)*

APPENDIX A

REQUIREMENTS FOR INSTALLED CAPACITY AND SPECIFICATIONS OF ELECTRIC METERS AND ROOFTOP PV POWER PURCHASE

1. Total installed capacity …….. MW

If the total installed capacity is under 1 MW, the investor of the rooftop PV power project shall re-sign Appendix A of this Agreement with the power company.

If the total installed capacity is 1 MW or over, the investor of the rooftop PV power project shall follow procedures for changing the capacity scale according to provisions of Clause 2 Article 11 herein and re-sign Appendix A of this Agreement with the power company.

2. Requirements for specifications of electric meters

APPENDIX B

DELIVERED ELECTRICITY METERED BY THE ELECTRIC METER FROM THE ROOFTOP PV POWER PROJECT TABLE

Unit: kWh

No.		**Excess electricity generate by Party B in the previous cycle (t-1) ($DSL_{k,t-1}$)**	**Electricity consumed by Party B in the cycle t ($SL_{TTk,t}$)**	**Electricity transmitted to the grid in the cycle t (SL. $_{MTk,t}$)**	**Excess electricity generate by Party B in the cycle t ($DSL_{k,t}$)**
(1)		**(2)**	**(3)**	**(4)**	**(5)=(4)+(2)-(3); (5) > 0**
1st cycle	Peak hour				
	Normal hour				
	Off-peak hour				
…					
…					
… cycle	Peak hour				
	Normal hour				

	Off-peak hour				
Annual financial statement	Peak hour				
	Normal hour				
	Off-peak hour				

Party B
(Signature and full name)

Party A
(Signature and full name)