### APPENDIX 3 STANDARD POWER PURCHASE AGREEMENT FOR ROOF – MOUNTED SOLAR POWER PROJECT

(Attached with the Circular No. /2017/TT-BCT dated... 2017 of Ministry of Industry and Trade )

#### APPENDIX 3.1 STANDARD POWER PURCHASE AGREEMENT FOR ROOF – MOUNTED SOLAR POWER PROJECT

(Attached with the Power purchase agreement No... date... month... year... between Power company.....and.... for household purpose, for non household purpose with the use of one-price meters)

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

velopment in victualii,
Based on demand of power purchase/sale of the two parties,
Today, the day month year, at
ÇO <sup>Y</sup>
We are:
Part A (Power company):
Address:
ID No./ Passport No
Email:
Telephone:Fax:
Tax code:
Account: At the Bank:
Representative:
Position:(to be authorized by
No, date, wear)  Under the Power of Attorney month year)
Part B (Owner of the Roof-mounted solar power

Address:		
ID No./ Passport NoIs	ssued on;	
Email:		
Telephone:	Fax:	
Tax code:		
Account:	At the Bank:	
Representative:		
Position:	(to be authorized by	Under
the Power of Attorney No year)	, da	ate month
year)		

Together agree to sign the Power Purchase Agreement for the roof-mounted solar power purchase and sale based on net-metering mechanism by using bi-directional electricity meters as followings:

#### **Article 1. Net-metering mechanism**

- 1. Electricity output calculated in period of recording the t-meter readings:
- a) In the period of recording the meter readings, if the amount of electricity produced by the solar power project installed on the roof of Party B plus the outstanding amount of electricity from the previous period (t-1) is smaller than the electricity consumed by Party B, the electricity output to pay Party B's electricity bill is determined by the following formula:

$$SL_{t}=SL_{TTt}-SL_{MTt}-\Delta SL_{t-1}$$

In which:

 $SL_{TTt}$ : Electricity consumption in period t of Party B (kWh);

SL<sub>MTt</sub>: Electricity production by party B connected to the grid in period t (kWh);

 $\Delta SL_{t-1}$ : Outstanding electricity produced in period t-1;

t: period of meter readings.

b) In the period of recording the meter readings, if the amount of electricity produced by the solar power project installed on the roof of Party B plus the outstanding amount of electricity from the previous period (t-1) is larger than the electricity consumed by Party B, the outstading electricity output in the period of recording the t-meter readings of Party B is determined by the following formula:

$$\Delta SL_t = SL_{MTt} + \Delta SL_{t-1} - SL_{TTt}$$

2. Electricity payment (excluding value added tax )  $T\theta_t$  in period of recording the t-meter readings is calculated by using electricity output calculated for payment in that period according to Clause 1 with the respective selling tariff as following:

$$T \mathfrak{D}_t = S L_t \times g$$

In which:

- g: Retail electricity tariff prescribed by competent state agencies (VND/kWh);
- 3. Periodically, within 03 working days after the end of meter reading cycle, the two parties shall record and unify the amount of electricity consumed in the period, the amount of electricity connected to grid and outstanding of Party B's electricity output in the period as following:

No	Party B's outstanding amount of electricity from the previous period (t-1) (\Delta \text{Lk,t-1})	Party B's electricity consumption in period t (SL <sub>TTk,t</sub> )	Party B's amount of electricity connected to the grid in period t (SL <sub>MTk,t</sub> )	Party B's outstanding amount of electricity in period t
(1)	(2)	(3)	(4)	(5)=(4)+(2)-(3); (5)>0
1				
2	J.A			

4. At the end of the period for recording the last meter readings of the year or the termination of the power purchase agreement, the excess power shall be paid at the tariff specified in Clause 1, Article 12 of Decision No. 11/2017 / QD-TTg.

#### Article 2. Rights and obligations of Party A

- Be responsible for the installation of bi-directional meters readings(delivered and received) to calculate electricity consumption and electricity connected to the grid by party B (unless otherwise agreed).
- Together with party B, be responsible for recording and unifying the amount of electricity consumed in the period, the amount of electricity connected to grid, the amount of outstanding electricity and the revenue of electricity generated by Party B.
- At the end of the period for recording the last meter readings of the year or the termination of the power purchase agreement, Party A shall pay Party B the excess power at the tariff specified in Clause 1, Article 12 of Decision No. 11/2017/QD-TTg. Within 5 working days from the date when the two parties reached agreement and signed to certify electricity consumed in the period,

electricity connected to grid in the period and electricity outstanding under Item 3, Article 1.

#### Article 3. Rights and obligations of Party B

- To ensure technical norms on solar power; to ensure the quality of produced electricity as stipulated in Clause 1, Article 15 of Decree No. 137/2013/ND-CP; Articles 40 and 41 of Circular No. 39/2015/TT-BCT or amendments, supplements or replacements, unless otherwise agreed.
- Together with party A be responsible for recording and unifying the amount of electricity consumed, the amount of electricity connected to grid, the amount of electricity outstanding and the revenue of electricity generated by Party B.

Article 4. Other agreements	
Article 5. Implementation clause	x 60 Y

- 1. Apart from the above contents, other contents under the Power purchase agreement for household purpose signed on date...month..... in the year 20 ... between the Power Company ... .. and ....... remain unchanged.
- 3. During the implementation period, should one of the two parties request to terminate, amend or supplement the contents of this signed Addendum, other party must be notified 15 days in advance for mutual resolve./.

Party B Party A
(Sign and full name) (Sign and full name and seal)

#### Appendix A

## REQUIREMENTS ON INSTALLED CAPACITY AND TECHNICAL STANDARD OF METER FOR RECORDING AND PURCHASING ELECTRICITY OF

**ROOF – MOUNTED SOLAR POWER PROJECT** 

(Attached with Power purchase agreement for household, administrative and non-business activities, production and business activities using one-price meters)

1. Total installed capacity ........... MW

In case total installed capacity is less than 01 MW, the owner of the roof-mounted solar project shall renew Appendix A of this agreement with the Power Company.

In case total installed capacity is equal or more than 01 MW, the owner of the roof-mounted solar project shall carry administrative procedure and process to change project capacity in accordance with clause 2 of Article 11 of the Circular and concurrently renew Appendix A of this agreement with the Power Company.

2. Technical requirements for meter readings.

#### **APPENDIX B** TABLE FOR DETERMINING THE AMOUNT OF ELECTRICITY DELIVERED VIA METER OF ROOF MOUNTED SOLAR PROJECT

Unit: kWh

Omn. Kiin				
No	Party B's outstanding amount of electricity from the previous period (t-1) (\Delta SL_{k,t-1})	Party B's electricity consumption in period t (SL <sub>TTk,t</sub> )	Party B's amount of electricity connected to grid in period t (SL <sub>MTk,t</sub> )	Party B's outstanding amount of electricity in period t
(1)	(2)	(3)	(4)	(5)=(4)+(2)-(3); (5)>0
Period 1				(3) > 0
				0
···				
Period n				7
Total				
_	_			
Part	ty B	٨	Part	t <b>y A</b> name and seal)
		O. You		
	full name)			

#### APPENDIX 3.2 STANDARD POWER PURCHASE AGREEMENT FOR ROOF – MOUNTED SOLAR POWER PROJECT

(Attached with the Power purchase agreement no... date... month... year... between Power company.....and.... for production or service purpose applying daily hour consumption tariff using three-price meter readings)

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

1			
Based on demand of pov	wer purchase/sale	e of the two p	arties,
Today, the day me	onth year	, at	<sub>C</sub> S
We are: Part A (Power compan	nv):	ser.	
Address:		ZO,	
ID No./ Passport No	A	at	. ,
Email:			
Telephone:	Fax:	:	
Tax code:	X		
Account:	At the	Bank:	
Representative:			
Position:		(to be Under th	authorized by e Power of Attorne
No.	, date	month	•
Part B (Owner of Roof	f-mounted solar <b>J</b>	power projec	et):
Address:			
ID No./ Passport No	Issued on	at	•
Email:			
Telephone:	Fax:	:	
Tax code:			

Account:	At the Bank:	
Representative:		
Position:	(to be authorized by	Under
the Power of Attorney No	, date	month
vear )		

Together agree to sign the Power Purchase Agreement for the roof-mounted solar power purchase and sale based on net-metering mechanism by using bi-directional electricity meters as followings:

#### **Article 1. Net-metering mechanism**

- 1. Electricity output calculated in the period of recording the t-meter readings:
- a) In the period of recording the meter readings, if the amount of electricity produced by the solar power project installed on the rooftop of Party B plus the outstanding amount of electricity from the previous period (t-1) is smaller than the electricity consumed by Party B, the electricity output of Party B for payment is determined by the following formula:

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

In which:

 $SL_{TTk,t}$ : Electricity consumption in k hour in period t of Party B (kWh);

 $SL_{MTk,t}$ : Electricity production by party B connected to the grid in k hour in period t (kWh);

 $\Delta SL_{k,t-1}$ : Outstanding electricity produced in period t-1;

t: period of meter readings recording;

k: normal hour, peak hour and off peak hour.

b) In the period of recording the meter readings, if the amount of electricity produced by the solar power project installed on the rooftop of Party B plus the outstanding amount of electricity from the previous period (t-1) during normal hour, peak hour and off peak hour is larger than the electricity consumed by Party B during normal hour, peak hour and off peak hour, the electricity outstanding of Party B during normal, peak and off peak hour in the period of recording the t-meter readings is determined as followings:

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

During the period of recording the meter readings, if the amount of electricity produced from roof-mounted solar power project during peak hours is larger than that of Party B's peak-hour power consumption, outstanding amount of electricity will be counter balanced in normal hour. If the amount of

electricity produced from roof-mounted solar power project during normal hours and the excess amount of electricity during peak hours which has not yet been counter balanced is larger than Party B's power consumption of normal hours, the outstanding amount of electricity will be counter balanced in off peak hour. If the amount of electricity produced from roof-mounted solar power project during off peak hours and the excess amount of electricity which has not yet been counter balanced during the normal hours is larger than Party B's power consumption during off peak hour, the outstanding amount of electricity will be counter balanced in next period's normal hour

2. Electricity payment (excluding value added tax )  $T\theta_t$  in period of recording the t-meter readings is calculated by using electricity output in that period according to Clause 1 with the selling electricity tariff by the following formula:

$$T\Theta_t = \sum_{k} (\Delta SL_{k,t} \times g_k)$$

In which:

 $g_k$ : Retail electricity price during normal hour, peak hour and off peak hour prescribed by competent state agencies (VND/kWh);

3. Periodically, after the end of meter readings recording period, the two parties shall record and unify the amount of electricity consumed, the amount of electricity connected to grid and the balance of Party B's electricity output in the period as following table:

No	Party B's outstanding amount of electricity from the previous period (t-1) (ΔSL <sub>k,t-1</sub> )	Party B's electricity consumption in period t (SL <sub>TTk,t</sub> )	Party B's amount of electricity connected to grid in period t (SL <sub>MTk,t</sub> )	Party B's outstanding amount of electricity in period t
(1)	(2)	(3)	(4)	(5)=(4)+(2)-(3); (5)>0
1				
2				
3				

4. At the end of the period for recording the last meter readings of the year or the termination of the power purchase agreement, the excess power shall be paid at the tariff specified in Clause 1, Article 12 of Decision No. 11/2017/QD-TTg.

Article 2. Rights and obligations of Party A

- Be responsible for the installation of three-price bi-directional meter readings (delivered and received) to calculate electricity consumed and connected to grid by party B (unless otherwise agreed).
- Together with party B, be responsible for recording and unifying the amount of electricity consumed and connected to grid, the amount of electricity outstanding and the revenue of electricity generated by Party B during various hours including normal, peak and off peak hour.
- At the end of the period for recording the last meter readings of the year or the termination of the power purchase agreement, Party A shall be responsible for the calculation and payment to Party B the excess power at the tariff specified in Clause 1, Article 12 of Decision No. 11/2017 / QD-TTg.

#### Article 3. Rights and obligations of Party B

- To ensure technical norms on solar power; to ensure the quality of generated electricity as stipulated in Clause 1, Article 15 of Decree No. 137/2013/ND-CP; Articles 40 and 41 of Circular No. 39/2015/TT-BCT or amendments, supplements or replacements, unless otherwise agreed.
- Together with party A, be responsible for recording and unifying the amount of electricity consumed, the amount of electricity connected to grid, the amount of electricity outstanding and the revenue of electricity generated by Party B during peak hour, normal hour and off peak hour.

Article 4. Other agreements	
Article 5. Implementation commitment	

#### 1 1 1

- 1. Apart from the above contents, other contents in the Power purchase agreement for......signed on date...month..... in the year 20 ... between the Power Company .... and ...... remain unchanged.
- 2. This Appendix is effective from the date of ... month ... year ... and is an inseparable part of the Power purchase agreement for ....... signed on date .....month....year ... between the Power Company ... . and .......
- 3. During the implementation period, should one of the two parties request to terminate, amend or supplement the contents of this Addendum, other party must be notified 15 days in advance for mutual resolve./.

Party B	Party A
(Sign and full name)	(Sign and full name and seal)

#### Appendix A

# REQUIREMENTS ON INSTALLED CAPACITY AND TECHNICAL STANDARD OF METER FOR RECORDING AND PURCHASING ELECTRICITY OF ROOF – MOUNTED SOLAR POWER PROJECT

1. Total installed capacity ........... MW

In case total installed capacity is less than 01 MW, the owner of the roof-mounted solar project shall renew Appendix A of this agreement with the Power Company.

In case total installed capacity is equal or more than 01 MW, , the owner of the roof-mounted solar project shall carry administrative procedure and process to change project capacity in accordance with clause 2 of Article 11 of the Circular and concurrently renew Appendix A of this contract with the Electricity Company.

2. Technical requirements for meter readings.

### APPENDIX B TABLE FOR DETERMINING THE AMOUNT OF ELECTRICITY DELIVERED VIA METER OF ROOF -MOUNTED SOLAR PROJECT

Unit: kWh

No	Party B's outstanding amount of electricity from the previous period (t-1) (ΔSL <sub>k,t-1</sub> )	Party B's electricity consumption in period t (SL <sub>TTk,t</sub> )	Party B's amount of electricity connected to grid in period t (SL <sub>MTk,t</sub> )	Party B's outstanding amount of electricity in period $t$ $(\Delta SL_{k,t})$
(1)	(2)	(3)	(4)	(5)=(4)+(2)-(3); (5)>0
Peak hour				
Normal hour				
Off-peak hour			(0)	
			2)	
Peak hour				
Normal hour				
Off-peak hour	A			
Peak hour		7		
Normal hour				
Off-peak hour	6			

Party B

Party A

(Sign and full name)

(Sign and full name and seal)