

# **NET-METERING PROGRAMME**

GUIDELINES TO NET-METERING APPLICATION



## How to apply for the Net-metering Programme?

Consumers interested in joining the Net-metering Programme shall submit an application in the prescribed form to the Ministry of Energy. The consumer shall complete and acquire all documents and certificates related to Net-metering before submitting the final application to the Ministry.

### To commence on the process of Net-metering Application

- 1. Check Eligibility:
  - a. Ineligible Consumer (such as not paying electricity bills, commit an offence under the Act, etc.) are not eligible to apply for Net-metering Programme and if they do apply, their processing fee will be forfeited. Ministry of Energy (ME) shall submit the application lists to Department of Electrical Services (DES) to check on high-risk Consumer. DES will not proceed with the study if the Consumer is on the high-risk lists.
  - b. Consumers shall fill in and submit the Net-metering Pre-Application Form to ME (Appendix A).
- 2. Appointment of Contractor/Installer:
  - a. An applicant shall engage and appoint their own Contractor/Installer on their behalf to process their Net-metering application.
  - b. Contractor/Installer should be listed in the list of Solar PV Contractors registered with .
- 3. Net-metering Assessment (NMA):
  - a. The Contractor/Installer shall perform the NMA with Professional Engineer (Electrical Engineer) before submitting the application to DES.
  - b. The Contractor/Installer shall conduct a technical study as stated in the NMA.



- c. Completed NMA form shall be submitted together with other required documents, as stated in the form. The required document includes an endorsed drawing by Professional Engineer (Electrical Engineer).
- d. NMA package shall be submitted to DES either online or manual as may be determined by the DES.
- e. Contractor/Installer shall receive NMA Approval upon successful submission.
- f. NMA form can be found in Appendix B.
- 4. Contractor/Installer shall conduct structural integrity assessment of the rooftop on the additional loads from the panels:
  - a. The Contractor/Installer shall submit the assessment done to the Building Authority the assessment.
  - b. The Contractor/Installer shall receive a letter of acknowledgement from the authority allowing construction to proceed.
- 5. Net-metering Application:
  - a. ME shall receive and process all Net-metering applications. ME shall acknowledge the receipt of the application, register the application and process the application in order of the receipt.
  - b. Once Approvals are obtained, the Contractor/Installer can submit the Netmetering Application to ME.
  - c. Documents submitted to ME shall include:
    - i. Net-metering completed application forms (Appendix C)
    - ii. NMA Approval
    - iii. Structural Assessment Approval
  - d. An application for Net-metering shall be accompanied with the information as stipulated in the Net-metering Form:
    - i. Applicant's Profile (Individual, Company):
      - 1. Full Name/Company Name
      - 2. Company Registration No.



- 3. Address
- 4. Contact Person
- ii. Information of the project:
  - 1. Site address/location
  - 2. Renewable energy resource
  - 3. Building type
  - 4. Consumer connection voltage (LV/MV)
- iii. Technical Information
  - 1. Maximum Demand of Consumer
  - 2. Proposed total installed capacity
  - 3. Yield projection
- iv. Proposed date for the signing of Net-metering Agreement and Commencement Date for Net-metering
- e. The fee for each application (refundable) for Net-metering Programme shall be at a rate of BND5/kW and shall be paid together with the application on the advice of ME.
- f. ME shall perform a technical review on the submission and validate the completeness of submission based on the agreed criteria.
- g. ME shall administer the approved capacity for Net-metering Programme.
- h. ME shall notify successful Net-metering Consumers and inform DES by providing them with the relevant documents.
- Upon successful application, a maximum of 12 months is given from the date of the approval, if the Net-metering Consumer is unable to complete the proposed works as planned in the submitted drawings with NMA Form. If the consumer exceeds the maximum period given, ME has the right to revoke the approved capacity.
- Contractor/Installer shall receive Net-metering Certificate upon successful application and may proceed with the installation of a solar PV system as approved.
- 6. Installation of System and Installation of Meter:



- a. Net-metering Consumer shall proceed with the installation of the system and engage Registered Meter Vendor to check the existing meter to be changed to the approved meter.
- 7. Testing and Commissioning:
  - a. The successful Net-metering Consumer shall perform a system test on their solar PV system and forward the test report to the ME.
  - b. The Contractor/Installer is advised to refer to Appendix A for the testing and commissioning of the Grid Connected Solar PV System. The Net-metering Consumer is required to follow testing and commissioning procedures and submit the Test and Commissioning Form (Appendix D) to DES and ME.
- 8. Contract Signing:
  - a. The Net-metering Consumer shall sign a Net-metering Agreement with DES upon the Net-metering Commencement date approval.
  - b. ME shall grant commencement approval to Net-metering Consumer to proceed with the Net-metering Agreement signing with DES.
  - c. This Net-metering Agreement shall commence from the date of this Agreement
  - d. The contract duration of the Net-metering Agreement is for a period of 20 years from the commencement date of the Agreement.
  - e. The consumer is registered as Net-metering Consumer under the Netmetering Programme once the Net-metering Agreement is executed.
  - f. The Net-metering Agreement will be shared to successful Consumer with the Net-metering Certificate.



# APPENDIX A PRE-APPLICATION FORM



### **NET-METERING PRE-APPLICATION FORM**

Applicant's Name	
Applicant's Address	
	гт
Installer Company's Name (If applicable)	
	T
Capacity to be installed	
Category	Residential
	Government
	Commercial

Notes:

Applicants with successful pre-application shall proceed to appoint their Registered Solar PV Contractor for Net-metering Application submission.



# APPENDIX B NET-METERING ASSESSMENT (NMA) FORM

### **BORANG PENILAIAN NET-METERING**

Net-Metering Assessment Form (NMA)

#### SECTION 1 | INFORMATION

¤ Consumer may not operate their Solar Photovoltaic (PV) system while interconnected to the DSP Distribution System until they receive written permission from Authority

#### SECTION 2 | CONSUMER INFORMATION

Applicant Name	
NRIC	
Electricity Bill Account No.	

I hereby authorise the Qualified Person as described in SECTION 3 to act on my behalf to manage my Net-metering application.

Date

Signature

#### SECTION 3 | CONTRACTOR DETAILS

Company Owner's Name		
Company Name	 	
Company Registration Number	Expiry Date	
Signature & Official Company Stamp	Date	

#### SECTION 4 | CONSUMER DETAILS

Installation Address		
Voltage at Point of Common Coupling (PCC)	Low Voltage (230V/400V)	Medium Voltage (11kV/33kV)
Substation location		

#### FOR Medium Voltage connected Consumer:

Maximum Demand

kW

FOR Low Voltage connected Consumer:

Fuse rating	(Amps)
CT rating	

#### SECTION 5 | TECHNICAL ASSESSMENT

Installed Net-metering Capacity:	kWp	
	kWac	
Estimated monthly generation:	kWh	
Distributed annual availability data:	kWh	
Expected Date of Commissioning of Net- metering:	//	dd/mm/yy

For generation capacity of > 12kW, QP shall fills in and attach Load Profile (LP) Form:

Daytime Peak Demand (11AM-3PM)	kW	(Friday to Monday)
Daytime Lowest Demand	kW	
Export during daytime peak	kWac	
Export during daytime lowest	kWac	

### SECTION 6 | SOLAR PHOTOVOLTAICS (PV) DETAILS

|--|

Types:	Monocrystalline
	Polycrystalline
	Thin film
	Others
Manufacturer:	
PV Inverter	
Nos of Inverter installed:	
Туре:	Single-phase
	3-phase
Manufacturer:	
Power factor:	lagging

	leadir
unity	

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#### SECTION 7 | DOCUMENTS CHECKLIST

- i Single-line diagram with Solar PV schematic (endorsed by PE)
- ii Photos of existing Meter and service line
- iji Others

#### SECTION 8 | DOCUMENTS CHECKLIST

By signing this form, I declare that:

- ¤ I am representing the owner of the premise and the information furnished above is true to my knowledge and belief.
- ¤ I confirm that the solar PV system design comply to the standards (Guidelines of Solar Rooftop Photovoltaic Sytem Interconnection to Low Voltage Network) and the inverter (s) used are as per approved lists.
- ¤ I also verify that the site condition is fit for installation of the solar PV system as per applicable regulations.

PE/Contractor's Signature & Official Stamp	
Name	
Date	

#### SECTION 9 | FOR OFFICE USE



# APPENDIX C NET-METERING APPLICATION



#### **BORANG PERMOHONAN NET-METERING**

NET-METERING APPLICATION FORM

For office use only:

Reference No.: Serial No.:

Date received:

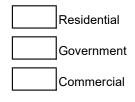
Time received:

Receiving Offer:

#### SECTION 1 | APPLICANT INFORMATION

\*Forms to be completed in capital letters

Category:



#### 1A | FOR INDIVIDUAL APPLICANT (if applicable)

#### **APPLICANT DETAILS**

Applicant Name:		
NRIC:		
Citizenship:		
Contact No.:	(H)	(M)
Email:		

#### ALTERNATE CONTACT PERSON

Contact Person Name:		
Relationship		
NRIC:		
Citizenship:		
Contact No.:	(H)	(M)
Email:		

#### 1B | FOR NON-INDIVIDUAL APPLICANT (if applicable)

APPLICANT DETAILS		
Company Owner's Name:		
Company Name:		
Company Registration No.:		
Address:		
Contact No.:	(H)	(M)
Email:		

#### **CONTACT PERSON**

Name:		
NRIC		
Citizenship:		
Position:		
Contact No.:	(H)	(M)
Email:		

#### **SECTION 2 | PROJECT INFORMATION**

#### 2.1 INSTALLATION SITE ADDRESS

Installation site address:	
Site ownership:	Fully owned
	Owned (charged to bank)
	Leased

#### 2.2 INFORMATION OF INSTALLATION

Electricity bill account No.:	
Renewable energy resources:	Solar
Installed capacity:	kWp

#### 2.3 INFORMATION OF PREMISE INSTALLATION

Voltage level at connection point:

Low voltage (Single phase)

Low voltage (Three phase)

Medium voltage (Three phase)

Voltage at Point of Common Coupling:

V

Project status:	New project
	Existing project
Types of building:	
	E.g.: House, shop, office, etc
Types of installation:	Rooftop of building
	Garage of car park
	Others (Please state):

#### 2.4 TECHNICAL INFORMATION

1). Module	
Туре	
Brand	
Model	
Quantity	
2). Inverter	
Brand	
Model	
Quantity	

#### 2.5 REGISTERED PV SOLAR PROVIDER OR REGISTERED ELECTRICAL CONTRACTOR

Company's name:		
Company Registration No.:		
Office address:		
Telephone No.:	(O)	(Fax)
Contact Person:		
Position:		
Contact No.:	(M)	(O)
Email:		

# 2.6 QUALIFIED PERSON (QP)

*Professional Engineer		
Name:		
NRIC:		
Contact No.:	(M)	(O)
Company's name: Company's registration No.:		

#### SECTION 3 | PROPOSED WORK PLAN

Bil.	Activities	Estimated Date
1	Net-metering Application submission date	
2	Proposed date for signing of Net-metering Agreement	
3	T&C proposal date with Distribution Licensee	
4	Net-metering Commencement date	

#### SECTION 4 | SUPPORTING DOCUMENTS CHECKLIST

The certified true copies of the following documents are to be submitted in support of this application, where applicable.

No.		Required documents	Please tick [/]
	Applica	nt Information:	1
1		Individual (For Domestic Category) Applicant's NRIC (front and back) / Passport (if foreign person).	
	1.1	Company / Organization / Society / Government Body (if applicable) Certificate of registration.	
	Site Info	ormation:	
2	2.1	Documents proving the Applicant's ownership of the site, or other conditional or unconditional rights (e.g. letter or agreement) that the Applicant has to utilise/lease the site for a minimum period equivalent to the effective period	
	Technic	al Information:	
3	3.1	The detailed engineering design of the renewable energy installation, including all relevant calculations to justify the installed capacity and claimed efficiencies, proposed plant layout and AC/DC single line diagram certified by relevant Qualified Person (QP)	
	3.2	Net-Metering Assessment (NMA) Approval issued by Department of Electrical Services (DES)	
	3.3	Product data sheet / technical parameter for all electrical components. Please provide rating of each electrical components (SPD, fuses, switches, PV modules, Inverters)	
	Billing I	nformation	
4 A copy of three (3) months electricity bill (latest) - can be requested from Department		of three (3) months electricity bill (latest) - can be requested from Department of Electrical Services (DES);	
Qualified Person		d Person and Electrical Contractor Certificates:	1
		Mandatory certificates:	
5	5.1	i) Contractor Registration Certificate by Ministry of Development (MOD)	
		ii) A certificate of registration as a Professional Engineer (Electrical) with BAPEQS for each Qualified Person (QP)'s;	
	Others	(Please specify):	-
C	(i)		
6	(ii)		
	(iii)		

#### SECTION 5 | DECLARATION FOR NET-METERING APPLICATION

#### 5.1 APPLICANT DECLARATION

#### **\*TO BE FIILED BY APPLICANT (INDIVIDUAL)**

I,	(Name),	(NRIC)
and		
		(Address)

sincerely declare the following:

I hereby authorize (name of the Qualified Person)...... ...... as the Qualified Person to act on my behalf to manage my Net-metering

- ii. I hereby attest that the definition of Qualified Person appointed here is as defined under Section 2 of the Building Control Order 2014;
- iii. I hereby confirm that I have not committed any offences under the Electricity Order 2017 and/or any other relevant laws and regulations pertaining to the supply and licensing of electricity;
- iv. I hereby certify that all information given is true and correct to my knowledge and belief;
- I understand and agree that the Ministry of Energy will have the right to take any action including to forfeit all initial fees paid, if any of the information given is false;
- vi. Ministry of Energy shall not be held liable for any loss, damage and inconvenience suffered by me after my application has been approved by the Ministry of Energy;
- vii. I hereby agree, understand and will comply with all the relevant laws and guidelines applicable to this application; and
- viii. Successful applicants who wishes to withdraw from the programme shall not have their application fees refunded.

Name:

NRIC:

Date:

#### \*TO BE FIILED BY APPLICANT (NON-INDIVIDUAL) (if applicable)

I,			(Name),	(NRIC)				
	(designation)	of a						
(name of the Company/Organization/el								
and								
				(Address)				

an authorized representative of this Applicant sincerely declare the following:

I hereby authorize (name of the Qualified Person)...... with NRIC.:

- i. OR I hereby declare myself with NRIC: ...... as a Qualified Person to manage my own Net-metering application; [please strikethrough where applicable];
- I hereby attest that the definition of Qualified Person appointed here is as defined under Section 2 of the Building Control Order 2014;
- iii. I hereby confirm that I have not committed any offences under the Electricity Order 2017 and/or any other relevant laws and regulations pertaining to the supply and licensing of electricity;
- iv. I hereby certify that all information given is true and correct to my knowledge and belief;
- I understand and agree that Ministry of Energy will have the right to take any action including to forfeit all initial fees paid, if any of the information given is false;
- vi. Ministry of Energy shall not be held liable for any loss, damage and inconvenience suffered by me after my application has been approved by Ministry of Energy;
- vii. I hereby agree, understand and will comply with all the relevant laws and guidelines applicable to this application; and
- viii. Successful applicants who wishes to withdraw from the programme shall not have their application fees refunded.

Name of the Authorized: Representative: Designation: NRIC: Date:

#### 5.2 ELECTRICAL CONTRACTOR DECLARATION

\*To be completed by Qualified Person

Company's Name:		
Company's Registation No:		
By signing this form, I	(Nar	ne)
	(NRIC) declare that:	

- I am representing the owner of the premise and the information furnished above is true to my knowledge and belief;
- i. I confirm that the solar PV system design comply to the relevant standards and other relevant requirements as per prudent utility practices;
- iii. I also verify that the site condition is fit for installation of the solar PV system as per applicable regulations;
- iv. I hereby acknowledge that all information given are true and the Ministry of Energy shall have the right to take any action if the above information are false;

Name of the Qualified Person:

NRIC:

Date:

Qualified Person Stamp:



# APPENDIX D TESTING AND COMMISSIONING FORM

# **NET-METERING TEST AND COMMISSIONING (T&C) FORM**

Consumer name:	Inspection date:								
Electricity bill account no.:	Inspection time start:								
Installation address:	Inspection time finish:								
SOLAR PV INSTALLATION TECHNICAL INFORMATION									
[Before installation] Voltage at Point of Connection	RED:		YELLOW:		BLUE:				
		Volts		Volts		Volts			
	RED:		YELLOW:		BLUE:				
[After installation] Voltage at Point of Connection					DECE.				
		Volts		Volts		Volts			
	RED:		YELLOW:		BLUE:				
Voltage at Meter (If accessible)									
		Volts		Volts		Volts			
Anti-islanding test	Disconnection time:			sec					
	Reconnection time:			min					
VERIFICATION OF TEST AND COMMISSIONG (T&C) OF SOLAR PV BY QUALIFIED PERSON									
QP's name:		QP's sign	ature:						
QP's NRIC:	Company's official chop:								
QP'S Registration No.:		-							
Date:		1							