

CAGAYAN 1 ELECTRIC COOPERATIVE, INC. CAGELCO 1 Maddarulug, Solana, Cagayan

POLICY NO. 02-2017

Title: POLICY ON THE IMPLEMENTATION OF NET METERING FOR RENEWABLE ENERGY SYSTEM

Pursuant to the resolution adopting the Rules Enabling the Net-Metering Program for Renewable Energy, Resolution no. 9, Series of 2013. In this regard the following working instructions are hereby issued to the field for effective implementation.

- Net Metering arrangement is permitted for CAGELCO 1 consumers with existing accounts and in good credit standing in the payment of electric bill. Qualified End-user (QE) or consumer is allowed to install an on-site Renewable Energy (RE) facility not exceeding **100 kilowatts (KW) in capacity per Consumer Account.** However, a QE must generate a facility not to exceed his maximum load requirement, otherwise CAGELCO I reserves the right to temporarily disconnect the RE facility after due notice until such time that an adjustment with the QE load will be made.
- 2. A QE who intends to operate in parallel with the DU's Distribution system shall inform CAGELCO 1 through **written request**, address to CAGELCO 1, of its intention to participate in the Net Metering Program.
- 3. CAGELCO 1 shall provide applicant with list of required documents in response to QE's inquiry such as Net-Metering Application Form, Application for interconnection, Detailed Planning Data, Plant Parameters Form, pro forma Net Metering Agreements, application fee, information and metering requirements.
- 4. Applicant shall submit the accomplished Net Metering Application forms with the supporting documents. CAGELCO 1 will then verify the accuracy and completeness of the documents. Within two (2) working days upon receipt of the application, CAGELCO 1 will issue an acknowledgement receipt with feedback on whether or not the application is complete.
- 5. With the submission of complete documentary requirement, the application proceeds to the technical evaluation. CAGELCO 1 will perform an initial assessment to determine on a nondiscriminatory basis whether or not a specific Distribution Impact Study (DIS) and Distribution Asset Study (DAS) will be needed, in accordance with the DSOAR, and inform the applicant accordingly.

- 6. If the conduct of DIS and DAS is deemed necessary, CAGELCO 1 informs the applicant and relays the following details on the DIS: Scope of the Study, Estimated Time of DIS Completion and DIS Fee. Within thirty (30) calendar days from receipt of the details on the DIS, the applicant must inform CAGELCO 1 of his decision on whether or not to proceed with the DIS and DAS.
- 7. The applicant must settle the **DIS fee** amounting to ₱5,000.00 and during the conduct of the DIS, additional information may be requested from the applicant. From receipt of complete information, CAGELCO 1 has thirty (30) days for the first year of implementation and thirty (30) days, year after, to complete the DIS and DAS. Within a day from completion of the DIS and DAS, CAGELCO 1 shall provide the applicant with the results of the study.
- 8. If the conduct of DAS is necessary, the DU issues an offer of DAS service to the applicant. Within thirty (30) days from receipt of the DAS offer, the applicant must inform CAGELCO 1 whether or not to proceed with the DAS. Upon acceptance of the DAS offer and payment of the DAS fee by the applicant, CAGELCO 1 has thirty (30) days to complete the study. Within a day from completion of the DAS, CAGELCO 1 informs the applicant of the result of the study.
- 9. Before finalizing the design of the interconnection facilities based on the result of the DIS and or DAS, the applicant shall submit the electrical permit issued by the Electrical Division of Office of the Building Official (OBO) / City Engineers Office of the LGU to see to it that that the applicant complies with the standard and requirements on electrical safety in the Philippine Electrical Code (PEC), and the Electrical Engineering Law.
- 10. CAGELCO 1 shall conduct inspection of the Service Entrance depending on the meter set-up (2 unidirectional meter or single bi-directional meter).
- 11. After the completion of the plans for the interconnection facilities, project agreements (e.g. Net-Metering Agreements, Fixed Asset Boundary Documents) will be executed and pay the applicable fees, such as **ERC fee** of **₱1,500.00** and **service fee** of **₱1,500.00** plus VAT. Construction of the interconnection facilities may then proceed.
- 12. The applicant shall be responsible for providing adequate protection for its facility under any operating conditions, and regardless of whether or not the interconnected generation is in operation. Mandatory safety precautions/features which have to be taken into consideration as part of the grid connected solar PV system installations are:
 - Automatic synchronization devices shall be installed to monitor and control the synchronization, frequency, power factor and the voltage level of the RE facility. Automatic synchronizing settings shall not be changed following installation unless mutually agreed by both parties.
 - b) The QE shall provide facilities against islanding to isolate and block the RE facility from closing back into the Distribution System until the system is energized for a minimum of two (2) minutes from the normal utility or CAGELCO 1 source.

- c) The Solar PV system should be separately grounded/earthed in accordance with requirements of the PEC.
- d) The QE shall provide a visible manual disconnecting switch with locking facility where it will be easily accessible to electrically isolate CAGELCO 1's Distribution System from the RE facility and to established working clearance for maintenance, safety and system consideration. The disconnect device shall be located 10 feet from the Connection point. If this is not practical, the disconnected device should be located between the RE facility and the connection point. The type of disconnect device must allow for visual indication of the contract's position and the handle must be lockable in the open position with a padlock.
- e) Protective relays shall be installed to trip the corresponding circuit breaker during abnormal conditions or grid failure and thus prevents any solar power injection to the Distribution System.
- 13. Caution Stickers shall be used with the yellow back ground and the text "Solar PV System" written in black letters. The size of these stickers shall be 10 cm (width) x 7 cm (height) with the text clearly printed in the center of the sticker. All SPV owning consumers should provide the mandatory sign board fitted near the existing meter reading terminal stating that 'This service is fitted with a grid connected SPV plant'. The Solar PV System Caution Stickers shall be provided and installed by CAGELCO 1 in the following locations during commissioning.
 - a) On or near to, the service connection meter of service with grid connected Solar PV System.
 - b) On the Consumer's main switch, of a service connection with a grid connected Solar PV System.
 - c) On distribution poles with grid connected Solar PV Systems at height of about 1.50 meters from the ground.
 - d) On each of the takeoff poles of a Distribution Transformer to which Solar PV Systems are connected.
 - e) On LT feeder pillars with grid connected Solar PV System on the street-facing door of the feeder pillar.
- 14. Applicant shall inform CAGELCO 1 once the installation is complete. Applicant's installed facilities will undergo testing and commissioning to be witnessed by CAGELCO 1 representative. Applicant is responsible for carrying out the relevant commissioning tests which includes the installation of required test equipment at the RE facility. Commissioning will include on-site inspection of the system components and functional test to ensure its conformance to the technical requirements. Any non-conformance shall be corrected by the applicant.
- 15. Applicant shall provide technical literature including type test certificates of the protective equipment.
- 16. Upon receiving the applicant's request for effecting Solar Net Metering along with the copy of the Certificate of Final Inspection issued by the Office of the Building Official (OBO), signed net metering agreement and payment of Service Fees, the Solar PV System shall be connected to the distribution system by the CAGELCO 1 within seven (7) working days.

- 17. Two Uni-directional meters shall be installed to measure import and export (kwh) separately or a single Bi-directional meter. A generation check meter may be installed in proximity to RE facility (at low voltage side) to record all energy production of the RE facility for purposes of issuance of RE Certificate, which CAGELCO 1 can use to comply with RPS obligation. The pull-out meter reading of the existing service connection meter and initial meter reading of the new Bi-directional or two Uni-directional meter should be properly recorded.
- 18. In the event there is no power from CAGELCO 1 the RE facility should automatically disconnect from the system. The QE must inform CAGELCO 1's System Operator if it is going to synchronize to or isolate from the system. QE shall provide CAGELCO 1 the contact number of the person who is responsible for the operation of the RE facility. QE shall also maintain the RE facility and interconnection facilities in a safe manner as approved by CAGELCO 1 in conformity with all applicable laws, rules and regulations.
- 19. CAGELCO 1 shall own and shall be responsible for the design, provision, installation, operation, maintenance, testing and sealing of the meter and associated metering equipment in accordance with section 2.11 of the DSOAR.
- 20. A list of service connections with grid connected Solar PV Systems shall be available at the Membership Development and Advocacy Section, CITED/Planning Division, TSD, Area offices, Billing office.
 - a) The MRBD shall verify the periodically the expected generation with the Solar Generation Meter and also compare the inverter meter reading with Solar Generation Meter reading to avoid malpractices.
 - b) A record shall be maintained at the Planning Division of each SPV plant commissioning date and other details including whether the inverter is a sine wave inverter and comply with Harmonic requirements as seen in the test certificate.
 - c) The SPV connection details of pole/pillar box/Distribution Transformer/Substation feeder end shall be maintained at the Planning Division as these information are vital.

21. Meter Reading & Billing

- a) The service connection meter readings of solar service connections can be taken along with the readings of other service connections as per the standard meter reading schedule
- b) In case of a net import bill, the Consumer shall settle the same as per existing norms and the applicable service connection tarrif. If in any billing cycle energy exported exceeds energy imported, the amount of net exported Kwh will be carried over to the next billing cycle for adjustment against the amount imported of that billing cycle.
- c) A meter card to record separately the service connection "import" kwh and export kwh and the readings of the Solar Generation Meter and Solar Generation Check meter (where ever applicable) with a facility to incorporate both the meter reader and Consumers initials shall be provided by CAGELCO 1.



CAGAYAN 1 ELECTRIC COOPERATIVE, INC. CAGELCO 1 Maddarulug, Solana, Cagayan

NET-METERING AGREEMENT

This Net-Metering Agreement is entered into by and between:

		, of	legal	age,	single/married,	with	postal
address at					, herein	after re	eferred
to as the Qua	alified End-User (QE); and	Cagayan 1 Ele	ectric C	oopei	ative, Inc.(CAG	ELCO I)	, an
electric distri	bution utility duly organized	and existing u	nder P	hilipp	ine law, with p	rincipa	I office
address at	Maddarulug, Solana, Cagaya	<u>n</u> , franchised	to cor	nstruc	t, own, operate	and m	aintain
an electric di	stribution facility in the mur	nicipalities/city	of <u> </u>	ugue	garao, Iguig, Am	ulung,	Alcala,
<u>Baggao, Peñablanca, Enrile, Solana, Tuao, Rizal, Sto. Niño and Piat</u> , all in the Province of							
Cagayan	_ represented herein by its	General Mana	ger	Engr.	Tito R. Lingan	here	einafter

referred to as the DU;

WITNESSETH THAT:

WHEREAS, QE intends to install within its premises for purposes of net-metering a Renewable Energy (RE) facility, more particularly described as follows:

Technology Type:	
Rated Capacity:	
Location:	

WHEREAS, DU has pre-qualified QE to be eligible to participate in the net-metering program;

NOW, THEREFORE, the parties enter into this net-metering agreement under the following terms and conditions:

Section 1. Compliance Standards. – The RE system to be installed within the QE's premises must be compliant with the standards set by Philippine Electrical Code (PEC), Philippine Distribution Code(PDC), Distribution Open Access Rules (DSOAR) and the Net-metering Interconnection Standards.

Section 2. Interconnection Set-Up. – The RE facility shall be embedded in the QE's premises and shall be equipped with appropriate metering equipment.

- a. The DU shall install, own, operate and maintain two uni-directional meters, one for import and one for export, or single bi-directional meter, whichever is more economical on a case to case basis.
- b. The DU may, at any time. Also install a third meter in proximity to the RE System to measure the total RE generated.

A complete and more detailed plans and specifications of the interconnection set-up and facilities are attached as an integral of this net-metering agreement.

Section 3. DU Inspection. – The QE shall allow the DU to enter the QE's premises to inspect, test, maintain and operate the protective devices and read or test the meters and other facilities. The DU may also disconnect the interconnection facilities if it reasonably believes a hazardous condition exists and such immediate action is necessary to protect persons, or the DU's facilities or property of others, against damage or interference caused by the QE's facilities, or lack of properly operating protective devices; provided, that prior notice is given of the intent to disconnect, and the QE is given at least three (3days) within which to remedy the hazardous condition.

QE shall be liable for any damages of the DU should the QE execute changes to the RE facility without first informing the DU.

Section 4. Meter Readings. – The DU shall be the Metering Service Provider and shall conduct the meter reading of the import and export meters to coincide with CAGELCO I meter reading schedule. The DU shall immediately leave a copy of the results of its meter readings at the QE's premises, in accordance with Section 2.11.2 of the Distribution Services and Open Access Rules (DSOAR).

Section 5. Pricing of Exported Renewable Energy. – The DU's blended generation cost shall be used as the price of the renewable energy exported by the QE's RE facility to the DU's distribution system. The DU's blended generation cost shall be computed in accordance with the methodology prescribed in the Rules Enabling the Net-Metering for Renewable Energy issued by the Energy Regulatory Commission (ERC).

In the event that the ERC approves a pricing methodology applicable to net-metering, such pricing methodology shall automatically substitute as the price of renewable energy exported by the QE to the distribution system.

Section 6. Net Metering Charge – The DUs shall impose a net-metering charge to all customers who avail of the Net-Metering program equivalent to their existing ERC-approved Php/customer/month supply and metering rates; plus the existing ERC-approved Php/kilowatthour metering rate based on the export energy to the Distribution System as

registered in the export meter. This Net-metering Charge shall cover the DU's incremental costs related system enhancement and additional meter reading and other operating costs.

The DUs may file with ERC their applications for approval of different Net-Metering Charges for Net-Metering customers in accordance with Section 4 (e), Rule 3 of the Implementing Rules and Regulations of Republic Act No. 9136 and Rule 6 of the ERC Rules of Practice and Procedure. Meantime, the Net-Metering Charges such as provided above shall be effective until different charge is approved by the ERC, upon application by the DUs.

Section 7. Billing Charges – The net amount shall be payable by or creditable to the QE shall be obtained by a subcontracting from the subtotal amount for import energy, the following: (a) the subtotal peso amount for export energy, and (b) the peso amount credited in the previous month, if any. If the resulting peso amount is positive, QE shall pay this positive peso amount to the DU. If the resulting peso amount is negative, the DU shall credit the negative peso amount the QE's electric bill in the immediately succeeding billing period.

Section 8. Termination Date – The agreement shall be co-terminus with the service contract of the QE with the DU under Customer Account No. Either party may however pre-terminate this net-metering agreement for just case.

Section 9. Dispute Resolution – In case of dispute over the application of certain provisions of this agreement, the parties shall exert best efforts to resolve the dispute among themselves within thirty (30) days from when the dispute arose. If the dispute remains unresolved after thirty (30) day period, either party may file a petition for dispute resolution with the Energy Regulatory Commission (ERC), who shall have original and exclusive jurisdiction over such dispute.

While these are pending with the ERC, the status quo of cases involving violation of contract shall be maintained. The maintenance of the status quo shall only be applicable to the subject matter of the case and will not extend to any other right/s and obligation/s between the parties

IN WITNESS WHEREOFF, the parties execute this Net-Metering Agreement this ______

at _____

CAGAYAN 1 ELECTRIC COOPERATIVE, INC.

By:

ENGR. TITO R. LINGAN

General Manager

Qualified End-User

Witnesses:

SIGNATURE OVER PRINTED NAME

SIGNATURE OVER PRINTED NAME

Acknowledgment

Republic of the Philippines)	
) S.S.	
BEFORE ME, this		_, the following persons appeared before me,
NAME	Identification Documents (TIN/Driver's License	Date/Place of Issue

Known to me to be same persons who personally appeared before me and acknowledged to me that the foregoing agreement is the result of the free act and deed and that of the corporation/cooperative which they present.

Doc. No.	
Page No	
Book no_	
Series of	

ELECTRICAL INSPECTION CHECKLIST

Applicant No	Date Applied			
Owner / Applicant				
(Family Name)	(First Name)	(MI)		
Address:				
(Street)	(Barangay)	(City/Municipality)		
Location of Installation:				
Type of Installation				
() New Electrical Wiring (Net Metering	() Temporary Conn	ection		
() Additional Load	() Separation Meter	•		
() Reconnection or without alteration	() Transfer of Mete another location	r within the bldg. to		
() Other (Specify)				
Type of Construction :				
() New () Old	()	Reconnection		
Type of Occupancy ·				
	() A gricultural			
Number of Outlets equipment to be installe	d :			
0 0	Others (Sp	pecify)		
-				
	<u></u>			
· · · · · · · · · · · · · · · · · · ·				
No. of Service Entrance Switch				
Nature of Wiring :				
	(Family Name) Address: (Street) Location of Installation: Type of Installation () New Electrical Wiring (Net Metering () Additional Load () Reconnection or without alteration () Other (Specify) Type of Construction : () New () New () Other (Specify) Type of Construction : () New () New () New () Other (Specify) Type of Construction : () Other (Specify) Type of Construction : () Other (Specify) Type of Occupancy : () New () New () Old Type of Occupancy : () Residential () Commercial () Industrial () Institutional Number of Outlets equipment to be installed No. of Conv. Outlet No. of Conv. Outlet No. of Controller (for Gen. Set) No. of Service Entrance Switch Nature of Wiring :	Owner / Applicant		

We hereby affix our hands signifying our conformity to the information herein above set forth.

(Signature of Owner/Applicant)	Barangay Electrician	(Printed Name & Signature of Licensed Professional Electrical Engineer)
TIN:	Address:	Res. Cert. No
Date Issued: Place Issued:	Contact No.:	Address: P.T.R./O.R. No



CAGAYAN I ELECTRIC COOPERATIVE, INC.

Maddarulug, Solana, Cagayan

Area 1 (Tuguegarao City)-09175782437, Area 2 (Peñablanca, Enrile, Solana, Amulung West)-09175782448, Area 3 (Tuao, Rizal, Sto.Niño, Piat)-09175782454, Area 4 (Iguig, Amulung East, Alcala, Baggao)-09175782447 Telephone Number : 844-1595 ; FB Page : Cagayan 1 Electric Cooperative, Inc. ; E-mail address: <u>cagelco1@yahoo.com</u>

 Telephone Number : 844-1595 ; FB Page : Cagayan 1 Electric Cooperative, Inc. ; E-mail address: cagelco1@yahoo.com

 NET METERING APPLICATION FORM
 Control No.:

	AP	PLICANT'S INFORMAT	ION			
FAMILY NAME	FIRST NAME	NAME EXTER	NSION	MIDDLE NAME		
COMPANY/AGENCY						
CONTACT NO.						
		POUSE'S INFORMATIC	N			
FAMILY NAME	FIRST NAME	NAME EXTEN		MIDDLE NAME		
	FIRST NAME		אוסוכו			
		ADDRESS e the Renewable Energy (RE) fa				
NO. STREET	ZONE SUBDIVISION	BARANGAY	MUNICIPALITY/CITY	PROVINCE		
		LER INFORMATION (Te				
FAMILY NAME	FIRST NAME	NAME EXTEN	ISION	MIDDLE NAME		
COMPANY/AGENCY						
NO. STREET	ZONE	BARANGAY	MUNICIPALITY/CITY	PROVINCE		
CONTACT NO.						
		CHNICAL SPECIFICATION	JN			
SOLAR WIND [] hydro 🛛 biomass 🗌 o	THERS				
Peak Capacity Outp						
Inverter Configuration Ty		(Hybrid System)				
Total Peak Capacity Outp						
Voltage Output/Modu Inverter Ty		DC SIGNATURE OVER PRINTED NAME OF Inverter/Central Inverter)		NAME OF TECHNICIAN		
Total Capacity Outp		erter/central inverter/				
Voltage Outp		/200)	DATI	 E		
		REQUIREMENTS				
	ETERING interconnection to CAGELC		Permit (Municipal/ City Engr's. Offic	,		
-	Signed & Sealed by PEE with Signature over	er Printed Name) 5. Certificate	of Final Electrical Inspection/Comp	letion(Municipal/ City Engr's. Office)		
3. Fire Safety Clearance (Municipal/City Fire Dept.)						
ATTACHMENTS						
1. Net Metering Agreement (Upon approval) 3. Distribution Impact/Asset Study (DIS/DAS)(from Technical Department)						
2. Electrical Inspection Ch						
SUMM	IARY OF CHARGES					
	t(DIS/DAS) FEE	I certify the	at all information above-s	tated are correct and true		
	ommission FEE	to the her	t of my knowledge and bel	lief.		
	SERVICE FEE					
VAT			NAME OF APPLICANT			
	OR Date:					
Remarks			ΠΔΤΓ			

POLICY NO. 02-2017

POLICY ON THE IMPLEMENTATION OF NET METERING FOR RENEWABLE ENERGY SYSTEM

Pursuant to the resolution adopting the Rules Enabling the Net-Metering Program for Renewable Energy, Resolution no. 9, Series of 2013. In this regard the following working instructions are hereby issued to the field for effective implementation.

- 1. Net Metering arrangement is permitted for CAGELCO 1 consumers with existing accounts and in good credit standing in the payment of electric bill. Qualified End-user (QE) or consumer is allowed to install an on-site Renewable Energy (RE) facility not exceeding 100 kilowatts (KW) in capacity per Consumer Account. However, a QE must generate a facility not to exceed his maximum load requirement, otherwise CAGELCO I reserves the right to temporarily disconnect the RE facility after due notice until such time that an adjustment with the QE load will be made.
- 2. A QE who intends to operate in parallel with the DU's Distribution system shall inform CAGELCO 1 through written request, address to CAGELCO 1, of its intention to participate in the Net Metering Program.
- 3. CAGELCO 1 shall provide application for interconnection, Detailed Planning Data, Plant Parameters Form, pro forma Net Metering Agreements, application fee, information and metering requirements.
- 4. Applicant shall submit the accomplished Net Metering Application forms with the supporting documents. CAGELCO 1 will then verify the accuracy and completeness of the documents. Within two (2) working days upon receipt of the application, CAGELCO 1 will issue an acknowledgement receipt with feedback on whether or not the application is complete.
- 5. With the submission of complete documentary requirement, the application proceeds to the technical evaluation. CAGELCO 1 will perform an initial assessment to determine on a nondiscriminatory basis whether or not a specific Distribution Impact Study (DIS) and Distribution Asset Study (DAS) will be needed, in accordance with the DSOAR, and inform the applicant accordingly.
- 6. If the conduct of DIS and DAS is deemed necessary, CAGELCO 1 informs the applicant and relays the following details on the DIS: Scope of the Study, Estimated Time of DIS Completion and DIS Fee. Within thirty (30) calendar days from receipt of the details on the DIS, the applicant must inform CAGELCO 1 of his decision on whether or not to proceed with the DIS and DAS.
- 7. The applicant must settle the DIS fee amounting to **P5,000.00** and during the conduct of the DIS, additional information may be requested from the applicant. From receipt of complete information, CAGELCO 1 has thirty (30) days for the first year of implementation and thirty (30) days, year after, to complete the DIS and DAS. Within a day from completion of the DIS and DAS, CAGELCO 1 shall provide the applicant with the results of the study.
- 8. If the conduct of DAS is necessary, the DU issues an offer of DAS service to the applicant. Within thirty (30) days from receipt of the DAS offer, the applicant must inform CAGELCO 1 whether or not to proceed with the DAS. Upon acceptance of the DAS offer and payment of the DAS fee by the applicant, CAGELCO 1 has thirty (30) days to complete the study. Within a day from completion of the DAS, CAGELCO 1 informs the applicant of the result of the study.
- 9. Before finalizing the design of the interconnection facilities based on the result of the DIS and or DAS, the applicant shall submit the electrical permit issued by the Electrical Division of Office of the Building Official (OBO) / City Engineers Office of the LGU to see to it that that the applicant complies with the standard and requirements on electrical safety in the Philippine Electrical Code (PEC), and the Electrical Engineering Law.
- 10. CAGELCO 1 shall conduct inspection of the Service Entrance depending on the meter set-up (2 uni-directional meter or single bi-directional meter).
- 11. After the completion of the plans for the interconnection facilities, project agreements (e.g. Net-Metering Agreements, Fixed Asset Boundary Documents) will be executed and pay the applicable fees, such as ERC fee of \$1,500.00 and service fee of \$1,500.00 plus VAT. Construction of the interconnection facilities may then proceed.
- 12. The applicant shall be responsible for providing adequate protection for its facility under any operating conditions, and regardless of whether or not the interconnected generation is in operation. Mandatory safety precautions/features which have to be taken into consideration as part of the grid connected solar PV system installations are:
 - a) Automatic synchronization devices shall be installed to monitor and control the synchronization, frequency, power factor and the voltage level of the RE facility. Automatic synchronizing settings shall not be changed following installation unless mutually agreed by both parties.
 - b) The QE shall provide facilities against islanding to isolate and block the RE facility from closing back into the Distribution System until the system is energized for a minimum of two (2) minutes from the normal utility or CAGELCO 1 source.
 - c) The Solar PV system should be separately grounded/earthed in accordance with requirements of the PEC.
 - d) The QE shall provide a visible manual disconnecting switch with locking facility where it will be easily accessible to electrically isolate CAGELCO 1's Distribution System from the RE facility and to established working clearance for maintenance, safety and system consideration. The disconnect device shall be located 10 feet from the Connection point. If this is not practical, the disconnected device should be located between the RE facility and the connection point. The type of disconnect device must allow for visual indication of the contract's position and the handle must be lockable in the open position with a padlock.
 - e) Protective relays shall be installed to trip the corresponding circuit breaker during abnormal conditions or grid failure and thus prevents any solar power injection to the Distribution System.
- 13. Caution Stickers shall be used with the yellow back ground and the text "Solar PV System" written in black letters. The size of these stickers shall be 10 cm (width) x 7 cm (height) with the text clearly printed in the center of the sticker. All SPV owning consumers should provide the mandatory sign board fitted near the existing meter reading terminal stating that 'This service is fitte with a grid connected SPV plant'. The Solar PV System Caution Stickers shall be provided and installed by CAGELCO 1 in the following locations during commissioning.
 - a) On or near to, the service connection meter of service with grid connected Solar PV System.
 - b) On the Consumer's main switch, of a service connection with a grid connected Solar PV System.
 - c) On distribution poles with grid connected Solar PV Systems at height of about 1.50 meters from the ground.
 - d) On each of the takeoff poles of a Distribution Transformer to which Solar PV Systems are connected.
 - e) On LT feeder pillars with grid connected Solar PV System on the street-facing door of the feeder pillar.
- 14. Applicant shall inform CAGELCO 1 once the installation is complete. Applicant's installed facilities will undergo testing and commissioning to be witnessed by CAGELCO 1 representative. Applicant is responsible for carrying out the relevant commissioning tests which includes the installation of required test equipment at the RE facility. Commissioning will include on-site inspection of the system components and functional test to ensure its conformance to the technical requirements. Any non-conformance shall be corrected by the applicant.
- 15. Applicant shall provide technical literature including type test certificates of the protective equipment.
- 16. Upon receiving the applicant's request for effecting Solar Net Metering along with the copy of the Certificate of Final Inspection issued by the Office of the Building Official (OBO), signed net metering agreement and payment of Service Fees, the Solar PV System shall be connected to the distribution system by the CAGELCO 1 within seven (7) working days.
- 17. Two Uni-directional meters shall be installed to measure import and export (kwh) separately or a single Bi-directional meter. A generation check meter may be installed in proximity to RE facility (at low voltage side) to record all energy production of the RE facility for purposes of issuance of RE Certificate, which CAGELCO 1 can use to comply with RPS obligation. The pull-out meter reading of the existing service connection meter and initial meter reading of the new Bi-directional or two Uni-directional meter should be properly recorded.
- 18. In the event there is no power from CAGELCO 1 the RE facility should automatically disconnect from the system. The QE must inform CAGELCO 1's System Operator if it is going to synchronize to or isolate from the system. QE shall provide CAGELCO 1 the contact number of the person who is responsible for the operation of the RE facility. QE shall also maintain the RE facility and interconnection facilities in a safe manner as approved by CAGELCO 1 in conformity with all applicable laws, rules and regulations.
- 19. CAGELCO 1 shall own and shall be responsible for the design, provision, installation, operation, maintenance, testing and sealing of the meter and associated metering equipment in accordance with section 2.11 of the DSOAR.
- 20. A list of service connections with grid connected Solar PV Systems shall be available at the Membership Development and Advocacy Section, CITED/Planning Division, TSD, Area offices, billing office.
 - a) The MRBD shall verify the periodically the expected generation with the Solar Generation Meter and also compare the inverter meter reading with Solar Generation Meter reading to avoid malpractices.
 - b) A record shall be maintained at the Planning Division of each SPV plant commissioning date and other details including whether the inverter is a sine wave inverter and comply with Harmonic requirements as seen in the test certificate.
 - c) The SPV connection details of pole/pillar box/Distribution Transformer/Substation feeder end shall be maintained at the Planning Division as these information are vital.
- 21. Meter Reading & Billing

a)

- The service connection meter readings of solar service connections can be taken along with the readings of other service connections as per the standard meter reading schedule
- b) In case of a net import bill, the Consumer shall settle the same as per existing norms and the applicable service connection tariff. If in any billing cycle energy exported exceeds energy imported, the amount of net exported Kwh will be carried over to the next billing cycle for adjustment against the amount imported of that billing cycle.
- c) A meter card to record separately the service connection "import" kwh and "export" kwh and the readings of the Solar Generation Meter and Solar Generation Check meter (where ever applicable) with a facility to incorporate both the meter reader and Consumers initials shall be provided by CAGELCO 1.