



NATIONAL ELECTRIFICATION ADMINISTRATION

"The 1st Performance Governance System-Institutionalized National Government Agency"
57 NIA Road, Government Center, Diliman, Quezon City 1100



10 May 2016

MEMORANDUM

TO : ALL ELECTRIC COOPERATIVES (ECs)

SUBJECT : Solar PV Mainstreaming for Household Electrification

I. BACKGROUND

Solar PV Mainstreaming (PVM) is a program of the Department of Energy (DOE) that seeks to "mainstream" the provision of solar home systems (SHS) as a utility service offering of electric cooperatives and other regulated electricity suppliers.

PV Mainstreaming includes an output based subsidy, with initial financing from the European Union and the Global Partnership on Output Based Aid (GPOBA), to buy down the initial cost of connection; and a regulatory framework that provides for customer payments for operations, maintenance and replacement of systems over time.

II. PROJECT RATIONALE

The major aim of the PVM is to support the attainment of Government's target of 90% household (HH) electrification by 2017 through the development of a viable and sustainable business model for off-grid electrification for remote HHs using individual PV systems.

III. SCOPE COMPARISON: SEP, BLEP, NIHE, PVM

Sitio Electrification Program (SEP) - energization of all sitios at 60 HHs per sitio nationwide.

Barangay Line Enhancement Program (BLEP) - connection of barangays previously energized by small generating sets or solar home system to the grid.

Nationwide Intensification of Household Electrification (NIHE) targets those remaining HHs in a sitio that are not energized through SEP/BLEP. DOE aims to provide power to at least 45,000 poor households through NIHE.

The Solar PVM targets those households with no access to the grid and are not programmed to be energized through either SEP/BLEP and/or NIHE within 3-5 years. DOE aims to provide power to 40,000 households through PVM.

IV. GRANT COMPONENT

- a. Solar Panel
- b. Controller
- c. 4 LED Bulbs

- d. Lithium-Ion Batteries
 - e. Colored TV/radio
- With 1 year warranty on parts

V. PROJECT BENEFICIARIES

Immediate beneficiaries: *Electric Cooperatives*

ECs will receive new business model and cost-effective strategy to perform their obligation of providing electricity service within their franchise areas.

Ultimate beneficiaries: *poor HHs in far-flung areas*

They will receive electricity service from ECs through solar PV mainstreaming approach.

VI. BUSINESS MODEL: FEE-FOR-SERVICE

- EC leases SHS to individual HH for a fixed monthly fee.
- EC is responsible for the repair, maintenance and replacement of identified components.
- The capital cost of the PV systems will be fully subsidized using the ASEP funds.

VII. MONTHLY FEE

Based on previous experiences with pilot projects in 2010, the Department of Energy has come up with an approximately PhP250.00 monthly fee for the maintenance of the SHS. This includes the salaries and allowances of EC's engineers and technicians, transportation cost, and other overhead costs.

Proposed Solar Home System Tariff

	COST COMPONENT	TARIFF (PHP/Month/Customer)	
		30 Wp	50 Wp
1	Base Operating Costs		
1.1	Salaries and Benefits		
	Engineer	24.33	24.33
	Technician 1	17.93	17.93
	Technician 2	17.34	17.34
1.2	Personnel Allowance		
	Engineer	2.90	2.90
	Technician 1	5.79	5.79
	Technician 2	5.79	5.79
1.3	Transportation Cost		
	Investment Cost	2.91	2.91
	Maintenance Cost	3.31	3.31
	Fuel Cost	1.63	1.63
1.4	EC Office Overhead Costs	0.08	0.05
1.5	Insurance	2.86	4.45
1.6	Interest Expense	1.6	2.49
2	Replacement Cost Fund (RCF)		
	Solar Panel	3.33	5.67
	Battery	41.56	71.25
	Controller	40.75	40.75
3	AGENT COLLECTION FEE	20.00	20.00
	TARIFF for ZONE A (<40 km from EC Office)	192.00	227.00
	TARIFF for ZONE B (40-45 km from EC Office)	199.00	234.00
	TARIFF for ZONE C* (>45 km from EC Office)	207.00	241.00
	* Applies for Islands		

The rate is still subject to approval of ERC.

VIII. ROLES AND OBLIGATIONS

1. European Union through World Bank

- Grants 40,000 SHS

2. National Electrification Administration (NEA)

- Supports implementation, coordination, monitoring and supervision of PV Mainstreaming
- Plays a key role in helping Electric Cooperatives to enter into the program

3. Electric Cooperatives

- Systems owners
- Responsible for maintenance, repair and replacement of PV components (PV module, battery, controller)
- Collect the participation fee and fixed monthly service fee (~Php250)

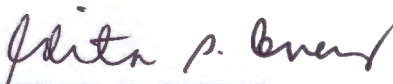
4. LGUGC

- Appointed as the Subsidy Program Manager who will conduct subsidy allocations competitions on behalf of participating ECs
- Will monitor installation progress, verify connections when claims for subsidy payments are made

5. Consumers

- Pay the participation fee and fixed monthly service fee to ECs through Solar Power Association (SOPA)

We encourage all ECs, especially those which cover households in very remote areas wherein connection to grid is not feasible, to support the program by signifying interest in Solar PVM. For additional information/requirements/inquiries, please contact NEA-ORED at nea_ored@yahoo.com.


EDITA S. BUENO
Administrator



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