

**Kingdom of Cambodia**

**Rural Electrification Fund (REF)**

**Operational Manual 2:  
PROCEDURES FOR REFS**

**Draft**

**Version: May 2004**

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## Explanation of Key Terms and Abbreviations

Board Approval Limit	Grants below the approval limit of US\$200,000 for an investment project do not require the approval of the REB
Developer	Entity (utility, private entrepreneur or CBO) that invests in infrastructure projects and companies
Electrification coverage	Percentage of national households living in an electrified area.
Environmental Assessment	The process of managing the environmental aspects (EA) of a policy, strategy, program, or subprojects from the earliest stages of identifying potential actions to their completion and evaluation. The process encompasses identification of potential adverse environmental impacts; assessment of these impacts and comparison to impacts of alternative approaches; design and implementation measures and plans to avoid, minimize, mitigate, or compensate for adverse impacts; and development of associated management and monitoring measures.
Environmental Impact Assessment	Environmental assessment instrument for (EIA) “Category A” projects to identify and assess major potential environmental impacts of proposed projects, evaluate alternatives, and design appropriate mitigation, management, and monitoring measures (generally in the form of an environmental impact plan).
Environmental Review	Environmental assessment instrument for (ER) “Category B” projects, in which the project is likely to have minimal impacts but should be reviewed with a simple and standardized checklist of possible impacts and appropriate mitigation measures.
Environmental Screening	The process of identifying as early as possible, the potential adverse environmental impacts of a proposed project, assigning an environmental category (Category “A”: projects that potentially cause significant and possibly irremediable

environmental impacts, “B”: projects that cause lesser impacts, which often are essentially remediable or mitigable; “C”: projects that can be expected to have little or no environmental impact); indicating the level of anticipated impact and corresponding level of EA required and identifying the most relevant EA instrument (ER, LEA or EIA) needed to address impacts and environmental issues associated with the project.;

Environmental and Social Assessment Framework

The frame document in Annex VI of this Manual (and any amendments thereto) that shall: (i) enable to assess the environmental and social impacts of Projects; and (ii) where applicable, govern the preparation and environmental management plans, resettlement and rehabilitation plans and other appropriate mechanisms required to mitigate and monitor any adverse impacts from carrying out the Project

Executing Agency

Agency nominated in a Government-to-Government Agreement for a new donor-financed program as the nationally responsible counterpart institution for overall policy issues.

Financial Closing

The point in time when full agreement has been reached between equity investors and lenders; all conditions of lenders and investors have been met to finance the total financial package for the project, the loan agreements and shareholder agreements have been signed and financing disbursements can take place.

Free limit

Grant for an investment project below US\$500,000. Subject to other eligibility criteria being fulfilled, grants below the free limit do not require the approval of IDA

Household electrification rate

Percentage of national households that are provided with an electricity service

Investment Subsidy

Subsidy payments made in instalments during construction and until commissioning, when the last payment, which can be linked to a target number of connections, is paid.

Least cost technology	Technology with the lowest annuitized life-cycle economic cost among alternative options; taking into account environmental costs and differences in risks.
Locally Initiated RE Project	Project proposal submitted to the REF for investment subsidy support, which was identified, prepared and developed by a private project developer, NGO or community.
Priority RE Projects	Projects that are identified and prioritized in the Indicative Rural Electrification Master Plan. License applications for projects located in priority project areas will include obligation to take on the whole investment package within a specified number of years.
Program Management Unit (PMU)	The unit appointed by MIME to administer the REF-grant program until the REFS has been established and become operational.
Stakeholder	“Interested party”: institution or legal person having a direct interest in the activity.

### **Abbreviations**

ACLEDA	Association of Cambodian Local Economic Development Agencies
AREC	Association of Rural Electricity Companies
BDS	Business Development Services
CBO	Community based organization
EAC	Electricity Authority of Cambodia
FMC	Financial Management Committee
FMR	Financial Monitoring Report
FU	Finance Unit
GEF	Global Environmental Facility
IFC	International Finance Corporation
IREMP	Indicative Rural Electrification Master Plan
ICB	International Competitive Bidding
MFI	Micro Finance Institutions
MoF	Ministry of Finance
MIME	Ministry of Industry, Mines and Energy
NGO	Non-governmental Organization
LIREP	Locally Initiated Rural Electrification Project
PAP	Project Affected Person
PCF	Prototype Carbon Fund
PCI	Participating Credit Institutions
PECC	Provincial Electricity Council of Cambodia

PFI	Participating Financial Institutions
PIU	Public Information Unit
PREP	Priority Rural Electrification Project
RGC	Royal Government of Cambodia
REB	Rural Electrification Board
REE	Rural Electrification Entity
REF	Rural Electrification Fund
REFS	Rural Electrification Fund Secretariat
REPMEU	Rural Electrification Planning, Monitoring & Evaluation Unit
RET	Renewable Energy Technology
SHS	Solar Home System
SOE	Statement of Expenditures
TA	Technical Assistance
VDC	Village Development Committee

***Exchange Rate:*** ***US\$1 = Riels 3,900.***



# **1 INTRODUCTION**

## ***1.1 Status of the Manual in its present Form (May 2004)***

The REB, as Board of the REF, adopts the procedures for the REF. The decision taking is solely subject to constraints imposed by covenants in REF loan- and or grant-financing agreements between the REF/RGC (Royal Government of Cambodia) and co-funding donors. Covenants will in particular cover procurement, disbursement and financial reporting issues.

This is a draft manual for consideration by REB. Some details are defined by standard World Bank operational procedures for loan agreements. But otherwise, the REB can adjust proposed procedures according to its preferences when it adopts the “Operational Manual for the REF” during one of its first meetings. During operation, further adjustments can be expected in response to lessons learned from practical experience. A manual is a steadily evolving instrument.

This Operational Manual 2: “Procedures for the REFS” details the daily life-operational procedures for the REFS in implementing the policies and tasks defined for the REF by e REB. The separate Operational Manual 1: “REF Governance” covers the operational procedures for the REB itself and outlines the expected coordination relationship between the REF and other institutions involved in rural development and rural electrification.

## ***1.2 Missing Sections***

Chapter 10: “Technical Specification” is empty. It will contain the results of ongoing consultant work defining technical specification for least-cost technologies to be used in REF-financed rural electrification activities.

Annex B: “Forms for Financial Reporting” is empty. These forms will be developed through the work on setting up a financial management and management information system for the REF.

## **2 BACKGROUND**

### ***2.1 Government Rural Electrification Policies and Strategies***

RGC electrification policy is to reduce the costs of electricity, which are among the highest in the world, and to increase the national connection rate: in 1998, 12% of Cambodia's 13 million people were connected to power supply, 50% of urban and 6% of rural households. The Government's electrification target is, by the year 2030, to provide 70% of rural households with access to electricity at affordable prices. The strategy relies on EdC to undertake the expansion of the national grid into rural areas, while private entrepreneurs invest in rural distribution and isolated grid projects. Stand alone systems, above all, solar home systems, are to provide service to rural households who will not be connected in the foreseeable future.

### ***2.2 Decree and sub-decree***

The RGC, through a Royal Decree and Sub-decree, has set up a Rural Electrification Fund (REF), as an independent state agency to channel sub-grants and technical assistance to the private sector and rural communities to implement rural electrification sub-projects. The decrees define the objectives, governance and financing sources of the REF. The REF is to be financed by donor grants and loans and by a rural electrification fee to be levied on the transmission of electricity. The REF is headed by a Board, the Rural Electrification Board, nominated by the Minister responsible for Energy, with REF daily operation being performed by the REFS, the Rural Electrification Fund Secretariat.

### ***2.3 Mission of the REF***

The objective of the REF is to accelerate the rate of rural electrification and reduce the economic cost of supply. The REF provides output-based investment grants and technical assistance to private developers who invest in isolated grid projects (rural electrification entities, REEs) and/or grid-connected micro/mini-hydro or biomass based power plants. The REF provides grants also to purchases of solar home systems and to TA for solar PV-companies. Investments in the expansion of the national grid into rural areas fall outside the scope of the REF, as the power company EdC finances these with soft loans and grants from bilateral and multilateral organisations.

The REF investment grants have a dual market enabling impact: (i) they reduce the cost of rural electrification, which by lowering the tariffs increases the connection rates in the

project areas, (ii) they lower the equity and loan financing share in project finance, which facilitates financial closure. To further facilitate loan financing of supported projects, the REF provides TA to financing institutions, including the Micro Finance Institutions (MFI), in the appraisal of rural electrification and renewable energy projects.

## **2.4 IDA credit and GEF grant**

IDA loans and GEF grants totaling US\$ ... million support the REF-activities directly and indirectly.

1. A start-up capital of US\$ million is provided to the REF in the form of an IDA credit of US\$6.18 (6.84 or 9.63???) million - passed on to the REF by the loan taker, the Ministry of Finance - and a GEF grant of US\$ 1.9 (or 2.5???)million.
2. An IDA loan facility of US\$10.60 million is to refinance loans to investments in mini-hydropower plants.
3. An IDA loan of US\$2.01 million finances TA to the development of the REFS during its first years of operation.
4. A TA package of US\$7.63 million (IDA: US\$3.78 million; GEF: US\$3.85 million) is given to MIME/REF to finance:
  - US\$4.15 million for TA to Renewable Energy Business Development.
  - US\$1.45 million (US\$0.30 million from GEF) are for TA to build technical and business planning capacity within REEs.
  - US\$0.61 million (of which US\$0.30 million from GEF) for capacity building of financial institutions.
  - US\$0.62 million for MIME policy making for renewable energy investments.
  - US\$0.30 million for TA to develop end-use activities and rural income generation.

## **2.5 Quantitative Targets for REF-Activities financed by IDA and GEF**

The quantitative for the 5 to 6 year IDA/GEF financed project activities are: (a) 45,000 new grid connections provided by REEs; (b) electricity service through solar home systems to about 12,000 households; (c) at least 6 MW of mini-hydro and 850kW of micro hydro capacity, amounting to 5 percent of national generating capacity.

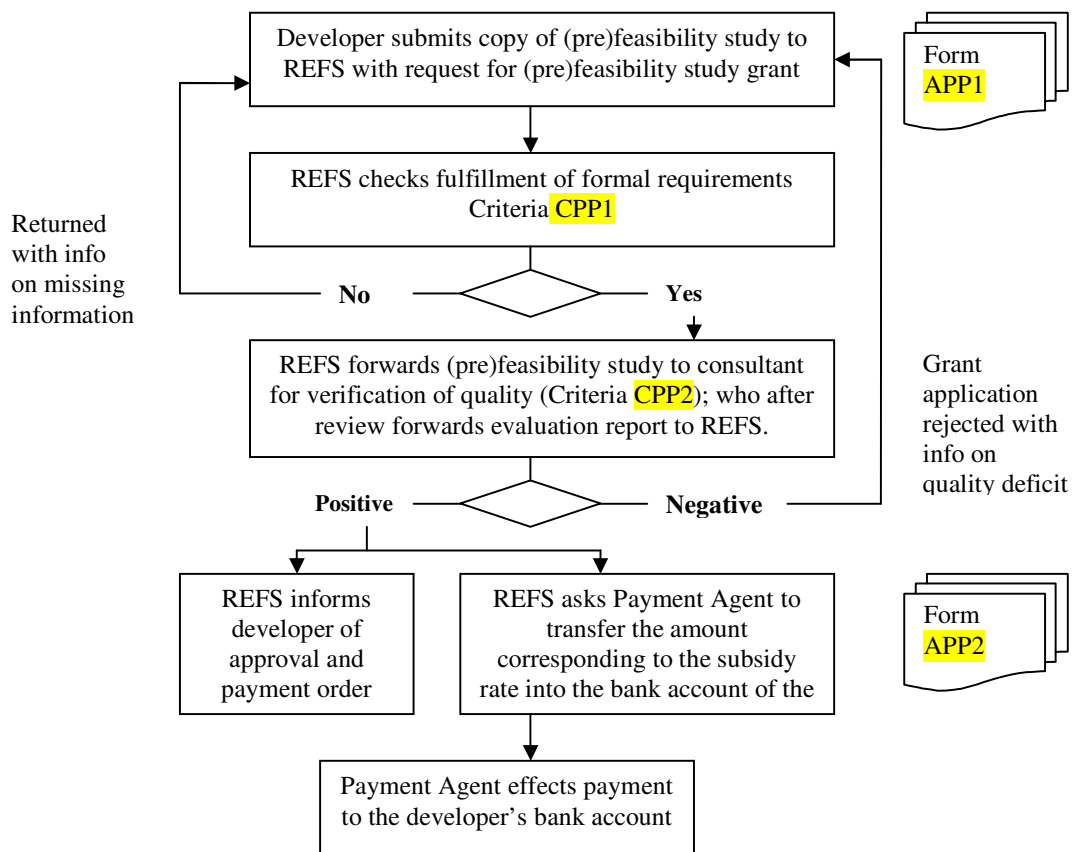
## ***2.6 Interim Program Management Unit, PMU***

The REF is expected to be fully established and operational only within one year of the start of the IDA/GEF financed project activities. In the interim; a transitional PMU composed of MIME and EdC staff is created at MIME to perform the functions of the REF and facilitate its timely creation. The procedures for PMU are the same as for the future REFS, which will replace it, once its core staff has been hired.

### 3 PROGRAM MECHANISMS AND PROJECT CYCLES

#### 3.1 Project Cycle for Locally Initiated Rural Electrification Project (LIREP)

##### 3.1.1 Approval of project preparation grant<sup>1</sup>



<sup>1</sup> This section is relevant if the REFS administers the grant scheme for (pre)feasibility studies. The alternative is that the grants are handled by the consultant firm being contracted to provide TA to project developers.

## Approval Criteria for Project Preparation Grant

### *Criteria CPPI: Criteria for Formal Check on Application for Project Preparation Grant*

1. Is the application form fully filled out or is any information missing
2. Is copy of the feasibility report attached
3. Has the project previously received a project preparation grant
4. Is the project eligible for REF-grant support, falling into one of the following categories:
  - Isolated grid project with diesel generator
  - Isolated grid project served by micro-hydro (possibly with diesel generator as back-up)
  - Isolated grid project served by biomass-fueled generator (possibly with diesel generator as back-up)
  - Micro- or mini-hydroplant connected to the national grid
  - Biomass fueled generator connected to the national grid

### *Criteria CPP2: Criteria for Quality Check on Feasibility Study*

1. Does the feasibility study cover the subjects listed in the REF/EAC guidelines for preparation of feasibility study
2. Is the technology being proposed least cost and in accordance with REF/EAC technical guidelines for rural electrification
3. Is the socio-economic assessment and demand forecast realistic
4. Are the cost assumptions realistic
5. Is the economic and financial analysis, including cash flow analysis adequately done.
6. Is the tariff calculation realistic
7. Are the environmental and social safeguards issues adequately covered in the feasibility report, following the REF guidelines on social and environmental assessments (Annexes VIII and IX).

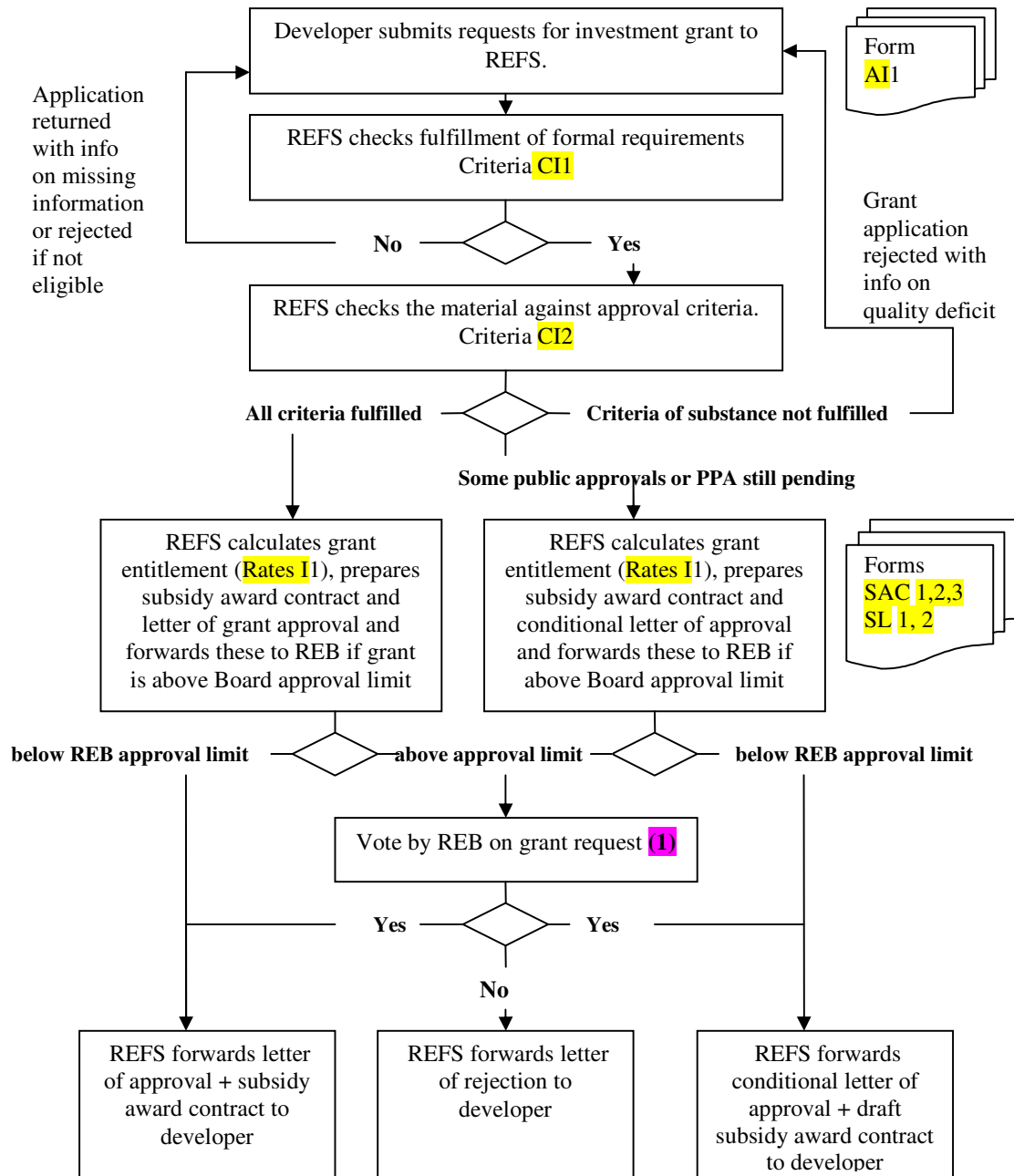
## Subsidy Rates Project Preparation Grants

### *Rates Schedule for Project Preparation Grants, RPP<sup>1)</sup>*

	Pre-feasibility study	Feasibility Study
Isolated grid project with diesel generator	US\$	US\$
Isolated grid project served by micro-hydro (possibly with diesel generator as back-up)	US\$	US\$
Isolated grid project served by biomass-fueled generator (possibly with diesel generator as back-up)	US\$	US\$
Micro-hydroplant connected to national grid	US\$	US\$
Mini-hydro power plant connected to national grid	US\$ 0	US\$ 0
Biomass fueled power plant connected to national grid	US\$ 0	US\$ 0

1) Rates to be determined based on a study of the market rates for the kind of studies in Cambodia. The rates are to be fixed at about 90% of the price of a competitively priced (pre)feasibility study

### 3.1.2 Approval of subsidy award contract: flow chart



(1) If grant amount to a single project is larger than US\$ 400,000 IDA no objection is required

## **Criteria for Approval of Investment Grants**

### *Criteria CII: Criteria for Formal Check on Application for Investment Grant*

1. Is the application form fully filled out or is any information missing
2. Is copy of the feasibility report attached
3. Is copy of the application to EAC for the generation/distribution license attached; and or copy of the license itself
4. Is copy of the letter of intent for project loan attached by the bank connection of developer
5. Are copies for all relevant approval documents attached; or if, not yet processed, of the applications for approval
6. Is the project eligible for REF-grant support, falling into one of the following categories:
  - Isolated grid project with diesel generator
  - Isolated grid project served by micro-hydro (possibly with diesel generator as back-up)
  - Isolated grid project served by biomass-fueled generator (possibly with diesel generator as back-up)
  - Micro- or mini-hydroplant connected to the national grid
  - Biomass fueled generator connected to the national grid

### *Criteria CI2: Criteria for Approval of Investment Grant*

As the license approval process by REA covers issues 1-4, the review is performed in close consultation with the REA-officer in charge of processing the license application. For maximum productivity, EAC and REB formally decide on a division of labor and/or form for the mutual consultation process; including the evaluation criteria to be used.

#### *(a) Criteria that apply to all categories of REF-supported projects*

1. Compliance with regulatory conditions:
  - All needed local planning approvals have been obtained
  - An EIA, if required, has been performed and approved by the pertinent authorities
  - EAC has issued a license for the project, or, received a license application
  - No other party applied to EAC for a license for the same project in response to the publication by EAC of the license application, within the time limit established by the Electricity Act and EAC regulations
2. Compliance with technical conditions:
  - The technical norms and standards for rural electrification and for renewable energy are fulfilled; the least cost design is used (confirmed by consultant contracted by REFS to review the feasibility study)



- The cost of individual major investment items is in line with the level of local costs according to the data bank on rural electrification costs established by REFS or EAC
3. Financial viability of the project
    - there is strong evidence of financial closure;
    - the commercial bank for providing the debt finance for the project has agreed to finance the project and finalized its due diligence assessment (copies of the draft loan agreement and the bank's project appraisal document are attached)
    - the evaluation confirms the bank's assessment of financial viability and ability of the project's cash flow in early years to service the debt payments.
  4. Institutional viability of the project
    - is the project applicant a legal person; or actively engaged in becoming registered as a legal person (sponsors initiating RE projects need to establish a legally recognizable entity such as a co-operative or a company to qualify for grant awards)
    - projects are not to be managed or majority-owned by the public sector and must demonstrate local community support.
  5. Compliance with World Bank standards for social and environmental safeguards

*(b) Criteria specific for distribution projects*

- The tariff calculation formula, used to establish the tariff schedule submitted to EAC for approval, takes the REF-investment subsidy into account
- potential consumers have expressed their interest in the project by paying a deposit

*(c) Criteria specific for grid-connected hydropower or biomass-fueled power plants*

- EdC has signed a PPA with the developer or a letter of intent.

### **Subsidy Rates for Investment Grants**

#### *Rates Schedule for Investment Grants, RI<sup>1)</sup>*

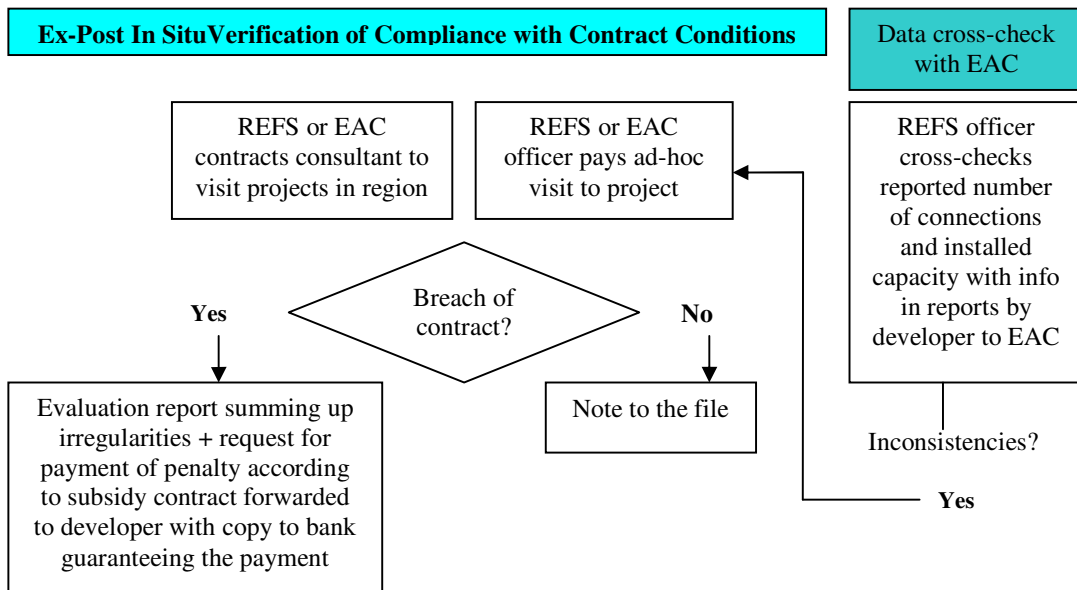
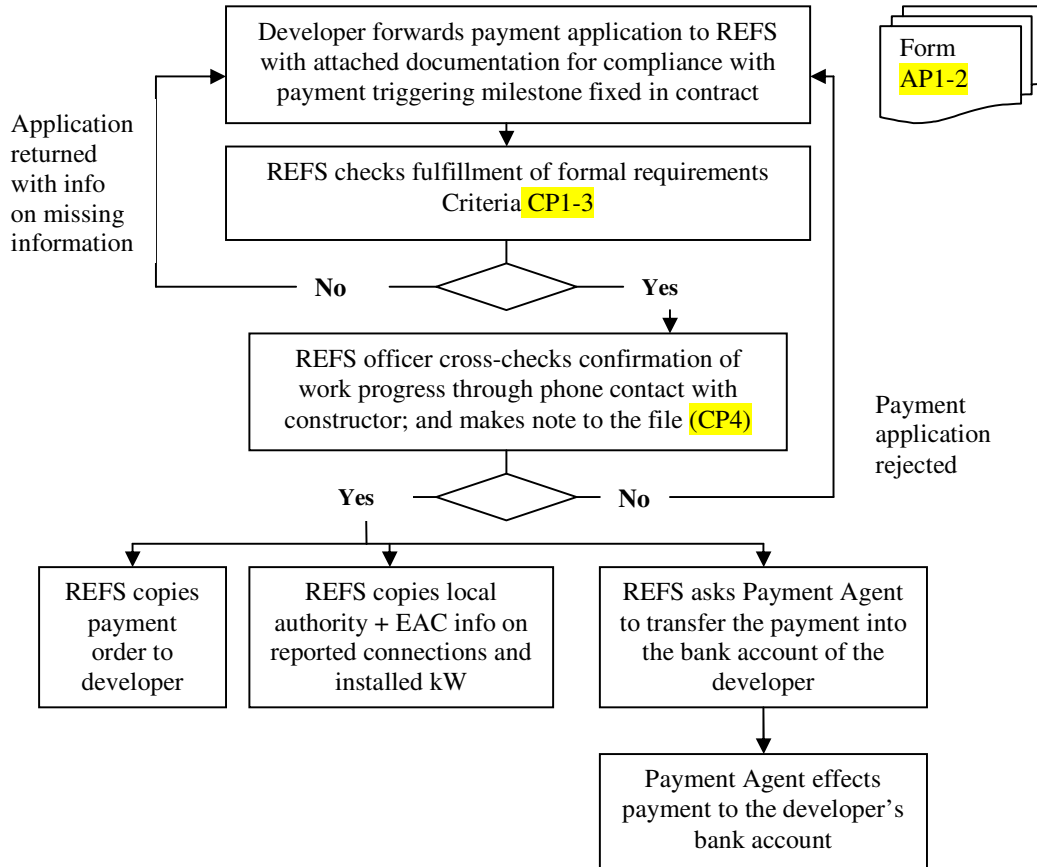
	Subsidy per connection	Subsidy per kW
Isolated grid project with diesel generator	US\$45	n.a.
Isolated grid project served by micro-hydro (possibly with diesel generator as back-up)	US\$45	US\$400
Isolated grid project served by biomass- fueled generator (possibly with diesel generator as back-up)	US\$45	US\$400
Micro-hydroplant connected to national grid	n.a.	US\$400
Mini-hydroplant connected to national grid	n.a.	US\$400
Biomass fueled generator connected to national grid	n.a.	US\$400

1) Rates for 1st year of operation. To be adjusted in the following years in response to the balance between the supply of funds and the demand for funds

#### *Hardship Bonus for eligible PREPs*

If cases where the feasibility study for a PREP can document particularly difficult - and costly - project implementation conditions and/or cases of particular social hardships in the project area; a *hardship bonus* can be added on top of the grant payment according to the standard subsidy rates in the rate schedule.

### 3.1.3 Disbursements under subsidy award contract



## **Check List with Criteria for Disbursement of Investment Grant (CP1-4)**

### 1st payment (criteria CP1)

- Request for 1st Payment form completed by project developer
- In case of conditional subsidy award contract, documentation that missing authorizations have been obtained and/or that missing PPA with EdC is signed
- Declaration of project developer informing of his signing of contracts amounting to at least 50% of the total investment sum estimated in the subsidy award contract + written confirmation by contractors having signed the listed contracts.
- Declaration of project developer informing (i) of start of construction and (ii) providing the planned time schedule for the completion of construction.
- Bank guarantee by co-financing bank for partial or full repayment of REF-grants to REF in case of non-compliance by developer with the investment program listed in the subsidy award contract, including respect of technical specifications, and/or having received payment based on an inflated number of connected customers.
- Bank account of developer for deposit corresponds to the bank account listed in the subsidy award contract; otherwise reason is given for new bank account.

### 2<sup>nd</sup> payment (criteria CP2)

- Request for 2nd Payment form completed by project developer
- Declaration of project developer that investment program listed in subsidy award contract is completed + written confirmation (i) by elected consumer representative in case of isolated grid project and (ii) by major construction contract holder in case of grid connected hydro- or biomass fueled power plant
- Declaration of developer cosigned by the major contractor for construction that the completed installations; as foreseen in the subsidy award contract; comply with rural electrification norms, standards and regulations. In case of deviation from use of planned technology, explanation and justification for this
- In case of isolated grid project, list of connected customers with names and addresses, cosigned by elected consumer representative and developer
- Bank account of developer for deposit corresponds to the bank account listed in the subsidy award contract; otherwise reason is given for new bank account

### 3rd payment (criteria CP3)

- Request for 3rd Payment form completed by project developer
- Project completion report form completed by project developer; containing investment data and, for isolated grid projects, information on productive loads and connection rates
- In case of isolated grid project, list of any additional connected customers since 2<sup>nd</sup> payment with names and addresses, cosigned by elected consumer representative and developer

- In case of grid-connected generators using renewable energy, confirmation of plant commissioning and handing over
- Bank account of developer for deposit corresponds to the bank account listed in the subsidy award contract; otherwise reason is given for new bank account

**Control checks on information received from project developer:**

*(a) Before authorizing Payment Agent to effect payment to developer (CP4)*

- REFS-officer administering the contract cross-checks the confirmation of completion of construction by direct phone call to the leading constructor who co-signed the declaration. The REFS officer makes a written note with date and time of phone confirmation, which is filed electronically and in paper to the project file.

*(b) After transfer of payment to developer*

- When authorizing the Payment Agent to effect the second and third payments, the REFS-officer sends a one-page note to the local planning office of the village/ regional authority, copied to EAC, informing it of reported connected customers and installed capacity of generators.
- REFS-officer administering the contract cross-checks the information on number of connected customers with “end-of-year” information supplied by developer to EAC in accordance with the regulatory requirements for his license. The REFS officer makes a written note, which is filed electronically and in paper to the project file.
- When within a three years period sufficient projects have been implemented in a region, a consultant can be contracted jointly by REFS/EAC to check the technical installations of completed projects in the region and to verify the number of connected customers.
- REFS and EAC staff pay ad-hoc visits to project sites, randomly selected, to get first-hand exposure to the rural electrification situation; and to use the opportunity to cross-check the performance of completed projects, including those already having been checked by a consultant. Relevant information from site-visits is shared between the two institutions.

**Procedure in case evaluation from site visits reports irregularities**

Site-visit consultant prepares evaluation report containing:

- Evaluation of whether any use of sub-standard components was due to negligence by the contractor, or a conscious cost-saving measure by the developer.

- Calculation of estimated cost-savings to developer due to use of sub-standard technical specifications, which were not reported in the requests for payments.
- Recommended investment program to bring the project site up to technical norms and standards
- Information on number of connected customers, pointing out if it is lower than the number on the list of connected customers used in the 2<sup>nd</sup> and 3<sup>rd</sup> payment requests
- Information on installed capacity of grid connected renewable energy systems for which the developer received a per kW investment grant, pointing out if capacity is lower than indicated in the subsidy award contract and in the requests for payments.
- Information on what explanations the developer provided when asked by the consultant to comment on his observations concerning the irregularities.

REFS officer

- Calculates the grant repayment penalty for breach of contract
- Informs the developer, with copy to the bank providing the guarantee for his repayment of grant, of his breach of contract and required penalty payment
- Checks that penalty payment is received within a month; if not, requests the bank to pay the penalty on behalf of the developer.

**Recommended Level of Penalties for Breach of Subsidy Award Contract**

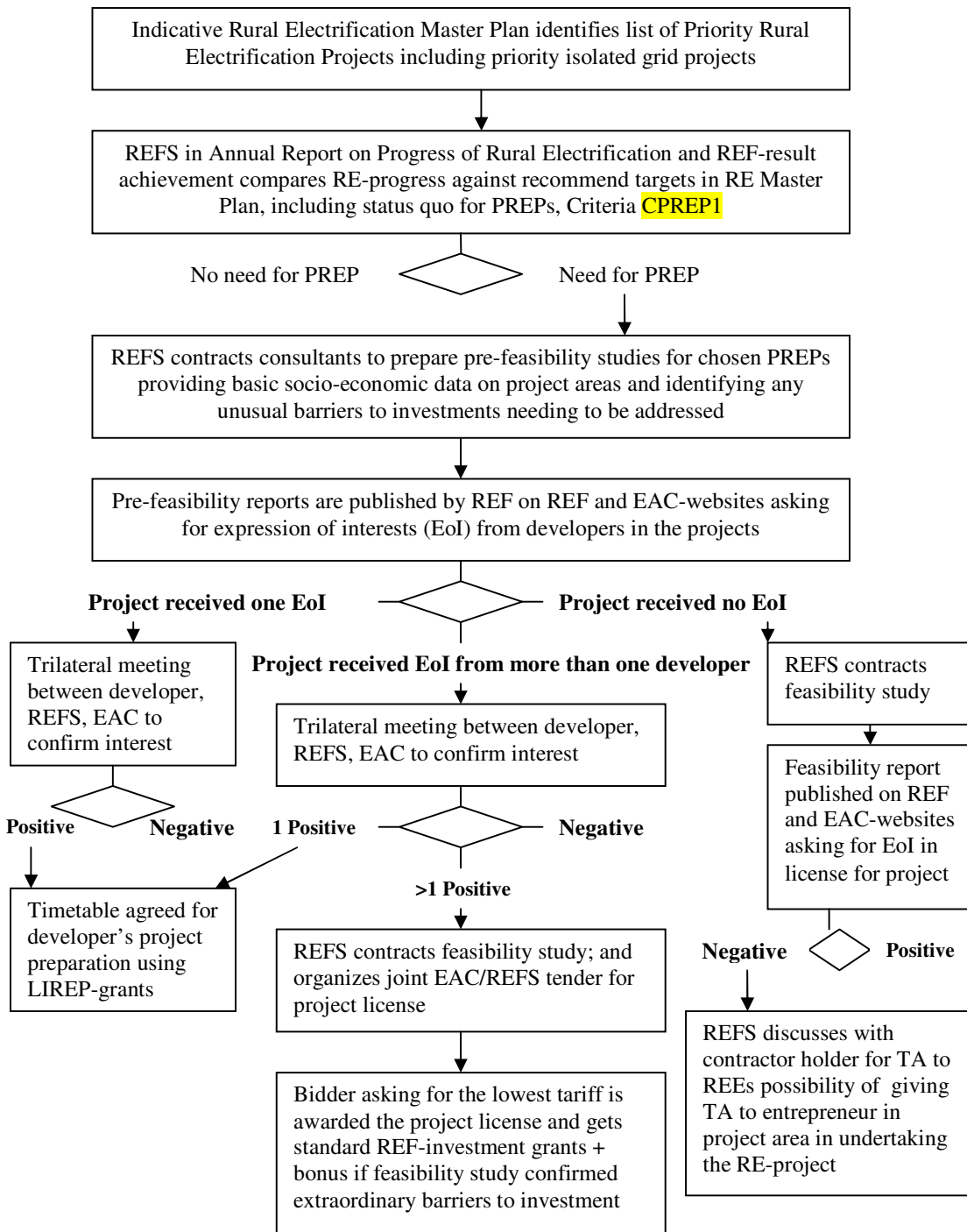
The Subsidy Award Contract states that unauthorized use of sub-standard equipment or over-reporting of connected customers or of installed generating capacity, is subject to penalty payments. The bank connection of the developer must provide a guarantee for any penalty payments arising out of breach of contract.

<b>Breach of Contract</b>	<b>Penalty</b>
Use of sub-standard equipment	Repayment of grant equal to three times the cost difference between standard and sub-standard equipment
Overstating number of connected customers	Repayment of grant equal to three times the excess grant payment
Overstatement of installed kW-capacity of generators using renewable energy	Repayment of grant equal to three times the excess grant payment

### Schedule for Disbursement of Investment Grants

	<b>First payment</b>	<b>Second Payment</b>	<b>Final Payment</b>
Isolated grid project with diesel generator	<u>After start of construction:</u> 40% of target number of connected consumers (according to feasibility study quoted in subsidy award contract) multiplied by grant per connected customer	<u>At finalization of construction</u> 40% of target number of connected consumers multiplied by grant per connected customer	<u>After three months operation</u> Number of connections three months after start of operation multiplied by grant per connected customer minus 1st and 2 <sup>nd</sup> payments
Isolated grid project served by micro-hydro or biomass-fueled generator (possibly with diesel generator as back-up)	<u>After start of construction:</u> 40% of per kW-grant multiplied by plant capacity in kW + 40% of target number of connected consumers multiplied by grant per connected customer	<u>At finalization of construction</u> 40% of per kW-grant multiplied by plant capacity in kW + 40% of target number of connected consumers multiplied by grant per connected customer	<u>After three months operation</u> 20% of per kW-grant multiplied by capacity in kW + number of connections three months after start of operation multiplied by grant per connected customer minus 1st and 2 <sup>nd</sup> payments for connected customers
Hydro – or biomass fueled power plant connected to national grid	<u>After start of construction:</u> 40% of per kW-grant multiplied by plant capacity in kW	<u>At finalization of construction</u> 40% of per kW-grant multiplied by plant capacity in kW	<u>At plant commissioning</u> 20% of per kW-grant multiplied by plant capacity in kW

### 3.2 Project Cycle for PREP: Priority Rural Electrification Project





## **Criteria indicating Need for initiating Priority Rural Electrification Project, CPREP1**

### *Introduction*

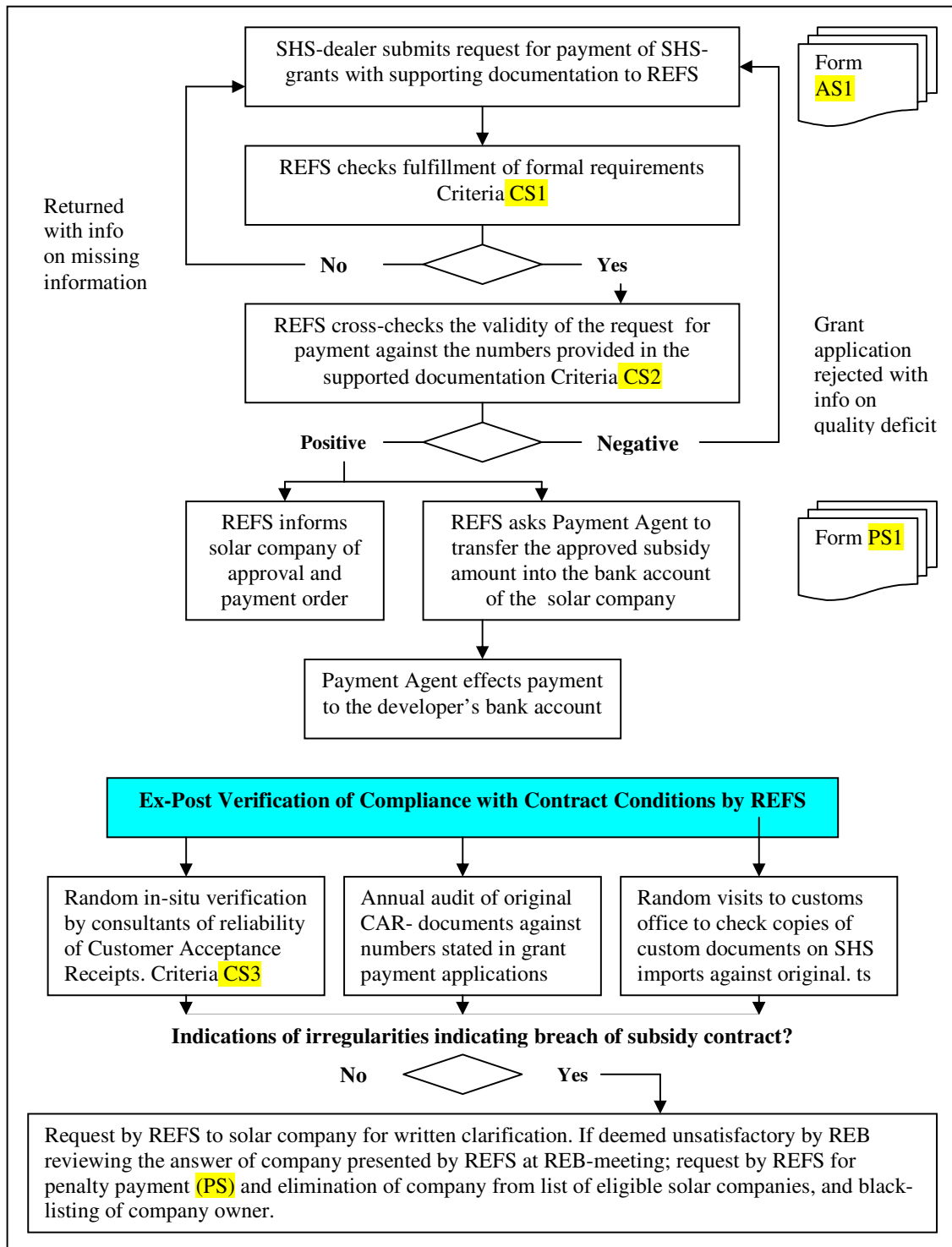
As a general rule, the REF reacts to the request for grant finance from project proposals prepared by the private sector and local communities; and reacts pro-actively by assisting the identification and preparation of project proposals through REF-supported technical assistance to active and potential project developers.

The PREP is a fall-back instrument, permitting the REF to assist the rural electrification of regions that are falling substantially behind the progress achieved in the other regions. If regions are falling behind, the first effort will be to intensify the TA- and information activities in the region by the sub-contractor. If that action fails to deliver, the REF will contract consultants to prepare (pre)feasibility studies for PREP-projects.

### *CPREP1: Steps to identify a PREP:*

- Are any regions falling significant behind in rural electrification in Cambodia in terms of electrification rates; or in the absence of good quantitative information on this, in terms of number of implemented rural electrification projects, ongoing applications for rural electrification licenses and REF-grants?
- If yes, does the Indicative Rural Electrification Master Plan (IREMP) list any Priority Rural Electrification Projects (PREPs) for the(se) region(s), which have not been implemented yet?
- If yes, check with EAC whether any license application for the project(s) has been received, and internally in the REFS whether any grant application for a (pre)feasibility study or for an investment grant for the project(s) has been received.
- If no, check (i) with the firm contracted by REF to provide TA to Rural Electrification Entities, REEs, whether any assistance is being provided by the firm to a potential project developer in the region to take on the PREP; and (ii) with the local authorities in the region, whether any development is occurring.
- If no, present the project idea to REB for approval as PREP-project.
- If approved as PREP by REB, contract consultant to undertake pre-feasibility study for the PREP.

### 3.3 Disbursement of Grants for Sales of Solar Home Systems



*Criteria CS1: Compliance with formal requirements for SHS-Subsidy*

- The solar company is eligible for access to REF-grants, being on the approved dealer list for solar home systems (SHS). Inclusion in the list is subject to approval by the REF's SHS consultant of the technical specifications of the solar home systems, SHS, marketed by the solar company in Cambodia. The approval relates to confirmation of compliance with the REF's quality standards for SHS.
- The grant application form is fully filled out.
- Detailed information in hard copy and in read-only soft copy format is presented on monthly/quarterly installed SHS, containing names and addresses of consumers according to region and to type of installed system.
- The solar company has signed a declaration confirming that the list of customers and size of systems exactly match the information given in the Customer Acceptance Receipts (CAR) and that the original CARs will be kept available for inspection by authorized personnel.
- Copies of custom forms for imports of SHS or SHS-components since the last payment of SHS-grants are attached. The solar company has signed a declaration confirming that the original custom forms will be kept available for inspection
- Has the bank connection of the solar company provided a guarantee for payment of penalty in case of breach of contract

*Criteria CS2: Quality check on information provided in the payment request*

- Does the information in the list of CARs match the totals in the subsidy request form?
- Does the information in the copies of the custom forms for imported solar home systems or solar home system components make it realistic to assume that sales corresponding to the scope in the subsidy payment request could have been reached?

*Criteria CS3: Check list for in-situ verification of Customer Acceptance Receipts*

- Do the households having signed the CARs all exist in the project area?
- Do these households have a SHS installed?
- Does the serial number and the size of the system match the information in the SAR?
- Do the technical specifications of the installed systems match the quality criteria for companies included on the list of eligible companies for REF-grant support?
- Has after-sales-service been provided as promised?

*Sanctions for Breach of Contract*

- Penalty payment of three times the excess grant amount that was paid to the solar company (Penalty Solar: PS). The excess amount is calculated by pro-rating the excess numbers noted during in-situ verification to the total sales of the solar company, for which the company has received SHS-grants from the REF. The solar company is entitled to ask REFS to hire consultants to undertake a complete in-situ verification of the inflated numbers, against payment of costs by the company.
- Elimination of the company from list of solar companies eligible for SHS-grants and for REF-financed TA to solar companies

## **4 ORGANIZATION AND ADMINISTRATION OF TA PROGRAMS**

### ***4.1 Responsibility for TA identification and implementation***

TA programs are carried out by specialized institutions under contract with the REF.

In the REFS, the identification and preparation of TA-programs is entrusted to the Information Officer, assisted by the Rural Electrification Technology Officer (capacity building related to grid based RE), the Finance Officer (TA to PFIs) and the Renewable Energy Technology Officer (TA to PV- and other RET-companies). During implementation of the program, the group monitors the work and comments on progress and evaluation reports submitted to the REFS.

Capacity building program are designed in close consultation with the target group of recipients, including a public expert hearing on a first draft program.

The Executive Secretary of REFS maintains a close dialogue with senior representatives of agencies involved in rural development on measures they can take to make use of the *productive potential of electricity* in their programs.

### ***4.2 Scope of Capacity Building Programs***

#### **4.2.1 Targeted business sectors**

The targeted business sectors involved in the supply side of rural electrification include:

- (i) Project developers (professional private investors as well as CBOs);
- (ii) RE-consultants, RE construction companies and other businesses involved in the production, installation, supply of equipment, O&M and other RE-related services;
- (iii) Financial intermediaries providing loans to RE-and RET investments, the participating financial institutions, PFIs.

#### **4.2.2 Scope of support**

Support to the supply side in RE covers TA at all stages - pre-investment; start up and early business and market development, business improvement and growth:

- (i) Business Development Assistance to agents involved in the implementation of *grid based RE-projects* - project developers and small utility operators, NGOs assisting local communities in

developing local electricity supply, consultants preparing feasibility studies, and constructors.

- (ii) Business Development Assistance to companies involved in the commercialization of *renewable energy technologies*, comprising dealers, retailers, and leasers of solar home systems.
- (iii) Capacity building in the *financial sector* to banks and micro-finance institutions in the appraisal of RE and RET investment projects.
- (iv) TA in management, finance, customer relations, billing and invoicing and O&M to *community owned and small scale private RE-utilities*.
- (v) *Promotion of productive uses of electricity* in on-farm and off-farm production. TA to small and medium scale rural enterprises on the financial feasibility of investments in electricity consuming equipment, and the preparation of business plans for investments making productive use of electricity.
- (vi) *Promotion of technical norms and standards and quality control*, including the verification of the accuracy of electric meters.

### **4.3 TA to be provided through Consortia of Firms**

To avoid fragmentation of REF-contracts, TA-contracts are, as far as possible, given as larger contracts to consortia of consulting firms, NGOs and institutions, who together have the required expertise to carry out the listed capacity building activities.

The training school of Electricité du Cambodge will be contracted to provide relevant training the RE-consultants and others in using least cost technologies for RE, and other fields related to electricity production, transmission and utilization.

### **4.4 Principles for Cost-Sharing and Subsidy Rates**

The willingness of private sector entities to pay for capacity building assistance expresses the target group's appreciation of the quality and the relevance of offered TA. Private companies, which receive business development services or sent staff to capacity building seminars, shall pay part of the specific cost of the training service. The TA enhances the professional qualifications of the companies for offering goods and services to the RE sector, and thereby the market value of their know-how.

The level of cost-sharing in capacity building activities is a performance indicator for the quality of the offered service. As a general rule:

- *Recipients of TA to businesses in the supply side of RE* are charged a fee equal to 50 percent of the specific cost of the service<sup>2</sup>
- *TA to businesses* for enhancing their productive uses of electricity is provided free of charge.

#### **4.5 Consultants contracted and supervised directly by REFS**

Activities that help developing and strengthening the core competences<sup>3</sup> of the REFS are implemented by the REFS Units themselves. Consultants are hired to produce specific inputs, but the production of final outputs remains in the hands of REFS staff. Examples are:

- Preparation of *feasibility studies for priority projects* by REPMEU.
- Performance of *regional information seminars and other outreach activities* by IU staff. Media consultants assist in preparing materials for the seminars and in developing the public media campaigns.
- *M&E reports on the effectiveness of policy instruments and administrative procedures* being used by the REF.

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<sup>2</sup> The general program overhead-administrative costs of the contractor providing the services is not to be included in the cost calculations.

<sup>3</sup> Core competences = the key success factors that enable the REFS to perform well

## **5 PROCUREMENT**

### ***5.1 Rules for Procurement in LIREP and PREP Projects***

Goods, services and construction works can, as a general rule, be procured by developers in line with established local private sector commercial practices. REF-grants are fixed according to objective criteria independent of the cost of investment, and finance less than 50 percent of the total investment, giving investors strong economic incentives in procuring goods and services at least cost.

Since the cost of investment influences the level of electricity tariff, which the EAC is willing to accept during negotiations leading to the award of the license for the project, REB and EAC will define rules and procedures to provide maximum cost-transparency.

The cost-estimates being used in the feasibility study and the tariff calculation schedule of the developer will be benchmarked against the numbers in the REF/EAC data base on regional costs of goods and services in Cambodia.

In addition, for large procurement packages with estimated cost exceeding US\$2 million per package International Competitive Bidding (ICB) may be compulsory procurement method.

### ***5.2 Procurement by REFS***

#### **5.2.1 General Rules and IDA prior review**

Consultants are selected and contracted according to the laws and procedures established by the Government of Cambodia.

Procurement shall follow rules adopted by the REB. Rules for procurement making use of funds originating from the World Bank shall be in accordance with World Bank rules.

For procurement of goods and works for REFS operation, including its TA-projects, IDA prior review in line with the IDA Procurement Guidelines shall be carried out for all procurement packages with estimated cost exceeding US\$200,000 equivalent.

For consultant services, Bank prior review in line with the IDA Guidelines for Selection of Consultants shall be required for all contracts with estimated cost exceeding US\$150,000 for firms and US\$50,000 for individuals.

## 5.2.2 Authority for signing contracts and for authorizing payments

Dual signature is obligatory for the signing of contracts paid by REF funds, and for the authorization of payments under these contracts.

The REB, upon proposal by the REFS-Director, decides by resolution how the dual signature procedure is to be applied. The procedure defines:

1. What contracts are:
  - co-signed by the REB Chairman/Deputy and the REFS Director;
  - co-signed by the REFS Director and the Administrative Officer;
  - co-signed by the REFS Director and the head of the pertinent technical unit in the REFS;
  - co-signed by the Administrative Officer and the head of the pertinent technical unit in the REFS;
2. Whose signatures are needed to sign off on an authorization for a payment, including the signing of a check issued in the name of the REFS.

## 5.2.3 Procedure for contracting Consultants

### *Quality based selection*

Consultants for REF-financed projects are selected according to qualifications.

Whenever applicable, consultants are contracted through use of standard contracts and are paid REF standard fee rates for standard services. Examples of standard services are the review of a feasibility study for the REFS, or the preparation of a feasibility study for a RE-project.

Reasons for the absence of price-competitive bidding for standard consultant services provided to the REF are:

- Because of the institutional and social complexity of RE-projects and the high cost of RE-investments, emphasis on the quality of the consultant is more cost-effective than emphasis on price.
- Due to the scarcity of qualified consultants - there is a high risk of collusion in bidding and oligopolistic price setting rather than price competition.
- The justification of payments to consultants can be more objectively verified.

The quality-based selection of consultants by REFS is done by either one of two procedures:



1. *Competitive tender – published or by invitation to pre-qualified consultants - for a fixed price contract* is used for non-routine assignments, where the selection is done through an evaluation of the qualification of the consultant and the quality of his technical proposal.
2. Direct Selection of a consultant from *the REF list of qualified consultants* is used for routine assignments related to the preparation or implementation of RE-projects.

Reuse of a well-performing consultant in follow-up projects has the advantage of re-enforcing the consultant's capacity for doing the job and his familiarity with REF-procedures. Yet, in order to maintain competitive pressure on the quality of performance and the price of the service, the REFS, when it chooses or recommends a consultant will attempt to alternate between well-qualified consultants. The REB monitors that a balanced procedure is followed in the selection of consultants.

#### *REF list of qualified consultants*

Qualified consultants, capable of preparing feasibility studies for RE-projects are in scarce supply in Cambodia. The REFS establishes and maintains a list of qualified consultants for the preparation and implementation of RE and RET projects; and provides training to consultants on the list or wanting to be on the list. The Director of REFS, assisted by his technical officers draws up lists of national consultants who are qualified to work for REF on tasks requiring a specific expertise. The list comprises sub-lists of qualified consultants in the following technical disciplines:

- RE-engineers
- Experts in the economic-financial analysis of projects
- Micro-hydro specialists
- Solar energy specialists
- EIA-specialists
- RE-management specialists and lawyers

The list serves three purposes:

1. *Ex ante quality control on consulting work*, which is co-financed by REF-funds, by making approval of subsidies to feasibility studies dependent on the use of consultants from the list. It gives a project developer assurance that a contracted consultant is qualified.
2. It enables REFS to *target their training activities* at consultants who either are on the list, or want to be on the list and provides consultants with an incentive to participate in training courses. New low-cost technologies, for example, can quickly be introduced as standard practice in project design.
3. *Simplification of administrative procedures*. The REFS need not insist on tenders or other lengthy procedure to identify a consultant.

To be included in one or more of the six sub-lists, the consultant must participate in the REF training seminar for the area of expertise. Consultants, who comply with a published set of qualification criteria, can participate in the seminars, being charged a small fee for their participation. For an experienced consultant it is sufficient to take part only in the first section of a seminar, which informs about the REF's technical requirements and approach in the area. Technically less well-trained consultants continue with the second section, which provides detailed training in applying the REFS-technical manual, which is developed for the discipline.

#### *Quality control*

Feasibility studies financed by REF are reviewed for quality control by a consultant drawn from the REF list of consultants and contracted by the REFS. Payment of the REF grant for the study depends on his acceptance of the report.

The REFS may experiment using a checklist to rank the overall performance of a consultant according to the accumulated number of points he is awarded for each item on the checklist.

Consultants, who in the execution of REF co-financed contracts do not perform to standards, are taken off the list by decision of the REFS Director, following a joint recommendation of the pertinent REFS officer heading the relevant unit and of the long-term technical consultant assisting the REFS-Director and/or the unit.

#### **5.2.4 Shortlists of Entirely National Consultants**

National consultants and local NGOs would be capable and more economically perform certain services under the Project, such as rural income generation promotion activities, independent monitoring of land acquisition and resettlement; project grievance services. In such cases, and if the assignment is below a ceiling of \$100,000, the shortlist may comprise entirely national consultants (firms registered or incorporated in Cambodia).

## 6 FINANCIAL MANAGEMENT AND USE OF FUNDS

### 6.1 Flow of Funds - Overview

The financial management and financial reporting obligations of the REF could become quite complex within a few years. The complexity depends on (i) how the RE-program of the Government of Cambodia develops, (ii) the Government's success in attracting funds for rural electrification and renewable energy, and (iii) the scope of the role, which the Government assigns to the REF.

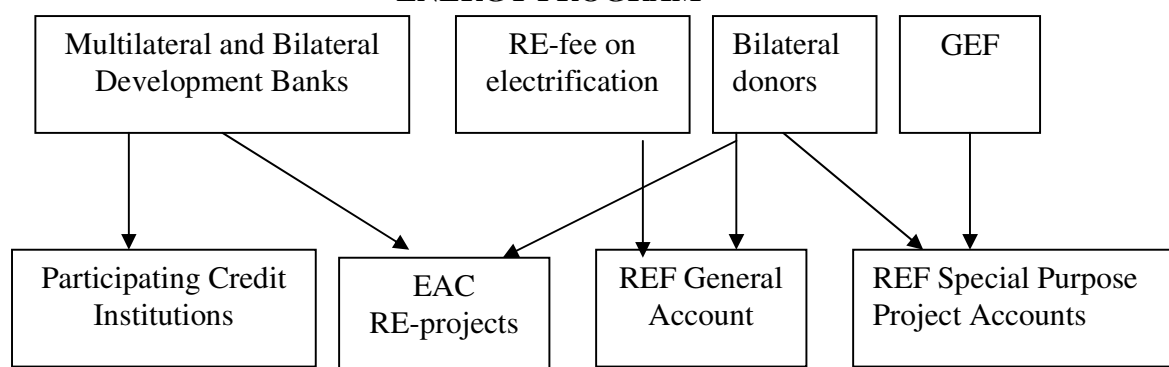
The chart shows possible financing sources and assignment of funds for RE and RET.

*The general REF-budget* is funded (i) by grants from bilateral donors pledging funds on a pluri-annual basis to the REF, (ii) by the revenue from the future REF-fee on electricity consumption, and (iii) by contributions from the national budget. During the first start-up years, the latter is funded through the IDA loan for the REF.

*Grants for Special Purpose Projects for RE and RET implemented by REF*, can come from the GEF, from development banks, and from bilateral donors.

*Concessional loans for the REF* can come from multilateral (IDA, ADB and IFC) and bilateral development banks (JIDA, KfW, etc.). Often, though, such loans would via the Ministry of Finance / Bank of Cambodia be channeled to EdC for its RE-investment program or to *Participating Credit Institutions (PCI)* to refinance loans of these to investments in RE and RET.

#### FUNDING OF NATIONAL RURAL ELECTRIFICATION AND RENEWABLE ENERGY PROGRAM

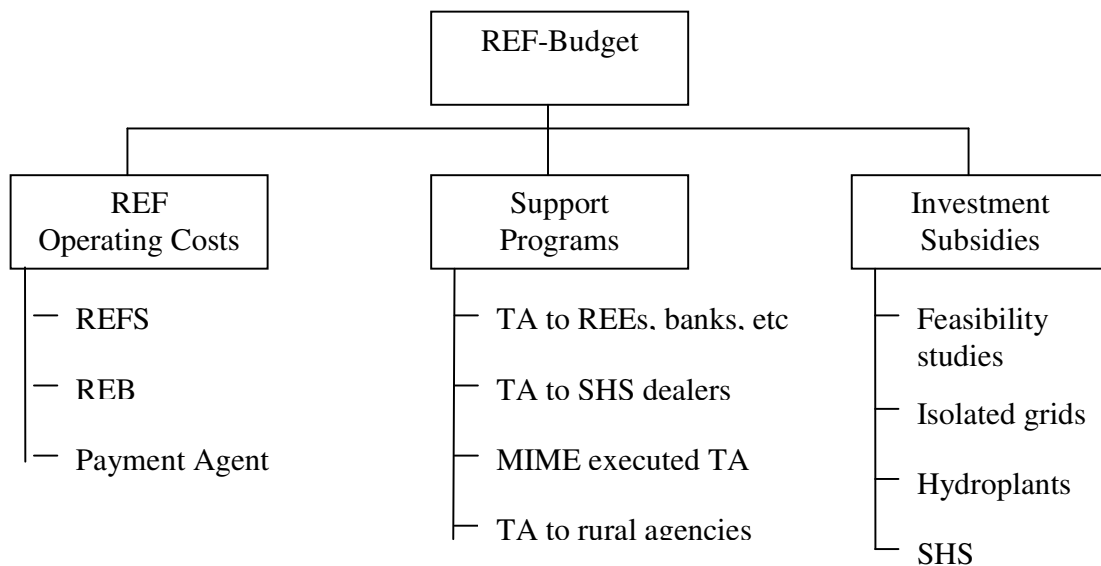


*Concessional loans to PCIs* and to EdC fall outside the mandate of the REF. But REPMEU reports on the adequacy of loan-finance terms and conditions for RE- and RET investors in its annual report on the progress of rural electrification.

Financial management and reporting procedures for *special purpose projects* are fixed in the agreements signed with the specific donor.

Funds of the REF are used:

1. To cover the *operating cost of the REF*, composed of:
  - (i) fees to members of the REB for participation in board meetings<sup>4</sup>;
  - (ii) the annual cost of the contract with the REF Payments Agent;
  - (iii) the annual cost of the contract with the REF auditor once he is appointed by the Minister in charge of Energy;
  - (iv) the “internal costs” of operating the REFS (staff, overhead costs and programs implemented by the REFS itself).
  
2. To finance the cost of *RE and RET support programs* (sub-contracts with outside institutions for the execution of capacity building and information activities). This includes the cost of MIME-executed TA under the IDA-loan.
  
3. For investment subsidies – to (*pre*)*feasibility studies and physical investments*.



Separate budgets are established each year for the above, which in turn are sub-divided into individual budget lines. The annual budget for REF operating costs and REF-support programs has a fixed upper limit; the annual REF budget for subsidies to feasibility studies and investments is an *indicative open-ended budget*. If demand for

<sup>4</sup> The compensation budget is subject to no objection by co-financing donors and multilateral development banks

investment subsidies is stronger than expected, extra funds can be drawn on the IDA loan within limits established by the loan agreement.

## **6.2 Responsibility for Financial Management<sup>5</sup>**

### **6.2.1 Financial Management Committee of the REB**

The *Financial Management Committee (FMC)* of the REB is composed of three members of the REB. The Chairman of REB and the donor representative on the REB are born members of the Committee; the third member is appointed by vote.

The responsibilities of the FMC are detailed in the Board Resolution leading to its establishment. The FMC undertakes in-depth reviews of REF financial management issues prior to their discussion at REB Board meetings. Responsibilities include:

- to be consulted by REFS-staff early in the annual budget planning process;
- review of quarterly FMRs and audited annual financial statements for the status of annual REF spending and its individual components: the REFS Operating Budget, the accounts of the REF Payments Agent and of implementing agencies under contract with REFS.
- determining the adequacy of the financial management and accounting system.
- Checking financial performance indicators such as operating costs of REFS in % of total REF

### **6.2.2 REF-Accounting Officer**

The REF Accounting Officer<sup>6</sup> reports directly to the Executive Director and to the REB. The responsibilities comprise:

- supervision of the preparation of withdrawal applications. Obtaining MOF approval on the application and forwarding signed WA to IDA.
- preparing the quarterly consolidated FMRs comprising the accounting transactions of the REFS, and of sub-contractors executing support programs, including MIME- and EAC executed activities

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<sup>5</sup> The Financial Management Action Plan agreed between IDA and GoC foresees that the REF has put in place a project accounting system at the REF (manual accounting system using Excel spread sheet) capable of producing FMRs, annual financial statements and required statutory reports by May 31, 2004; and be capable of finalizing and adopting the FAM by June 30, 2004

<sup>6</sup> Start-up interim arrangement. As MIME's experiences in procurement, disbursement and accounting are low, EdC will help MIME during the transition in: (i) preparation of SOEs and Withdrawal Application for submission to IDA; (ii) maintaining of the accounting books; and (iii) preparation of consolidated FMRs for REF, MIME-TA and EAC-TA activities. Once the REF is established, the Project Accountant to be engaged under REF will help maintain the above tasks.

- preparing the quarterly reports to the Executive Director of the REFS on the financial status of REFS and its budget situation
- development and implementation of internal control rules and regulations
- supervise the implementation of accounting registration and control procedures
- maintain REFS general ledger of daily operating cost payment
- propose the format for the financial reports, which project developers and the REF Payments Agent submit on the status of disbursements and outstanding commitments.
- ensuring that the financial information received from project developers and from the Payments Agent is entered into the REFS central data base forming the basis for the MIS.
- assistance to the Director in preparing the annual budget for REFS
- supervise the proper implementation of the budget and provide feedback on issues that need attention
- Overall management and control of the Special Accounts and Counterpart Funds Account including preparation of monthly reconciliations of such accounts.

### **6.2.3 Disbursement Officer / Administrative Officer**

Under supervision and final responsibility of the REFS Director, the Disbursement Officer / Administrative Officer, is in charge of general administration, personnel, disbursement, and the daily financial management of REFS.

The Disbursement Officer / Administrative Officer performs the daily financial management control and monitoring of REFS funds and prepares the required financial management Reports, which through the REFS Director are submitted to the REB. The tasks comprise:

- responsibility for the design, implementation and management of REFS administrative personnel
- Ensuring that all expenditures are authorized in accordance with established financial procedures, with proper supporting documentation and are recorded in the books of accounts.
- Preparation of withdrawal applications together with the relevant supporting documentation including Statement of Expenditures.
- approve administrative and sub-project disbursements following the decision of the Executive Director
- timely payment of bills for office rental and for utility services (water, electricity, telecommunications)
- prepare and deliver the personnel payroll

## **6.3 Procedures for Transfer of Funds, Flow of Funds**

### **6.3.1 REF Counterpart Fund Account set up by Minister in charge of Energy**

Government counterpart funds are channeled through the Counterpart Fund Account. A special deposit account in the name of REF is set up by the Ministry of Industry, Mines and Energy at the National Bank of Cambodia into which all national counterpart funds for the REF shall be deposited. The Counterpart Fund Account shall receive an initial deposit of US\$10,000 from MEF. The Counterpart Funds Accounts will be periodically replenished from the Government (monthly or when the amounts withdrawn equal 20% of the initial deposit, whichever comes first).

### **6.3.2 Accounts set up by donors for transfer of funds to the REF**

A donor collaborating with the REF opens a Special Account in US Dollars with the National Bank of Cambodia (NBC) for the deposit of his funds that are destined for the REF as per the Specific Credit Agreement signed by the Royal Government and the donor.<sup>7</sup>

The donor account can be an account for transfer of funds to the *general budget* of the REF or to a *special purpose project account* opened by the REF for a specific RE/RET program, and for which the REF is Implementing Agency. The first external funders being the IDA and GEF two accounts are opened by these at National Bank of Cambodia:

- the Special IDA Account to receive the funds from IDA (an example of a “general budget” account, financing both operating expenses of REFS and investment grants for REEs).
- the Special GEF Account to receive the funds from GEF ( an example of a “special purpose budget”, as the funds will be used to finance TA and investment grants exclusively for renewable energy activities)

### **6.3.3 Transfer of funds from a donor account to a REF account**

A donor, who has agreed to provide *grant-support the General REF Budget*, transfers his funds into the *REF account* on a quarterly basis, in accordance with the procedure in the grant agreement.

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<sup>7</sup> Depending on the outcome of negotiations, the IDA loan may be split into two portions. One part of the loan is used to co-finance the annual REF budget, the other is onlend by the Ministry of Finance to the PCIs (participating credit institutions) as a refinancing facility for loans to RE-projects.

The draw-down of *concessional loans awarded to the REF*, such as the IDA-loan, is done gradually, when the liquidity need for it arises.

A donor, who has signed an agreement for a special purpose project/program with the REF as implementing agency, transfers his funds into the *specific project account* opened by the REF for his project/program.

### **6.3.4 Procedures for withdrawals from IDA account and GEF account**

IDA funds are channeled through the IDA Special Account for the REF.<sup>8</sup> IDA deposits an advance within the authorized allocation to the IDA Special Account based on the application by REF. The REF uses the Special Account to finance IDA's share of eligible expenditures under the Project in foreign and local currencies, and then claiming for replenishment of the Special Account. For some expenditures with the amount over the minimum application size set up in the Disbursement Letter, the REF may submit withdrawal applications to request IDA to make payments directly to the REE.

Withdrawal of IDA funds. Disbursement of IDA funds is based on:

- Statement of Expenditures (SOE),
- Withdrawal Applications (WA) or
- Direct Payment Applications.

Disbursement from the Special Accounts to the REF requires the signatures of the Minister of Economy and Finance or his designate and the representative from REF Board.<sup>9</sup>

Initially, until the REFS is established, MIME manages the GEF and IDA accounts.

### **6.3.5 Transfer of funds from the REF account to Support Programs**

Funds inscribed in the annual REF budget for Support Programs are transferred from the REF-account directly to the *bank accounts of the beneficiaries*.

## **6.4 Quarterly FMRs**

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<sup>8</sup> The procedures for the GEF-account are identical as for the IDA account, thus, replace "IDA" by "GEF".

<sup>9</sup> For MIME's TA activities, the Minister of Economy and Finance or his designate and the Minister of Industry, Mine and Energy or his designate sign the request.



### 6.4.1 Project Accounts for Special Purpose Projects

When a donor, other than the World Bank, signs an agreement with REB/RGC for providing finance, not to the general annual budget of the REF, but to specific activities, a *Project Account* will be opened for this “special purpose project”. The procedures for the draw down of funds from this account will be defined in the project agreement signed between the donor and the REF.<sup>10</sup> The REB Chairman and the Director of the REFS cosign the contract on behalf of the REF.

### 6.4.2 Quarterly Financial Monitoring Reports (FMR)

FMRs integrate project accounting, procurement, contract management, disbursement and audit with physical progress of project implementation. The FMRs emphasize linkages between expenditures and physical progress, including information under three main categories:

A *Project Financial Statement* which includes

- (i) Balance Sheet;
- (ii) Sources and Uses of Funds Statement;
- (iii) Uses of Funds by Project Activities;
- (iv) *Project Progress Report* to provide information on project implementation progress in physical and financial terms using monitoring indicators and which explains variances between actual physical and financial progress versus forecasts;
- (v) *Procurement Management Report*, which shows procurement status and contract commitments and expenditure including source of supply data for contracts.

REF submits PMRs to IDA on a quarterly basis within 45 days of the quarter end starting the first quarter following Project’s first disbursement.<sup>11</sup> Additional output monitoring report and key performance indicators will be identified and developed to suit project needs during implementation as appropriate.

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<sup>10</sup> The PMRs to IDA shall be in accordance with the Guideline to Borrowers issued on November 30, 2002. The PMR formats for the REF (including MIME and EAC) have been designed and agreed with EdC and the MIME/PMU

<sup>11</sup> Starting the quarter of September 30, 2004

## **6.5 Statements of Expenditure (SOEs)**

During the operation of the REF, disbursement will be on the basis of *Statements of Expenditure (SOEs)*. An advance will be made into the Accounts upon Credit effectiveness. Subsequent replenishments will be made on the basis of withdrawal applications and SOEs showing payments made out of the Account. Supporting documents for transactions that fall below the SOE threshold will be retained at the REFS for inspection in accordance with World Bank agreements.

Proceeds of the Credit/Grant expected to be disbursed on the basis of SOEs are:

- works estimated to cost the equivalent of US\$500,000 or less;
- goods estimated to cost the equivalent of US\$200,000 or less;
- consulting firms estimated to cost the equivalent of US\$100,000 or less;
- individual consultant's contract estimated to cost the equivalent of US\$50,000 or less; and
- REF sub-grant, no matter the cost.

Disbursement for any expenditure exceeding the above limits will be made by direct payment against submission of full documentation and signed contracts.

The documentation supporting SOE disbursements will be retained by the Project during the life of the Project and until one year after the receipt of the audit report for the last year in which the last disbursement would be made. These documents will be made available for review by the auditors and IDA supervision missions.

Should the auditors or IDA supervision missions find that disbursements have been made that are not justified by supporting documentations, or are ineligible, IDA will have the right to withhold further deposits to the Special Accounts. IDA may exercise this right until the Borrower has refunded the amount involved or (if IDA agrees) has submitted evidence of other eligible expenditures that offset the ineligible amounts.

## **6.6 Interim Arrangement for REF upstart**

A consultant will design, implement, and initially operate a financial management system with proper procedures and controls during the first few years of the REF's operation. The consultant provides necessary training of REF staff, and will slowly phase-out as capacity is built within the organization.

Preparation of consolidated accounts by REF. The Project Accountant to be engaged under REF will also handle the disbursement arrangement and accounting books for MIME activities once the MIME-PMU is ceased; and prepare consolidated FMRs for MIME-TA, REF and EAC-TA activities.

## **6.7 Planning and Budgeting:**

The REF Secretariat is responsible for annual plans and budgets of the Project, with the inputs from responsible units. This should help ensure that financial resources are available for project implementation and coordinated with the procurement plans.

The *REFS unit-heads* prepare the budget proposals for budget lines referring to their specific areas of activity.

The *accounting officer* prepares the budget proposal for the budget lines covering the general REFS-operating expenses.

The *REFS-Director in collaboration with the accounting officer* consolidates the individual budget proposals into a draft REFS budget, cutting down on cost items considered excessive.

After discussion and approval by the *REB* of the draft budget, the REB submits the budget proposal to the *Minister in charge of Energy*.

The budget proposal is discussed at the *Annual Assembly of Stakeholders*, before final adoption by the REB.

REB is responsible for keeping the operating cost of the REFS as a percentage of the annual REF budget as low as possible without impairing the efficiency of the REFS. The trend in the percentage is discussed at the Annual Meeting of Stakeholders.

## **6.8 Accounting System**

IDA guidelines and procedures for disbursements, auditing and overall financial management require the REF to:

- maintain the Project's books of accounts,
- monitor overall project disbursements,
- request replenishment of the Special Accounts and the Counterpart Funds Accounts,
- coordinate with the MEF on annual counterpart fund requirements,
- prepare withdrawal applications for the MEF to submit to IDA,
- produce quarterly Financial Monitoring Reports (FMRs),
- prepare annual financial statements, and having them audited by an external auditor acceptable to the IDA.

Accounting policies will be in accordance with International Accounting System (IAS) applicable for project accounting. The accounting system will contain: (a) a chart of accounts and a coding system capable of capturing transactions classified by project

components and IDA disbursement categories; (b) use of the cash method of accounting; (c) a double entry accounting system; and (d) the production of annual financial statements and quarterly FMRs acceptable to IDA.

The books of accounts for REF activities include:

- (i) Cash Book
- (ii) Ledgers
- (iii) Journal Vouchers
- (iv) Contracts Register

The Chart of Accounts should be developed in a way that allows project costs to be directly related to specific work activities and outputs of the program/project.

## **6.9 Auditing**

The REF-accounts and financial statements are audited in accordance with International Standards on Auditing by an independent external auditor appointed under terms of reference satisfactory to IDA.

The auditor presents his report to the Minister in charge of Energy and of Finance for the annual auditing of REFS, MIME-TA and EAC-TA components and of the Payment Agent. The auditor reports to the Minister in charge of Energy, with copy to the REB and to co-financing donors. The annual cost of the auditing firm is paid by the REF-budget.

The auditor audits the consolidated project financial statements of the REF, and the MIME-TA and EAC-TA components. In addition, the audit will determine:

- (i) whether the activities of the Special Accounts associated with the respective project funds have been correctly accounted for and used in accordance with the IDA Credit and Grant Agreements; and
- (ii) the adequacy of supporting documents and controls surrounding the use of the Statement of Expenditures (SOEs) as a basis for disbursement.

A separate Management Letter will also be submitted which will:

- (i) identify any material weakness in accounting and internal control;
- (ii) report on the degree of compliance of financial covenants of the Credit and Project Agreements; and
- (iii) communicate matters that have come to the attention of the auditors which might have a significant impact on the implementation of the Project.

The audited financial statements will be submitted to IDA within six months after the end of each fiscal year.

## 7 DISCLOSURE OF INFORMATION

### 7.1 Management Information System (MIS)

#### 7.1.1 Type of management information needs

The management information needs can be categorized into:

1. Financial and Accounting Information (provided by the periodic financial status reports and procurement reports).
2. Project progress – quantitative information on target achievement in terms of (i) number of electrified communities, households and institutions and (ii) number of trained consultants and operators, etc. (provided by project progress reports).
3. Cost-effectiveness analysis - of REF-policy instruments, procedures and choice of areas of intervention (provided by internal surveys, benchmarking and other monitoring indicators, evaluation reports, survey interviews with clients and collaborating financial institutions).
4. Impact analysis – quantitative and qualitative information on the socio-economic changes in electrified communities (provided by M&E-reports).

#### 7.1.2 Hierarchy of Management Information Needs

The management information needs related to the operation of the REF run through four layers of hierarchy:

1. At the bottom level are the *individual technical officers* who manage the individual, specific activities of the REF. They are consumers of the basic raw data and producers of the initial processed data, which composes the MIS.
2. Next come the *administrative officer and the Director* who monitor the use of funds and the performance of REF officers;
3. Then the *REB* who is ultimately responsible for the financial management of the REF and for the specific choice of instruments and areas of intervention;
4. At the top level, the *Ministers in charge of Energy and for Finance and donors* want information to control (i) that - compared with alternative uses of funds - they get value for money by supporting REF-activities and (ii) that the REF-funds are not deviated to other purposes than the intended.

For each level, it is to be defined:

- (vii) what kind of information is needed for decision taking at that “level” so that the functions assigned to that “level” can be performed in an effective manner;
- (viii) how the required information is to be collected;
- (ix) in what form the collected information is to be synthesized and presented to the upper layer;
- (x) how the collected information is to be integrated into the REF data base, and thus, be available for the MIS.

### 7.1.3 Collection and initial processing of data for the MIS

Being responsible for the initial data entry and the initial processing of data for the MIS, each Head of Unit is held accountable for the systematic collection of data, which is relevant for the work of the unit, and the assessment of its performance.

The M&E-officer of REPMEU assists the Heads of FU, IU, and REU in finding appropriate responses to the four questions listed in section 1.6.2, above.

In the monitoring of the performance of a sub-contractor, the Head of the Unit is responsible for ensuring that the contracted entity:

- presents all required *financial reports* and *progress reports* timely and in accordance with the format defined in the contract;
- at the end of a *capacity building seminar*, asks the attendants to fill out a *user-satisfaction questionnaire*, rating the relevancy of the content and the quality of the trainers and coming up with suggestions on improvements.

*Project Implementation Plans* for the executing agents address the following areas:

1. Inputs and outputs of *financial information* required to track implementation;
2. Inputs and outputs of *physical information* matched with financial information required;
3. arrangements for recording project impacts, outcomes, outputs, and inputs that are required to assess project progress toward project objectives.

The REFS-Director monitors that the Unit-Heads:

- summarize their conclusions and observations on received progress reports in a short, concise note;
- write short notes in standard format on field visits and participation at seminars or outreach meetings summarizing (i) number and type of attendants, (ii) subjects discussed, (iii) key impressions of feedbacks and lessons learned.

The summaries and notes are entered in the data base operated by REPMEU, and are accessible to all REFS-staff.

## **7.2 Fiscal Year Financial Report and Annexes**

Once the financial accounts for a fiscal year have been audited, the REB submits the *fiscal year financial report on the REF* to the Minister in charge of Finance and to co-financing donors. The report, covers the consolidated financial accounts of the REF comprising the general REF-budget and the budgets for special purpose projects/programs that are implemented by REF. The financial statements presented in the report include:

- *Statement of Sources and Uses of Funds* showing funds from the different donors and national sources of revenue separately, a summary of expenditures analyzed under the main headings and by main category of expenditures
- *Notes* in respect of significant accounting policies and accounting standards adopted by management when preparing the accounts and any supplementary information or explanations that may be deemed appropriate by management in order to enhance the presentation of a “true and fair view”.
- *Special Account Statement* showing deposits and replenishments received, payments substantiated by withdrawal applications, interest that may have been earned on the account and the balance at the end of the fiscal year.
- *A Reconciliation* between the amounts shown as “Received by REF from IDA” and that shown as having “Disbursed” by them.
- *Summary of Credit Withdrawals* using program management reports, FMRs, listing individual withdrawal applications by reference number, date and amount.

## **7.3 Public Dissemination Policy**

### **7.3.1 REF progress reports and annual RE-Status Report**

The Director of the REFS prepares *three short REF progress reports* to the REB during a year and one detailed *RE-Status Report*. REB approves the reports before submitting the reports to the Minister responsible for Energy and to co-financing donors and multilateral development banks.

The progress reports and Status Report synthesize the information of progress reports received from sub-contracted consultants and the payments agent and summarizes the results from M&E.

### **7.3.2 Annual RE-Status Report**

The annual RE Status Report, prepared by the REFS Director and approved by REB is submitted to the Minister in charge of Energy and the Annual Assembly of Stakeholders roughly one month before the start of a new fiscal year. It is a 10-15 pages analytical report, which reports on the progress in RE in general, and of REF-financed activities in particular, and summarizes the qualitative and quantitative M&E information on RE, which the RREFS collected during the year, since the presentation of the last report. The Cabinet and Parliament are other target groups for the report.

The report (i) informs on:

- a. the advancement of RE and its impact on the rural transformation objective;
- b. the efficiency and the impact of the REF investment subsidies and the procedures for these,
- c. the results and effectiveness of REF-financed capacity building programs,
- d. the results and cost-effectiveness of programs to commercialize RETs,
- e. RE-and RET project activities, which are financed outside the REF-framework by NGOs and other donor programs;

and, (ii) presents the budget and work program for the next year REF-activities, including the proposed subsidy rates and eligibility criteria.

After approval by the Ministry of Energy and by donors, the annual RE-status report is published on the REF website.

### **7.3.3 Publication of M&E reports**

The REB decides on the publication of M&E reports.

### **7.3.4 Publication of eligibility criteria and subsidy rates**

REB resolutions on annual eligibility criteria and subsidy rates are published in the annual invitation for subsidy applications, which is placed on the website and in major newspapers.



## 8 MONITORING AND EVALUATION

### 8.1 Objectives for Monitoring and Evaluation (M&E)

M&E reports are prepared to provide the REB, the RGC and co-financing donors and multilateral banks with information on:

1. The status of national RE and the role of the REF herein, making use of *output indicators* for the REF. The information documents that output targets for individual REF-activities are being achieved.
2. The socio-economic impact of RE projects (*impact indicators* for the REF). The information helps the Ministry of Finance and co-financing donors and multilateral development banks to determine whether the amount of public resources allocated to the REF are justified by their socio-economic impacts.
3. The effectiveness of REF procedures and the relevancy and cost-effectiveness of REF-financed support programs (*program adjustment indicators* for the REF). The information gives the REB the qualitative and quantitative data needed to take informed decisions on recommended subsidy levels, eligibility criteria and procedures, the REF budget and the annual REFS work program, including the launching or closing of individual support components.

### 8.2 Organisation of M&E

Monitoring and evaluation is undertaken through self-evaluation and through contracted external consultants.

As inputs to the preparation of the Annual Rural Electrification and REF-Status Report, REF-officers are requested to contribute their assessments and evaluations of the effectiveness of REF procedures and REF support projects in their areas of responsibility.

The initiative for specific M&E-reports executed by external consultants can come from the REFS-Director, from the REB and from any co-financing donor/multilateral development bank.

The *Rural Electrification Planning and Monitoring & Evaluation Unit (REPMEU)* of the REFS is responsible implementing entity for M&E-activities within the REFS. Normally, REPMEU will write the TOR for an M&E activity and contract the consultants. In the case of M&E activities initiated by foreign donors and multilateral development banks, REPMEU is responsible for facilitating required local assistance to the M&E-tram contracted by these.

The *RE-Data base* developed and maintained by REPMEU is of key importance for the monitoring work. It stores quantitative information from REF-grant application forms (feasibility study: number of households in community, economic activities, number of household/business owned generators) and from REF-grant disbursement forms (project completion form: number of connected households, type of productive uses and estimated productive loads, km of MV- and LV-lines, number of poles and transformers and cost data). It also stores quantitative and synthesizes qualitative data from M&E-reports.

Due to the self-interest of the REFS in the justification of public support to RE-projects, the M&E of the impact of RE on rural transformation is entrusted to an outside institution, which reports directly to the Ministers in charge of Energy and for Finance whenever a report of major relevance has been prepared. The *Cambodia Development Research Institute* is a logical candidate as executing agency for this activity.

REPMEU will in close consultation with the contracted consultant for the capacity building component develop efficient *M&E procedures for REF supported capacity building activities*. One standard procedure is that participants at training courses are requested to fill out a questionnaire at the end of the seminar on the quality and relevancy of received training.

### **8.3 Plan for presentation of M&E-reports**

<b>Type of Report</b>	<b>Comments</b>
<u>REFS</u>	
- Quarterly progress	Short standard format report with quantitative data on outputs + short observations on items calling for attention
- Annual RE- and REF Status Report	Quantitative data on RE + REF-outputs + self-evaluation by REFS on effectiveness of procedures, programs and subsidy levels + synthesis of conclusions of evaluation reports prepared by outside consultant
- Mid-term review	Evaluation by outside consultant contracted by donors
- End-of-term report	Quantitative data + self-evaluation + attached evaluation report prepared by donor-contracted consultant
<u>Outsourced TA-activities:</u>	
- Quarterly progress	Short standard format report with quantitative data on outputs + short observations on items calling for attention
- Annual status report	Quantitative data + conclusions from self-evaluation
- Mid-term review	Evaluation by outside consultant contracted by REFS
- End-of-project report	Quantitative data + self-evaluation + attached evaluation report prepared by REFS-contracted consultant
<u>Socio-Economic Impact of REF</u>	Responsibility for M&E permanently outsourced to outside institution
<u>Ad-hoc M&amp;E Reports</u>	Evaluation reports requested by donors and executed by donor-contracted consultants or by consultants contracted by REFS on behalf of donor

## **8.4 M&E of REF Performance**

### **8.4.1 Output Indicators**

#### *1. Rural Grid Electrification Status*

(national progress divided into grid extension projects by EdC and isolated grid projects by REF))

- The number of communities and agglomerations in Cambodia that have been electrified during the year; new households getting electricity service; percentage and number of communities by category of size that remain without electricity service
- Progress in rural electrification coverage (percentage of rural population living in electrified areas) and rural connection rate (percentage of rural households having electricity service).
- The number of rural enterprises (including those in the broadly define agriculture sector) that have been connected during the year and their estimated load
- The number of health clinics and schools that have been electrified during the year and the percentage and number of national clinics that remain without electricity service

#### *2. Sales of solar home systems*

- Annual sales of solar pv systems for isolated households and institutions (national progress divided into REF-supported projects and projects supported by other sources)

#### *3. Promotion of grid-connected generators using renewable energy*

- Number of micro-hydro plants, total installed capacity and annual generation of electricity
- Number of mini-hydro plants, total installed capacity and annual generation of electricity
- Number of biomass-fueled power plants, total installed capacity and annual generation of electricity

### **8.4.2 Impact Indicators**

#### *1. Socio-economic impacts*

In-depth analysis of a few RE-projects, covering a representative spectrum of RE-projects, will be undertaken to evaluate the impact which electrification has on rural transformation. The M&E of rural transformation is of particular importance, as the

socio-economic results must justify the substantial support from scarce public resources, which is given to RE, and which competes with alternative claims on these resources for other sector interventions. The subject covers three major issues:

1. *Productive use impact.* The impact of electricity (i) on the improvement and quality of *social services* – health, education, public administration – (ii) on *commercial business activities* - the creation of new agro-industrial businesses and services, development of productivity and quality enhancement in existing agro-industrial businesses and services- and (iii) links to *other infrastructure investments* such as water, road and telecommunications.
2. *Impact on household welfare.* Benefits from improved lighting and better access to radio and, above all, TV.
3. *Poverty impact of supported RE-projects.* Connection rates of poor households; poverty impacts from indirect access to electricity..
4. *The equity impact* of REF subsidies (socio-economic class and regional)

Indicators for the above are collected using a methodology containing participatory and survey elements.

#### *2. Impacts on costs of rural electrification and on rural tariffs and quality of service*

- Evolution in *the costs of rural electrification over time, adjusted for differences in customer density and other cost-affecting factors*
- Evolution in *rural tariffs over time, adjusted for differences in customer density and other cost-affecting factors*
- average number of hours per day in which electricity is supplied to households by the REEs

### **8.4.3 Indicators for efficiency of individual instruments**

#### *M&E of the effectiveness of REF-investment subsidies*

The M&E relates to the effectiveness (i) of REF subsidy levels and (ii) of the procedures for allocating subsidies to projects. Key performance indicators to be monitored and evaluated would be:

- The annual balance between the supply of grant funds (forecast payments for the year) and the demand for funds (accumulated grant finance requested by applicants)
- The impact of REF investment subsidies on reducing the cost of investment for project developers (subsidy in percent of the cost of investment).
- The importance of RE-investment subsidies for facilitating financial closure of projects

- Whether other instruments for investment support, such as guarantee schemes for loans, for example, would be a cost effective mean to enhance the impact of RE investment subsidies on the acceleration of RE.
- The extent of free-rider effects (giving subsidies to projects, which would have been carried out also in the absence of a subsidy; or offering lower tariffs to consumers who would have been willing to pay a higher tariff).
- The evolution over time in the cost of subsidy per connected customer
- Extent of “perverse” (investment distorting) incentives of procedures used for the processing of applications and for the form for payment of awarded subsidies

*M&E of the effectiveness of RE-support programs*

Key output indicators are:

- Number of feasibility studies/business plans prepared with REF-financed TA
- Number of technicians in RE-construction and/or operation trained in REF-financed courses number of trained rural and renewable electricity employees in different institutions (at least 200).
- Number of solar energy technicians trained in REF-financed courses
- Number of bank staff trained in appraisal of RE- and renewable energy projects

Key impact indicators are:

- Evolution in the quality of feasibility studies, which are attached to the applications for REF investment subsidies.
- Evolution in the penetration of least cost technologies and quality of construction work
- Evolution in the unit price of components and of services
- Evolution in the quality of business plans presented by project developers to banks for loan finance for RE and RET projects
- Evolution in the percentage of timely repayment of loans by REEs to financial institutions;
- Evolution in the quality of project appraisal by financial intermediaries, inter alia witnessed in repayments of loans Evolution in the regional generation of project proposals for REF funding
- Evolution in the number of firms that provide goods and services to RE and their regional distribution

#### 8.4.4 Indicators for result achievement

Key performance indicators for progress in rural electrification:

- The number of communities and agglomerations in Cambodia that have been electrified during the year and the percentage and number of communities and agglomerations by category of size that remain without electricity service
- Progress in rural electrification coverage (percentage of rural population living in electrified areas) and rural connection rate (percentage of rural households having electricity service).
- The number of rural enterprises (including those in the broadly define agriculture sector) that have been connected during the year and their estimated load
- The number of health clinics and schools that have been electrified during the year and the percentage and number of clinics that are without electricity service
- Progress in solar PV market development for isolated households and institutions (number and capacity of systems installed for households and institutions; information to be provided by PSF)

Key performance indicators for effectiveness of REF-investment subsidies:

- access of project developers to loan finance for RE and RET projects
- reduction in average tariff due to the subsidy
- household connection rates in project areas

Key performance indicators for effectiveness of REF-TA:

- regional generation of project proposals for REF funding
- quality of project appraisal by financial intermediaries, inter alia witnessed in repayments of loans
- number of firms that provide goods and services to RE and their regional distribution
- quality of feasibility studies/business plans that are attached to the applications for REF investment subsidies.
- penetration of least cost technologies and quality of construction work
- unit price of components and of services

Indicators for rural transformation will cover:

- *Productive use impact.* The impact of electricity (i) on the improvement and quality of social services – health, education, public administration – (ii) on commercial business activities - the creation of new agro-industrial businesses and services, development of productivity and quality enhancement in existing agro-industrial businesses and services- and (iii) links to other infrastructure investments such as water, road and telecommunications.
- *Impact on household welfare.* Benefits from improved lighting and better access to radio and, above all, TV.
- *Poverty impact* of supported RE-projects. Connection rates of poor households; poverty impacts from indirect access to electricity.

## 9 ENVIRONMENT AND SOCIAL SCREENING AND MANAGEMENT PLANS

### 9.1 World Bank Safeguard Policies

REF projects and programs funded with IDA and GEF resources need to satisfy the World Bank's safeguard policies, in addition to conformity with environmental legislation of RGC. World Bank policies and guidelines pertaining to environmental safeguards that may require consideration are:

- OP/BP/GP 4.01 Environmental Assessment
- OP/BP/GP 4.36 Forestry
- OP/BP/GP 4.04 Natural Habitats
- OP 4.07 Water Resource Management
- OP 4.30 Involuntary Resettlement
- OP/BP 4.37 Safety of Dams
- OP 4.09 Pest Management

OD 4.01 requires the REF, as project implementing institution, to undertake the functions of *project screening, EA review and implementation of mitigation and monitoring plans.*

### 9.2 Potential Environmental Issues

The key environmental issue for solar home systems concerns the disposal and recycling of lead acid or nickel-cadmium batteries.

The micro- and mini hydro projects are likely to be run-of-the river as opposed to storage projects. Potential impacts concern: (i) partial dewatering of a section of the riverbed from the intake until water is returned to the river downstream of the powerhouse and consequent impacts on aquatic life in the dewatered section; (ii) potential soil erosion caused by flushing flows discharged from sedimentation basins and by overflows at the forebays; (iii) potential ground instability caused by canal/pipe construction, (iv) cutting of trees for use of power poles for village hydro projects; and (v) adverse impacts due to construction of access roads.

Rapid expansion of diesel-thermal power plants may result in accelerating deforestation when based on tree-cutting for fuel supply.

### **9.3 Environmental Guidelines**

Environmental assessments (EAs) for LIREPs are carried out by the developers in and by REFS in the case of PREPs, and included in the feasibility study. The EAs are reviewed and cleared by the central environmental authority in Cambodia and by the REF.

The first two environmental assessments of mini hydropower and biomass projects will be submitted to IDA for review and clearance prior to disbursements for associated investments. In addition, the environmental assessments for any project that involves involuntary resettlement of more than 20 families, land acquisition, mini hydro projects and biomass energy projects greater than 5 MW will be reviewed and cleared by IDA prior to disbursement from the Credit line.

The environmental assessment should cover physical-chemical, biological, socio-economic and cultural assessment that are likely to arise during construction and operation activities as appropriate.

The REFS-officer responsible for the subsidy award approval and disbursement approvals for a project will:

1. *Project evaluation and approval:*
  - Screen proposal to categorize project according to type of environmental review that will be necessary
  - Check that feasibility study undertook the Environmental Review, Limited Environmental Assessment, or a Full Environmental Assessment, which is appropriate for the category and identifies impacts and designs appropriate mitigation measures
  - Check that feasibility study verifies that the project is consistent with regional land use plans
  - Once project has been screened and any necessary environmental review or assessment has been completed, project can be approved if it meets environmental viability criteria
  - Approval may be denied if the environmental assessment recommendations have not been satisfactorily incorporated into project design
2. *Investment implementation/supervision of projects involving ethnic minorities and/or requiring full EIA:*
  - Undertake site visits to ensure that environmental criteria and mitigation measures, as required by contracts, have been incorporated into project design
  - Require changes to project design if unforeseen impacts occur
  - Meet with contractors and community representatives to gather feedbacks
  - Approval required to issue final payment for project construction



## **9.4 Ethnic minority issues<sup>12</sup>**

As a prerequisite to IDA support, REF-supported activities must meet the requirements of Operational Directive 4.20 (Indigenous Peoples). This policy directive requires that special planning measures be established to protect the interests of ethnic minorities, i.e. social groups with a social and cultural identity distinct from the dominant society that makes them vulnerable to being disadvantaged in the development process.

The largest ethnic minority groups in Cambodia include people of Vietnamese and Chinese descent, Muslim Chams, and ethnic Lao. OD 4.20 applies with reference to Cambodian “Highland Peoples”, because these groups maintain cultural and socioeconomic practices different than those practiced by the Khmer national majority.

Consultations with and participation of indigenous people/ethnic minorities, their leaders and local government officials will be an integral part of the overall *Indigenous People Development Plan (IPDP)*, which will be included in the project feasibility report. Project areas which have indigenous people/ethnic minority communities and are candidates for REF support will be visited (at the time of first consultation with communes) by developers, relevant local authorities, and consultants. The IPDPs consist of the following sections:

- (a) preliminary screening
- (b) social assessment
- (c) mitigation measures
- (d) development assistance
- (e) monitoring

## **9.5 Resettlement Policy Framework<sup>13</sup>**

The Government’s Inter-ministerial Resettlement Committee (IRC) is charged with determining entitlements, valuation of affected assets and in fixing of compensation rates.

REF-supported projects involving cases of involuntary resettlement must comply with the framework on resettlement outlined in Annex IX. It conforms to the objectives and principles of the World Bank’s Operational Policy 4.12 on *Involuntary Resettlement*.

Current legal provisions in Cambodia governing land acquisition, compensation and resettlement may not meet the objectives and principles of O.P. 4.12. In the case of any inconsistency between the provisions of the Cambodian legal framework and this policy framework, the REB in consultation with relevant ministries in Cambodia and World Bank staff will decide whether adjustments can be made to local procedures without breaking Cambodian law.

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<sup>12</sup> Refer to Annex IX for details

<sup>13</sup> Refer to Annex Section A: Annex III: Resettlement Policy Framework” for details.

## **10 TECHNICAL SPECIFICATIONS**

To be added when ongoing consulting work, defining the technical specifications is completed.

## **ANNEX A: FORMS FOR PROJECT CYCLE**

### ***I. Forms for Project Preparation Grant***



Time schedule for execution of feasibility study

**Type of project:**

**I. Rural distribution project based on national grid connection**

.....

**II. Isolated grid projects**

Diesel generator .....

Micro/mini-hydro .....

Biomass-fueled generator

**III. Generation for national grid**

**A. Renewable energy based generation**

Micro/Mini hydro power plant connected to national grid ....

Biomass fueled power plant connected to national grid ....

Distance to grid km.

Proposed generation  
capacity kW

**Project description:**

(provide brief summary of project)

<b>Demand profile</b>		
Name(s) of village(s) to be Electrified:		
	Year 1	Year 10
Population/number of households in villages to be electrified		
Estimated number of households to be electrified		

<b>PART 2 – SUPPORTING ANNEXES</b>	
Terms of Reference for feasibility study	Annex 1
Budget for feasibility study	Annex 2
Time schedule for feasibility study	Annex 3

**PART 3 – APPROVAL AND TRANSFER ORDER (APP2)**

For internal use only. Not to be filled out by applicant

Conditions for receiving project preparation grant have been confirmed and found in order.

A project preparation grant of USD \_\_\_\_\_ is approved to be allocated for the project in accordance with the guidelines for grant disbursement

The grant will be transferred to the applicants account no:  
When the study has been received and approved.

Date of approval:

Name of approving officer:

**Form APP2: Payment Authorization for Project Preparation Grant**

## ***II. Forms for Investment Grants***



**Application: Investment Grant to Renewable Energy Generation  
Project selling Power to the National Grid (AIG1)**

**PART 1 - APPLICATION**

Name and address of Applicant:

Bank account number for transfer of grant:

Name of Co-financing Bank:

**Business Form for Investing Entity**

- Private joint stock company.....:
- Community joint stock company ... :
- Community cooperative .....:

Copy of legal person registration, or active application for forming the legal person attached as Annex 6

**Location of Project:**

- Province :
- District :
- Commune :

<b>Project finance</b>		<u>USD</u>
Equity from investor	:	
Loan (amount, maturity, interest rate) *)	:	
Requested Grant from REFS	:	
Grants from other sources	:	_____
<b>TOTAL</b> .....	:	
*) Proof of commercial bank debt financing including copies of the draft loan agreement and the banks project appraisal document, attached as Annex 5		

Name of equity investors / ownership percentage	Name	Ownership %

**Project Description:**  
 (provide brief summary of project)

<b>Compliance with regulatory conditions</b>			
Application for Local Planning Approval submitted	Yes:	No:	Attached as Annex 2
Is an environmental assessment required .....	Yes:	No:	Attached as Annex 3
If Yes attach approval from relevant authority			
Application for generation license submitted.....	Yes:	No:	Attached as Annex 4
PPA signed with the electricity company.....	Yes:	No:	Attached as Annex 4

<p><b>Compliance with technical conditions</b></p> <p>Technical norms and standards are in accordance with national rules and regulations</p> <p>REF least cost design principles have been applied</p> <p>If there are deviations from norms and design recommendations, please justify</p>	<p>Included in feasibility study and to be confirmed by consultant contracted by REFS to review the feasibility study</p>
--	---

<p><b>Key project data</b></p>		
	<p><u>Capacity in kW</u></p>	<p><u>Expected annual GWh output</u></p>
<p>Mini/micro-hydro power plant</p>	<p>:</p>	
<p>Biomass fueled power plant</p>	<p>:</p>	
<p>Length of MV line connecting plant to national grid :</p>		<p>km</p>

<p><b>Investment Cost Estimate:</b></p> <p>Cost of generation plant</p> <p>Cost of MV line connection to national grid</p> <p><b>Total investment cost</b></p>	<p>USD</p>
<p><b>Key Ranking Indicators</b></p> <p>Estimated Total investment cost per kW of installed capacity</p> <p>Estimated Production cost per kWh for 10 year period (12% discount rate)</p>	<p>USD</p>

<p><b>Financial viability of the project over a 10 year period</b></p> <p>Sales forecast  Operational cost break-down  Profitability calculations  Cash-flow projection</p> <p>IRR</p>	<p>Included in feasibility study and to be confirmed by consultant contracted by REFS to review the feasibility study</p> <p style="text-align: center;">%</p>
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<p><b>Calculation of subsidy grants</b></p> <p>Renewable energy generation .....kW of USD 400</p>	<p>Investment grant  USD</p>
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<b>PART 2 – SUPPORTING ANNEXES</b>	
Annex 1:	Copy of feasibility study
Annex 2:	Documentation that all required local planning approvals have been obtained
Annex 3	Environmental assessment report, if required
Annex 4	Generation license application to ERA
Annex 5	Proof that the commercial bank for providing the debt finance for the project has agreed to finance the project and finalized its due diligence assessment, including copies of the draft loan agreement and the banks project appraisal document
Annex 6	Copy of legal person registration or active application for forming the legal person

<b>PART 3 – APPROVAL AND TRANSFER ORDER (APP2)</b>
<p>Conditions for receiving investment grant have been confirmed and found in order.</p> <p>A project investment grant of USD _____ is approved to be allocated for the project in accordance with the guidelines for grant disbursement</p> <p>The grant will be transferred to the applicants account no:</p> <p>Date of approval:</p> <p>Name of approving officer:</p>

## ***Application Investment Grant Distribution Project (AID1)***

### **PART 1 - APPLICATION**

Name and address of Applicant:

Bank account number for transfer of grant:

Name of Co-financing Bank:

Proposed organization structure for project implementation

- Private owner .....
- Community joint stock company .....
- Community cooperative .....

Copy of legal person registration, or active application for forming the legal person attached as Annex 6

Location of Project:

- Province :
- District :
- Commune :
- Names of villages to be Electrified:

Project Description:  
(provide brief summary of project)

**Key project data**

**Capacity of generation system for isolated grids**

Diesel generator	kW
Hydro power	kW
Biomass combustion generation	kW

**Supply of electricity from national grid**

Length of MV supply line(s)	km
-----------------------------	----

**Distribution system**

Length of MV-lines connecting villages covered by distribution license	km
Length of LV distribution lines	km
Number of household connections	No.

<b>Demand Profile</b>	year 1 kWh / year	year 10 (kWh / year)
Electricity sales to households		
Electricity sales to private productive / commercial uses		
Electricity sales to public institutions (kWh / year)		
Total electricity sales (kWh/year)		

<b>Investment Cost Estimate:</b>	USD
<b>I A Cost of generation system for isolated grids</b> Diesel generator Hydro power Biomass combustion generation	
<b>I B Cost of connection line to national grid</b> MV supply line connecting LV-system to national grid Transformers to LV system	
<b>II Cost of distribution system</b> Cost of MV-lines connecting villages covered by distribution license LV distribution lines Cost of household connections	
<b>III. Contingencies</b>	
<b>Total investment cost</b>	

<b>Project finance</b>		
		<u>USD</u>
• Equity	:	
• REF grant	:	
• Other grants	:	
• Consumer connection fees	:	
• Consumer contribution in kind (value of free labor)	:	
• Bank loan*)	:	_____
Total Project Finance	:	
*) Proof of commercial bank debt financing including copies of the draft loan agreement and the banks project appraisal document, attached as Annex 5		
Name of equity investors / ownership percentage	Name	Ownership %



<b>Tariff structure</b>	Connection fee	Fixed monthly charges	kWh charges
Household tariff			
Commercial consumers			
Public consumers			

<p><b>Key Ranking Indicators: Cost of Investment</b></p> <p>Estimated Total investment cost / kW of installed capacity</p> <p>Estimated Production cost per kWh for 10 year period (12% discount rate)</p> <p>Estimated Total Investment cost per connected household</p>	USD
<p><b>Key Ranking Indicators: Socio-Economic Data:</b></p> <p>Number of schools to be connected:</p> <p>Number of health clinics to be connected</p> <p>Number of community centers to be connected</p> <p>Number of individual diesel generators that are expected</p> <p>Data to justify qualifying for possible allocation of hardship bonus;</p> <p>Please detail:</p>	

<p><b>Financial viability of the project over a 10 year period</b></p> <p>Sales forecast</p> <p>Operational cost break-down</p> <p>Profitability calculations</p> <p>Cash-flow</p> <p>Balance sheets</p> <p>IRR</p>	<p>Included in feasibility study and to be confirmed by consultant contracted by REFS to review the feasibility study</p> <p>%</p>
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<p><b>Compliance with regulatory conditions</b></p> <p>Application for Local Planning Approval submitted</p> <p>Environmental assessment required ..... Yes .... No If Yes attach approval from relevant authority</p> <p>Application for distribution license submitted ..... Yes .... No If Yes attach approval or application from/to relevant authority</p> <p>Application for generation license submitted ..... Yes .... No If Yes attach approval or application from/to relevant authority</p>	<p>Attached as Annex 2</p> <p>Attached as Annex 3</p> <p>Attached as Annex 4</p> <p>Attached as Annex 4</p>
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<p><b>Compliance with technical conditions</b></p> <p>Technical norms and standards in accordance with rules for rural electrification and for renewable energy.</p> <p>Least cost design applied. If not please justify</p> <p>Cost of individual major investment items is in line with level of local costs according to the data bank on rural electrification costs established by REFS or ERA. If not, please justify</p>	<p>Included in feasibility study and to be confirmed by consultant contracted by REFS to review the feasibility study</p>
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<p><b>Local community support</b></p> <p>Name of local community representative</p> <p>Interest expressed by potential consumers in the project by paying a deposit</p>	<p>Annex 7</p>
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<b>Calculation of subsidy grants</b>	<b>Investment grant USD</b>
No of connections ----- of USD 45	.....
Length of LV lines ..... km a USD	.....
Length of MV lines ..... km a USD	.....
Renewable energy generation .....kW of USD 400	.....
Hardship bonus	.....
<b>Total subsidy grant applied for</b>	

<b>PART 2 – SUPPORTING ANNEXES</b>	
Annex 1:	Copy of feasibility study
Annex 2:	Documentation that all required local planning approvals have been obtained
Annex 3	Environmental assessment report, if required
Annex 4	Application to ERA for distribution license and generation license
Annex 5	Proof that the commercial bank for providing the debt finance for the project has agreed to finance the project and finalized its due diligence assessment, including copies of the draft loan agreement and the banks project appraisal document
Annex 6	Copy of legal person registration or active application for forming the legal person
Annex 7	Documentation that potential consumers have expressed their interest in the project by paying a deposit
Annex 8	Documentation that hardship bonus may be applicable
Annex 9:	Layout Plans of generation system (if applicable) and local distribution system
Annex 10:	Business Plan for Utility Operation

**PART 3 – APPROVAL AND TRANSFER ORDER (APP2)**

Conditions for receiving investment grant have been confirmed and found in order.

A project investment grant of USD \_\_\_\_\_ is approved to be allocated for the project in accordance with the guidelines for grant disbursement

The grant will be transferred to the applicants account no:

Date of approval:

Name of approving officer:

## Draft Subsidy Award Contract: Distribution Project

Processing officer: Approving officer: Project no: Project: Application dated: Approval date: Signature approving officer:	
<b>Grant elements:</b>  No of connections ----- of USD 45 Length of MV line connecting to the national grid.. km a USD ... Renewable energy generation .....kW of USD 400 Hardship bonus <b>Total approved subsidy grant</b>	<u>USD</u>

### Awarded subsidy amount

Your company has been awarded a total grant subsidy of USD \_\_\_\_\_ for completion of above project in accordance with your application and REF rules for project implementation.

It is a condition for the grant payment that your project is carried out in accordance with above specifications and REF rules. REF holds the option to control actual project implementation within three years after project implementation and claim a penalty repayment in case the mentioned conditions are not fulfilled.

## **Disbursement schedule**

The disbursement of the award will be the following:

First Payment: 40 % of awarded grant after documentation of start of construction, and completed request form (CP1) for first payment is received.

The payment request must include

- i) Distribution license from ERA
- ii) A declaration of project developer informing of his signing of listed contracts amounting to at least 50% of the total investment sum estimated in the subsidy award contract
- iii) A written confirmation by contractors having signed the listed contracts
- iv) A declaration of project developer informing of start of construction
- v) Planned time schedule for the completion of construction.

In addition documentation must be provided that the following missing authorizations have been obtained:

- .....
- .....
- .....

The bank account for the requested deposit must correspond to the bank account listed in the subsidy award contract; otherwise reason for new bank account must be given.

Second payment: 40 % of awarded grant after finalization of construction, and completed request form (CP2) for second payment is received from project developer.

The request must include

- i) A declaration of project developer stating that investment program listed in subsidy award contract is completed
- ii) A written confirmation by elected consumer representative
- iii) A declaration of developer co-signed by the major contractor for construction that the completed installations; as foreseen in the subsidy award contract; comply with rural electrification norms, standards and regulations. In case of deviation from use of planned technology, explanation and justification for this
- iv) A list of connected customers with names and addresses, co-signed by elected consumer representative and developer

The bank account for the requested deposit must correspond to the bank account listed in the subsidy award contract; otherwise reason for new bank account must be given.

Final payment: Final payment of awarded grant after three months of operation, and receipt of completed request form (CP3) for final payment. The grant element for established connections will be adjusted to the final number of connections.

The request must include:

- i) A project completion report completed by project developer
- ii) A confirmation of plant commissioning and handing over

Bank account of developer for deposit must correspond to the bank account listed in the subsidy award contract; otherwise reason is given for new bank account

### **Obligation to provide asked for project information to REF**

The Rural Electrification Fund (REF) holds the option to control actual performance and construction quality during the first three years of a projects operational life. REF will normally recruit a consultant to carry out a site visit and prepare an evaluation report.

Unauthorized use of sub-standard equipment or over-reporting of connected customers or of installed generating capacity is subject to penalty payments. In case a breach of contract is established REF will calculate a grant repayment penalty as follows:.

- Use of sub-standard equipment. Repayment of grant equal to three times the cost difference between standard and sub-standard equipment
- Overstating number of connected customers. Repayment of grant equal to three times the excess grant payment
- Overstatement of installed kW-capacity of generators using renewable energy  
Repayment of grant equal to three times the excess grant payment
- Overstating the length in km of MV-lines connecting the LV-distribution systems to the national or local grid. Repayment of grant equal to three times the excess grant payment

By his signature on the requests for payment of the requested REF-investment grant, the developer accepts:

- to give monitoring consultants contracted by the REF or REFS staff unrestricted access to the installations and to fully assist in providing any requested information relevant for control of compliance with the subsidy contract conditions;
- to pay the stated penalties in case irregularities are observed and the REFS has submitted request of payment to the project owner.

Signed by .....



## Draft Subsidy Award Contract: Generation Project

Processing officer:	
Approving officer:	
Project no:	
Project:	
Application dated:	
Approval date:	
Signature approving officer:	
<b>Grant elements:</b>	USD
Renewable energy generation .....kW of USD 400	
<b>Total Approved subsidy grant</b>	

### Awarded subsidy amount

Your company has been awarded a total grant subsidy of USD \_\_\_\_\_ for completion of above project in accordance with your application and REF rules for project implementation.

It is a condition for the grant payment that your project is carried out in accordance with above specifications and REF rules. REF holds the option to control actual project implementation within three years after project implementation and claim a penalty repayment in case the mentioned conditions are not fulfilled.

## **Disbursement schedule**

The disbursement of the award will be the following:

First Payment: 40 % of awarded grant after documentation of start of construction, and completed request form (CP1) for first payment is received.

The payment request must include

- Generation license from ERA
- PPA or a letter of intent is signed by EdC
- A declaration of project developer informing of his signing of listed contracts amounting to at least 50% of the total investment sum estimated in the subsidy award contract
- A written confirmation by contractors having signed the listed contracts
- A declaration of project developer informing of start of construction
- Planned time schedule for the completion of construction.

In addition documentation must be provided that the following missing authorizations have been obtained:

- .....
- .....
- .....

The bank account for the requested deposit must correspond to the bank account listed in the subsidy award contract; otherwise reason for new bank account must be given.

Second payment: 40 % of awarded grant after finalization of construction, and completed request form (CP2) for second payment is received from project developer.

The request must include

- A declaration of project developer stating that investment program listed in subsidy award contract is completed
- A written confirmation by major construction contract holder
- A declaration of developer co-signed by the major contractor for construction that the completed installations; as foreseen in the subsidy award contract; comply with rural electrification norms, standards and regulations. In case of deviation from use of planned technology, explanation and justification for this

The bank account for the requested deposit must correspond to the bank account listed in the subsidy award contract; otherwise reason for new bank account must be given.

Final payment: Final payment of awarded grant after three months of operation, and receipt of completed request form (CP3) for final payment. The grant element for established connections will be adjusted to the final number of connections.

The request must include:

- iii) A project completion report completed by project developer
- iv) A confirmation of plant commissioning and handing over

Bank account of developer for deposit must correspond to the bank account listed in the subsidy award contract; otherwise reason is given for new bank account

### **Obligation to provide asked for project information to REF**

The Rural Electrification Fund (REF) holds the option to control actual performance and construction quality during the first three years of a projects operational life. REF will normally recruit a consultant to carry out a site visit and prepare an evaluation report.

Unauthorized use of sub-standard equipment or over-reporting of connected customers, of installed generating capacity or of length of MV-lines is subject to penalty payments. In case a breach of contract is established REF will calculate a grant repayment penalty as follows:

- Use of sub-standard equipment. Repayment of grant equal to three times the cost difference between standard and sub-standard equipment
- Overstatement of installed kW-capacity of generators using renewable energy  
Repayment of grant equal to three times the excess grant payment

By his signature on the requests for payment of the requested REF-investment grant, the developer accepts:

- to give monitoring consultants contracted by the REF or REFS staff unrestricted access to the installations and to fully assist in providing any requested information relevant for control of compliance with the subsidy contract conditions;
- to pay the stated penalties in case irregularities are observed and the REFS has submitted request of payment to the project owner.

Signed by

.....

**Application for Payment of Investment Grant: Distribution Project  
(APD1) First Payment**

Name and address of Applicant:	
REF Project no:	
Date of Subsidy Award Contract contract:	

<p><b>Grant elements:</b></p> <p>No of connections ----- of USD 45</p> <p>Length of MV lines ..... km a USD</p> <p>Renewable energy generation .....kW of USD 400</p> <p>Hardship bonus</p>	USD
<b>Total approved subsidy grant</b>	
Due payment 40 % of USD .....	

<b>Enclosures</b>	<ul style="list-style-type: none"> <li>• Distribution license from ERA</li> <li>• A declaration of project developer informing of his signing of listed contracts amounting to at least 50% of the total investment sum estimated in the subsidy award contract</li> <li>• A written confirmation by contractors having signed the listed contracts</li> <li>• A declaration of project developer informing of start of construction</li> <li>• Planned time schedule for the completion of construction.</li> </ul>
-------------------	--

Date: .....

Place: .....

Company:.....

Signed by

.....  
position

Bank account for transfer of grant subsidy  
.....

**Application Payment of Investment Grant Distribution projects  
(APD2) Second Payment**

Name and address of Applicant:	
REF Project no:	
Date of Subsidy Award Contract contract:	

<p><b>Grant elements:</b></p> <p>No of connections ----- of USD 45</p> <p>Length of LV lines ..... km a USD</p> <p>Length of MV lines ..... km a USD</p> <p>Renewable energy generation .....kW of USD 400</p> <p>Hardship bonus</p>	USD
<b>Total approved subsidy grant</b>	
Due payment 40 % of USD .....	

<b>Enclosures</b>	<ul style="list-style-type: none"> <li>• A declaration of project developer stating that investment program listed in subsidy award contract is completed</li> <li>• A written confirmation by elected consumer representative in case of isolated grid project</li> <li>• A written confirmation by major construction contract holder in case of grid connected hydro- or biomass fired power plant</li> <li>• A declaration of developer co-signed by the major contractor for construction that the completed installations; as foreseen in the subsidy award contract; comply with rural electrification norms, standards and regulations. In case of deviation from use of planned technology, explanation and justification for this</li> </ul>
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Date: .....

Place: .....

Company:.....

Signed by

.....  
position

Bank account for transfer of grant subsidy  
.....

**Application Payment of Investment Grant Distribution projects Final Payment (APD3)**

Name and address of Applicant:	
REF Project no:	
Date of Subsidy Award Contract contract:	

<p><b>Grant elements:</b></p> <p>No of connections ----- of USD 45</p> <p>Length of LV lines ..... km a USD</p> <p>Length of MV lines ..... km a USD</p> <p>Renewable energy generation .....kW of USD 400</p> <p>Hardship bonus</p>	USD
<b>Total approved subsidy grant</b>	



<p><b>Calculation of Final Payment</b></p> <p><b><u>1. Subsidy entitlement</u></b></p> <p><u>(a) Grant elements in subsidy award contract:</u></p> <ul style="list-style-type: none"> <li>• No of connections ----- of USD 45</li> <li>• Length of LV lines ..... km a USD</li> <li>• Length of MV lines ..... km a USD</li> <li>• Renewable energy generation .....kW of USD 400</li> <li>• Hardship bonus</li> <li>• Total approved subsidy grant</li> </ul> <p><u>(b) Corrections for additional/less connections than assumed:</u></p> <p style="text-align: center;">+/- of USD 45</p> <p>Total subsidy entitlement:</p> <p><b>2. First payment of Grant subsidy</b></p> <p><b>3. Second payment of Grant subsidy</b></p>	<p><u>USD</u></p>
<p><b>Final due payment</b></p>	

<p><b>Enclosures</b></p>	<ul style="list-style-type: none"> <li>• A project completion report completed by project developer</li> <li>• A confirmation of plant commissioning and handing over</li> <li>• A list of any additional connected customers since second payment with names and addresses, co-signed by elected consumer representative and developer</li> </ul>
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Date: .....

Place: .....

Company:.....

Signed by  
Position

Bank account for transfer of grant subsidy :

**Application Payment of Investment Grant Generation Project  
First Payment (APG1)**

Name and address of Applicant:	
REF Project no:	
Date of Subsidy Award Contract contract:	

<b>Grant elements:</b> Renewable energy generation .....kW of USD 400	USD
<b>Total approved subsidy grant</b>	

Due payment 40 % of USD .....	
-------------------------------	--

Date: .....

Place: .....

Company:.....

Signed by

.....  
position

Bank account for transfer of grant subsidy

<b>Enclosures</b>	<ul style="list-style-type: none"> <li>i) Generation license from ERA</li> <li>ii) PPA with the developer or a letter of intent is signed by EdC</li> <li>iii) A declaration of project developer informing of his signing of listed contracts amounting to at least 50% of the total investment sum estimated in the subsidy award contract</li> <li>iv) A written confirmation by contractors having signed the listed contracts</li> <li>v) A declaration of project developer informing of start of construction</li> <li>vi) Planned time schedule for the completion of construction..</li> </ul>
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.....

**Application Payment of Investment Grant Generation Project  
Second Payment (APG2)**

Name and address of Applicant:	
REF Project no:	
Date of Subsidy Award Contract contract:	

<b>Grant elements:</b>	USD
Renewable energy generation .....kW of USD 400	
<b>Total approved subsidy grant</b>	

Due payment 40 % of USD .....	
-------------------------------	--

Date: .....

Place: .....

Company:.....

Signed by

.....

position

Bank account for transfer of grant subsidy

.....

<p><b>Enclosures</b></p>	<p>v) A declaration of project developer stating that investment program listed in subsidy award contract is completed</p> <p>vi) A written confirmation by major construction contract holder</p> <p>vii) A declaration of developer co-signed by the major contractor for construction that the completed installations; as foreseen in the subsidy award contract; comply with rural electrification norms, standards and regulations. In case of deviation from use of planned technology, explanation and justification for this</p>
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**Application Payment of Investment Grant Generation Project  
Final Payment (APG3)**

Name and address of Applicant:	
REF Project no:	
Date of Subsidy Award Contract contract:	

<b>Calculation of Final Payment</b>	USD
Approved subsidy grant : Renewable energy generation .....kW of USD 400	
First payment of Grant subsidy	
Second payment of Grant subsidy	
<b>Final due payment</b>	

Date: .....

Place: .....

Company:.....

Signed by

position

Bank account for transfer of grant subsidy  
.....

<b>Enclosures</b>	v) vi)	A project completion report completed by project developer A confirmation of plant commissioning and handing over
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## **ANNEX B: Guidelines for Environmental Management**



## ***ANNEX C: Ethnic Minorities Development Strategy for REF***

### **Introduction**

As a prerequisite to IDA support, RE&T must meet the requirements of Operational Directive 4.20 (Indigenous Peoples). This policy directive requires that special planning measures be established to protect the interests of ethnic minorities, i.e. social groups with a social and cultural identity distinct from the dominant society that makes them vulnerable to being disadvantaged in the development process.

Indigenous peoples can be identified in particular geographical areas by the presence in varying degrees of the following characteristics:

- (a) a close attachment to ancestral territories and to the natural resources in these areas;
- (b) self-identification and identification by others as members of a distinct cultural group;
- (c) an indigenous language, often different from the national language;
- (d) presence of customary social and political institutions; and
- (e) primarily subsistence-oriented production.

Based on the above characteristics, the largest ethnic minority groups in Cambodia include people of Vietnamese and Chinese descent, Muslim Chams (who are in the subproject areas) and ethnic Lao, all of whom are generally not considered to be “Cambodian Highland People” in the Cambodian context.

The Bank has determined that OD 4.20 applies with reference to Cambodian “Highland Peoples”, because these groups maintain cultural and socioeconomic practices different than those practiced by the Khmer national majority.

In the context of this project, it is important to note that the OD 4.20 refers to social groups and not to individuals. The primary objectives of OD 4.20 are:

- to ensure that such groups are afforded meaningful opportunities to participate in planning that affects them;
- to ensure that opportunities to provide such groups with culturally appropriate benefits are considered; and
- to ensure that any project impacts that adversely affect them are avoided or otherwise minimized and mitigated.

REF-supported subprojects, including mini and micro hydropower plants, solar powers, and REE isolated systems, might benefit some ethnic minorities. This strategy note provides some general principles and procedures that will be applied during project implementation, if indigenous people/ethnic minorities are reported in any of the

subprojects. The purpose of the strategy is one of *ensuring consultation, giving ethnic minorities a voice, and an opportunity to participate in the project.*

### **Screening for indigenous people among beneficiary populations**

The project design recognizes that ‘meaningful’ participation by poor and disadvantaged sections of society requires special focus that goes beyond routine project implementation management. In the operation manual for REF, detailed guidelines on social assessment and resettlement aspects are included. Under these guidelines, the developer of each subproject will carry out preliminary social assessment during the preparation of project feasibility report, which will be prepared by experienced consulting team to be funded under the project TA. Such effort is designed to understand the basic social economic needs of the communities and support key activities aimed at empowering beneficiary populations to exercise their voices and choices.

The project is, therefore, committed and has the organizational instruments to ensure that ethnic minorities are (i) consulted in matter relating to each subproject, (ii) provided opportunities for participation in decision making related to the subproject, and (iii) provided opportunities for participation in project activities should they so desire.

Re-confirming that there are no IPs among beneficiary populations will be undertaken in the social assessment process. By gathering both qualitative and quantitative data in the project areas through a range of PRA techniques, the basic social economic profile of beneficiary population will be developed. Such procedures have already been used in the feasibility studies of some pilot subprojects, which are aimed at ensuring that all minority voices and opinions are heard through the project preparation and implementation process.

### **Principles and procedures applied where the project involves Cambodian Highland People**

REF once it is set up, will ensure that full consultation, in a language spoken by the indigenous people/minority group, and invite participation of indigenous people/ethnic minorities are fully taken into account during preparation and implementation of subprojects, while respecting their current practices, beliefs and cultural preferences. The outcome of the consultations will be documented into the project proposal. (See section 4 for detailed procedures of such consultation efforts.)

If the indigenous people conclude that the project will be beneficial, or non-harmful to their way or life or cultural beliefs, and the adverse impacts are minimal, measures and assistance will be developed in consultation with tribal elders, community groups, and independent assigned NGOs. The community should also be consulted to ensure that their rights and culture are respected. The assistance may also include institutional strengthening and capacity building of tribal elders and community groups working with the project.

## **Reporting, Monitoring and Documentation**

The proposed screening, social assessment and consultation process will provide comprehensive baseline data on social, economic and technical aspects of each subproject. This includes also participatory mapping of community access to power supply and key services. If the social assessment confirms that no ethnic minority populations exist in the project areas, no further action is necessary. If the social assessment indicates that there are potential social issues because of ethnic minority populations in such subproject, it will be ensured that the responsible developer will undertake specific measures to consult with, and give opportunity for ethnic minority populations in participating decision making related to the subproject, should they so desire.

Besides specific attention to ethnic minority issues in supervision and monitoring, the PMU in MIME/REF will include these matters in their progress reporting. The IDA supervision missions will periodically pay special attention to ensure that that the subproject affords benefits to vulnerable groups and ethnic minorities.

### **Consultation Framework for Ethnic Minority Issues under REF**

The consultation framework aims to ensure that indigenous people/ethnic minorities are well informed, consulted and mobilized to participate in the sub-projects to be supported by REF. Their participation can either provide them benefits with more certainty, or protect them from any potential adverse impacts of sub-projects to be financed by the Project. The main features/process of the consultation framework includes a preliminary screening process, then a social impact assessment to determine the degree and nature of impact of each subproject to be supported by REF, and an action plan will be developed if warranted. Consultations with and participation of indigenous people/ethnic minorities, their leaders and local government officials will be an integral part of the overall Indigenous People Development Plan (IPDP), which could be included in the project feasibility report. The IPDPs consist of the following sections:

- (f) preliminary screening
- (g) social assessment
- (h) mitigation measures
- (i) development assistance
- (j) monitoring

The Project will provide a series of training to all implementers and local agencies preparing and implementing IPDPs.

### **Preliminary Screening**

All subproject areas which have indigenous people/ethnic minority communities and are candidates for REF support will be visited (at the time of first consultation with communes) by developers, relevant local authorities, and consultants. Prior to the visit, respective developers

will send a letters to the communities informing their leaders that they will be visited by the respective developers and local authorities and consultation will be conducted on the subproject. The letter will request that the communities invite to the meeting representatives of farmers, women associations and village leaders for discussion on the subproject. During the visit, the community leaders and other participants will present their views with regards to the subproject.

At this visit, the social scientists (consultants) will undertake a screening for ethnic minority population with the help of ethnic minority leaders and local authorities. The screening will check for the following:

- (a) names of ethnic groups in the affected village
- (b) total number of ethnic minority groups in the affected villages
- (c) percentage of ethnic minority of village population
- (d) number and percentage of ethnic minority households along the zone of influence of the proposed sub-Project.

If the results show that there are ethnic minority communities in the zone of influence of the proposed subproject, a social impact assessment will be planned for those areas.

### **Social Assessment**

The social assessment (SA) will be undertaken by the social scientists (consultants). The SA will gather relevant information on the following: demographic data; social, cultural and economic situation; and social, cultural and economic impacts - positive and negative.

Information will be gathered from separate group meetings: ethnic minority leaders; ethnic minority men; and ethnic minority women, especially those who live in the zone of influence of the proposed work under sub-Project. Discussions will focus on subproject impacts, positive and negative; and recommendations for design of subproject. If the SA indicates that the potential impact of the proposed sub-project will be significantly adverse or that the ethnic minority community rejects the project, the sub-Project will not be implemented in that locality; no further action is needed in this case. If the ethnic minority supports the sub-Project implementation an IPDP will be developed.

### **Indigenous People Development Plan**

The IPDP will consist of a number of activities and will include mitigation measures of potentially negative impacts, modification of subproject design, and development assistance. Where there is land acquisition in ethnic minority communities, the project will ensure that their rights will not be violated and that they be compensated for the use of any part of their land in a manner that is culturally acceptable to them. The compensation and rehabilitation will follow the Resettlement Policy Framework of the project. An IPDP will include:

- (1) legal Framework
- (2) baseline data;

- (3) land tenure information;
- (4) local participation;
- (5) technical identification of development or mitigation activities;
- (6) institutional arrangement;
- (7) implementation schedule;
- (8) monitoring and evaluation; and
- (9) cost and financing plan.

### **Implementation Arrangement**

Consultants will also be responsible for training respective developers or local NGOs to undertake the work of consultation, screening, social impact assessment, analyses and preparing IPDPs.

Developers of individual subprojects and local authorities are responsible for implementing IPDP (arrange adequate staff and budget).

### **Monitoring**

Implementation of the IPDPs will be regularly supervised and monitored by MIME/REF. The findings and recommendations will be recorded in quarterly reports and to be furnished to IDA.

The independent agency which would be used by MIME/REF to undertake external monitoring and evaluation of the implementation of resettlement action plans for the REF will also be tasked with monitoring the activities for IPDP. While, the external monitoring agency will visit a sample of affected households for resettlement in each relevant province on an annual basis, it will also visit a sample of at least 10% of ethnic minority households in the project affected areas.

### **Schedule**

The IPDP should have an implementation schedule that is coordinated with the subproject implementation. Logically, social assessments and group meetings should be undertaken before subproject designs are prepared. Compensation for land acquisition should be satisfactorily completed at least one month prior to start of civil work. Monitoring should take place at the recommended times during and after civil work.

### **Budget**

The IPDP will include information on detailed cost of mitigation measures and other rehabilitation entitlements for ethnic minority in the affected areas. Sources of funding for the various activities and financing plans will be clearly specified in the cost tables.

### **Reporting/Documentation**

The IPDPs will be prepared and submitted by individual developers to REF and then the IDA at the same time that respective developers submit their subproject applications to REF and the IDA for review.

## ***ANNEX D. Resettlement Policy Framework***

While construction of MV and LV requires little land acquisition and resettlement, small land acquisition might be required for the construction of mini hydro and some MV facilities. Following the Bank policy on involuntary resettlement, a resettlement policy framework has been prepared for the RE component. The Resettlement Policy Framework, presented below, addresses adverse social impacts that may result due to involuntary acquisition of assets and changes in land use and includes provision for compensation and rehabilitation assistance.

### **1. DEFINITIONS**

**Compensation** means payment in cash or in kind for an asset to be acquired or affected by a project at replacement cost.

**Cut-off Date** is the date prior to which the occupation or use of the project area makes residents/users of the project area eligible to be categorized as affected persons. The cut-off date coincides with the date of the census of affected persons within the project area boundaries. Persons not covered in the census, because they were not residing, having assets, or deriving an income from the project area, are not eligible for compensation and other entitlements.

**Eligible landholders** are affected persons who (a) hold title to land; or (b) do not hold title but whose possession of land can be legalized with a title pursuant to the Land Law of Cambodia.

**Entitlement** means a range of measures comprising compensation, income restoration support, transfer assistance, income substitution, and relocation support which are due to affected people, depending on the nature of their losses, to restore their economic and social base.

**Project Authorities** refer to both Electricite du Cambodge (EDC) and Ministry of Industry, Mining, and Energy (MIME), with EDC in charge of grid extension of RE Component, and MIME/REF in charge of off-grid electrification of RE component.

**Project Affected Persons (PAPs)** includes any person or persons, households, a firm, or private or public institution who, in the context of acquisition of assets and change in land usage, as of the cut-off date, on account of the execution of the project, or any of its subcomponents or part, would have their:

- (a) Standard of living adversely affected;

- (b) Right, title, or interest in any house, land (including residential, commercial, agricultural and grazing land) or any other moveable or fixed assets acquired or possessed, in full or in part, permanently or temporarily adversely affected; or
- (c) Business, occupation, places of work or residence or habitat adversely affected, with or without displacement.

PAP includes persons and affected household and consists of all members of a household residing under one roof and operating as a single economic unit, who are adversely affected by a project or any of its components. For resettlement purposes, affected persons will be considered as members of affected households.

**Rehabilitation** means assistance provided to project affected persons seriously affected due to the loss of productive assets, incomes, employment or sources of living, to supplement payment of compensation for acquired assets, in order to achieve, at a minimum, full restoration of living standards and quality of life.

**Replacement cost.** With regard to land and structures, **replacement cost** is defined as follows: For agricultural land, it is the pre-project or pre-displacement, whichever is higher, market value of land of equal productive potential or use located in the vicinity of the affected land, plus the cost of preparing the land to levels similar to those of the affected land, plus the cost of any registration and transfer taxes. For land in urban areas, it is the pre-displacement market value of land of equal size and use, with similar or improved public infrastructure facilities and services and located in the vicinity of the affected land, plus the cost of any registration and transfer taxes. For houses and other structures, it is the market cost of the materials to build a replacement structure with an area and quality similar to or better than those of the affected structure, or to repair a partially affected structure, plus the cost of transporting building materials to the construction site, plus the cost of any labor and contractors' fees, plus the cost of any registration and transfer taxes. In determining the replacement cost, depreciation of the asset and the value of salvage materials are not taken into account, nor is the value of benefits to be derived from the project deducted from the valuation of an affected asset.

**Resettlement** means all measures taken to mitigate any and all adverse impacts of a project on PAP property and/or livelihoods, including compensation, relocation (where relevant) and rehabilitation as needed.

**Vulnerable group** are distinct groups of people who might suffer disproportionately or face the risk of being marginalized from the effects of resettlement and specifically include: (i) female headed households with dependents, (ii) disabled household heads, (iii) households falling under the generally accepted indicator for poverty, (iv) elderly households with no means of support and landlessness, and (v) indigenous minorities.



## 2. CAMBODIAN LEGAL PROVISIONS

The Constitution of Cambodia provides for land acquisition for public purposes. In Article 20 it states that "Nobody shall be forced to transfer his or her ownership, if forcing is necessary in public interest and if no proper and just indemnity has been paid to owner". Regarding compensation, Article 40 of the Constitution states that "...The right to confiscate (land) possession from any person shall be exercised only in the public interest as provided for under law and shall require fair and just compensation."

Some protection for vulnerable groups is also specified in the Constitution in Article 73: "The State shall give full consideration to children and mothers. The State shall establish nurseries, and help support women and children who have inadequate support" and Article 74: "The State shall assist the disabled and the families of combatants who sacrificed their lives for the nation".

The new 2001 Land Law provides that no person shall be "deprived of their ownership unless this action is for the public interest consistent with formalities and procedures provided by laws and regulations, and after just and fair compensation". There are currently no such "laws and regulations" and there continues to be an absence of definition for "just compensation". In addition, a person holding illegally possessed property cannot claim compensation, even if there is a title (Article 19). Further, any "illegal and intentional or deceitful acquisition of the public domain of the State or public legal entity shall be punished" with a fine and/or imprisonment. This penalty can be doubled if the landholder is held to damage or delay work in favor of the common interest, especially the possession of land necessarily reserved for maintaining roads. Under the new Land Law, those who have occupied a right of way or public properties may not be entitled to any compensation or social support, regardless of their being an affected person or a member of a vulnerable group.

Although individual rights to ownership and compensation are protected by present laws, there are no clearly defined specific provisions or a mechanism for land acquisition by the State through expropriation. The expropriation of immovable properties is based on decisions of government staff and implementation in an ad-hoc manner varying from one project to another.

Traditional private land ownership was abolished during the Khmer Rouge period (1975-1979) and was not re-introduced until the late 1980s. Determining ownership and obtaining documentation to prove ownership is a cumbersome and time consuming process which many landholders have not utilized. The boundaries of public land still remain unclearly defined and it can be difficult to distinguish between public and private land. This blurring between public and private land is particularly acute with regard to rights of ways for roads, irrigation channels and the like. There was no specific law or regulation on rights of way until 1999 when a Government of Cambodia Decree identified a 50-meter right of way for some specified national roads and 60 meters for other national roads. The width of other rights of way varies depending on the type of

road. No efforts were made to publicize the claimed rights of way and no physical demarcations have been made for these rights of way.

Presently, the Government's Inter-ministerial Resettlement Committee (IRC) is charged with determining entitlements, valuation of affected assets and in fixing of compensation rates. Current legal provisions governing land acquisition, compensation and resettlement in Cambodia do not meet the objectives and principles of World Bank's Operational Policy (O.P.) 4.12 on *Involuntary Resettlement*.

This policy framework conforms to the objectives and principles of the World Bank's O.P. 4.12. In the case of any inconsistency between the provisions of the Cambodian legal framework and this policy framework, the Cambodian law shall be waived to the extent necessary.

### **3. OBJECTIVES AND PRINCIPLES OF THE POLICY**

#### **3.1 Overall Objectives**

This Policy framework seeks to address the inadequacy of the existing legal provisions discussed in the previous section. This policy is based on the philosophy that the project must serve the needs of society and ensure that PAPs are at least as well off due to the project. This can be ensured through the following basic objectives:

- (i) Avoid involuntary resettlement where feasible and minimize resettlement where population displacement is unavoidable,
- (ii) Ensure that displaced people receive compensation, assistance and rehabilitation so that they would be at least as well off as they would have been in the absence of the project,
- (iii) PAPs will benefit from the project, and
- (iv) Project stakeholders (which includes PAPs) are consulted and given the opportunity to participate, as practicable, in the design, implementation, and operation of the project.
- (v) Appropriate assistance and compensation, in cash or in kind, provided to adversely affected people, including indigenous groups, ethnic minorities and pastoralists who may have usage or customary rights to the land or other resources taken for the project.

Three important elements of involuntary resettlement are: (i) compensation for loss of assets, loss of livelihood and income, (ii) assistance for relocation, including provision of relocation sites with appropriate facilities and services, and (iii) assistance for rehabilitation to improve, or at least restoration of incomes and living standards to the pre-project level.

### 3.2 Principles on Compensation and Entitlements

The overriding principle for all development projects is that people unavoidably affected should be compensated and assisted, so that their economic and social future would be at least as favorable as it would have been in the absence of the project. This will be accomplished using the following specific principles.

- (1) Acquisition of land and other assets and shifting of people will be avoided and minimized as much as possible.
- (2) Only PAPs who are found to be living in, doing business, or cultivating land, or having rights over resources within, the project area as the date of the census (cut-off date) are eligible for compensation for loss of assets, other assistance and rehabilitation for social and economic losses. PAPs will be compensated for affected land, either through receiving replacement land or replacement cost for their land.
- (3) All compensation for affected land, structures, and other fixed assets shall be paid at replacement cost.
- (4) The resettlement transition period will be minimized and the acquisition of assets, compensation, resettlement and rehabilitation for a segment/section or phase (except where long-term rehabilitation measures such as vocational training) will be completed at least one (1) month prior to the initiation of construction work under the respective segment/section or phase thereof.
- (5) PAPs losing all of their assets (farmland, house or business), or in case of partial loss when the remaining assets are determined as un-viable for continued use, will be entitled for compensation for the entire assets at replacement cost.<sup>14</sup>
- (6) In the case of a partial impact on the assets, i.e., partial loss of land or structures and the remaining assets remain viable for continued use, compensation for the affected assets will be paid in cash.
- (7) In case of land for land for arable land, the replacement land should be in the form of land of equivalent productive value and/or characteristics at a location acceptable to PAPs. If replacement land at a location acceptable to PAPs is not available, cash representing replacement cost of land should be compensated.

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<sup>14</sup> Where significantly large or entire landholdings are affected by the project or in cases where only partial land is affected but the remaining land becomes economically non-viable, the general mechanism for compensation of lost agricultural land will be through provision of "land for land" arrangements of equivalent productivity and at a location acceptable to the PAP. Where the PAPs stand to lose residential land with structures that exist in a closely located group exceeding 20 households, the project authorities, in consultation with affected households, may offer a relocation option to fully developed resettlement sites, or alternative facilities to housing projects. If suitable residential / agricultural replacement land is not available, and at the informed request of the PAPs, cash compensation at replacement cost will be provided.

- (8) In case of land for land for residential and commercial sites, the Implementing Agency shall provide PAPs the appropriate plot of land with basic services such as electricity, water, drainage, emergency sanitation service, and access at least at the pre-project level.
- (9) For resettlement site land, the plot owner of the proposed relocation site will also be entitled to compensation for his/her land, and depending on his/her choice, the compensation may be in cash or in the form of a replacement land within or outside the relocation site.
- (10) The project authorities will provide resettlement assistance and the following minimum allowances to eligible PAPs:
- (a) **Disruption allowance** shall be given to PAPs whose business income is temporarily lost due to the project. The allowance should be provided in cash based on the temporary projected business income lost.
  - (b) **Vulnerable group** assistance shall be provided for vulnerable families, such as female-headed household, poor families, and disabled headed households in an amount that shall assist them to become economically viable. In addition to any specific allowances to which members of vulnerable groups may be entitled, they shall also receive rehabilitation assistance based on their priorities and needs.
  - (c) **Rental allowance** shall be given to house tenants of affected main structures who will be forced to find a new place to live, at an amount equivalent to three month's rent. It shall also be given to affected persons forced to lease premises until replacement land and housing is available to them up to a maximum period of three months.
  - (d) **Transportation allowance** (in cash or in kind according to mutual agreement of the PAP and the project authorities) to relocating PAPs. When the allowance is in cash, it shall be an amount equivalent to actual transportation costs.
  - (e) **Repair allowance** is given to PAPs affected by a partial loss of structures and those affected during moving locations based on cost of repairs.
- (11) Rehabilitation assistance is a form of special skills training or other development support to PAPs severely affected due to the loss of productive assets and/or their only source of income and which will require them to engage in some other income-earning activities. The project authorities, by consulting with stakeholders, will coordinate closely with concerned agencies (local authorities and independent assigned NGOs) that have the mandate and the expertise to undertake the needed rehabilitation assistance.

- (12) The project authorities will provide vulnerable PAPs the rehabilitation assistance needed to cope with a new environment and to improve their status. This assistance shall be based on the needs and priorities of the vulnerable groups.
- (13) Any PAPs' loss due to any acquisition or restriction on access to common resources as a common property will be mitigated by arrangements of such property that will ensure, as a first option, that new access of those PAPs to an equivalent resource will occur on a continuing basis, if feasible. If it is not feasible, then other alternatives shall be identified in consultation with the PAPs.
- (14) Resettlement programs will include adequate institutional arrangements to ensure effective and timely design, planning, consultation and implementation of compensation and resettlement. The project authorities will ensure effective coordination with relevant agencies for the implementation of the Resettlement Action Plan (RAP).
- (16) Adequate arrangements will be made for the timely conduct of social assessments, inventory of affected assets, socioeconomic survey, and the preparation and implementation of RPs, including the timely conduct of internal and external monitoring of RP implementation.

General entitlements for compensation and rehabilitation assistance for different categories of PAPs are shown in the Entitlement Matrix below but the relevant Resettlement Plan may provide for more specific or additional allowances.

### Entitlement Matrix

	<b>Type of Loss</b>	<b>Application</b>	<b>Entitled Person</b>	<b>Compensation</b>
1	Arable land	Loss of arable land.	Eligible landholder	<ul style="list-style-type: none"> <li>• Land for land or cash compensation for lost land at replacement cost according to AP choice. “Land for land” will be provided in terms of a new parcel of land of equivalent productivity and free of taxes, registration and transfer cost; at a location acceptable to PAP; and with long-term security of tenure.</li> <li>• Eligible for economic rehabilitation assistance and other allowances, as applicable.</li> </ul>
			Non-titled but possessory landholder	
		Lease holder and agricultural laborer	<ul style="list-style-type: none"> <li>• No compensation but additional assistance given so that they are not worse off due to the project and to enable them to replace affected assets.</li> <li>• Cash compensation for agricultural laborer equivalent to three months salary and assistance in getting alternative employment.</li> <li>• Cash compensation equivalent to replacement cost of gross harvest for one year.</li> </ul>	
		Temporary acquisition or easement	Eligible landholder	<ul style="list-style-type: none"> <li>• Cash compensation based on opportunity lost during the period.</li> </ul>

2	Residential land	Loss of residential land	Eligible landholder Non-titled but possessory landholder	<ul style="list-style-type: none"> <li>• Compensation in cash at replacement cost or, at PAP choice, replacement land of minimum plot of acceptable size or a plot of equivalent size, whichever is larger, in a nearby resettlement area with adequate physical and social infrastructure.</li> <li>• Replacement land to be free from taxes, registration and transfer costs.</li> <li>• Eligible for relocation assistance and other allowances as applicable.</li> </ul>
			Lessee	<ul style="list-style-type: none"> <li>• No compensation but additional assistance provided so that they are not worse off due to the project and enable them to replace affected assets.</li> <li>• Eligible for relocation assistance and other allowances, as applicable.</li> </ul>
		Temporary acquisition	Eligible landholder Non-titled but possessory landholder	<ul style="list-style-type: none"> <li>• Cash compensation for the net loss of income and damaged assets.</li> </ul>
			Lessee	<ul style="list-style-type: none"> <li>• Assistance provided so that they are not worse off due to the project.</li> <li>• Cash compensation and other allowances, as applicable.</li> </ul>

3	Commercial land	Plots used for business affected	Eligible landholder	<ul style="list-style-type: none"> <li>• Compensation in cash at replacement cost for the affected portion or, at PAP option, replacement land of sufficient size for business continuation in market area of resettlement area or at location comparable to previous site. When the affected premises are larger than the relocation plot, cash compensation at replacement cost to cover the difference in area.</li> <li>• Eligible for relocation assistance and other allowances, as applicable.</li> <li>• Eligible for economic rehabilitation assistance.</li> </ul>
			Non-titled but possessory landholder	<ul style="list-style-type: none"> <li>• Assistance for finding new commercial place.</li> <li>• Eligible for relocation assistance and other allowances, as applicable.</li> <li>• Eligible for economic rehabilitation assistance</li> </ul>
			Lessee	<ul style="list-style-type: none"> <li>• Assistance for finding new commercial place.</li> <li>• Eligible for relocation assistance and other allowances, as applicable.</li> <li>• Eligible for economic rehabilitation assistance</li> </ul>

4	Structures	Structures affected	Owner	<ul style="list-style-type: none"> <li>• Compensation in cash for affected portion of the structure and other fixed assets at replacement cost, without depreciation and without deductions for salvaged material.</li> <li>• Assistance in restoration of any remaining structure, if applicable.</li> <li>• Eligible for relocation assistance and other allowance.</li> </ul>
			Tenant	<ul style="list-style-type: none"> <li>• Three months rent allowance and other allowances as applicable.</li> </ul>
5	Loss of business / incomes or employment	Loss of business / incomes / employment	Affected APs	<ul style="list-style-type: none"> <li>• Cash compensation for the loss of business, incomes and wages.</li> <li>• Assistance during the transition period.</li> <li>• Eligible for rehabilitation assistance and other allowances, as applicable.</li> </ul>
6	Standing crops,	Crops or trees affected by	Owner of crops or trees	<ul style="list-style-type: none"> <li>• Compensation in cash calculated on the basis of type, age and</li> </ul>



	trees	land acquisition or temporary acquisition/easement		productive value of affected crops or trees. • Other allowances as applicable.
7	Common resources	Loss of access	APs	• Arrangement for new resource or rehabilitation assistance.
8	Electric and/or water connection	Loss of, or damage to, affected assets, partially or entirely.	APs	• Replacement or compensation to cover cost of restoring the facilities.
9	Public facilities	Loss of, or damage to, public infrastructure	Concerned agencies	• Replacement or compensation in cash at replacement cost to respective agencies.
10	Special assistance	Special assistance to vulnerable group and indigenous/ethnic minorities	Vulnerable groups and indigenous/ethnic minorities	• Vulnerable group and Cambodian highland people assistance / allowance based on identified needs and priorities.

#### 4. PUBLIC PARTICIPATION AND CONSULTATION

The project authorities would be responsible for public consultation and public information dissemination. Consultations and public participation would be carried out as an ongoing process throughout project planning, design and implementation stages. Preparation of appropriate documents and planning and implementation for the acquisition of land and other assets will be carried out in consultation with the PAPs and the PAPs will receive prior information of the compensation, relocation and other assistance available to them including:

- The relevant details of the project;
- The resettlement plan and various degrees of project impact;
- Details of entitlements under the resettlement plan and what is required of PAPs in order to claim their entitlements;
- Compensation process and compensation rates;
- Relocation and resettlement site development operation in order to obtain agreement and support of affected people in participating in these operations; and
- Implementation schedule with a timetable for the delivery of entitlements.
- Information concerning grievance procedures and how to use them.

The project authorities would also provide a detailed explanation of the grievance process and enlist the help of village leaders and other influential community officials in encouraging the participation of the PAPs in resettlement activities. Finally, the project authorities shall attempt to ensure that all vulnerable groups including Cambodian Highland People understand the process and that their needs are specifically taken into consideration.

Public participation is performed and information is made available during both preparation and implementation of the Resettlement Plan and should include, at a minimum, public information booklet, community meetings and television and radio reports.

## **5. GRIEVANCE REDRESS MECHANISM**

Grievances related to any aspect of a project will be handled through negotiations and are aimed at achieving consensus. All complaints received in writing (or written when received verbally) from the PAPs will be documented by each level grievance committee, established by the project authorities at varying governance levels, i.e., commune, district and/or provincial levels. PAPs will be exempted from all administrative and legal fees incurred in pursuant to the grievance redress procedures. Grievance committees would comprise of representatives of PAPs, community leaders and independent assigned NGOs, in addition to the representatives of commune and district officials, and project authorities.

If PAPs do not receive any response from an established grievance redress body (at whatever level) within 20 (twenty) days from the filing of the complaint, or if the decision of grievance redress body is not satisfactory, the PAP will have the right to submit the complaint to the next higher level of the grievance redress mechanism.

If the matter still remains unresolved after all levels of grievance redress have been utilized, the complainant may then forward his/her case to a court of law.

In projects where indigenous minorities are affected, all complaints shall be discussed and negotiations shall be carried out in the community where the affected indigenous minorities live. Where necessary, the project proponents will provide assistance so that the rights of the indigenous minorities are protected.

In addition to the above mechanisms, and at the option of the PAPs, grievances may be taken to other mediating bodies, such as a council of village elders, monks at a local pagoda, or any other dispute resolution mechanism as may be decided by the PAPs.

## **6. MONITORING AND EVALUATION**

### **6.1. Internal Monitoring**

The PMUs in EDC and MIME would appoint adequate full time staff to monitor the process of resettlement for RE component. In order to assist with this monitoring, the authorities shall obtain and maintain appropriate baseline data prior to the resettlement impacts. The monitoring staff will submit periodic progress reports to the involved authorities for inclusion in the progress report. The main objective of the reports is to determine whether the resettlement is effective and to make the needed recommendations for change. The monitoring staff will be present in the field as well as at every meeting related to resettlement.

## **6.2. External Monitoring**

*In the project, sub-project or any component thereof, with significant resettlement, an external agency will be contracted to monitor the process of resettlement. The external monitoring agency would be provided full access to project documents and database to facilitate monitoring process. The external monitoring agency will prepare periodic monitoring reports for submission to the PMUs as well as to the IDA.*

In the event monitoring by either the internal or external monitor shows that PAPs are not receiving entitlements due to them, or there are other problems in implementation in accordance with the Resettlement Plan, then the project authorities will take, on a priority basis, all steps necessary to rectify the situation and ensure compliance with a Resettlement Plan.

## **6.3 Evaluation**

Six months to one year after the completion of resettlement in the project, the project authorities will contract a competent external agency for ex-post evaluation of resettlement implementation to determine whether the objectives of the policy have been achieved and severely affected PAPs have been able to restore their incomes and livelihood to the pre-project levels. Where necessary, and based on the outcome of the evaluation, additional assistance would be provided by the project authorities to achieve the objectives of the policy framework.

# **7. REPORTING AND DOCUMENTATION**

## **7.1. Initial Social Assessment**

The project authorities will carry out initial social assessment to determine potential social issues and likely adverse impacts at the sub-project identification stage. Based on

the initial social assessment decision can be taken on the types of detailed studies and field investigations required and necessary documentation.

## **7.2 Abbreviated Resettlement Plan**

Where in a sub-project less than 200 people are affected due to the loss of assets, incomes, employment or businesses, project authorities would carry out field surveys covering full census of affected people and inventory of affected assets, and prepare an abbreviated Resettlement Plan. The abbreviated Resettlement Plan covers the following minimum elements: (i) a census survey displaced persons and valuation of assets; (ii) description of compensation and other resettlement assistance to be provided; (iii) consultation with displaced people about acceptable alternatives; (iv) institutional responsibilities for implementation and procedures for grievance redress; (v) arrangements for monitoring and implementation; and (vi) a timetable and budget.

## **7.3 Resettlement Plan**

Where in a sub-project more than 200 people are affected, project authorities would be required to conduct detailed field investigations including census, inventory of affected assets and socio-economic baseline surveys of severely affected persons and prepare a Resettlement Plan for submission to the Bank. The Resettlement Plan (RP) would include: (i) description of the project and potential resettlement impacts; (ii) principles and objectives of resettlement; (iii) socioeconomic survey and baseline information; (iv) legal framework; (v) category of PAPs and their eligibility; (vi) valuation and compensation for losses and entitlement matrix; (vii) resettlement measures; (viii) institutional arrangements; (ix) community participation and grievance procedures; (x) cost and budget; (xi) implementation schedule; and (xii) monitoring and evaluation.

## **8. LEGAL AND INSTITUTIONAL REQUIREMENTS**

The PMUs from MIME and EDC will be jointly responsible for planning and implementation of the RE Component. The PMU in EDC will be responsible for grid extension activities; and the PMU in MIME, or REF once it is set up, will be responsible for off-grid electrification activities. As the project proponent, both EDC and MIME/REF will be responsible for, at a minimum, the following resettlement activities:

- (a) Carry out all necessary surveys and field investigations and preparation of necessary documents;
- (b) With assistance from other relevant agencies and local authorities, implementation of resettlement activities in accordance with the approved RPs;
- (c) Address all deficiencies identified in resettlement implementation;
- (d) Ensure timely allocation of resources and budgetary provisions, and process compensation claims of PAPs to ensure that the same are paid in time as planned; and
- (e) Supervise and monitor RP implementation.

## **9. Costs and Budget**

Necessary funds for planning and implementation of Resettlement Plan will be provided by the project authorities. The project authorities will also provide for all costs related to mitigating adverse social impacts based on budgetary requirements established in the RP. All of these costs are to be a part of the total project cost.

Each RP will detail cost estimates for compensation and relocation (if applicable) of PAPs with a breakdown by category of PAPs and by type of asset affected, such as agricultural, residential, and commercial land; affected house, structures and other fixed assets; and type of assistances, such as transport allowance, disruption allowance, etc. The cost estimates will include adequate provisions for contingencies.

In case of overruns due to unforeseen circumstances or delays, the project authorities will allocate additional funds as necessary.