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RESTRUCTURING PAPER

ON A

PROPOSED PROJECT RESTRUCTURING

OF

RURAL ELECTRIFICATION PHASE II PROJECT  
IDA GRANT No. H538-LA AND GEF GRANT No. TF098662

(BOARD APPROVAL DATE: JANUARY 12, 2010)

TO THE

LAO PEOPLE'S DEMOCRATIC REPUBLIC

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Southeast Asia Sustainable Development Unit  
Southeast Asia Country Management Unit  
East Asia and Pacific Region

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## ABBREVIATIONS AND ACRONYMS

APL	Adaptable Program Loan
BOO	Build, Own, Operate
BOOT	Build, Own, Operate, Transfer
BOT	Build, Operate, Transfer
EdL	Electricité du Laos
EGDF	Ethnic Group Development Framework
ESSF	Environmental and Social Safeguards Framework
GEF	Global Environment Facility
IDA	International Development Association
IOC	Incremental Operating Costs
IPP	Independent Power Producers
MEM	Ministry of Energy and Mines
O&M	Operations and Maintenance
P2P	Power to the Poor
PESCO	Provincial Electrification Service Company
PPP	Public Private Partnership
REF	Rural Electrification Fund
REP II	Rural Electrification Phase II Project
RPF	Resettlement Policy Framework
SDR	Special Drawing Rights
SHS	Solar Home System
TF	Trust Fund
VOPS	Village Off-Grid Promotion and Support Office
VPN	Virtual Private Network

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**LAO PEOPLE'S DEMOCRATIC REPUBLIC  
RURAL ELECTRIFICATION PHASE II PROJECT**

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## **RURAL ELECTRIFICATION PHASE II PROJECT**

### **RESTRUCTURING PAPER**

#### **A. SUMMARY**

The proposed changes to the Project IDA Grant No. H5380-LA, and the GEF Grant TF098662 include: (i) amendments to the description of project components as defined in Schedule 1 of the IDA Financing Agreement and the GEF Grant Agreement; (ii) reallocation of funds in both Grants; (iii) modifications of disbursement categories; (iv) addition of Public Private Partnership (PPP) arrangements under the description of methods for the procurement; (v) removal of an outcome indicator; and (vi) closing date extension. This will be the first extension. These changes are proposed to ensure the achievement of the Project Development Objectives (PDO) and the Global Environment Objectives (GEO).

#### **B. PROJECT STATUS**

Reasonable progress has been made towards the achievement of the first PDO to “increase access to electricity of rural households in villages of Project provinces”. About half of targeted rural households have been connected after three years of implementation. Over 15,000 solar home systems (SHS) have been procured, about one-third have been installed, and about 84 percent of targeted households under the Power to the Poor (P2P) program have already been connected. Despite these achievements, progress toward achieving the PDO is moderately satisfactory in view of the deterioration of the financial situation of Electricite du Laos (EdL) and the consequent risks towards achieving the second PDO to “further improve the financial performance of EdL”. To address this issue, the Government of Lao PDR (GOL) started increasing electricity tariffs in March 2012 and agreed to implement a time-bound action plan for the financial sustainability of the power sector including improvements in EdL’s operational efficiency and its financial management systems.

Achievement of the Global Environment Objectives under the GEF Grant rating is currently moderately unsatisfactory. The GEO on increasing EdL supply efficiency, particularly reducing electricity distribution losses below 13 percent may not be met by project closing. The GEO on increasing consumer demand efficiency is also under threat as the intended energy efficiency (EE) pilot projects have been delayed. Finally, the GEO to adopt substantial renewable energy in rural electrification program is also under threat. The revised business models for biogas and village hydro power pilot projects as an alternative rural electrification delivery model are not tested, and there is a high risk of a repeated bidding failure.

## C. PROPOSED CHANGES

### Results and Indicators

First, following EdL's corporate restructuring in December 2010, the original PDO financial outcome indicator "return on revalued assets" is no longer meaningful at EdL level as most profits are currently accrued at EdL Generation Company level. This restructuring proposes to drop this indicator. In addition, this restructuring proposes to reduce the PDO indicator "debt service coverage ratio" from 1.3 to 1.1 to also account for lower expected profits at EdL level.

Second, this restructuring proposes to drop the PDO indicator "self-financing ratio" as EdL and EdL Generation Company are substantially increasing new investments in generation, transmission and distribution assets. During this investment ramp up period, the 15 percent self-financing ratios (after debt repayments) may not be met.

### Project Components

Changes are proposed to the legal descriptions of the following components.

Component A.1 "Grid Extension": Changes to the description of this component include provision of training to improve the performance of EdL's project management unit under Part A.1 (b) of the Financing Agreement. Also, consultancy services for implementation supervision, production of modular specifications, review of design standards will be added. The remaining balance of US\$1,304,000 of IDA funds under A.1 will be used to finance additional activities under components A.2 and A.3 as discussed below.

Component A.2 "Loss Reduction": Some US\$0.29 million of IDA funds will be reallocated from component A1 to purchase critical testing equipment needed to identify losses in EdL's system and take appropriate actions. Changes to the description of this component are not necessary as the procurement of goods under Component A.2 is included in the Financing Agreement.

Component A.3 "Information Technology System and Financial Management": Changes to this component include a reallocation of some US\$1.02 million of IDA funds from component A.1 to finance: (i) approximately US\$0.34 million of Virtual Private Network and related computing and information technology equipment and software, which will facilitate EdL's financial management; and (ii) approximately US\$0.68 million of technical assistance, goods and/or works, for upgrading EdL's accounting system. These changes will further enhance revenue collection and strengthen the financial management capacity of EdL as envisaged under the second action plan for financial sustainability of EdL and the Lao power sector 2013-17.

Component B.1 "Off-Grid Investment Program": During project implementation, a large number of homes targeted as beneficiaries of SHS have been instead connected to the grid, and the unit cost of SHS has been significantly reduced, resulting in savings of US\$1,592,000 million under Component B.1. It is proposed that these savings be

reallocated to: (i) component B.2 “Institutional Strengthening”; (ii) B.3 “Alternative Rural Electrification Delivery Models”; and (iii) B.5 “Organizational Strengthening of the Ministry of Energy and Mines (MEM)” in order to enhance the capacity of the Ministry of Energy and Mines (MEM) to carry out its supervision and monitoring roles under the project.

Component B.2 “Institutional Strengthening”: US\$382,000 of IDA funds will be reallocated from Component B.1 to cover the costs of consultancy services to manage the village off-grid program (VOPS) and to monitor debt collection performance.

Component B.3 “Alternative Rural Electrification Delivery Models”: Proposed amendments include the provision of financial resources to design, supply, install, and supervise pilot projects for village hydropower in Houaphan province, and biomass and/or biogas in Vientiane, to be developed under PPP schemes. The reallocation of US\$1.0 million IDA funds from Component B.1 will cover: (i) approximately US\$0.5 million for goods and/or works (such as hydropower turbines, generators, distribution lines, and switch controllers) for such pilot projects; and (ii) approximately US\$0.5 million for technical assistance and supervision of the pilot projects.

Proposed amendments to Component B.3 under the GEF Grant include the reallocation of US\$20,000 originally under Component B.5: “Organizational Strengthening of MEM”, to this Component. The disbursement for works and consultant services is proposed to be included in the GEF disbursement categories.

Component B.5 “Organizational Strengthening of MEM”: Some US\$210,000 of IDA funds will be reallocated from component B.1 to enhance MEM’s supervision and monitoring capacities through the purchase of vehicles and office equipment. The funds will also serve to ensure sufficient budget is available to cover supervision and monitoring costs.

## **Safeguards**

This project was assigned as environmental assessment Category “B” at appraisal, and remains so through this restructuring. The village hydropower and biogas works to be carried out under Part B.3 under the alternative rural electrification delivery models, may include small-scale works consistent with the Project Appraisal Document, and do not require additional safeguard instruments. Safeguard instruments already in place, including the Environmental and Social Safeguards Framework (ESSFs), Resettlement Policy Framework (RPF), and Ethnic Group Development Framework (EGDF), remain valid. In addition, an Environmental Management Plan (EMP) for biogas projects is being prepared and will be incorporated in the bidding process after Bank review.

## Project Costs

Adjustments to IDA and GEF funding for components A and B are shown below:

Project Costs (US\$m.)				
Components/Activities	IDA Grant H-538-LA		TF098662	
	Current	Proposed	Current	Proposed
<b>Component A: Implemented by EdL</b>	<b>15,900,000</b>	<b>15,900,000</b>	<b>999,000</b>	<b>999,000</b>
A.1. Grid Extension	14,600,000	13,296,000		
A.2. Loss Reduction	1,000,000	1,286,000	200,000	200,000
A.3. Information Technology Systems and Financial Management		1,018,000		
A.4. Safeguards Capacity Building <sup>1</sup>				
A.5. Demand-Side Management and Energy Efficiency Program	300,000	300,000	799,000	799,000
<b>Component B: Implemented by MEM</b>	<b>4,100,000</b>	<b>4,100,000</b>	<b>819,000</b>	<b>819,000</b>
B.1. Off-Grid Investment Program	4,000,000	2,408,000		
B.2. Institutional Strengthening		382,000		
B.3. Alternative Rural Electrification Delivery Models		1,000,000	799,000	819,000
B.4. Rural Electrification Master Plan and Database				
B.5. Organizational Strengthening of MEM	100,000	310,000	20,000	
<b>Total A and B</b>	<b>20,000,000</b>	<b>20,000,000</b>	<b>1,818,000</b>	<b>1,818,000</b>

## Disbursement Arrangements

The definition of “Incremental Operating Costs” (IOC) under the IDA Financing Agreement is expanded to include: (i) salaries for contract staff; and (ii) charges for the opening and operating Project bank accounts.

## Procurement

Procurement under PPP arrangements including Build Operate Own (BOO), Build Operate Transfer (BOT), Build Own Operate Transfer (BOOT), concessions, and similar private sector arrangements will be added as a procurement method under Schedule 2, Section III of the IDA Financing Agreement to account for the procurement of Goods and/or Works under the village hydropower and biogas power pilot projects.

Procurement under BOO/BOT/BOOT, concessions and similar private sector arrangements will be added under Schedule 1, Section III, Part B.2 of the GEF Grant Agreement (TF098662), in order to account for potential PPP schemes for the pilot biomass/biogas projects.

For the biogas power pilot projects, MEM will hire private contractor(s) to supply and install the biogas power facilities at selected pig farms owned by pig farmers. The Bank’s standard bidding document will be used for the selection of the supply and installation

<sup>1</sup> Activities under subcomponent A.4 and B.4 are co-financed by other donors.

contractor(s). Separately, MEM will hire experienced operations and maintenance (O&M) consultants to operate and maintain the biogas power facilities. MEM will utilize IDA funds and/or GEF Grant to cover the cost of the supply and installation contract(s), the cost of O&M consultants, and supervision.

For the village hydropower pilot projects, MEM will hire private licensees(s) to supply, install, operate and maintain the village hydropower facilities under bidding documents agreed by the Bank. In general, this bidding document calls for the supply and installation of the village hydropower facilities, connecting electricity users, O&M, and electricity tariff/connection fee collection services. MEM will utilize IDA funds and/or GEF Grant to cover the cost of the village hydropower facilities, connecting users, O&M, and supervision.

### Reallocation of Grant Proceeds

Expenditure categories under the IDA Grant will be modified to include financing of goods, training, consultant services under category (1); and financing of goods, works, and consultant services under Category (2). Grant proceeds will be reallocated from Category (2) to Category (4) to cover IOC costs under B.5(a).

### IDA Grant No. H-538-LA

Category of Expenditure		Allocation (SDR)		Percentage of Financing	
Current	Revised	Current	Revised	Current	Revised
(1) Goods under Parts A.1(a), A.2(a), and A.5(a) of the Project	(1) Goods, Works, Consultants' Services, and Training under Parts A.1, A.2, A.3, and A.5 of the Project	9,945,000	9,945,000	100%	100%
(2) Goods under Parts B.1(a) and B.5(a) of the Project	(2) Goods, Works, Consultants' Services and Training under Parts B.1, B.2, B.3 and B.5 of the Project	2,525,000	2,491,000	100%	100%
(3) Incremental Operating Costs under Parts A.1(a), A.2(a) and A.5(a) of the Project	Incremental Operating Costs under Parts A.1, A.2 and A.5 of the Project	65,000	65,000	100%	100%
(4) Incremental Operating Costs under Part B.5(a) of the Project	Incremental Operating Costs under Part B.5 of the Project	65,000	99,000	100%	100%
<b>Total</b>		<b>12,600,000</b>	<b>12,600,000</b>		

### GEF TF098662

Changes under the TF098662 include under Category (2) financing of works, and under the same Category (2) GEF will no longer finance Component B.5.

Category of Expenditure		Amount of the Grant Allocated (USD)		Percentage of Financing	
Current	Revised	Current	Revised	Current	Revised
(1) Goods, services, training, Incremental Operating Costs under Part A.2(a) and A.5 of the Project	Goods, Consultants' Services, Training and Incremental Operating Costs under Part A.2(a) and A.5 of the Project	999,000	No change	100%	100%
(2) Goods, services, training, and Incremental Operating Costs under Part B3 and B.5 of the Project	(2) Goods, works, consultants' services, Training and Incremental Operating Costs under Parts B.3 and B.5 of the Project	819,000	No change	100%	100%, except for any expenditures incurred on or after October 31, 2013 under Part B.5
<b>Total</b>		<b>1,818,000</b>	<b>No change</b>		

### Closing Date

The closing date of the IDA Grant No. H5380-LA and the GEF Grant TF098662 will be extended for 12 months from June 30, 2014 until June 30, 2015. The extension is necessary to ensure adequate time for project implementation after this restructuring. The major implementation delay issues have been addressed, which allowed grid extension construction to continue, installation of SHS to resume, and the village hydro and biogas power pilot projects to be rebid. This will be the first extension of the project. The PDO and GEO remain considerably achievable.

### Second Action Plan for Financial Sustainability of the Power Sector

The Second Action Plan for Financial Sustainability of the Power Sector was developed for the period 2013–2017. This action plan will help address, *inter alia*, the adequacy of EdL electricity tariffs, the outstanding arrears on electricity bills, and cost reductions for financial sustainability of the power sector.