

"Power to the Poor" Pilot Project



Rapid Assessment of "Power to the Poor" Pilot Project

The "Power to the Poor" (P2P) Program is a support scheme designed to enable rural households, that do not have the initial capital to pay for connection costs, to access the main electricity grid. It provides eligible households with a no-cost "basic" 3/9 ampere meter (low voltage) together with an interest free credit to cover the additional costs of installation and indoor wiring. The program targets poor households and, in particular, female headed poor households.

The Program is initiated by the World Bank as part of the Rural Electrification Project (REP) in Lao PDR. Electricité du Laos (EdL) is the main entity responsible for program management and implementation and Electricity Construction and Installation (ECI) is subcontracted by EdL to provide the house wiring service.

The scheme was launched in 20 selected pilot villages during the fall of 2008 and completed by the end of January 2009. The implementation of this Pilot Project resulted in 537 newly electrified households of which 68 were female headed. This meant an overall increase in connection rate from 78 percent to 95 percent. Among female headed households the connection rate increased even more from 63 percent to 90 percent.

Overall, the implementation of the Pilot Project has shown that the P2P Program is relevant, appropriate and well-designed. The service provided is relatively simple but functional and target households seem keen to join the program. The overall success of the program is believed to be a result of the simplicity of the program design.

A few critical points feared to result in a lack of real participation at household level have been identified in this assessment. These are mainly related to the inconsistent use of the campaign materials and relatively fast implementation schedule. These points can, however be improved relatively easily and at no major costs to program implementers by distributing posters and brochures before the survey team goes to the village and by allowing more time for the survey work itself.

Despite the gender focus of the program, female headed households are still disproportionately represented among the un-connected households after program intervention. Many female headed households are likely to have been excluded from the program because they are too poor to make the repayments.

In order to include the poorest households (male as well as female headed) it is suggested that the program introduces the idea that village committees take on loans through the program through a community fund, similar to the way schools or other public buildings are included in the program.

As it is likely that there will be a demand for the program in the future, and since the financial structure for long term implementation are in place, it is highly recommended that potential models for a long term integration of the P2P Program within the standard EdL service program are investigated by the program management.

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Abbreviations & Acronyms

DEC Development Economics Group (of the World Bank)

DEM Department of Energy and Mines

ECI Electricity Construction and Installation

EdL Electricité du Laos

HH Household

IDA International Development Association (of the World Bank)

Lao PDR Lao People's Democratic Republic

P2P Power to the Poor

REP Rural Electrification Project

SPRE Southern Provinces Rural Electrification Project

TOR Terms of Reference

Currency Equivalents

(average during time of program implementation)

Currency unit: Lao Kip

November 2008 – March 2009 USD: 1.00 Kip: 8541

Photos:

All photos taken by Vilaythong Chanthalinh.

Front page photo: Woman in front of her newly 'P2P-eletrified' house, Thaseng village, Sukhuma district, Champasack province.

1 Introduction

The "Power to the Poor" (P2P) Program is a support scheme designed to enable rural households, that do not have the initial capital to pay for connection costs, to access the main electricity grid. The scheme was launched in 20 selected pilot villages during the fall of 2008 and completed by the end of January 2009. The implementation of the project resulted in an overall increase in connection rate from 78 percent to 95 percent in the pilot villages.

This report presents the results of a Rapid Assessment of the "Power to the Poor" Pilot Project and offers recommendations on how to improve the program for the future phases and up-scaling (the P2P Phase II was initiated at the beginning of March 2009). In accordance with the Terms of Reference (TOR) any issues associated with the implementation of the Pilot Project itself are discussed as well as any issues that could influence the scaling-up of the program. As such, this report has a strong operational focus.

This assessment is meant to compliment the impact evaluation under completion by the World Bank's Development Economics group (DEC). It is based on knowledge mainly generated through fieldwork including: semi-structured interviews and participant observations in target villages, as well as within the agencies responsible for project implementation. Thus it offers a qualitative perspective on the implementation of the P2P Pilot Project while paying particular attention to gender issues.

The report begins with a background section (Section 2) followed by a description of the methodology used in the assessment (Section 3). The program objectives, design and process of implementation are presented and evaluated in Section 4. Then the initial results and end-user's satisfaction with the project is described in Section 5 before the appropriateness and any critical issues of the program are discussed in Section 6. Finally, Section 7 gives a summary of recommendations.

2 Background

In the Lao People's Democratic Republic (Lao PDR) many rural households cannot afford the initial capital costs of connecting to the main electricity grid. Research suggests that even after grid access has been in a village for more than 10 years, some 20 percent of households remain unconnected¹.

Access to electricity is considered a significant factor in reducing rural poverty. Not only can electricity be used for income-generating activities including water pumping for vegetable gardens, household industry including weaving of mats, baskets and textiles, refrigeration for tourism related activities such as selling cold drinks and ice cream, and even power tools used in mechanical repair shops. Additional indirect benefits of electrification include improved educational outcomes, improved social and community services, extended hours for productive and leisure activities, and enhanced security.

In the context of Lao PDR, household based income-generating activities, such as those described above, are well developed and widespread and the social impacts and benefits of electrification for lower income households is expected to be larger than for rural electrification projects elsewhere. Furthermore, having electricity is considered to directly improve the situation of Lao women (and children) with regard to the persistent challenges of women's empowerment and livelihood improvement. These include: time poverty, as a result of women's participation in agricultural production, as well as other income generating activities, house keeping and child rearing responsibilities; gender gaps, especially in secondary education; and drudgery associated with household burdens.

In addition to these generalized benefits of electricity for the rural poor, access to grid electricity enable households to make significant savings as the energy costs from the electrical grid are significantly lower than alternative sources.

Households headed by women (most often widows or divorcees) tend to be poorer than male headed households, mainly due to the lack of male adult's labor capacity. Field research conducted in two villages by the World Bank team in June 2007² indicated that female headed households are disproportionately represented among the poor. Table 2.1 below shows the disproportion of female headed poor households in the two villages represented in the survey.

While female headed households composed roughly four percent of all households in both villages, almost 1/3 of poor households were headed by women, usually older widows in Phone Phang village, Savannakhet province. In Done Khone village, Champasack province, the proportion was lower, about ten percent, however still significantly

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¹ Lao PDR House Wiring Assistance Program. Final Report. The World Bank Lao PDR Country Office, 2007.

² Ibid: 31.

disproportionate. The field survey showed that these female headed households lacked both sufficient family members to generate income through labor or sufficient land or assets to generate rental income. Many of these women were found to be wholly dependent on remittances from absent family members.

Table 2.1: Proportion of female headed households (HH):

Village:	No. of all HH:	No. of female headed HH:	% of female headed HH:	No. of poor HH:	No. of female headed poor HH:	% of female headed poor HH:
Phone Phang, Savannakhet	222	8	3.6%	17	5	29.4%
Done Khone, Champasack	214	8	3.7%	65	7	10.8%

As part of the IDA³-supported Rural Electrification Project (REP), funding was therefore provided through the World Bank's Gender Action Plan in fiscal year 2007 to design a pilot intervention aimed at increasing rural electrification rates among the poorest households while paying special attention to female headed households, by introducing an interest free loan to pay for the initial connection cost.

Electricité du Laos (EdL) was chosen as the main entity responsible for the implementation of all aspects of the entire program, including: managing implementation; procuring wiring installation services; issuing partial credits for indoor house wiring services; disbursing funds to wiring service providers upon proof of job completion; initializing new customer account entries in their mainstream customer billing and accounting system; tracking receivables and arrears; ensuring proper posting of reflows to financial accounts; and overall results monitoring and reporting on fund operations. Electricity Construction and Installation (ECI) was considered the best provider of the house wiring service. ECI had already worked as an EdL subcontractor and was therefore considered easily mobilized to provide the house wiring services. Finally, Sunlabob Rural Energy Ltd. was assigned to assist EdL and ECI in the development of communication and dissemination materials including: a step by step implementation manual; tools for household eligibility determination; and campaign materials including: posters, brochures, and voucher forms.

The Pilot Project was completed by the end of January 2009. Outcomes have included well developed and printed campaign materials; a tested implementation procedure; a developed billing system; and 537 newly electrified households of which 68 are female headed.

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³ The International Development Association of the World Bank.

3 Methodology

The findings presented in this report come from fieldwork conducted as part of the assessment. The aim of the fieldwork was to assess the results of the Pilot Project and evaluate the practice of project implementation while focusing on the particular experiences of the various program participants: program implementers; service providers; and recipients. The fieldwork was planned in association with the P2P Project Manager and the REP Coordinator in Champasack province (both EdL staff), who both participated in part of fieldwork activities.

The fieldwork was conducted in Vientiane Capital and Champasack province, in March 2009, using ethnographic research methods including participant observations and semi-structured interviews.

At the time of this assessment, the P2P Phase II had already been launched and implementation begun. The main program implementers, the 'P2P survey team' who had completed the Pilot Project consisted of three people, two EdL staff members and one ECI staff member. This same team continued the work of implementation in Phase II of the program. Therefore it was possible to participate in and observe the program implementation procedure in practice.



The survey team survey an un-connected household in Kenghuakhong village, Khong district.

Observations were made of the implementation work in Kenghuakhong village in Khong district. Furthermore, 4 completed sites ('pilot villages') were visited and observations of electrical installations were made during visits in a number of P2P-electrified households as well as a number of households that were excluded from program participation. These villages were: Deuatia village in Moolapamok district; Huadonedeng village in Pathoumphone district; and Thapchan and Thaseng villages in Sukhuma district.

The observations were made by the consultant with the help of a Lao research assistant. Attention was paid to any issues related to gender. The final data set contained the observations of:

- 1) the work of the survey team during one full day in the field;
- 2) village walks in four completed 'pilot village';
- 3) electrical installations in four male headed 'P2P-electrified' households;
- 4) electrical installations in four female headed 'P2P-electrified' households; and
- 5) electrical installations in four 'non-P2P-eligible' households of which two were female headed.

Semi-structured interviews were designed to enable the various participants in the P2P Pilot Project to describe their individual experiences with and perceptions of the project. As with all other interactions in the field, the interviews were conducted in Lao language by the consultant with the help of the Lao research assistant. Some interviews were conducted with the interviewees individually, while others were conducted in groups which ever was more appropriate. The final data contained interviews with:

- 1) key persons within EdL, national headquarters in Vientiane;
- 2) key persons within ECI, national headquarters in Vientiane;
- 3) key-persons within EdL provincial headquarters in Pakse;
- 4) key-persons within DEM⁴ provincial headquarters in Pakse;
- 5) the P2P survey team;
- 6) village committee members (village chief, Lao Women's Union or Lao Front representatives) of 4 pilot villages;
- 7) members of four P2P-electrified female headed households;
- 8) members of four P2P-electrified male headed households; and
- 9) members of four P2P-non-eligible households of which two were female headed.

Finally, two international consultants involved with the project design and implementation have been consulted for any relevant information and individual perceptions of the program.

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⁴ Department of Energy and Mines.

4 **Project Objectives, Design, and Implementation**

4.1 **Objectives of the P2P Pilot Project**

The overall objective of the P2P Program is to increase the connection rate in already electrified villages with the aim of archiving the Lao Government's development goal of 90 percent of all households electrified nationwide by the year 2020.

The specific objective of the P2P Pilot Project was to demonstrate the practicality of providing financial support to households which otherwise would be unable to pay the initial costs of a grid connection. The Pilot was meant to demonstrate that a properly designed pro-poor activity would not affect mobilization of non-poor households to pay the full cost of connection. Other objectives for the Pilot Project include:

- testing a participatory village-level process for determining which households receive the credit;
- testing whether gender-sensitive eligibility criteria can capture households who tend to be particularly disadvantaged;
- verifying that the financial remediation terms are sufficient to increase village electrification rates to the 80-90 percent level and affordable to participants;
- demonstrating the ability to track extension and repayment of the grid connection credit; and
- proving that the additional work flow can be integrated within the rural electrification construction process, financial management, and administrative procedures of the REP.

4.2 **Project Design**

The P2P support scheme provides eligible households with a no-cost "basic" 3/9 ampere meter (low voltage) together with an interest free credit for a maximum of 700,000 Kip to cover the additional costs of installation and indoor wiring. The service is sufficient to allow an average household to run two light bulbs and a small electrical appliance (such as a radio). Repayments of the credit are made to EdL through a separate billing (additional to the monthly electricity bill) of 20,000 Kip per month over a period of a maximum 35 months.

The length of the repayment period depends on the actual cost of installation and indoor wiring. If these costs are lower than the 700,000 Kip, the extended credit is similarly lower. The repayment will still be made in monthly bills of 20,000 Kip but should stop as soon as the amount of the actual credit is reached. If the actual costs of installation and wiring, on the other hand, are higher than 700,000 Kip, the extended credit is still 700,000 Kip and the household must pay the difference to ECI at the time of installation.

The scheme targets poor households and, in particular, female headed poor households. The selection process is based on the idea, that within an already electrified village, a certain amount of 'natural selection' has already taken place, with households who are able to afford the initial costs of connection doing so. All un-connected households are scrutinized by the project 'survey team', and considered eligible for participation in the scheme if the following criteria are met. The household should:

- be considered poor (for instance living in a relatively small house, not having enough rice to feed the family the whole year, having a lot of children and/or being female headed);
- not be considered too poor (not able to pay the repayments of 20,000 Kip per month);
- be safe to electrify; and
- be located within a distance of 30 meters from the nearest electrical source.

4.3 Process of Implementation

As described in the P2P Manual⁵ (Annex 1) the implementation of the program consists of 3 main steps to be followed in each 'P2P village': 1) 'Outline Village Plan'; 2) 'Community Meeting and Household Eligibility Status'; and 3): 'Wiring and Connection'. As the Phase II of the P2P Program had already been initiated at the time of this assessment, it was possible to observe the practice of program implementation, (mainly of Step 2), by joining the survey team in the field.

The implementation procedure is evaluated below based on the findings of observations during the community meeting and household eligibility survey conducted among 32 unconnected households in Kenghuakhong village in Khong district.

Step 1: 'Outline Village Plan'

The first step is to send a 'runner' to the village to explain the project to the village chief and announce the exact date the P2P 'survey team' will make their visit. The runner should bring campaign materials (posters and brochures). Finally the runner is expected to gather a list of all non-electrified households from the village chief and leave a village questionnaire form to be filled out by the village chief/committee⁶.

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⁵ Sunlabob Renewable Energy Ltd., 2008.

⁶ P2P Training and Implementation Manual, Sunlabob Renewable Energy Ltd., 2008: 4f.

In practice, the level of information passed on to the village chief (and hence villagers), during this first encounter with the project, seems to vary between villages, depending on how clearly the runner has been able to explain the project and how well the village chief has understood the main idea of the project. Furthermore, it depends on whether or not the runner has brought posters or brochures to help explain and illustrate the project. Finally a number of village representatives point out that they were not given an exact date for the arrival of the P2P survey team, which meant that not all un-electrified households were present when the team arrived.

The inconsistency of the functions of the runner results in little information being given to the villagers prior the P2P village meeting (Step 2). As the program is implemented on the day of the village meeting, and on that day only, the household members have to learn about the program and consider its implications, and decide whether to participate or not. Not having access to information about the program before this day, it is feared, leaves household members short in knowledge and time for considering how a formal electrical grid connection and a credit scheme may affect the individual family.

Major economic decisions are, in many Lao homes, taken by the head of the household but based on discussion with other members of the immediate and/or extended family (husband, wife, siblings or parents). In order to provide households, and especially female members of the households (either as participants in the decision making or as household heads), with the opportunity to make an informed consensual decision whether or not to take part in the P2P Program, sufficient information as well as time is needed prior to the point at which decision is needed to be taken.

One of the main functions of the Pilot Project was to develop campaign materials including posters and brochures, and various voucher forms. Originally there was a plan to develop four different posters explaining the 'Project Timeline', the 'Benefits of Electrification in Homes', 'Eligibility Criteria', and 'Safety Issues'. The posters were to be designed using illustrations by local artists and a small amount of text in the Lao language. When the time came to printing the posters, it was decided that all of this information should be included in a single poster, this information was then easily included in a single brochure (Annex 2).

The results were a very good set of materials for dissemination of program information to potential end-users. The posters/brochures are concise, with clear illustrations, simple text and an efficient use of resources (paper, printing etc.). They have the potential to increase participation at household level by providing important information for household members to discuss the program before the day of intervention. This directly improves women's involvement in the decision making process, including in those households that are not female headed.

It is therefore reasonable to suggest that the runner announces the exact date of the team's visit. It is also important that the runner brings a few posters and enough brochures to each village for the village chief to hand out to each un-connected household, preferable several days before the village meeting and survey work. This could help ensure that households are better prepared for the next step of program implementation.

Summary of findings and suggestions:

- The role of the runner as information provider is in-consistent, too often leaving household members, and in particular female household members, un-prepared for adequate participation in the decision making process.
- The runner could announce an exact date of the village meeting.
- The runner could provide the village chief with posters and enough brochures to hand out to all un-connected households.

Step 2: 'Community Meeting and Household Eligibility Status'

The P2P 'survey-team' together with district representatives of EdL and Department of Energy and Mines (DEM) go to the village on the announced date and present the project to the assembled villagers representing all non-electrified households. After the meeting the P2P surveyors, the district representatives and village chief visit each of the non-electrified households to establish the distance from the house to power source and to complete the household questionnaire. Based on the gathered information the team will then determine whether the household is eligible or not. If determined 'not-eligible' the team will present the household with a disqualification statement. If the household is eligible the ECI representative calculates the actual installation cost based on the distance to the pole and signs a quotation form with the household. Finally, a signed copy of the credit agreement as well as an installation/wiring completion sheet should be given to the household member⁷.

In practice, all un-electrified households are invited to participate in the presentation meeting. The team brings posters and brochures which are hung up at the meeting place and handed out to villagers respectively. The meeting itself takes about 15 minutes during which the project is explained. Afterwards the villagers are encouraged to ask questions to the survey team members as they visit the household.

The P2P survey team consists of three people, two EdL staff members and one ECI staff member. After the presentation meeting, the team splits into two. One EdL surveyor stays at the meeting place to carry out loan processing administration, while the other EdL surveyor and the ECI surveyor, along with village committee members and district representatives visit each un-electrified household.

⁷ P2P Training and Implementation Manual, Sunlabob Renewable Energy Ltd., 2008: 5ff.



The P2P survey team at work in Kenghuakhong village, Khong district.

On average the team spends approximately 10-15 minutes in each household. The EdL surveyor quickly explains the loan again before completing the household questionnaire, while the ECI surveyor measures the distance from the house to the nearest electricity distribution pole and calculates the actual cost of the connection and indoor wiring. In practice households located between 30 and 45 meters from the nearest electrical source are included in the program if the household is able to pay the extra cost of connection due to the need of extra materials (see Section 5.2).

During the interview the household head (or other household representative) is asked questions about their income situation and how much money they currently spend on electricity from informal connections with neighbors or other energy sources (diesel or kerosene). Finally they are asked whether and how they will be able to pay 20,000 Kip per month for the loan repayment.

The questions are generally asked quickly, without much time for the household head to consider their answers. If the household, based on this information, is considered eligible, the EdL surveyor signs the questionnaire and it is given to the household head together with a quotation of actual connection costs signed by the ECI surveyor. The household head is then told to return to the meeting place where the other EdL surveyor is waiting to complete the signing of a credit agreement with each credit taker. The signed questionnaire and quotation form are then attached to the credit agreement. Only one copy is signed. No installation/wiring completion sheet is signed. Finally the survey team completes the village check list, and collects all documents which are then taken to the EdL district office to be signed and stamped before copies are made and given to the credit taking households.



P2P implementers and program participants posing for a photo at the end of the day in Kenghuakhong Village, Khong district.

The survey team is very efficient. They have a lot of experience with the implementation procedure and are able to survey up to 2 villages and more than 60 households in one day. However, a draw back of their efficiency is that the household members are given very limited information and time to discuss the issue, and thus are asked to commit to a long term loan, under rushed conditions.

These conditions, again, provide obstacles to any real participation of the recipient household members in the decision making process. It might be suggested that the team spends more time with each household. If they could take time to discuss the potential disadvantages of being in debt, as well as the advantages of the grid connection, this would provide target recipients with a better understanding of how a formal electricity grid connection and a credit scheme may affect the individual family.

Summary of findings and suggestions:

- The program design is simple and the implementation schedule efficient.
- The speed of implementation however can result in a low level of participation amongst household members and in particular female household members, in the decision making process.
- The survey team could take more time to explain and discuss advantages and disadvantages of joining the program.

Step 3: 'Wiring and Connection'

The ECI Installation team goes back to the village and completes installations for each credit taking household within 45 days of contract signature. After installation, an EdL representative must return to the households to formally inspect the wiring and remove the seal from the meter, thereby connecting the household to the electrical grid. Finally the EdL team must complete the village check list⁶.

In practice the ECI installation team will go to install the actual household connection as soon as they receive a signed agreement for the installations from EdL. During implementation of the Pilot Project, this agreement was not signed until after completion of the survey work in all of the 20 pilot villages, causing a delay to household installations in some villages. As soon as ECI received the agreement, however, installations were mobilized quickly and all joining were connected by the end of January 2009, three months after the initiation of the survey work.

The management staff responsible for the P2P Program within ECI expressed some concerns related to the above procedure, since it causes some waiting time for their installation team. The procedure is repeated in the P2P Phase II, in that the survey work has been completed in a total of 29 villages in Champasack province prior to the installation agreement between EdL and ECI being signed. The procedure, however, is likely to be linked to the way the program is still implemented and financed as a 'World Bank Project' rather than an integrated part of EdL's services based on a 'revolving fund'. This may make it difficult to change the procedure. It could, however be suggested that EdL make sure communication occurs with ECI, thus giving ECI a better chance to plan and schedule their activities.

Summary of findings and suggestions:

- Installations were completed quickly despite a small delay caused by the implementation procedure.
- The delay caused the ECI installation team to wait before installation could occur.
- The P2P program management could make sure that ECI is appropriately informed about the schedule of program activities.

⁸ P2P Training and Implementation Manual, Sunlabob Renewable Energy Ltd., 2008: 7.

Variation from the manual in the implementation procedure is not viewed as necessarily detrimental to the objectives of the project. It is not considered a goal in itself to follow the manual to the letter and promptly. However, the potential problems related to the 'rushed implementation', as discussed above, indicate that the speed of the implementation is highly valued by program implementers, and may be at a cost to any meaningful participation at the household level. This suggests that the implementation process is, to a large extent geared towards program requirements, rather than focusing on the need of the end-users. This is a critical issue if the program aims to encourage empowerment of the poor, with a specific focus on poor women's participation in the decision making of the household. An obvious solution to help ensure a higher level of participation of women in the decision making process is to slow down the pace of the survey work and to make better use of the produced campaign materials. This would entail only minor changes which should be easily integrated within the current procedure of program implementation.

5 Project Up-Take

5.1 Initial Results

The P2P Pilot Project was launched in 20 selected villages located in 5 different districts of Champasack province. The villages were chosen by the World Bank team based on information provided by provincial administration. The villages varied in size, consisting of between 59 and 416 households. All of the villages had been electrified under the World Bank supported Southern Provinces Rural Electrification Project (SPRE) between years 1998 and 2004. Table 5.1 below shows the performance of the P2P Pilot Project.

Table 5.1: Grid connected households (HH) in the 20 pilot villages:

Description:	No. of HH:	% of all HH:
All HH:	3,057	100%
HH connected before P2P:	2,375	78%
HH connected through P2P:	537	18%
Total HH connected after P2P:	2,912	95%
Total HH un-connected after P2P:	145	5%

The total number of households in all of the 20 villages was 3,057. Prior to the P2P Pilot Project, 682 of these households (22%) were without a formal grid connection. During the campaign, 537 (79%) of these un-electrified households were provided with a grid connection, increasing the overall connection rate from 78 percent to 95 percent and leaving only 5 percent of all households in the 20 villages without a formal electricity grid connection. The connection rate varies slightly between villages from 84 percent to 100 percent. Two villages have reached a 100 percent connection rate and only two villages have rates lower than 90 percent. The remaining 16 villages all have connection rates between 90 and 99 percent.

When considering only female headed households, the increase in connection rate due to the implementation of the P2P Program is even greater. As illustrated in Table 5.2, the connection rate among female headed households increased from 63 percent to 90 percent.

⁹ Many of these households however, were connected to the grid informally, through the connection of a neighboring house.

Time:	No. of all female headed HH:	No. of connected female headed HH:	Percentage of connected female headed HH:
Pre P2P:	247	155	63%
Post P2P:	247	223	90%

Table 5.2: Grid connected female headed households (HH) in the 20 pilot villages:

Of the non-eligible households, Table 5.3 shows a breakdown of the numbers of households and reasons for their non-eligibility.

Table 5.3: Non-eligible households (HH):

Reason for non-eligibility:	No. of non-eligible	% of non-eligible	
cason for non-engionity.	НН:	НН:	
All non-eligible HH:	145	100%	
Not poor HH:	46	32%	
Too far away HH:	57	39%	
Too Poor HH:	42	29%	

Of the remaining 145 non-eligible households, 46 (32%) were considered 'not poor enough'. Many of these families had just built a new house, maybe even of concrete, and thus were considered by the village chief, or the survey team, able to mobilize the money to cover the connection cost in the near future by themselves.

57 households (39%) were located 'too far' away from the electricity source. Finally, 42 households (29%) were considered, or considered themselves, 'too poor' to join the program, as they would not be able to pay the extra monthly cost of 20,000 Kip. This 'breakdown' shows that the P2P Program, while aimed at poor households, do not reach the poorest of the poor. These are the families who cannot afford to take a loan, and these are the families who live on the outskirts of the village, some even in the middle of the rice fields, if this is the only land they have access to. Together these types of families represent about 3-4 percent of all households in the 20 pilot villages.

The Field Survey completed by the World Bank team in 2007 indicated that female headed households are disproportionately represented among the poorest households that are unlikely to be able to afford to connect even when offered the no-cost basic meter and credit scheme to cover additional connection costs¹⁰. In the P2P survey work, there is no data available on the reasons for the non-eligibility of female headed households. Based on the findings of the Field Survey referred to above, it can be assumed that most of them are

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¹⁰ Lao PDR House Wiring Assistance Program. Final Report. The World Bank Lao PDR Country Office, 2007: 29ff).

among the poorest 3-4 percent of households, since female headed households are less likely to have disposal income due to the lack of adult labor capacity and lack of time to invest in income generating activities. This may also result in housing location or materials being unsuitable for electricity connection. Unfortunately, this results in a growing disproportion of un-connected female headed households.

According to the data collected by the P2P survey team, a total of 247 (8%) of all households in the 20 pilot villages were female headed. Prior to project intervention 92 (37%) of these were without a formal electrical grid connection (compared to 21% of all male headed households). Furthermore, 24 female headed households were determined non-eligible, leaving 10 percent of all female headed households without formal grid connection after project implementation (compared to 4% of all male households). This indicates a growing disproportion of un-connected female headed households despite the decrease of un-connected households of both types.

Table 5.4: Un-connected households (HH) divided by gender of household head:

Time:	Female headed HH:		Male headed HH:	
All HH:	247	100%	2,810	100%
Un-connected HH pre P2P:	92	37%	590	21%
Un-connected HH post P2P:	24	10%	121	4%

That the implementation of the credit scheme has in fact resulted in a growing disproportion of un-electrified female headed households is more clearly illustrated when looking only at the female headed households, as these compose 13 percent of all unconnected households prior to project intervention, and 17 percent after (Table 5.5).

Table 5.5: Proportion of female headed un-connected households (HH):

Time:	No. of HH:	% of all un-connected HH:
All un-connected HH pre P2P:	682	100%
Un-connected female headed HH pre P2P:	92	13%
All un-connected HH post P2P:	145	100%
Un-connected female headed HH post P2P:	24	17%

It is, however, important to keep in mind that the relative increase in connection rate due to project intervention was higher among female headed households (from 63% to 90%) than the overall increase (from 78% to 95%). A total of 68 female headed households were electrified during the P2P Pilot. Without a gender focus of the program this number could very well have been smaller and thus the bias against female headed households greater.

Furthermore, it is important to remember that women (and girls) in general form half of a household whether or not the household is female headed. Grid electricity has a significant impact on *all* women's lives – including for women living in male headed households. Overall the P2P Program is therefore considered to be an important factor in contributing to the poor's, and in particular poor women's, access to grid electricity and thus to an elevation in living standards and welfare.

Summary of findings:

- Due to the P2P Program the overall connection rate in the pilot villages increased from 78 percent to 95 percent.
- Among female headed households the connection rate increased from 63 percent to 90 percent.
- With the current program design and eligibility criteria, the poorest 3-4 percent of all households is still excluded from joining the program.
- Female headed households are still disproportionately represented among unconnected households after program intervention.

5.2 Cost of Connection

Occasionally households did not have to borrow the full amount of 700,000 Kip. More often than not, however, households needed to pay more than the loan amount, even if the house was located within 10-15 meters of the power source.

The total cost of connecting the 537 pilot households recorded by ECI was 428,372,286 Kip, with an average cost of connection being 797,714 Kip. The total credit being provided to all households was 373,737,529 Kip. This meant that households, on average, had to pay a further 101,741 Kip not facilitated by the loan, which represents an immediate, upfront cost to the household. This 'extra' payment rarely exceeded 50,000 Kip, but in some cases, a household could pay as much as 300,000 Kip on top of the loan. This was usually if the house was located toward the criteria limit of 30 meters, or further away, from the nearest electrical pole or if the house itself was large and required more cable for indoor wiring.

Following discussions with program recipients during this assessment, it was found that most did not feel this 'up-front' connection cost problematic. Recipients did not feel it to be too expensive for them to connect, neither did they regard the differences in price between households "unfair". Most interviewed recipients expressed their understanding for why some household connections were more expensive than others. However, when considering the pro-poor focus of the P2P Program it should be noted that poorer and less influential households are often located further from the centre of the village and often

further from the energy distribution source. This cost loading could therefore be providing a greater burden on poorer households than on relatively wealthier households.

Extending the credit to 800,000 Kip could be a solution to this scenario. During the development of the P2P Pilot Project, the size of credit was in fact lowered from 800,000 Kip to 700,000 Kip. This was, in part, to create exchange rate parity with the target amount of 80 US Dollars and in part to make it possible to provide credit (and connection) for a larger number of households with the first tranche of grant capital. Extending the credit to 800,000 Kip would, however, mean extending the repayment schedule or raising the repayment amounts, and in the end, not actually lowering the connection cost for poorer households.

A better solution would be to initiate a 'one-price-for-all' external connection cost, allowing the law of averages to balance the program budget. Increased costs due to internal wiring (of larger houses) could remain borne by the households. However, since few households have a connection cost lower than 700,000 Kip, this option would probably also mean extending the credit a little to, for example 750,000 Kip, or maybe even 800,000 Kip.

Summary of findings and suggestions:

- The size of the credit seems appropriate.
- Generally recipient households do not find it problematic to pay a small amount of the total connection costs up-front.
- There is a concern that poorer households are paying more for their grid connection than relatively wealthier households.
- A solution could be to charge 'one-price-for-all' for external connection costs and leave only extra internal wiring costs borne by the recipient household according to quantity of materials needed.

5.3 End-User's Satisfaction

As illustrated by the relatively high up-take rate (79% of all un-connected households joined the program), the P2P Program is generally well received by targeted households. The main reason for joining the program, as explained by the households interviewed, is that the credit scheme is a 'good deal'. The price of connection is considered relatively low compared to other options, such as for instance connecting through a private service provider. Furthermore, due to the 'no-cost' meter, the cost of connection through the P2P Program is approximately 600,000 Kip lower than standard EdL connection fees.

Without differences between female headed and male headed households, connecting households generally find it a considerable advantage not to have to pay the entire amount at once, rather being able to make repayments spread over the period of 3 years. Despite the 700,000 Kip credit, in most cases, is not enough to cover the entire cost of connection, as discussed above, it is considered a significant help by lowering the immediate up-front costs. The repayments of 20,000 Kip per month are considered by most interviewed households both manageable and appropriate.

Interviews with the village chiefs and other village committee members revealed that they felt that the overall quality of life and community status had increased as a result of the P2P Program intervention in their village.

Most of the connected households find that their working day can be extended by an additional 3-4 hours as a result of better lighting in the evenings. When compared to the light from an oil lamp, recipient households felt that the electric light is both brighter and more convenient.

As illustrated in the following quote, to have light at nighttime is of particular importance to families with young children:

We often need to have light at nighttime. We have 6 children. Some of them are still small. Before we used a lot of oil for our lamps. It was difficult, especially if a child was sick. Now we have two light strips. It is easy"

(Male head of household; Thapcharn village; young couple with 6 children)

Some households reported using of the better lighting for income generating activities, such as producing and/or mending fishing nets, fishing being the most common source of protein supplement and cash income augmentation in the interviewed households. One household used their access to electricity to recharge the batteries in a torch. With this torch the husband goes frog hunting at night time. The frogs they sell at the market, which generates enough cash to pay the monthly repayments. However, such cases were rare among the interviewed households who mostly reported no major changes in everyday life and work program.

That few households have felt any major changes in their everyday life and/or electricity consumption, besides lighting, may be a result of this assessment occurring only two to three months after households have been connected. It could however also be a consequence of the fact that most households actually had access to grid electricity, prior to the intervention, through a neighbor's connection. Even so, most households state that the new formal connection is an advantage when compared to the prior informal connection. These households stress the importance of having their own connection, despite the fact that their electricity consumption had not changed significantly. Having their own connection means that they now can have 2, 3 or even 4 lights, as compared to the single light bulb they had previously. Financially the price of their electricity consumption had decreased, on average from 5000 Kip to 2-3000 Kip saving 2-3000 Kip per month. Moreover, it seemed equally, if not more, important to them to have one's own connection

rather than having to depend on another household. This suggests that dependency is also a form of poverty experienced by the rural poor that is addressed the P2P Program. This is illustrated below in the words of a divorced woman in Thapcharn village:

"It is better now. Before I had to ask my neighbors to plug in my light every night. Now I don't have to ask them. Now it is easy"

(Female head of household; Thapcharn village; single with 3 children)

In general the assessment revealed a high level of satisfaction among recipients. Only one of 8 interviewed households expressed regret of joining the program, mainly because it had made no change in their life:

"We saw the lights in our neighbor's houses and wanted to have the same. When the team came here we accepted the loan. Now my wife is worried how to pay the bill every month. She turns of the light early every night. Our life is the same as before"

(Male head of household; Huadonedeng village; married with 7 children)

Despite the overall high level of satisfaction, it is important to keep in mind that, taking on a loan, putting the household in debt, represents a risk of exacerbating the poverty of a household rather than decreasing it. As illustrated by the quote above, having to pay, even a relatively small amount of 20,000 Kip per month can be difficult for some of the poorer households. While electrified via a neighbor, households could simply 'unplug' should their financial circumstances change or they decided not to pay for electricity during certain times of the year. With this new connection, through the P2P Program, they loose this flexibility.

This scenario is further illustrated by the case of the young woman from Thapcharn village, (also quoted above). This woman is the mother of 3 children, two sons, aged 3 and 11 years, and a 13 year old daughter. During the interview, which took place in her small house, she explained that her husband had left her 3 years ago to look for work. Since then she had not heard from him. She has difficulties feeding her children on the small salary she gets helping others in their rice fields. When the P2P survey team came to the village, as the female head of her household, she was determined eligible for the program and her household was connected to the electricity grid. As stated in the quote above she is happy to have her own connection. What she does not mention to us is that when time came to submit the repayments, she had to borrow money from a sister twice to pay the 20,000 Kip. This we heard from a female friend of the woman who joined us during the interview. This friend also told us, while tears started to run down the woman's cheeks, that because of the repayments, the woman has not been able to buy medicine for one of her children who had fallen ill. At the time of the interview, her child was still sick.

Even though this woman expresses gratitude for having her own electricity connection, her story demonstrates that taking on a loan, even with no interest and relatively small repayments, is a financial risk for the poorest households. Hence the appropriateness of the

program design and methods of implementation, including the effectiveness in reaching target households (including the poorest and female headed households), are very important issues to be considered.

Time will show whether and how villagers impacted by the program will benefit by using electricity (or lower cost electricity) to augment their income generating capacity, establish household industries and improve children's educational development. These are likely to be long term and organic benefits that will grow as people swap ideas and develop an understanding of the opportunities available to them.

Summary of findings:

- Generally the satisfaction is high among the recipient villages and households. Only one of eight interviewed households expresses regret for joining the program.
- Most household use their new connection solely for better lighting which has extended their productive work day by 3-4 hours.
- In a few cases the electricity consumption was directly linked to income generating activities, these were however rare at the time of the assessment.
- In one case a household had to borrow money elsewhere to meet repayments.
- The inherent risk of a credit scheme increasing the financial burden on a household should be carefully considered.

6 Project Appropriateness and Critical Issues

The implementation of the Pilot Project has shown that the P2P Program is relevant, appropriate and well-designed. The service provided is relatively simple but functional and target households seem keen to join the program. Both survey- and installation teams are efficient in getting the service out to the recipients and up-take rates have been high. Overall village electrification rates have increased to a 95 percent level with the electrification rate of female headed households reaching a 90 percent level. Finally, the size of the credit, as well as the 20,000 Kip repayment tranches, seem to be reasonable and affordable for most households and the 'two-bills' system developed by EdL seems to be working well with repayments being tracked.

A few critical points feared to result in a lack of participation in the decision making at household level have been identified in this assessment (Section 4). These are mainly related to the inconsistent use of the campaign materials and the relatively fast implementation schedule. These points can, however, be improved relatively easy and at no major cost to program implementers by distributing posters and brochures before the survey team goes to the village and by allowing more time for the survey work itself.

The overall success of the program is believed to be a result of the simplicity of the program design. With a single option being offered to end-users, the implementation and administration is quick and repayments easy to monitor. The implementation manual provides a clear and detailed step by step guide of implementation procedure. Finally, the implementing team, the 'survey team', is a consistent unit of 3 highly qualified persons, with considerable experience in the program implementation.

This simplicity however could also prove to be a weakness of the program. The issue of the poorest households, and in particular the poorest female headed households, being excluded from program participation is left un-resolved. Furthermore, there is a need to focus on capacity building within local EdL and ECI departments, at both provincial and district levels. The program is ostensibly controlled from a central level, which may be working well during the up-scaling as long as the program is implemented as a small scale 'project'. It does however pose a barrier towards the longer term sustainability of the program. Finally the selection of participating villages mainly in the P2P Phase II, has caused some difficulties for the implementing agencies. These are all issues which will need to be addressed if the program is to be successful in its up-scaling, and if the program is to gain longer term sustainability as an integrated part of regular EdL services.

6.1 Exclusion of the Poorest Households

As described in Section 5.1, the nature of the eligibility criteria results in an exclusion of the poorest households. This is due primarily to the poorest households being too far from an electricity distribution source, having poorly constructed housing, posing a safety risk, or households simply not having the disposable income to make loan repayments. Furthermore, this exclusion is likely to have resulted in a bias against female headed households despite the gender focus of the program. This presents the question of whether or not non-eligible households should be included in the program and if so how?

The answer is complicated. Households excluded because of the safety risk due to poor construction can of obvious reasons only be included in the program if the physical conditions of the house are improved.

Households excluded due to their location too far from the energy distribution source are likewise technically problematic to include. A low voltage connection to a household at such long distance from the energy distribution source cannot be installed without a major loss of electricity. To connect these homes would involve further extensions of the grid itself, and in some cases installation of extra transformers, which is, according to the P2P program management, expensive and only cost-effective if 20 households or more benefits from the extension.

While considering whether and how to include the poorest households it is important to remember that small credit schemes, such as the P2P Program, while aiming at alleviating poverty, entails an inherent risk of increasing poverty if the nature of the loan is inappropriate for the economic level of the borrower. As illustrated in the case study above (Section 5.3), the poorest of households are the most vulnerable to the credit scheme actually exacerbating their poverty rather than alleviating it. The servicing of the loan could result in directing available income away from other basic needs such as education, healthcare, food security, and diet diversity. Finally, the poorest households are the most unlikely to be able to make the repayments, resulting in having to borrow money elsewhere, which may or may not be an interest free loan.

These issues may be further compounded as many households do not use their electricity connection directly for income generating activities. Joining the P2P Program could therefore put these households in debt without directly contributing to the income of the household, at least not in the short term. Therefore, it is strongly recommended that a credit scheme of the P2P Program is not provided to households who cannot afford repayments of 20,000 Kip per month.

The Terms of Reference for this study calls for a discussion and recommendations for alternative ways of including the poorest households. Based on the discussion above, it is suggested that if the poorest households are to be connected to the electrical grid, a more flexible program is required.

The repayments could for instance be lowered to 10,000 Kip per month for the poorest households. Such grading of households would however make the eligibility determination as well as the financial administration of tracking repayments more complex and would result in some households being in debt for a period of almost 6 years.

Another solution could be to supply the poorest households with a fully subsidized connection. Only 42 households in the Pilot Project were determined 'too poor' to join the program. Financially it would mean a total cost of approximately 30 million Kip (approximately 3,500 US Dollars) depending on the actual need for materials. This solution however would also complicate eligibility determination besides having the long term consequence of taking away money from credit takers and thus decrease the amount available in a possible revolving fund.

Both of these suggestions would reduce the simplicity of the program and thus make implementation more demanding. A better solution could be to let village and/or other collective funds join in the credit scheme on behalf of the poorest households. Similar collective funds are already entering the P2P Program in the cases of the connection of public buildings, such as schools. In these cases the village chief is responsible for collecting money from the villagers in order to make the repayments. A similar scheme could be provided for the poorest households if the villagers can agree. This would not result in major changes in the way the program is being implemented, as the extra administration would be borne by the individual village committees. Such community based solutions are found to be working very well elsewhere.

Summary of discussion:

- Households excluded because of the safety risk due to poor construction can only be included in the program if the physical conditions of the house are improved.
- Households located too far from the energy distribution source can only be included by grid extension.
- It is not recommended to include households that cannot afford the monthly repayments, as it could lead to exacerbation of their poverty rather than alleviation of it.
- The 'poorest' households could be included if more flexibility of service is built into the program, such as lower repayments schedules or total subsidizing. This would however reduce the simplicity of the program and complicate eligibility determination, thus make both the implementation process and financial administration of the credit scheme more demanding.
- A better solution may be to introduce the possibility of village committees to join the program on behalf of the poorest households organizing collective funds to cover repayments.

6.2 Need for Capacity Building within EdL and ECI

The implementation of the Pilot Project, including the development of the final program design, implementation manual and campaign materials, was carried out as part of a capacity building exercise which included household visits and focus group discussions at village level. The workgroup consisted of EdL and ECI staff and was supervised by an international consultant provided by Sunlabob Rural Energy Ltd. EdL, as well as ECI staff were thus engaged in the development and testing of the campaign materials, implementation manual and all other tools needed in the process of implementation (Annex 1 & 2). Two members of the workgroup, both EdL staff, continued working with the program implementation as members of the survey team. This team completed the survey work in the Pilot Project and has proven to be highly qualified and efficient. Another team has since been trained and survey work of the P2P Phase II is currently being undertaken in Khammouane and Savannakhet provinces simultaneously.

The structure of the program could be termed a 'project-based' model of implementation where a few centrally based teams are responsible for the credit extension. This works well, as long as the program is in its early stages. It means that there will be a good chance of ensuring a high level of skills in those implementing the program, while, only creating a demand for capacity building at local level for tracking of repayment tranches.

The intention of the program's management is to upscale the provision of P2P services to the whole country. When this occurs the program will need to train more survey teams, with one team per province of operation. However, this only needs to occur if the capital is fully in place to charge the initial fund for each province. The training (and increase) in survey capacity, and hence implementation capacity, should be proportional to the availability of capital for initial installations. If funds become available in a step-by-step fashion then the current two teams would be sufficient to implement the program, all be it more slowly.

Finally, based on the good results of the Pilot Project, it is felt that the P2P program management should be ambitious and try to develop the program into an integrated 'normal' service provided by EdL, at least in the districts/provinces where the program has already been implemented, and therefore have a proven capacity for managing financial administration and tracking repayments.

In the Lao PDR House Wiring Assistance Program Final Report it is recommended that EdL establish and manage a revolving fund to provide financial assistance to poor households who cannot afford the full initial cost of connection and indoor wiring, thus ensuring the sustainability of the P2P Program over the longer term¹¹.

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¹¹ Lao PDR House Wiring Assistance Program. Final Report. The World Bank Lao PDR Country Office, 2007: 39f.

The general idea is that the repayments of loans already provided flow back into this fund, providing the capital for future credit extensions. This of course has a long term horizon, as repayments are low and initial funds return slowly to EdL over a period of three years. It does however mean that the program has the financial potential of becoming a self-sufficient and sustainable service within EdL.

It is very likely that there will be a demand for the program in the future, even in villages that have already been included in the program. The needs in villages do not remain constant. Household circumstances can change, families migrate or new families develop over time and hence new households are established. Some of these new households may be poor and unable to pay the initial costs to connect to the electricity grid. Furthermore some household may have been unable to attend the first P2P village meeting due to travel or sojourning in another part of Lao PDR. Thus it is fair to assume that their will be a need for the scheme in the longer term and for the scheme to revisit already visited villages. This would however, need a stronger program focus on capacity development at district and provincial levels than has been present in the Pilot Project.

The credit scheme could for example be a service that individual households or villages could apply for once or twice every year. There could be one person responsible for the credit extensions at province level, who then visits the applicant households for program eligibility. In this way the service could be provided, not only in selected villages, but throughout a district or province.

Since the financial structure for long term implementation is in place, it is highly recommended that potential models for the long term integration of the P2P Program are investigated by the program management within EdL.

Summary of discussion:

- The program is currently being implemented on a 'project basis'.
- With such a 'project basis' model having few but highly qualified survey teams it is
 working well, as long as funds for the program become available in a step-by-step
 fashion.
- If funding is in place for implementation of the program country wide, the program will need to train more survey teams, with one team per province of operation. The training (and increase) in survey capacity, and hence implementation capacity, should be proportional to the availability of capital for initial installations.
- The P2P Program has the financial means and projections to become self sufficient in the long term;
- Models for how the program could be integrated into 'normal' EdL service provision in the long term should be considered.

6.3 Selection of the 'P2P-Villages'

The selection of villages for the Pilot Project was made by the World Bank team, but guided by provincial administration. This has worked reasonably well, however there is some concern over the top-down nature of the village selection process with regard to the program up-scaling (Phase II). This is mainly due to the Impact Evaluation of the P2P Program, proposed by the World Bank's Development Economics Group (DEC), and its requirements of keeping certain villages as control villages for impact comparison purposes. This has caused some problems for program implementers.

For instance, due to a new village administrative structure in many provinces many individual villages (with their own village chief and committees) have now been merged with other villages. These village 'groups' now have a single Chief and village administration. To implement the P2P Program in one sub-village and not all within such a merged-village is problematic for the local authorities as well as program implementers. Villagers are unlikely to understand the purpose of leaving some sub-villages out of the development process to allow for a research control group.

Also, district and provincial governments have requested the participation of certain villages prior to others. This may not always fit with the schedule proposed by the DEC team, while program management within EdL finds it difficult to ignore such requests.

Instead of the program dictating where development should happen first, the local EdL department and administration could have been consulted in the selection process. Existing plans for development could have been reviewed and compared with an implementation schedule to identify which villages would 'naturally' receive intervention later and hence which could reasonably fall into a control group. Such local level participatory selection has proven to be effective in other experimental/pilot development programs in the region.

Summary of discussion:

- The top-down nature of the village selection process with regard to the program upscaling (Phase II) has caused some problems for program implementers.
- Program management finds it difficult to ignore request from local government regarding the village selection.
- With a local level participatory selection process aligned with existing plans for development, these problems could have been avoided or minimized.

7 Summary of Recommendations

The overall conclusion of this assessment is that the P2P Program is relevant, appropriate and well-designed. A few critical issues have been identified. These are listed below and recommendations for possible solutions are offered.

Process of Project Implementation (Section 4)

Observations:

- The program design is simple and the implementation schedule efficient.
- Installations were completed quickly despite a small delay caused by the implementation procedure.

Issue 1: Villagers and village administration do not know exactly when the survey team will visit the village, thus they are unable to plan for the visit and some households are absent.

Recommendation: The runner could announce an exact date of the survey team visit and village meeting.

Issue 2: The role of the runner as information provider is in-consistent, too often leaving household members, and in particular female household members, un-prepared for adequate participation in the decision making process.

Recommendation: The runner could provide the village chief with posters and enough brochures to hand out to all un-connected households several days before the meeting.

Issue 3: The speed of implementation can result in a low level of participation amongst household members and in particular female household members, in the decision making process.

Recommendation: The survey team could take more time to explain and discuss advantages and disadvantages of joining the program.

Issue 4: A delay related to the implementation procedure caused the ECI installation team to wait before installation could occur.

Recommendation: The program management could make sure that ECI is appropriately informed about the schedule of program activities.

Project Uptake (Section 5)

Initial Results

Observations:

- Due to the P2P Program the overall connection rate in the pilot villages increased from 78 percent to 95 percent.
- Among female headed households the connection rate increased from 63 percent to 90 percent.
- With the current program design and eligibility criteria, the poorest 3-4 percent of all households is still excluded from joining the program.
- Female headed households are still disproportionately represented among unconnected households after program intervention.

Cost of Connection

Observations:

- The size of the credit seems appropriate.
- Generally recipient households do not find it problematic to pay a small amount of the total connection costs up-front.

Issue 5: There is a concern that poorer households are paying more for their grid connection than relatively wealthier households.

Recommendation: A solution could be to charge 'one-price-for-all' for external connection costs and leave only extra internal wiring costs borne by the recipient household according to quantity of materials needed.

End-User's Satisfaction

Observations:

- Generally the satisfaction is high among the recipient villages and households. Only one of eight interviewed households expresses regret for joining the program.
- Most household use their new connection solely for better lighting which has extended their productive work day by 3-4 hours.
- In a few cases the electricity consumption was directly linked to income generating activities, these were however rare at the time of the assessment.

Issue 6: In one case a household had to borrow money elsewhere to meet repayments.

Recommendation: The inherent risk of a credit scheme increasing the financial burden on a household should be carefully considered. Households who cannot afford the 20,000 Kip repayments should not be included the program.

Project Appropriateness and Critical Issues (Section 6)

Exclusion of the Poorest Households

Observations:

- Households excluded because of the safety risk due to poor construction can only be included in the program if the physical conditions of the house are improved.
- Households located too far from the energy distribution source can only be included by grid extension.
- It is not recommended to include households that cannot afford the monthly repayments, as it could lead to exacerbation of their poverty rather than alleviation of it.

Issue 7: How to provide access to the main electricity grid to the poorest households?

Recommendation: The P2P Program could introduce a possibility of village committees to organize community based credit connection for the poorest households.

Need for Capacity Building within EdL and ECI

Observations:

- The program is currently being implemented on a 'project basis'.
- With such a 'project basis' model having few but highly qualified teams, it is working well as long as funds for the program become available in a step-by-step fashion.
- The training (and increase) in survey capacity, and hence implementation capacity, should be proportional to the availability of capital for initial installations.
- The P2P Program has the financial means and projections to become self sufficient in the long term.

Recommendations: If funding is in place for implementation of the program country wide, the program will need to train more survey teams, with one team per province of operation.

Models for how the program could be integrated into normal EdL service provision in the long term should be considered.

Selection of the 'P2P-Villages'

Observations:

• The top-down nature of the village selection process with regard to the program upscaling (Phase II) has caused some problems for program implementers.

Issue 8: Program management finds it difficult to ignore request from local government.

Recommendation: With a local level participatory selection process aligned with existing plans for development, these problems could have been avoided or minimized.



Power to the Poor Pilot Project

Training & Implementation Manual

Emma Townsend-Gault Sunlabob Renewable Energy Ltd .



Electricity where the sun shines

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SECTION 1: Introduction and Background

This training and implementation manual has been designed to support EDL and ECI staff in implementing the Power to the Poor project. This manual details the tools that are used to identify target households for inclusion in the Power to the Poor project, the forms that must be filled out for each target household and village, as well as a number of key tips and hints based on fieldwork. Translated into English and Lao, this manual is suitable for use by National, Provincial and District personnel involved in the project. The Annexes at the back of the manual contain all worksheets needed by the project teams.

Project Background¹

Many poor rural households cannot afford the initial costs of connecting to EdL's electricity grid. The inability of the poor to afford a connection is a problem which must be overcome if the GOL is to achieve its national goal to provide electricity to 90% of total households in Lao PDR by the year 2020. Meeting this goal will become increasingly difficult as the electricity grid is extended into remote areas, where more households will find it difficult to mobilize such large sums of money. Therefore, developing a program of financial assistance to poor households will be important in meeting the national electrification goals.

The objective of the "Power to the Poor" pilot is to demonstrate the practicality of providing financial support to households which otherwise would be unable to pay the initial costs of a grid connection. The pilot will demonstrate that a properly designed pro-poor activity does not affect mobilization of non-poor households to pay the full cost of connection. Other objectives for the pilot program include: (i) demonstrating the ability to track extension and repayment of the grid connection credit; (ii) testing a participatory village-level process for determining which households receive the credits; (iii) testing whether gender-sensitive eligibility criteria can capture households who tend to be particularly disadvantaged; (iv) verifying that the financial remediation terms are sufficient to increase overall village electrification rates to the 80-90 percent level and affordable to participants; and (v) proving that the additional work flow can be integrated within the rural electrification construction process, financial management, and administrative procedures of the REP.

SECTION 2: Approaches to Working with the Community

When working in rural villages each person is a representative of their organization. As such it is important to always follow the rules of Lao PDR when working in Villages.

These include:

- Not discriminating against people be reason of gender, ethnicity, age or disability
- Not eating or buying endangered or protected wildlife from villagers
- Not engaging in anti-social practices

In order to foster good relationships between the EDL and ECI implementation teams and the local villagers, it is important to always:

¹ Taken from the "Lao PDR Rural Electrification Program House Wiring Assistance Program Manual"

² Based on earlier electrification efforts about 60-70% of households in an electrified village are able to mobilize enough money to connect. This pilot is targeted at the other 30-40% who cannot afford to connect and who would otherwise be passed by.

- Show respect to all villagers
- Listen to villagers questions and answer them
- Understand that villagers with low-educational levels may find explanations difficult do not shout at them, insult their intelligence, or otherwise belittle them
- Ask permission to enter households
- Ask permission to take photographs
- Be sensitive to village norms, especially when staying over at night

When implementing tools for household identification, be careful to:

- Speak clearly so all present can hear
- Ask if there are questions
- Allow time for villagers questions
- · Allow time for villagers to consult with each other
- Be patient!
- Fill out all forms with the household it is easy to forget afterward.

Hints and tips from Power to the Poor fieldwork:

- Make sure that the nai ban is told about the village meeting at least two days in advance to ensure all potential households can take part
- Think strategically about planning routes to and from districts to avoid wasting time
- Explain to villagers that if they save 1000 kip a day they will be able to re-pay the loan and the monthly electricity bill easily
- Schools and other community buildings can be included in the project if the village agrees
 Make sure to get the full names of both husband and wife, as they appear on any
 documentation, to avoid confusion later on
- Be aware of government policies of joining villages if two villages have joined together, make sure both sides of the village are aware of the meeting to ensure all eligible households attend

SECTION 3: Power to the Poor Protocol

1 Power to the Poor Village Visit Steps and Timetable

I.I Visit I: Outline Village Plan

Purpose of the Visit

EDL runner to visit the village, gather primary data from the Village Chief and explain the project

Step 1: The EDL 'runner' goes to the village to set up a meeting with the Nai Ban, and all the households that are not electrified.

The runner should go at least 2 days before proposed meeting date.

The runner will ask the village leadership for a list of the all households without an authorized power meter.

The runner will take one copy of each poster to the village, help the Nai Ban attach the poster to a sheltered public space, and briefly explain the Power to the Poor project to the Nai Ban.

The runner will also leave a Village Questionnaire Form with the Nai Ban to fill out, and request a list of all non-electrified households be compiled. (See Annex 1)

The Runner will stress the importance of all non-electrified households being present at the meeting – especially the female headed households.

1.2 Visit 2: Community Meeting and Household Eligibility Status

Purpose of the Visit

To introduce the Power to the Poor project to the villagers without electricity, conduct household eligibility questionnaire, provide quotations, vouchers and credit agreements

Step 2: The EDL/ECI team go to the village, and present the project to the assembled villagers at the planned meeting

The team visits each of the un-electrified households in turn and completes a household questionnaire. (Annex 2)

If the household is ineligible to take part, the team will present them with a disqualification statement. (Annex 3)

If the household is interested, ECI surveys the house, and signs a quotation form with the household. (Annex 4)

EDL signs a credit agreement (1 copy for the household, and 1 for EDL). (Annex 5) and EDL gives a Installation/wiring completion electrify sheet to the household keep (Annex 6)

ECI then completes the installation, the household will give the signed installation/wiring Completion sheet to ECI.

Village Meeting Plan

In the villages, we must:

- Identify ourselves as coming from EDL/ECI
- Explain that the purpose of the project is to provide wiring based on a loan for households who cannot afford to pay the upfront costs, with a particular focus on those households headed by women.
- Explain that they will receive a credit voucher for a loan of 700,000 kip, and will be asked
 to pay the surplus on the day ECI come to wire the household. (Estimates are that the
 cost will be less than 800,000 kip).
- Briefly explain the time-line of the project
- Explain that households participating in the project will pay back the cost of the loan
 every month with their electricity bill. The cost will be, on average, 20,000 kip per month
 plus the monthly electricity bill.
- Explain that the households we talk to are not guaranteed to take part in the project.

We hope to get a picture of the true situation in the village

We will be:

Asking some questions about the village situation to the Nai Ban

- Establishing the **distances** the households are from a power line/source.
- Asking questions to establish whether the household meets the projects eligibility criteria
 of safety and distance

1.3 Visit 3: Wiring and connection

Purpose of the Visit

The final visit sees the EDL and ECI teams visiting each target household to install the wiring system. After installation, each system will be checked by an EDL technician, and signed off on.

Step 3: ECI must come back to the village for installation within 45 days of the village meeting.

EDL must come back and formally inspect the household wiring, and remove the seal from the meter, thereby connecting the household to the electrical grid

The EDL team must complete the final village checklist (Annex 7)

2 Explanation of Tools

2.1 Annex 1: Village Questionnaire

The success of the Power to the Poor project depends on good cooperation between villagers and the EDL/ECI team. Consulting with the Village Chief and leadership is essential to ensuring this process happens effectively.

2.2 Annex 2: Household Questionnaire

The Household Survey will ensure eligible households take part in the project, while collecting a clear picture of the status of the household.

2.3 Annex 3: Disqualification Statement

The Disqualification Statement puts the reasons for the households non-eligibility in writing

2.4 Annex 4: ECI Quotation

The Quotation gives the best estimate for the household of the total costs of the installation, and demonstrates the amount they will have to pay over the loan amount

2.5 Annex 5: Credit Agreement

The credit agreement serves as a contract between EDL/ECI and the individual household

2.6 Annex 6: Installation/wiring Sheet

The installation/wiring sheet is signed by the household, and given to ECI on completion of wiring as proof of installation

2.7 Annex 7: Final Village Checklist

This checklist provides the basis for evaluation data, and ensures the teams have collected all necessary information at the village level.

Village Questionnaire – to be completed by the Nai Ban (Village Chief).

Demographics:

Village:	Nai Ban #1:		
District:	Nai Ban #2:		
Province:	Nai Ban #3:		
Ethnicity 1:	LWU representative:		
Ethnicity 2:	Neo Hom representative:		
Ethnicity 3:	Contact Phone No.:		
Total Population:	No. of Households:		
No. of Women:	No. of Families		
No. of Men:	No. of Electrified Households:		
No. of Female Headed Households:	No. of Non-Electrified Households:		
No. of Non-Electrified Female Headed Households:			

Infrastructure:

		Tick Yes or No:			
Does the village have:	Yes	No	Is it elec	Is it electrified:	
Electricity			Yes	No	
Village Office					
Primary School					
Low Secondary School					
High Secondary School					
Health Clinic					
Market					
Temple					
Rice Mill					
Water Source					

List the main reasons for why un-electrified households do	1: 2:
not have access to the grid. (example: lack of money, too	3:
far from power pole etc.)	4:
,	5:

Household Questionnaire

Village:					
Household number:					
Ethnicity:					
Γ					\neg
Head of the household:			Sender:		
No. of people in the house	hold:				
No. of men:		No. of	women:	No. of	children:
Г			<u> </u>		
How much land do you ha	ve for agricultur	e:	Na:		Hai:
Do you produce enough ri	ce to feed the h	ousehold	the entire yea	r?	Yes / No:
If not, for how many month	ns per year do y	ou lack ri	ce?		No of months:
How much do you spend of	on lighting each	month?			LAK:
How many litres of diesel	or household po	ower do y	ou buy each r	nonth?	L:
How much kerosene for he	ousehold power	do you b	uy each mont	h?	L:
If you buy or borrow powe	r from your neig	jhbours, h	ow much do y	ou pay?	P LAK:
Would you like to be conn					es / No:
Would you be able to pay	app. 20,000 kip	/ month fo	or 35 months?	Y	es / No:
		1:			
		2:			
How would you generate t		3:			
pay for the electricity? List	activities.	4:			
		5:			
		ე.			
Surveyor Obs	servations:				
How far is the house from	the power pole	?	Is the house safe to elec		Why?
Less than 30m			Yes / No:		
Between 30-45m					
More than 45m					

Signature of Household, Nai Ban and EDL

ກະຊວງພະລັງງາ	ແລະ ບໍ່ແຮ່
ລັດວິສາຫະກິດ ໄນ	ປຟ້າລາວ



ເລກທີ່ .		/ຟຟລ
ະຄອ	ຫຼວງ, ວັ	ທີ

ສະໜອງໄຟຟ້າ ໃຫ້ຜູ້ທຸກຍາກ					
"Power to the Poor"					
ຊື່ຫົວໜ້າຄອບຄົວ Name of head of household:					
ເຮືອນເລກທີ Household number:					
ນ້ຳເບີຜູ້ໃຊ້ໄຟຟ້າ EDL consumer number:					
ข้าม Village:					
ເມືອງ District:					
ແຂວງ Province:					
This household is not eligible for participation in the project because: ເຮືອນຫຼັງນີ້ແມ່ນບໍ່ຖືກເລືອກເອົາໃນການມີສ່ວນຮ່ວມກັບໂຄງການເພາະວ່າ:					
ລາຍເຊັນ ແລະຈ້ຳຕາ ຟຟລ	ายข้า Villaga Haad				
EdL stamp and signature:	Village Head				

ສາທາລະ ະລັດ ປະຊາທິປະໄຕ ປະຊາຊີ ລາວ

ສັ ຕິພາບ ເອກະລາດ ປະຊາທິປະໄຕ ເອກະພາບ ວັດທະ າຖາວອ

ກະຊວງພະລັງງາ ແລະ ບໍ່ແຮ່ ລັດວິສາຫະກິດກໍ່ສ້າງ ແລະ ຕິດຕັ້ງໄຟຟ້າ



ເລກທີ່ .		./ทฅฃ	
ະຄອ	ຫຼວງ, ວັ	ິທີ	

ລາຍລະອຽດການຕິດຕັ້ງແລ່ນໄຟຟ້າໃນເຮືອນ Quotation for Installation of In-house Wiring and Electricity Outlets

No.	Item	Unit	Quantity	Unit price (Kip)	Total Price (Kip)	Remarks
1	PVC 1x10mm ² Al.	m	70	3,000	210,000	
2	PVC 2x4mm ²	m	4	9,600	38,400	
3	PVC 2x1mm ²	m	10	3,000	30,000	
4	clip No. 1, 2, 3, 4	g	1	6,000	6,000	
5	Nails No. 3/8	g	1	3,600	3,600	
6	Nails No. 8	g	1	3,600	3,600	
7	Plugs	pcs	1	2,400	2,400	
8	Sockets for light bulbs	pcs	2	6,000	12,000	
9	Fluorecence 20 w	set	2	27,600	55,200	
10	Panel for switching	pcs	1	7,200	7,200	
11	Fuse box	pcs	3	3,600	10,800	
12	Fuse link 5 A(20 cm length)	roll	1	1,500	1,500	
13	Breaker 2 p 10 A	pcs	1	18,000	18,000	
14	tape	pcs	1	6,000	6,000	
15	switch	pcs	2	3,600	7,200	
16	Screw No. 6	g	1	2,400	2,400	
17	Screw No. 10	g	1	3,600	3,600	
18	Parallel groove clamp Al 16/70	pcs				
19	Rack with 2 spool insulator	set				
	Total Cost of Materials				417,900	
	Labor cost				126,000	
	Administration service				135,056	
	Tax 10%				67,891	
	Grand Total				746,852	

Provisions ຂໍ້ກຳນົດ

• The above estimate is based on the best judgment of ECI's surveyor, actual costs may be different.

ການປະເມີນລາຄາຕິດຕັ້ງໄຟຟ້າຢູ່ຂ້າງເທິງຂອງນັກວິຊາການສຳຫລວດຂອງ ກຕຟ ແມ່ນເໝາະສົມ ທີ່ສຸດແລ້ວ, ແຕ່ລາຄາຕົວຈິງອາດແຕກຕ່າງກັນ.

- The quoted price remains valid up to 45 days after the date provided below. ມູນຄ່ຳລາຄາທີ່ໄດ້ກຳນົດໃຫ້ໃຊ້ໄດ້ພຸງ 45 ວັນ ນັບແຕ່ວັນທີທີ່ໄດ້ສະເໜີໃຫ້ເປັນຕົ້ນໄປ
- The Electricity Consumer is not bound to accept the present offer.
 ຜູ້ໄຊ້ໄຟຟ້າຕ້ອງຍອມຮັບ ຫຼືປະຕິເສດມູນຄ່າລາຄາຕໍ່ການສະໜອງໄຟຟ້າໃຫ້ໃນປະຈຸບັນ ຫຼືບໍ່ນັ້ນແມ່ນ
 ຂື້ນກັບຄວາມພ້ອມຂອງຜູ້ກ່ຽວເອງ
- ECI will install materials within one week of (a) receiving the signed agreement from the Electricity Consumer or (b) completion of medium voltage stringing in the village, whichever is the later.

ກຕຟ ຈະຕິດຕັ້ງອຸປະກອນຕ່າງໆໃຫ້ພາຍໃນໜຶ່ງອາທິດ (ກ) ຫລັງຈາກຜູ້ໄຊ້ໄຟຟ້າໄດ້ເຫັນດີລົງລາຍ ເຊັນໃສ່ໃນໃບສັນຍາ ຫລື (ຂ) ສຳເລັດການແລ່ນສາຍໄຟຟ້າແຮງກາງຢູ່ໃນບ້ານ

The Electricity Consumer must return present quotation with signature and within 45 days of the date provided above.
 ຜູ້ໄຊ້ໄຟຟ້າຕ້ອງສົ່ງໃບສະເໜີສະບັບນີ້ພ້ອມທັງລົງລາຍເຊັນຄືນໃຫ້ ກຕຟ ພາຍໃນ 45 ວັນ ນັບແຕ່ ວັນທີໄດ້ສະໜອງການບໍລິການຕ່າງໆໃຫ້ດັ່ງຢູ່ຂ້າງເທິງນີ້ .

Date/ວັນທີ:	
 [Electricity Consumer signature]	[ECI stamp and signature]
ลายเร็บ ตู้ใส่ไฟฟ้า	ເຊັນ ແລະຈຳຕາ ຂອງ ກຕຟ

ກະຊວງພະລັງງາ	ແລະ ບໍ່ແຮ່
ລັດວິສາຫະກິດ ໄນ	ຟຟ້າລາວ



ເລກທີ່ .	/ຟຟລ		
ະຄອ	ຫຼວງ, ວັ	ິທີ	

<u>ໃບສັ ຍາ</u> ກູ້ຢືມເງິ ຄ່າຕິດຕັ້ງໄຟຟ້າເຂົ້າເຮືອ ລ່ວງໜ້າ

(Credit Agreement)

บ้า / Village :	 	
ເມືອງ/District:	 	
-		
ແຂວງ/ Province:		

ໂຄງກາ ສະໜອງໄຟຟ້າ ໃຫ້ຜູ້ທຸກຍາກ

"Power to the Poor"

ກາ ຕຶກລົງວ່າດ້ວຍກາ ໃຫ້ກູ້ຢືມເງິ ລ່ວງໜ້າ ເພື່ອຊຸກຍູ້ກາ ຕິດຕັ້ງໄຟຟ້າເຂົ້າເຮືອ ລະຫວ່າງ ລັດວິສາ ຫະກິດໄຟຟ້າລາວ (ຟຟລ) ແລະ ຜູ້ໃຊ້ໄຟຟ້າ / Agreement on Subsidy Credit for Electricity Installation between Electricité du Laos and Electrical Consumer

້ນ ທະຂອງ ຟຟລ / EDL Obligations :

- (i) ຈ່າຍຄ່າຕິດຕັ້ງໄຟຟ້າ ໃ ຈຳ ວ ເງິ 700,000 ກີບ (ເຈັດແສ ກີບ) ຕາງ ຄອບຄົວທີ່ໄດ້ຮັບ ອະ ຸມັດໃຫ້ກູ້ຢືມ ແລະ ໄດ້ເຊັ ສັ ຍາກູ້ຢືມເງິ ກັບ ຟຟລ ໃຫ້ລັດວິສາຫະກິດກໍ່ສ້າງ ແລະ ຕິດຕັ້ງໄຟຟ້າ (ກຕຟ) ເຊິ່ງເປັ ຜູ້ຮັບເໝົາໃ ກາ ຕິດຕັ້ງໄຟຟ້າເຂົ້າເຮືອ ຂອງຜູ້ໃຊ້ໄຟຟ້າ/ Provide eligible households with electrical wiring worth up to LAK 700,000. The actual installation/wiring free (not more than LAK 700,000) will be paid directly to Electrical Construction and Installation (ECI) by EDL.
- (ii) ສະໜອງໝໍ້ ບໄຟຟ້າ ຂະໜາດ 3/9 ອຳແປ ໃຫ້ ໂດຍບໍ່ຄິດ ໄລ່ມູ ຄ່າຢູ່ເຮືອ ຂອງຜູ້ ໃຊ້ໄຟຟ້າ/
 Install at no cost a 3/9 Ampere electricity consumption meter at the premise of the Electricity Consumer.

(iii) ເກັບເງິ ຄ່າຕິດຕັ້ງຄື ໃ ແຕ່ລະເດືອ ຈາກຜູ້ໃຊ້ໄຟຟ້າ ລວມທັງເງິ ຄ່າກະແສໄຟຟ້າ ປະຈຳເດືອ ໂດຍຜ່າ ບິ ເກັບເງິ ຄ່າໄຟຟ້າປະຈຳເດືອ / Collect monthly cost installation from the Electricity Consumer through the monthly electricity bill.

ພັ ທະຂອງ ລັດວິສາຫະກິດ ກໍ່ສ້າງ ແລະ ຕິດຕັ້ງໄຟຟ້າ (ກຕຟ)/(ECI obligations)

- (i) ຕອບສະໜອງ ພ້ອມກັບຕິດຕັ້ງ ອຸປະກອ ໄຟຟ້າ ໃສ່ເຮືອ ຂອງຜູ້ໃຊ້ໄຟຟ້າ ພາຍໃ 45 ວັ ຫລັງຈາກຜູ້ຊົມໃຊ້ໄດ້ເຊັ ສັ ຍາກູ້ຢືມເງິ ຄ່າຕິດຕັ້ງໄຟເຂົ້າເຮືອ ກັບ ຟຟລ ແລ້ວ / Providing a non - binding quotation for all services and material which will be required for inhouse wiring. Installing materials within **45 days** of receiving the signed agreement from the Electricity Consumer.
- (ii) ຫລັງຈາກກາ ຕິດຕັ້ງ ພາຍ ໃ ໄລຍະ 6 ເດືອ ຖ້າຫາກມີບັ ຫາໃດ ກ່ຽວກັບກາ ໃຊ້ ໄຟຟ້າ ເຊິ່ງເື່ອງມາຈາກກາ ຜິດພາດຂອງອຸປະກອ ຫລື ກາ ຕິດຕັ້ງບໍ່ສືມບູ ຈະສ້ອມແປງໃຫ້ຄື / Within six months of installation, repairing any malfunctions caused by material failure or incomplete installation.

ພັ ທະຂອງຜູ້ໃຊ້ໄຟຟ້າ / Electricity Consumer obligations:

- (i) ຊຳລະເງິ ກູ້ຢືມ ແລະ ຄ່າຊົມໃຊ້ໄຟຟ້າປະຈຳເດືອ ຕາມໃບບິ ເກັບເງິ ຄ່າໄຟຟ້າປະຈຳເດືອ ຈື ກວ່າຈະຄົບຖ້ວ ຕາມຈຳ ວ ເງິ ກູ້ຢືມ (ປະມາ 35 ເດືອ)

 Repay the credit in equal instalments of LAK 20,000 per month each month for 35 months.
- (ii) ເຈົ້າຂອງເຮືອ ຜູ້ທີ່ຖືກຄັດເລືອກເຂົ້າໃ ໂຄງກາ ຕ້ອງໄດ້ຊຳລະມູ ຄ່າສ່ວ ເກີ ຂອງລາຄາ ຄິດໄລ່ຕົວຈິງ ເມື່ອທຽບໃສ່ເງີ ກູ້ຢືມ ທີ່ທາງລັດວິສາຫະກິດໄຟຟ້າລາວ ອາຸມັດໃຫ້ສູງສຸດ (700,000 ກີບ) ໃຫ້ທາງລັດວິສາຫະກິດກໍ່ສ້າງ ແລະ ຕິດຕັ້ງໄຟຟ້າເລີຍ If the quotation for household wiring is over 700,000 kip, the household must pay the extra amount directly to ECI prior to wiring the house.
- (iii) ຮັກສາ ອຸປະກອ ຕ່າງໆ ແລະກາ ຕິດຕັ້ງ ໃຫ້ຢູ່ໃ ເງື່ອ ໄຂທີ່ປອດໄພ Maintain all materials and installations in safe condition.

ຂໍ້ກຳົດ Provisions

ບັດາເຄື່ອງມື ແລະອຸປະກອ ຮັບໃຊ້ຕ່າງໆ ທີ່ໄດ້ຕິດຕັ້ງໃຫ້, ລັດວິສາຫະກິດໄຟຟ້າລາວ ສາມາດ ກູ້ຄື ໄດ້ ພາຍຫລັງທີ່ໄດ້ແຈ້ງເຕືອ ກ່ອ 45 ວັ ໃ ກໍລະີ ຜູ້ໃຊ້ໄຟຟ້າ ບໍ່ຈ່າຍ ເງິ ກູ້ຢືມ ແລະ ຄ່າກະແສໄຟຟ້າໃຫ້ຕາມກຳົດ.

All material and equipment remains the property of EDL and can be removed with notice of 45 days in case of non-payment of credit instalments or electricity consumption charges.

ໃ ກໍລະີ ບັ ຫາຂັດຂ້ອງໃດໜຶ່ງ ເກີດຂຶ້ ຈີ ບໍ່ສາມາດ ຳໃຊ້ໄດ້ ຫລັງຈາກກາ ຕິດຕັ້ງໄດ້ 6 ເດືອ ຜູ້ຊົມໃຊ້ໄຟຟ້າຈະຕ້ອງໄດ້ຮັບຜິດຊອບຄ່າສ້ອມແປງຕ່າງໆ.

Any repairs or malfunctions occurring after six months of installation must be repaired at the cost of the Electricity Consumer.

ໃ ກໍລະີຄ່າຕິດຕັ້ງໄຟຟ້າ ທັງໝົດ ຕຳກວ່າ 700,000 ກີບ, ຈຳ ວ ເງິ ທີ່ຈະ ໃຫ້ກູ້ ຢືມ ແມ່ ອີງໃສ່ມູ ຄ່າຕິດຕັ້ງຕົວຈິງ ແລະ ກາ ເກັບຄື ໃ ແຕ່ລະເດືອ ຈະແບ່ງຕາມສັດສ່ວ (ຫລຸດລິງຕາມມູ ຄ່າຕົວຈິງຂອງກາ ຕິດຕັ້ງ).

In case of total installation costs of less than LAK 700,000, the credit amount will be limited to actual cost, and monthly instalment payments will be reduced proportionally.

ໜັງສືສັ ຍາສະບັບີ້ ສ້າງຂຶ້ ລະຫວ່າງ ລັດວິສາຫະກິດໄຟຟ້າລາວ (ຟຟລ) ແລະ ຜູ້ໃຊ້ໄຟຟ້າ ໂດຍມີກາ ຮັບຮູ້ ຈາກອຳ າດກາ ປົກຄອງບ້າ , ສັ ຍາໄດ້ເຮັດເປັ 2 ສະບັບ : ຜູ້ໃຊ້ໄຟຟ້າ ເກັບໄວ້ 1 ສະບັບ ແລະ ລັດວິສາຫະກິດໄຟຟ້າລາວ (ຟຟລ) ເກັບໄວ້ 1 ສະບັບ.

The present contract must be signed in two originals, one to be kept by the Electricity Consumer and one to be kept by EDL.

ທຸກພາກສ່ວ ກ່ຽວຂ້ອງ ເຫັ ດີແລະຕົກລົງເຊັ : (Agreement)				
ລັດວິສາຫະກິດໄຟຟ້າລາວ (EDL)	<u>ายข้า (Village Head)</u>	ตู้ใช้ไขข้า(Eligible Household)		
ວັ ທີ / Date				

ກະຊວງພະລັງງາ	ແລະ ບໍ່ແຊ
ລັດວິສາຫະກິດ ໄ	ຟຟ້າລາວ



ເລກທີ່		./ຟຟລ
ະຄອ	ຫຼວງ, ວັ	ທີ

<u>ໜັງສືຢັ້ງຢື ກາ ຕິດຕັ້ງສຳເລັດ</u> (Installation Voucher)

ສະໜອງໄຟຟ້າ ໃຫ້ຜູ້ທຸກຍາກ

"Power to the Poor"

ໜັງສືຄ້ຳປະກັນເງິນສົດ ຈຳນວນ 700.000 ກີບ ໂດຍບໍ່ມີດອກເບ້ຍ ເພື່ອນຳໃຊ້ເຂົ້າໃນ ໂຄງການໄຟຟ້າສຳລັບຄອບຄົວທຸກຍາກ Voucher for a credit of LAK 700,000 at no interest, for use in the "Power to the Poor" program

ຊື່ຫົວໜ້າຄອບຄົວ:
Name of head of household:
ເຮືອນເລກທີ: Household number
ນ້ຳເບີຜູ້ໃຊ້ໄຟຟ້າ: EDL consumer number:
ບ້ານ: Village:
ເມືອງ: District:
ແຂວງ:

ລາຍເຊັນ ແລະຈ້ຳຕາ ຟຟລ EdL stamp and signature:
ວັນທີ ອອກໜັງສືຄ້ຳປະກັນ: Date of voucher issuance
ວັນທີສຳເລັດວງກການຕິດຕັ້ງ ໂດຍ ກຕຟ: Date of completion of installation work by ECI:
ລາຍເຊັ ຂອງຜູ້ກວດກາເຕັກິກປະຈຳສາຂາ Technical Signature of Branch

ລາຍເຊັ ຂອງຫົວໜ້າຄອບຄົວ ຢັ້ງຢືນການສຳເລັດວງກ ຂອງ ກຕຟ Household signature for completion of work by ECI:

ຂໍ້ມູ ກາ ສຳຫຼວດຕົວຈິງຂອງບ້າ ຈາກທີມງາ ຟຟລ ແລະ ກຕຟ

	ຈຳ ວ ຫົວໜ້າຄອບຄົວທີ່	ຈຳ ວ ຫົວໜ້າຄອບຄົວທີ່ເປັ
	ເປັ ຜູ້ຍິງ	ผู้ຊาย
ຈຳ ວ ຄົວເຮືອນ		
ຈຳ ວ ຄອບຄົວທີ່ບໍ່ມີໄຟຟ້າໃຊ້		
ຈຳ ວ ຄອບຄົວທີ່ຖືກເລືອກເຂົ້າໃ		
โดງภา		
ຈຳ ວ ຄອບຄົວທີ່ບໍ່ຖືກເລືອກເຂົ້າ		
ໃ ໂຄງກາ		

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ເຂັ າຍບ້າ

Village checklist

Have all non-electrified households been surveyed? Have all non-eligible households received dis-qualification statements? Have all eligible households signed a credit agreement and been given a voucher?

	Female Headed Households	Male Headed Households
Total Households		
Households without electricity		
Households joining the project		
Households not joining the project		