

2. Joint Evaluation Report

JOINT EVALUATION REPORT  
ON  
JAPANESE TECHNICAL COOPERATION  
FOR  
MID-TERM EVALUATION OF  
ELECTRIC POWER TECHNICAL STANDARD ESTABLISHMENT  
IN LAO PEOPLE'S DEMOCRATIC REPUBLIC

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

MINISTRY OF INDUSTRY AND HANDICRAFTS (MIH)

September 4, 2001

Vientiane

Lao People's Democratic Republic

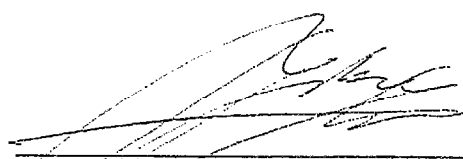
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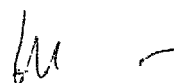
September 4, 2001

Vientiane

Lao People's Democratic Republic



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Department of Electricity  
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1. Schedule of joint evaluation

1.1 Schedule of preliminary evaluation and analysis

(August 7 – August 15, 2001)

August 7 (Tue).....Meeting with Japan International Cooperation Agency (JICA) office, Ministry of Industry and Handicrafts (MIH), Electricite du Laos (EDL)

August 8 (Wed).....Interview to JICA experts

August 9 (Thu).....Interview to JICA experts

August 10 (Fri) .....Interview to counterparts

August 11 (Sat).....Arrangement of material

August 12 (Sun).....Arrangement of material

August 13 (Mon) .....Meeting with Department of Electricity (DOE)

Interview to counterparts

August 14 (Tue).....Interview to JICA Individual experts

Arrangement of material

August 15 (Wed).....Arrangement of material

Surveying facilities of EDL

1.2 Schedule of joint evaluation

(August 28 — September 4, 2001)

August 28 (Tue).....Meeting with Embassy of Japan, JICA office, MIH, DOE

August 29 (Wed)..... Interview to JICA experts and counterparts

August 30 (Thu)..... Interview to counterparts

Discussion with DOE

August 31 (Fri) .....Discussion with DOE on Minutes of Meeting (M/M) and Joint evaluation report

September 1 (Sat) .....Making final draft of M/M, its annex and Joint evaluation report

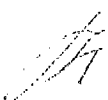
Surveying facilities of EDL

September 2 (Sun) .....Making final draft of M/M, its annex and Joint evaluation report

September 3 (Mon) ....Interview to JICA Individual experts

Discussion with DOE on final draft of M/M and Joint evaluation report

September 4 (Tue) ..... Joint Coordinating Committee Meeting, Signing of M/M and Joint evaluation report

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## 2. Members of the Joint Evaluation Team

### 2-1 The Japanese team

Mr. Takanori TANAKA (Leader)

Deputy Managing Director

Mining and Industrial Development Cooperation Department

Japan International Cooperation Agency

Ms. Naoko MATSUDA (Technical Cooperation Planning)

Assistant Director - International Cooperation

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Mr. Takumi IWABUCHI (Hydropower Civil Engineering)

Assistant Manager

Administration Department

International Cooperation Center

Japan Electric Power Information Center, Inc.

Mr. Takehisa MIYAHARA (Hydropower Generation and Transformation)

Managing Director

Japan Electric Power Information Center Inc

President

International Cooperation Center

Mr. Shigeo IMAMURA (Transmission and Distribution)

Assistant Manager

Administration Department

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Mr. Naohisa YOSHIFUJI (Project Management)

Staff

Second Technical Cooperation Division

Mining and Industrial Development Cooperation Department

Japan International Cooperation Agency

Mr. Yoshiki MIZUGUCHI (Evaluation Analysis)  
Staff  
Overseas Projects Office  
Civil & Architectural Engineering Department  
Chubu Electric Power Co., Inc.

## 2-2 The Laotian team

Mr. Houmphone BULYAPHOL  
Director General  
Department of Electricity  
Ministry of Industry and Handicrafts

Mr. Viraphonh VIRAVONG  
General Manager  
Electricite du Laos

## 3. Method of evaluation

Evaluation was conducted based on Project Cycle Management (PCM) method. The Joint Evaluation Team (the Team) examined Project Design Matrix (PDM) which was attached to the Minutes of Discussion of the Implementation Study signed on March 7, 2000. The Team visited the site of the Project on Electric Power Technical Standard Establishment in Lao People's Democratic Republic (the Project) and had a series of interviews with Japanese experts, counterparts and other related organizations. Consequently, the Team confirmed the situation of the accomplishment of the Project in terms of inputs, activities, outputs and project purpose stated in the PDM. The Team also conducted evaluation with the following 5 components.

### 3-1 Efficiency

Evaluate how the results stand in relation to the effort made and resources, how economically the resources were converted to the outputs, and whether the same results could have been achieved by other better methods.

### 3-2 Effectiveness

Evaluate the extent to which the purpose has been achieved, and whether the Project purpose can be expected to be achieved on the basis of the outputs of the Project.

### 3-3 Impact

Foreseeable or unforeseeable, as well as favorable or adverse effects the Project has upon the target groups and persons affected by the Project.

### 3-4 Relevance

Evaluate the degree to which the Project can still be justified in relation to the national and regional priority levels given to the theme.

### 3-5 Sustainability

Evaluate the extent to which the positive effects of the Project will continue after external assistance has been concluded.

## 4. Results of evaluation

### 4-1 Summary

#### 1) Efficiency

Machinery and equipment, experts, full-time and part-time counterparts, building and facilities were appropriately inputted by the time of mid-term evaluation. Despite the slight delay of material by the Japanese side, Output 1 was almost achieved as planned and Output 2 and 3 are on achievement along the Work Plan.

#### 2) Effectiveness

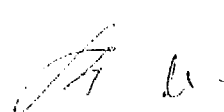
It was confirmed that Output 1 was almost achieved, Output 2 is securely being progressed with the technical transfer of the experts and Output 3 is going to be achieved since the counterparts had performed presentation at the Interim Seminar and mini workshops. Considering the rest of cooperation term, it is evaluated that the Project Purpose will be achieved by the end of the Project.

#### 3) Impact

Through seminars, mini workshops, newspapers and other media, etc., importance, role and function of the Lao Electric Power Technical Standard were broadly acknowledged by the engineers, university representatives and nation.

#### 4) Relevance

Due to no enacted Lao Electric Power Technical Standard, there exist many facilities that had employed different technical standards. Under this situation, many problems had been caused,



furthermore, many projects are planned at this moment. Then it is the most important issues to establish and enact the Lao Electric Power Technical Standard. At the same time, the Lao Electricity Law that defines establishment of the Lao Electric Power Technical Standard is scheduled to be enacted soon. Under these situations, it is strongly expected to establish the Lao Electric Power Technical Standard as early as possible.

Therefore, the Overall Goal and the Project Purpose are still consistent with the needs.

#### 5) Sustainability

DOE was established in 1994 as one of national organization in MIH, and is only organization that is responsible for electricity sector in Lao P. D. R. Meanwhile, there are some anxious points in forecast of financial budget at the Laotian side. The counterparts of DOE and EDL began to utilize the transferred expertise from the Japanese experts. EDL, as a utility, had already organized the team to follow up the Lao Electric Power Technical Standard in advance. Then, it is expectable that the Lao Electric Power Technical Standard would be smoothly introduced and accepted by the nation.

Therefore, forecast of sustainability is in good condition.

#### 4-2 Details

The evaluation on five items, such as efficiency, effectiveness, impact, relevance and sustainability, are summarized in the following charts.

##### 1) Efficiency

Inputs	Results
Machinery and Equipment	<ol style="list-style-type: none"> <li>1. Machinery, equipment and materials had been provided as bare essentials of training and establishing the Lao Electric Power Technical Standard, and have been utilized under good condition.</li> <li>2. Books provided from the Japanese side reached to the Project after 11 months from the start of the Project.</li> </ol>
Experts	<ol style="list-style-type: none"> <li>1. Long-term and short-term experts of each technical field were appropriately chosen and met the needs of the project.</li> <li>2. Quantity and quality of experts are reasonable and well balanced.</li> </ol>
Counterpart training in Japan	<ol style="list-style-type: none"> <li>1. Counterpart training in Japan has been done well in the timing, period, etc. including additional acceptance in number.</li> </ol>
Building and facilities	<ol style="list-style-type: none"> <li>1. Building and room for the Project had been provided by the Laotian side since the start of the Project.</li> <li>2. Library room has been provided by the Laotian side in timing with arrival of the books.</li> </ol>



	3. The facilities of the project are utilized quite well.
Counterparts	1. Two (2) management staff, five (5) full-time counterparts and thirteen (13) part-time counterparts have been assigned to the Project from the start of the Project. 2. All the counterparts have adequate ability for the Project activities.

## 2) Effectiveness

Output 1 Necessary information for Lao Electric Power Technical Standard will be collected	The information related to various data in hydropower dams, hydropower stations, substations, transmission lines and distribution lines through field investigation had been almost gathered. The Project sent questionnaires to IPP and consultant companies, and acquired planning and construction data. Furthermore, the Project gathered information related to technical standards in foreign countries using various books. Through these activities, basic information for the counterparts and concerned staff who establish and maintain the Lao Electric Power Technical Standard has been collected.
Output 2 Necessary technique for establishing / maintaining Lao Electric Power Technical Standard will be mastered	Laotian staff in the Project gained more understanding of related role, importance and contents of technical standard and has been accumulating basic knowledge for electricity technology based on the gathered information through Output 1. These activities have been discussed through the meetings that were held every week in each field. Also such new technology as the underground transmission line was understood by the counterparts as well as the basic knowledge.
Output 3 Necessary contents of Lao Electric Power Technical Standard will be grasped	The Project made comparison tables of the technical standards in foreign countries including Japan in each field, then staff has understood the difference in between. Moreover, the Project picked up necessary items for the Lao Electric Power Standard plan and made the draft articles of the Lao Electric Power Technical Standard based on the information and technique acquired through Output 1 and 2. The counterparts presented the draft articles of the Lao Electric Power Technical Standard at the Interim Seminar and mini workshops.

## 3) Impact

Variety of impacts	Results
Positive impacts which are expected	1. Seventy-nine (79) Laotian and sixteen (16) Japanese participated in the Inception Seminar held in November 2000. In this seminar, the participants understood the relationship between the Lao Electricity Law and the Lao Electric Power Technical Standard, role and function of technical standard, etc.

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	<p>2. Sixty-nine (69) Laotian, twenty-six (26) Japanese and two (2) Cambodian participated in the Interim Seminar held in July 2001. In this seminar, the Project provided and explained the draft articles of the Lao Electric Power Technical Standard and the participants involving the university representatives understood the contents.</p> <p>3. Other electric staff understood the role and contents of the Lao Electric Power Technical Standard through mini workshops.</p> <p>4. The Laotian side gained more understanding on how to plan the transmission lines by themselves.</p> <p>5. By this Project, EDL staff has newly made single line diagrams, arrangement figures, etc., at the same time DOE started to organize the information of the electric facilities.</p>
Negative impacts which are expected	In our evaluation, we could not detect any negative impact.
Positive impacts which are unexpected	<p>1. News paper such as Vientiane Times and a local paper, TV and radio introduced the Project several times, and the Laotian nation acknowledged the purpose and outline of the Project.</p> <p>2. The Interim Seminar brought an idea to the university representatives to have cooperative relationship with the counterparts to edit the technical terminology from English to Lao language.</p>
Negative impacts which are unexpected	In our evaluation, we could not detect any negative impact.

#### 4) Relevance

Relevance with National Policies	<p>Due to no enacted Lao Electric Power Technical Standard, there exist many facilities that had employed different technical standards. Under this situation, many problems had been caused, furthermore, many projects are planned at this moment. Then it is the most important issues to establish and enact the Lao Electric Power Technical Standard. At the same time, the Lao Electricity Law that defines establishment of the Lao Electric Power Technical Standard is scheduled to be enacted soon. Under these situations, it is strongly expected to establish the Lao Electric Power Technical Standard as early as possible.</p> <p>Therefore, the Overall Goal and the Project Purpose are still consistent with the needs.</p>
Relevance with Residents	<p>The Lao nation desires stable and safe electricity under economic growth. The electric power outage and voltage drop will decrease after constructing generators, transmission and distribution lines using the Lao Electric Power</p>

	Technical Standard. Therefore, since the Lao nation will get benefit through the Project, the Overall Goal and the Project Purpose are consistent with their needs.
Relevance with Japanese Policies	Japanese policies to cooperate developing countries have been shifting from infrastructure cooperation to intellectual cooperation such as establishment of laws. The purpose of the Project is to train staff to establish and maintain the Lao Electric Power Technical Standard through establishing technical standard and this is exactly an intellectual cooperation. Thus, the Overall Goal and the Project Purpose of the Project are still consistent with the Japanese policies.

### 5) Sustainability

Policy aspects	DOE in MIH is the only organization which is responsible for administration of electric power. The alignment with EDL that is the state own electric power utility in Lao P. D. R. is fine. MIH continuously assigned staff and secures budget to DOE. Since MIH will strongly assist DOE, the forecast of sustainability about policy aspects is good.
Technological aspects	The transferred technique from Japanese experts has been established in DOE and EDL staff, and they have shared information on mastered technique through rollouts. The forecast of technical sustainability is in good condition.
Environmental aspects	Beneficial point by establishing the Lao Electric Power Technical Standard in the environmental aspect is that safety of the constructive structure is enhanced and that water discharge for natural conservation is secured. Accordingly public safety and the downstream environment are sustained.
Socio-cultural aspects	By establishing the Lao Electric Power Technical Standard, positive influence will be toward socio-cultural aspects through economic growth. However, negative influence toward it has not been identified at the time of the mid-term evaluation.
Economic and Financial aspects	There are some anxious points in forecast of financial budget at the Laotian side.
Institutional and management aspects	DOE was established in 1994 as one of national organization in MIH, and is only organization which is responsible for electricity sector in Lao P. D. R. However, the Project is time-limited, and will be dissolved at the end of the Project and the mastered technique through the Project might be scattered after the Project. However, EDL as a utility had already organized the team to follow up the Lao Electric Power Technical Standard in advance. Then, it is expectable that the Lao Technical Standard would be smoothly introduced and accepted by the nation. The forecast of institutional sustainability is in good condition.

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## 5. Conclusion

- 5-1 At the time of the mid-term evaluation, the Project activities have been achieved along the lines of the Work Plan which the Project made. Since the Relevance of the Overall Goal and the Project Purpose is confirmed and the Project activities have not changed, there is no necessity to make any modification on the Project plan.
- 5-2 The Japanese side dispatched long-term and short-term experts in each field according to the R/D. The Laotian side assigned the Project Director, the Project Manager and full-time and part-time counterparts adequately according to the R/D. The Project activities have been achieved smoothly on the Project organization. Therefore, there is no necessity to make any modification on the Project organization.
- 5-3 At the time of the mid-term evaluation, Output 1 was almost achieved as planned and others were confirmed to be smoothly carried out along the plan. Considering the rest of cooperation term, the Project purpose is expected to be achieved by the end of the Project.

## 6. Recommendations

- 6-1 Addressing the way to enact the Electric Power Technical Standard, dispatch of short-term experts will be needed in the third year of the Project under no long-term technical experts.
- 6-2 Since the Project leaves the draft of the Lao Electric Power Technical Standard only in English, it is considerable that accurate translation into Lao language will be quite crucial. Therefore the Laotian side needs to pay sufficient attention on this point.
- 6-3 DOE needs to implement, amend and revise the Lao Electric Power Technical Standard continuously after the end of the Project. Then it is necessary for DOE to conduct safety examination and inspection for the electric facilities based on the Lao Electric Power Technical Standard. Therefore it is expected that DOE should strengthen its organization duly.

