

**ASIAN DEVELOPMENT BANK**

**TAR:PHI 36554**

**TECHNICAL ASSISTANCE**

**TO THE**

**REPUBLIC OF THE PHILIPPINES**

**FOR**

**PROMOTING GOOD GOVERNANCE IN THE  
RESTRUCTURED POWER SECTOR**

**July 2003**

## CURRENCY EQUIVALENTS

(as of 9 June 2003)

Currency Unit	=	peso (P)
P1.00	=	\$0.0188
\$1.00	=	P53.32

## ABBREVIATIONS

ADB	–	Asian Development Bank
DOE	–	Department of Energy
EPIMB	–	Electric Power Industry Management Bureau
EPIRA	–	Electric Power Industry Reform Act
ERC	–	Energy Regulatory Commission
MEDP	–	missionary electrification development plan
NPC	–	National Power Corporation
PDP	–	power development plan
PPIAF	–	Public-Private Infrastructure Advisory Facility
PSALM	–	Power Sector Assets and Liabilities Management Corporation
PSRP	–	Power Sector Restructuring Program
SPUG	–	Small Power Utilities Group
TA	–	technical assistance
TDP	–	transmission development plan
TRANSCO	–	National Transmission Corporation
USAID	–	United States Agency for International Development

## NOTE

In this report, "\$" refers to US dollars.

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## I. INTRODUCTION

1. As the privatization of the National Power Corporation (NPC) and the establishment of a competitive electricity market are in progress, the Government of the Republic of the Philippines requested the Asian Development Bank (ADB) to provide advisory technical assistance (TA) in order to promote good governance in the restructured power sector and to sustain the progress achieved under the ADB-supported Power Sector Restructuring Program (PSRP).<sup>1</sup> A Fact-Finding Mission that was conducted from 2 February to 3 March 2003 reached an understanding with the Government on the objectives, scope, cost estimates, financing, and implementation arrangements of the TA.<sup>2</sup> The TA framework is in Appendix 1.

## II. ISSUES

2. To address the problems facing the Philippine power sector, the Government decided to restructure and privatize the electric power industry. The centerpiece of the restructuring of the power industry was the passage of the Electric Power Industry Reform Act (EPIRA) in June 2001 and promulgation of the implementing rules and regulations in February 2002. The EPIRA established a new legal and regulatory framework for the power sector and enabled unbundling the power industry into generation, transmission, distribution, and supply sectors. The regulatory function will be performed by the newly established, independent Energy Regulatory Commission (ERC). The Department of Energy (DOE) will be responsible for the formulation of policies for the planning and implementation of a comprehensive program for efficient electricity supply. The EPIRA also created Government-owned corporations, i.e. the Power Sector Assets and Liabilities Management Corporation (PSALM) to manage the privatization of NPC, and the National Transmission Corporation (TRANSCO) to take possession of NPC's transmission assets to be operated by a private sector concessionaire. The role of NPC will be reduced to the operation of the Small Power Utilities Group (SPUG) responsible for providing power generation and its associated power delivery systems in areas that are not connected to the national transmission system.

3. With the creation of these new public sector entities and the expected entry of private sector players in the industry, promotion of good governance is essential to ensure transparent and reasonable electricity prices in a competitive market and full accountability to achieve reliable electricity supply in the country. While the new legal and regulatory framework has been established by EPIRA, there is still potential conflict between DOE's policy-making functions and ERC's regulatory functions. It is important to draw a clear distinction between those regulations that are appropriately exercised by the Government and those that should be left to an independent economic regulator. It is necessary to undertake governance assessment to formulate relevant recommendations for streamlining the role of DOE in the restructured power sector and its relations with ERC. Other areas that have been identified as key to promote good governance in the power sector include: (i) institutional capacity of DOE to undertake its new mandates in the restructured power sector; and (ii) public-private partnership to accelerate and sustain rural electrification. All these issues will be addressed by the TA.

4. To effectively deliver the new mandate under EPIRA, President Arroyo approved the reorganization of DOE in August 2002 and established a new unit within the DOE, i.e. the Electric Power Industry Management Bureau (EPIMB). The EPIMB will have the following functions: (i) supervise the restructuring of the power sector with a view to creating a

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<sup>1</sup> ADB. 1998. *Loan to the Republic of the Philippines for the Power Sector Restructuring Program*. Manila.

<sup>2</sup> The TA first appeared in *ADB Business Opportunities* (Internet edition) on 19 March 2003.

competitive electricity market; (ii) formulate plans and programs that would ensure efficient and reliable electricity supply; and (iii) formulate plans and strategies on rural electrification. For the task (i) the ongoing ADB TA for transition to a competitive electricity market<sup>3</sup> is providing needed expertise to DOE for the establishment of the wholesale electricity spot market, while this TA will specifically assist DOE in undertaking the tasks (ii) and (iii) through capacity building of EPIMB.

5. As part of its policy-making functions, the EPIMB will prepare the power development plan (PDP) and approve the transmission development plan (TDP) which will be prepared by TRANSCO. The PDP will provide an annual plan for managing electricity demand through energy-efficient programs and for the upgrading, expansion, rehabilitation, and maintenance of power generation and transmission facilities. In accordance with the guidelines of the PDP, TRANSCO will propose the TDP for managing the transmission system efficiently through effective planning for expansion, upgrading, rehabilitation, and maintenance and this will be implemented after its approval by EPIMB.

6. The EPIMB will also prepare the missionary electrification development plan (MEDP) to specify the respective roles of public and private sectors in rural electrification and provide a time-bound action plan including capital investment, operations, and generating capacity additions. The Government has an accelerated rural electrification program that targets all barangays by 2006. By the end of 2002, electrification at the barangay level was around 85%, leaving about 5,500 barangays unelectrified, which are mostly located in isolated or remote areas. Innovative public-private partnerships are required to expand electrification in these difficult areas. Operation in these areas will be opened to the private sector, which will provide the service with government subsidies through a competitive bidding process.

7. The power sector restructuring process in the Philippines has now entered into a critical phase. As the lead financing agency in the power sector in the Philippines, ADB will continue to review and monitor the privatization process and conduct regular policy dialog with the Government. After the power sector's restructuring, the expansion of generation capacity and transmission networks will be carried out primarily by the private sector. ADB's future role will be mainly to assist the Government in pursuing further reforms to promote good governance, strengthen the regulatory framework of the power sector, ensure healthy market competition and support rural electrification. The TA has been formulated in consultation with other donors to avoid duplication. The World Bank, the Japan Bank for International Cooperation and the United States Agency for International Development (USAID) are providing TA to DOE to strengthen its capacity in other critical areas including monitoring system for the implementation of EPIRA, promotion of new and renewable energy, and harmonization of market rules and grid code.

8. Moreover, in view of the importance of the ERC in ensuring good governance in the power sector, ADB has coordinated with USAID to provide institutional support to ERC to strengthen its role in the restructured power sector. The consultants engaged by ADB and USAID, including former regulators from developed countries, have been instrumental in assisting ERC in undertaking its functions. In particular, ADB's on-going TA (footnote 3) helped ERC to develop a performance-based regulation framework for power transmission and distribution, which is critical for the privatization of transmission assets. Further, ADB has recently secured a grant of \$300,000 from the Public-Private Infrastructure Advisory Facility

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<sup>3</sup> ADB. 2002. *Technical Assistance to the Philippines for a Competition Policy for the Electricity Sector*. Manila.

(PPIAF)<sup>4</sup> to assist ERC in dealing with regulatory issues affecting distribution utilities and electric cooperatives.

### III. THE TECHNICAL ASSISTANCE

#### A. Purpose and Output

9. The long-term goal of ADB's assistance is to ensure the quality, reliability, security, and affordability of electricity supply in the Philippines. The TA supports this goal by (i) strengthening DOE in order to fulfill its new mandate in the restructured power sector, and (ii) promoting good governance to sustain the achievements of the power sector restructuring program. Based on the recommended policies and strategies, the TA will identify areas that need further support.

10. The governance assessment to be conducted by the TA will help clarify the respective roles of DOE and ERC, and promote good governance in the restructured power sector by : (i) strengthening of DOE's planning capacities through capacity building of EPIMB; and (ii) formulation of the five-year MEDP to promote public and private partnerships for the expansion of rural electrification in nonviable areas. The TA will also identify areas in which the power sector may need further strengthening.

#### B. Methodology and Key Activities

11. The TA will adopt a participatory approach in the development of power sector by consulting target groups, communities, relevant government agencies, stakeholders, and non-governmental organizations active in the area covered by the TA. National inventories will be taken to create a database for the preparation of the PDP, TDP, and MEDP. Consultations, and field visits will also be undertaken to ensure successful implementation of the mandates of the EPIRA. Partnerships will be established with counterpart jurisdictions in other countries with relevant experience to help EPIMB staff absorb lessons learned on power sector restructuring and development of competitive markets.

12. The capacity building of EPIMB include the following key activities:

- (i) undertaking a necessary governance assessment and formulating necessary recommendations to remove potential conflicts between DOE's policy-making functions and ERC's regulatory functions;
- (ii) undertaking institutional analysis and formulation of recommendations to strengthen EPIMB to undertake its new mandates in the restructured power sector;
- (iii) development of implementation plans in generation and transmission that are consistent with power sector restructuring strategy;
- (iv) development of national inventories relating to existing generation, transmission and distribution capacities, through workshops, field visits and stakeholders' consultations;
- (v) provision of software for the development of a national database including a system for on-line submission of information required for review and preparation of the PDP, TDP and MEDP; and provision of relevant training to EPIMB staff;

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<sup>4</sup> The PPIAF is a multilateral TA facility aimed at helping developing countries improve their infrastructure through private sector involvement. The PPIAF is owned and directed by participating aid agencies including ADB.

- (vi) establishment of partnerships with counterpart agencies in other countries that have undertaken electricity restructuring in order to learn from their experience;
- (vii) development of a monitoring and management system of electrification and related livelihood development projects, and provision of relevant training to EPIMB staff; and
- (viii) provision of necessary computers, office equipment and other multimedia devices that are necessary for the establishment of databases; and provision of relevant training to EPIMB staff for the use of this equipment.

13. The development and formulation of the MEDP will include the following key activities:

- (i) formulation of recommendations on public-private partnership to accelerate and sustain rural electrification in nonviable areas;
- (ii) review of the definition of rural electrification, and inclusion of relevant recommendations in the MEDP;
- (iii) listing of unelectrified barangays eligible for inclusion in the MEDP, and development of energy database available in the barangays that can be tapped;
- (iv) identification of appropriate parameters, e.g., technical, financial, and socioeconomic impact of the project, that should be taken into consideration;
- (v) review of ongoing missionary electrification projects for existing SPUG areas and subsidy scheme appropriate for the MEDP;
- (vi) formulation of financial/technical evaluation models for prioritization and project cost evaluation methodology for MEDP projects; and
- (vii) development of a sample business case for SPUG's existing areas that are suitable for privatization as well as indicative timetable.

14. In consultation with relevant government agencies and other stakeholders in the power sector, the TA consultants will be required to identify areas, if any, where further strengthening of power sector is necessary. In particular, the following activities will be undertaken:

- (i) identification of gaps, if any, in institutional capacity and financial resources to fully implement the PDP, TDP, and MEDP;
- (ii) recommendation of policy initiatives to further promote public-private sector partnerships in the implementation of the PDP, TDP, and MEDP; and
- (iii) identification of areas in the power sector that require further strengthening, and preparation of an assistance plan for the power sector.

### **C. Cost and Financing**

15. The total cost of the TA is estimated to be \$1.15 million equivalent, comprising a foreign exchange cost of \$730,000 and local currency costs of \$420,000 equivalent. The TA will be financed, on a grant basis, by ADB's TA funding program in the amount of \$800,000 equivalent, which will include the entire foreign currency cost and \$70,000 equivalent in local currency costs. The Government will contribute the remaining \$350,000 equivalent in kind, including office accommodation in Manila, counterpart staff remuneration, secretarial support, and workshops. The Government assured the availability of counterpart services, facilities, and funds by the TA's expected commencement date. Details of the cost estimates and financing plan are in Appendix 2.

#### **D. Implementation Arrangements**

16. DOE will be the Executing Agency for the TA and will work in close collaboration with ERC and other relevant government agencies. DOE will assign a project coordinator prior to contract negotiations, and counterpart staff to work with the consultants.

17. The TA will be carried out over 12 months starting in September 2003 for completion by September 2004. Consultants' inputs will amount to about 30 person-months (16 person-months international and 14 person-months domestic). The international consultants will comprise (i) a team leader with extensive experience in power sector restructuring and privatization (6 person-months); (ii) a rural electrification specialist with experience in new and renewable energy technologies (3 person-months); (iii) a legal/regulatory specialist (3 person-months); and (iv) an information technology specialist with experience in developing energy databases (4 person-months). The domestic consultants will include (i) a rural electrification and socioeconomic development expert (6 person-months); (ii) an information technology expert on databases (6 person-months); and (iii) communication experts (2 person-months). The consultants will be engaged by ADB through a firm using the quality- and cost-based selection method in accordance with its *Guidelines on the Use of Consultants* and other arrangements satisfactory to ADB for engaging domestic consultants. The simplified technical proposal format will be used. Equipment for use by the consultants will be procured in accordance with ADB's *Guidelines for Procurement*. The detailed terms of reference for the consultants are in Appendix 3.

18. The consultants will submit short monthly progress reports summarizing project activities, issues, and constraints for the duration of the TA. In addition, four major reports will be submitted: an inception report within 2 weeks from TA commencement, an interim report of TA progress within 6 months, and a draft final report towards the end of the TA. After receiving the inception report, ADB will undertake an inception mission to discuss and agree with the Executing Agency and the consultants on the various milestones of TA implementation. A TA review mission will be fielded after the receipt of the interim report to monitor the progress of TA implementation and make necessary adjustments. A tripartite meeting will be held at the end of TA implementation to discuss the consultants' draft final report. The final report will be prepared by the consultants within 15 days after the tripartite meeting has taken place among DOE, the consultants, and ADB to discuss the draft final report.

19. All computer models, databases, and training materials developed by the consultants including office equipment purchased during the TA will be transferred to DOE upon completion of the TA, and thereafter will remain the property of the Government.

#### **IV. THE PRESIDENT'S DECISION**

20. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$800,000 on a grant basis to the Government of the Republic of the Philippines for Promoting Good Governance in the Restructured Power Sector, and hereby reports this action to the Board.

## TECHNICAL ASSISTANCE FRAMEWORK

<b>Design Summary</b>	<b>Performance Indicators/Targets</b>	<b>Monitoring Mechanisms</b>	<b>Assumptions And Risks</b>
<p><b>Goal</b></p> <ul style="list-style-type: none"> <li>• To help achieve sustained economic growth through improving the quality, reliability, security, and affordability of electricity supply</li> </ul>	<ul style="list-style-type: none"> <li>• Increased gross national product per capita</li> <li>• Reduced national debt</li> <li>• Reduced unemployment</li> </ul>	<ul style="list-style-type: none"> <li>• Annual economics, statistics</li> </ul>	<ul style="list-style-type: none"> <li>• Increasing quality and affordability of electricity supply will improve economic outcomes</li> <li>• Economic benefits will accrue to all sectors of the economy, especially the poor</li> </ul>
<p><b>Purpose</b></p> <ul style="list-style-type: none"> <li>• To sustain power sector reform through improved governance</li> <li>• To strengthen DOE's institutional capacity to fulfill its new mandate in the restructured power sector</li> </ul>	<ul style="list-style-type: none"> <li>• Restructuring and privatization of the power sector</li> <li>• Establishment of competitive markets</li> </ul>	<ul style="list-style-type: none"> <li>• Economic and energy reports</li> <li>• Periodic reviews of key institutional changes</li> </ul>	<ul style="list-style-type: none"> <li>• Timely implementation of the privatization plan</li> <li>• Government's full commitment to the reform process</li> <li>• Independence of the regulatory body</li> </ul>
<p><b>Outputs</b></p> <ul style="list-style-type: none"> <li>• Recommendations made to streamline DOE's role and assistance provided to the newly established EPIMB</li> <li>• Full MEDP prepared</li> <li>• Plan prepared and recommendations made on future assistance from development financial institutions</li> </ul>	<ul style="list-style-type: none"> <li>• ADB and DOE to ensure fielding consultants as per the terms of reference by September 2003</li> <li>• Submission of the final report by the consultant in August 2004 and completion of TA by September 2004</li> <li>• Final report reviewed and accepted by the Government and ADB in accordance with the TOR</li> </ul>	<ul style="list-style-type: none"> <li>• Consultants' reports</li> <li>• TA review missions</li> <li>• TA completion report</li> </ul>	<ul style="list-style-type: none"> <li>• Availability of government counterpart support</li> </ul>
<p><b>Key Activities</b></p> <ul style="list-style-type: none"> <li>• Development of implementation plans consistent with power sector restructuring strategy</li> <li>• Establishment of partnerships with counterpart agencies in</li> </ul>	<ul style="list-style-type: none"> <li>• ADB and DOE to ensure fielding and provision of consultants as per the TOR by September 2003</li> <li>• Submission of the final report by the</li> </ul>	<ul style="list-style-type: none"> <li>• Consultants' reports</li> <li>• TA review missions</li> <li>• TA completion report</li> </ul>	<ul style="list-style-type: none"> <li>• Selection of qualified consultants in accordance with ADB's <i>Guidelines on the Use of Consultants</i></li> </ul>

<b>Design Summary</b>	<b>Performance Indicators/Targets</b>	<b>Monitoring Mechanisms</b>	<b>Assumptions And Risks</b>
<p>other countries</p> <ul style="list-style-type: none"> <li>• Development of a national database for generation, transmission, and distribution development plan preparation</li> <li>• Listing of unelectrified barangays for inclusion in the MEDP, and development of a database of energy resources</li> <li>• Review of ongoing missionary electrification projects and subsidy scheme</li> <li>• Assessment of the financing requirements</li> </ul>	<p>consultant in August 2004 and completion of TA by September 2004</p> <ul style="list-style-type: none"> <li>• The final report reviewed and accepted by the Government and ADB in accordance with the TOR</li> </ul>		
<p><b>Inputs</b></p> <ul style="list-style-type: none"> <li>• 30 person-months: 14 domestic, and 16 international. The consultants will field a team with expertise in power sector restructuring, power utility privatization, rural electrification (including new and renewable technologies), institutional/regulatory issues</li> <li>• ADB TA grant of \$800,000 and government contribution of \$350,000 in kind</li> </ul>	<ul style="list-style-type: none"> <li>• ADB and DOE to ensure fielding and provision of consultants as per the TOR by September 2003</li> <li>• Submission of the final report by the consultant in August 2004 and completion of TA by September 2004</li> </ul>	<ul style="list-style-type: none"> <li>• Consultants' reports</li> <li>• TA review missions</li> <li>• TA completion report</li> </ul>	<ul style="list-style-type: none"> <li>• Selection of qualified consultants in accordance with ADB <i>Guidelines on the Use of Consultants</i></li> </ul>

ADB= Asian Development Bank, EPIMB= Electric Power Industry Management Bureau, MEDP= missionary electrification development plan, TA= technical assistance, TOR= terms of reference.

**COST ESTIMATES AND FINANCING PLAN**  
(\$'000)

Item	Foreign Exchange	Local Currency	Total Cost
<b>A. Asian Development Bank Financing<sup>a</sup></b>			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	480	0	480
ii. Domestic Consultants	0	56	56
b. International and Local Travel	30	4	34
c. Reports and Communications	5	0	5
2. Software, Equipment <sup>b</sup>	65	4	69
3. Training, Seminars, and Consultations <sup>c</sup>	55	0	55
4. Contingencies	95	6	101
<b>Subtotal (A)</b>	<b>730</b>	<b>70</b>	<b>800</b>
<b>B. Government Financing</b>			
1. Office Accommodation	0	120	120
2. Counterpart Staff	0	130	130
3. Secretarial Support and Communication	0	80	80
4. Consultation and Workshops	0	20	20
<b>Subtotal (B)</b>	<b>0</b>	<b>350</b>	<b>350</b>
<b>Total</b>	<b>730</b>	<b>420</b>	<b>1,150</b>

<sup>a</sup> Financed by ADB's TA funding program.

<sup>b</sup> Relevant computer software will be acquired to support the establishment of energy databases. Equipment to be purchased includes the required server, desktop and laptop computers, and related accessories for the operations of energy databases. All the software and equipment procured will be turned over to the Department of Energy upon completion of the technical assistance.

<sup>c</sup> This component provides for up to four officials to participate in contact visits for up to 2 weeks to learn and update their knowledge and skills on power sector restructuring and operations of competitive markets, and will cover travel, accommodation, and materials.

Source: Asian Development Bank estimates.

## DETAILED TERMS OF REFERENCE FOR CONSULTANTS

### A. International Consultants

#### 1. Power Sector Restructuring Specialist/Team Leader

1. As the team leader, the power sector restructuring specialist will undertake the following tasks:
  - (i) Coordinate technical assistance implementation, including training activities, and ensure timely delivery of all tasks by team members.
  - (ii) Develop implementation plans that are consistent with power sector restructuring strategy.
  - (iii) Design and develop implementation plans that are consistent with power sector reform activities and rural electrification, and provide relevant training to EPIMB staff.
  - (iv) Undertake institutional analysis and formulation of recommendations to strengthen EPIMB to undertake its new mandates in the restructured power sector.
  - (v) Identify gaps, if any, in institutional capacity and financial resources to fully implement the power development plan (PDP), transmission development plan (TDP) and MEDP.
  - (vi) Initiate and establish partnerships with counterpart agencies in other countries in jurisdictions that have done electricity restructuring.
  - (vii) Assess adjustment costs and financing as the power sector reform is fully implemented.
  - (viii) Identify areas that require further assistance from development financing institutions and prepare an assistance plan for the power sector.

#### 2. Rural Electrification Specialist

2. The rural electrification specialist will undertake the following tasks:
  - (i) Formulate recommendations on public-private partnership to accelerate and sustain rural electrification in nonviable areas.
  - (ii) Review the definition of rural electrification in barangays and make relevant recommendations to be included in the missionary electrification development plan (MEDP).
  - (iii) List unelectrified barangays for inclusion in the MEDP and develop a database of energy resources available in the barangays that can be tapped whenever feasible.
  - (iv) Identify appropriate parameters, e.g., technical, financial and socioeconomic impact of the project, including promotion of indigenous and renewable energy source.
  - (v) Review ongoing missionary electrification projects for existing SPUG areas and a subsidy scheme appropriate for the MEDP.
  - (vi) Develop a sample business case for the Small Power Utilities Group's (SPUG) existing areas that are suitable for privatization, including program sequence of sales as well as indicative timetable.
  - (vii) Identify the financial and socioeconomic impacts of projects recommended in the MEDP, and provide relevant training to EPIMB staff.

- (viii) Formulate financial evaluation models for prioritization and a project cost evaluation methodology for MEDP projects, and provide relevant training to DOE staff.

### **3. Legal/Regulatory Specialist**

3. The legal/regulatory will undertake the following tasks:

- (i) Undertake a sector governance assessment including regulatory and legislative requirements, institutional strengthening, and results-based management for key agencies.
- (ii) Formulate necessary recommendations to streamline the role of the Department of Energy (DOE) in the restructured power sector and its relations with the Energy Regulatory Commission.
- (iii) Recommend policy initiatives to further promote public-private sector partnerships in the implementation of the PSP, TDP and MEDP.
- (iv) Assist the team leader in formulating operational strategies for the Asian Development Bank in providing further assistance to the power sector.

### **4. Information Technology Specialist**

4. The information technology specialist will undertake the following tasks:

- (i) Develop a national database including a system for on-line submission of information requirements for generation, transmission, and distribution development plan preparation, and provide relevant training to EPIMB staff.
- (ii) Develop a monitoring and management system of electrification and non-electrification projects, and provide relevant training to EPIMB staff.
- (iii) Assist in procurement and installation of necessary software, computers, office equipment, and other multimedia devices for EPIMB, and provide of relevant training to DOE staff.

## **B. Domestic Consultants**

5. The domestic consultants will include (i) a rural electrification and socioeconomic development expert; (ii) an information technology expert on energy databases; and (iii) communication experts. The domestic consultants will

- (i) collect, review, and analyze data and information required for the preparation of the MEDP, and other related reports as specified;
- (ii) assist in developing promotional kits relating to power sector reform activities and rural electrification, and implement the necessary education campaign;
- (iii) assist the international consultants in coordinating with key stakeholders in the country;
- (iv) assist the international consultants in organizing the workshops; and
- (v) perform other activities as assigned by the team leader.