

ASIAN DEVELOPMENT BANK

TAR:PHI 37752-01

PROPOSED

TECHNICAL ASSISTANCE
(Financed by the Japan Special Fund)

TO THE

REPUBLIC OF THE PHILIPPINES

FOR

**INSTITUTIONAL STRENGTHENING OF ENERGY REGULATORY
COMMISSION AND PRIVATIZATION OF NATIONAL POWER CORPORATION**

December 2004

CURRENCY EQUIVALENTS

(as of 1 December 2004)

Currency Unit	=	peso (P)
P1.00	=	\$0.0178
\$1.00	=	P56.130

TECHNICAL ASSISTANCE CLASSIFICATION

Targeting	–	General intervention
Classification		
Sector	–	Energy
Subsector	–	Energy sector development
Themes	–	Sustainable economic growth, Governance, Private sector development
Subthemes	–	Promoting economic efficiency and enabling markets, Public governance, Privatization

ABBREVIATIONS

ADB	–	Asian Development Bank
EPIRA	–	Electric Power Industry Reform Act
ERC	–	Energy Regulatory Commission
IPP	–	independent power producer
IT	–	information technology
NPC	–	National Power Corporation
PPIAF	–	Public-Private Infrastructure Advisory Facility
PSALM	–	Power Sector Assets and Liabilities Management Corporation
TA	–	technical assistance
TRANSCO	–	National Transmission Corporation
WESM	–	wholesale electricity spot market

NOTE

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

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I. INTRODUCTION

1. To sustain progress achieved under the Power Sector Restructuring Program,¹ the Government of the Republic of the Philippines requested the Asian Development Bank (ADB) to provide advisory technical assistance (TA) to strengthen the institutional capacity of the newly established Energy Regulatory Commission (ERC) and facilitate the privatization of National Power Corporation (NPC). A Fact-Finding Mission that was conducted from 18 August to 21 September 2004 reached an understanding with the Government on the TA objectives, scope, cost estimates, financing, and implementation arrangements.² The TA framework is in Appendix 1.

II. ISSUES

2. In the early 1990s, Luzon experienced severe power shortages, leading to prolonged blackouts and adverse impacts on the economy. The Asian financial crisis in 1997–1998 suppressed economic growth and reduced electricity demand, and NPC's debt service burden spiraled upward to unsustainable levels. To address these problems, the Government decided to restructure and privatize the electric power industry. The blueprint for restructuring, the Electric Power Industry Reform Act (EPIRA), which Congress passed in June 2001, enables unbundling the power sector into generation, transmission, distribution and supply, and provides the legal framework for sector restructuring and privatization of NPC. In accordance with EPIRA, the Energy Regulatory Board was converted to a statutory regulatory body, ERC. The Power Sector Assets and Liabilities Management Corporation (PSALM) was created to oversee and manage the privatization of NPC's generation assets (consisting of 41 plants with a total rated capacity of about 7,000 MW), award the concession for National Transmission Corporation's (TRANSCO) transmission operations, and take over the debt liabilities of NPC.

3. Since then, the Government proceeded with the privatization of NPC's generation and transmission assets. As of early December 2004, the bidding for one major power plant of 600 MW (Masinloc Thermal Power Plant) and five minihydro power plants had been completed. Subsequent to two unsuccessful biddings for TRANSCO's concession in 2003, bilateral discussions with interested bidders were initiated, but were terminated without conclusion in October 2004. Apart from unfavorable external factors that affected all emerging markets and political uncertainties associated with the elections, slower than expected progress was partly due to perceived regulatory uncertainties related to ERC's institutional capacity and technical expertise. Some of ERC's rulings proved to be vulnerable to court challenges, which were filed on the basis of lack of strict compliance with rules and procedures set in relevant laws. Initial diagnosis undertaken by the Fact-Finding Mission indicated the weakness of ERC in the following areas: (i) employees are unable to undertake thorough analysis due to lack of knowledge and skills in regulation and rate-setting methodologies, (ii) the document tracking and filing system is poor as business processes are not clearly defined, and (iii) staff are inexperienced in handling consumer complaints and dispute resolution.

4. The success of restructuring will depend to a major degree on the credibility of sector regulation. A strong, independent, and professional regulator working as a team to transform the electric industry and balance the interests of all stakeholders is envisioned. The chairman and the four commissioners of ERC are appointed by the President of the Philippines. ERC has 250 staff members working in five divisions: Planning and Information, Regulatory Operations,

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

² The TA first appeared in *ADB Business Opportunities* (Internet edition) on 15 October 2004.

Market Operations, Legal Service, and Finance and Administration. Given the wide range of ERC's responsibilities and tasks, as well as their complexity and politically sensitive nature, ERC's initial difficulties in rendering timely and technically sound decisions have not been surprising. It is noted that ERC is making steady progress in fulfilling its mandate set by EPIRA. To date, ERC has completed the requirements for open access by unbundling the rates of 133 distribution utilities, removing intergrid cross subsidies in 2002, and starting to remove intra-grid and interclass cross subsidies. With the provisional approval of the increase in NPC's generation rate and removal of the cap on the cost of purchased power, ERC has balanced the demands of customers and investors. To lighten ERC's regulatory burden and make its decisions more predictable, ERC's responsibilities, organization, internal administrative processes, and regulatory procedures need to be reassessed. On the basis of the reassessment, appropriate measures will have to be taken to improve the efficiency and transparency of ERC's decision-making processes and, as a result, the consistency and predictability of its decisions. The TA will help in this endeavor.

5. Power sector restructuring has reached a critical juncture. While the legal framework has been in place and the wholesale electricity spot market (WESM) is being established, the progress has been slow in the privatization of generation and transmission assets. NPC's contracts with independent power producers (IPPs), with take-or-pay provisions, need to be administered in a way that is consistent with the competitive market. IPP administrators will have to be selected through a competitive bidding process. PSALM has also to conduct revaluation of NPC generation assets which is needed to justify tariff increases prior to NPC's privatization and encourage private investors to bid for these assets.³ As for the concession of TRANSCO, after the two rounds of unsuccessful bidding for the concession and termination of bilateral discussions with interested bidders, PSALM decided to launch fresh competitive bidding in the first half of 2005. A fair, transparent, and competitive bidding process will enhance potential investors' confidence in the privatization process. To facilitate and speed up the privatization process, PSALM's institutional capacity needs to be reinforced. The TA will draw lessons learned from the previous experience and international best practice to assist PSALM in undertaking its privatization mandate.

6. The TA is designed as an integral part of ADB's assistance to the Philippine power sector in accordance with the country strategy and program and will complement the following ongoing operations: (i) TA for institutional strengthening of the DOE;⁴ (ii) TA for facilitating the transition to WESM;⁵ and (iii) a loan to establish the WESM and reinforce transmission systems.⁶ ADB has also managed a Public-Private Infrastructure Advisory Facility grant⁷ to assist ERC in dealing with regulatory issues affecting distribution utilities and rural electric cooperatives. These activities have been closely coordinated with those of other funding agencies in the sector, particularly the United States Agency for International Development, which has also been assisting ERC in preparing regulatory guidelines.

³ On 22 June 2004, a joint NPC/PSALM petition was filed to ERC for a tariff increase of P1.87/kWh. However, on 4 September 2004, the ERC gave only provisional approval for a P0.98/KWh tariff increase. One of the main reasons for the reduced tariff increase was the lack of proper asset revaluation.

⁴ ADB. 2003. *Technical Assistance to the Republic of the Philippines for Promoting Good Governance in the Restructured Power Sector*. Manila.

⁵ ADB. 2002. *Technical Assistance to the Republic of the Philippines for a Competition Policy for the Electricity Sector*. Manila.

⁶ ADB. 2002. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the National Power Corporation for the Electricity Market and Transmission Development and Technical Assistance Grant to the Republic of the Philippines for the Transition to Competitive Electricity Market*. Manila.

⁷ This 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.

III. THE PROPOSED TECHNICAL ASSISTANCE

A. Purpose and Output

7. The goal of ADB's operation in the power sector is a financially sustainable, efficient, and secure power supply that arrests the drain on the Government's finances caused by the power sector, thus freeing up resources for the social sectors. The purpose of the TA is to gain investors confidence by enhancing ERC's efficiency and independence, and provide the necessary financial and technical advice to PSALM for the privatization of NPC.

8. The Government has announced a new timetable for privatizing NPC's generation assets and TRANSCO. The target is to privatize 70% of NPC's eligible generation capacity by the end of 2005 and award TRANSCO's concession in the first half of 2005. Moreover, IPP administrators will be selected to manage IPP liabilities in a competitive market. The TA will provide necessary support to ERC and PSALM to facilitate and assist in the implementation of the Government's ambitious program. The consultants' outputs will also help ADB to implement a new Power Sector Development Program, which is currently being processed. By the end of TA implementation, the following main outputs are expected:

- (i) ERC's institutional capacity and public confidence in ERC's impartiality and independence reinforced; and
- (ii) Significant progress in privatizing NPC's eligible generation assets achieved, appointment of IPP administrators selected, and TRANSCO's concession awarded.

B. Methodology and Key Activities

9. The TA will be implemented in two parts. Part A provides capacity building for ERC and part B provides advisory services to PSALM for privatization.

10. For part A, the main task is to strengthen ERC's institutional capacity as a competent and efficient regulator. Specifically, the following activities will be undertaken:

- (i) **Institutional strengthening of ERC.** Formulate and develop a strategic planning process; strengthen institutional capacity relative to organization structure, operations, systems, program resources, and resource management (including financial, technological, human, and physical resources), internal audit, and accountability mechanisms; develop a code of ethics and professional conduct for the entire ERC; strengthen the legal competence of ERC; strengthen technical competence and transparency in rate setting, adjustments, and tariff calculations; and review existing budgetary constraints and recommend a mechanism for proper financial management and accountability.
- (ii) **Improving regulatory processes.** Review, rationalize, and streamline current administrative and regulatory rules of procedure for due process and automation purposes; complete drafting of all necessary rules of procedure, and codify all of ERC's rules of procedure; develop and strengthen the consumer complaints mechanism and the quasi-judicial grievance and dispute resolution mechanisms; develop and strengthen the mediation mechanism for disputes among market participants; and establish a "case flow" management and tracking system for the handling of all regulatory and quasi-judicial processes.

- (iii) **Improving accountability and transparency of regulation.** Develop a comprehensive information plan to improve monitoring of regulated and non-regulated entities; propose an integrated information management system with the corresponding business models; and establish rules for and monitor the publication, by ERC on its web site, of the full text of the applications and decisions as appropriate, including tariff adjustment, consumer complaints, and market player disputes.
- (iv) **Enhancing technical competence of ERC staff.** Provide training in the newly introduced performance-based regulation for setting transmission and distribution tariffs, evaluation of utilities performance and monitoring of compliance with service standards, monitoring of competitive markets, and protection of consumers' and industry's interests; and develop staff operational manuals for implementing performance-based rate setting and market monitoring and surveillance.

11. The main purpose of part B is to provide a diagnosis of the main reasons for the limited success in privatization to date and make recommendations on how to improve the process. Specifically, the following activities will be undertaken:

- (i) Draw lessons from the privatization experience of the last 3 years and recommend necessary adjustments in the methods, sequence, and timing of the privatization process.
- (ii) Assist PSALM in assessing necessary generation and transmission capital expenditure during the transition period before the privatization of NPC's assets.
- (iii) Assist PSALM in evaluating IPP contract liabilities, and bidding and selecting IPP administrators that will promote competition and minimize PSALM's net liability.
- (iv) Propose and design necessary credit enhancement schemes based on feedback from potential investors.
- (v) Review NPC's existing records of assets, make appropriate updates/adjustments to the existing asset values, and make a field inventory of a representative number of high-value assets in Luzon, Visayas, and Mindanao.
- (vi) Train PSALM/NPC personnel to familiarize them with the best international practices of privatization and valuation methodology proposed to be adopted for NPC's generation assets.

C. Cost and Financing

12. The total cost of the TA is estimated at \$1,715,000 million equivalent, comprising foreign exchange of \$1,085,000 and local currency of \$630,000 equivalent. The Government has requested ADB to finance \$1,200,000 equivalent covering the entire foreign exchange cost and \$115,000 equivalent of the local currency cost. The TA will be financed by ADB on a grant basis from the Japan Special Fund funded by the Government of Japan. The Government through two Executing Agencies will contribute the remaining cost in kind, including office accommodation in Manila, counterpart staff time input, secretarial support, and workshops (see Appendix 2 for details of the cost estimates and financing plan).

D. Implementation Arrangements

13. ERC will be the Executing Agency for part A of the TA and PSALM for part B. In close collaboration with other relevant agencies and stakeholders, ERC and PSALM will assign counterpart staff to work with the consultants.

14. The TA will be carried out over 24 months starting in March 2005 for completion by February 2007. Consultants' inputs will amount to about 57 person-months (37 international and 20 domestic). Two consulting firms will be engaged for part A and part B of the TA, respectively, by ADB using the quality- and cost-based selection method (using simplified technical proposal format) in accordance with ADB's *Guidelines on the Use of Consultants*. For part A, the services of the consulting firm will be for 34 person-months (22 international and 12 domestic) over the full period from March 2005 to February 2007. The team of international consultants (22 person-months) will comprise (i) a regulatory institutional expert/team leader (10), (ii) a regulatory-quasi-judicial processes expert (5), (iii) a utilities regulation and market monitoring expert (2), and (iv) an information technology (IT) expert (5). Domestic consultants will comprise one legal and regulatory specialist (6) and one IT/business process engineer (6) to assist the international consultants. For part B, the services of the consulting firm will be for 23 persons-months (15 international, and 8 domestic) for 14 months, from March 2005 to April 2006. The team of international consultants will comprise (i) a privatization advisor/team leader (7), (ii) a financial advisor (3), (iii) a technical advisor-power generation specialist (3), and (iv) a technical advisor-power transmission specialist (2). The domestic consultants will comprise accountants/asset valuation specialists (8) to assist the international consultants. The detailed terms of reference for the consultants are in Appendix 3.

15. 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 4 weeks from TA commencement, an interim report on TA progress within 6 months, and a draft final report toward the end of the TA. After receiving the inception report, ADB will undertake an inception mission to discuss and agree with the ERC, PSALM, and the consultants on the milestones of TA implementation. A TA review mission will be fielded after the interim report is received to assess the progress of TA implementation and make necessary adjustments. For each part of the TA, a tripartite meeting among the executing agency, consultants, and ADB 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.

16. All training materials developed by the consultants and office equipment purchased under the TA will be transferred to ERC and PSALM upon completion of the TA, and thereafter will remain the property of the Government.

IV. THE PRESIDENT'S RECOMMENDATION

17. The President recommends that the Board approve the provision of technical assistance not exceeding the equivalent of \$1,200,000 on a grant basis to the Government of the Philippines for Institutional Strengthening of Energy Regulatory Commission and Privatization of National Power Corporation.

TECHNICAL ASSISTANCE FRAMEWORK

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions (A) and Risks (R)
<p>Goal</p> <p>Ensure financially sustainable, efficient, and secure power supply by completing power sector restructuring</p>	<p>Reduced level of power sector debt</p> <p>After 2008, no countrywide blackouts</p>	<p>DOE's statistics as contained in annual Philippines Energy Plan</p>	
<p>Purpose</p> <p>To ensure investor confidence by reinforcing ERC's credibility as independent and efficient regulator, and facilitating successful privatization of NPC and TRANSCO</p>	<p>Reduced number of appeals or complaints against ERC's rulings</p> <p>70% of eligible NPC assets privatized</p>	<p>Surveys of investor and consumer concerns by Social Weather Station and chambers of commerce</p> <p>DOE/PSALM's report to Congress on the implementation of EPIRA</p>	<p>(A) Macroeconomic and political stability</p> <p>(A) Strong fiscal stabilization program</p> <p>(A) Support of reforms by stakeholders</p>
<p>Outputs</p> <p>Regulatory framework and performance improved</p> <p>Private sector participation increased</p>	<p>ERC's impartiality, efficiency, and competence established by mid-2006</p> <p>Regulatory framework for wholesale and retail competition completed by mid-2006</p> <p>TRANSCO's concession awarded and at least 30% NPC's eligible generation assets, including at least one major power plant of 200 MW or more sold by end-2005</p>	<p>All petitions to ERC handled within the statutory time limit with no backlogs of cases</p> <p>Guidelines issued and posted on ERC web site</p> <p>Concession and sale agreements</p>	<p>(R) Weakening of the political will in the executive and legislative branches of the Government to proceed with restructuring</p> <p>(R) Political interference in ERC's decision making</p> <p>(A) There are interested investors.</p> <p>(R) Deteriorating investment climate.</p>
<p>Key Activities</p> <p>Institutional strengthening of ERC</p> <p>Improving regulatory process</p>	<p>Operational guidelines, rules of procedures established</p> <p>ERC's integrated information management system implemented</p>	<p>Consultants' reports</p> <p>TA review missions</p> <p>Automated business procedures, staff operational manuals</p>	<p>(A) Selection of qualified consultants in accordance with ADB's <i>Guidelines on the Use of Consultants</i></p> <p>(A) ADB, ERC, and PSALM to ensure fielding of consultants by March 2005 as per the terms of reference</p>

Continued on next page

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions (A) and Risks (R)
<p>Improving accountability and transparency of regulation</p> <p>Training programs</p> <p>Revaluation of NPC's assets</p> <p>Advisory services to PSALM for NPC's privatization and selection of IPP administrators</p>	<p>Greater public disclosure</p> <p>50 ERC/PSALM staff members trained</p> <p>Amended valuation of assets</p> <p>Bidding conducted for the privatization of generation and transmission assets</p>	<p>ERC web site</p> <p>ERC annual reports</p> <p>NPC/PSALM/annual reports</p> <p>DOE/PSALM's report to Congress on the implementation of EPIRA</p> <p>Technical assistance completion report</p>	<p>(A) Continued support by Government</p>
Inputs			
<p>ADB grant</p> <p>Government funding (in kind)</p> <p>International Consultants:</p> <ul style="list-style-type: none"> - Institutional expert for power utilities regulation - Regulatory expert for dispute resolution - Market monitoring expert - Information technology expert - Privatization advisor - Financial advisor for asset valuation - Technical advisor for power generation - Technical advisor for power transmission <p>Domestic consultants: Legal and regulatory advisors, asset appraiser</p> <p>ADB staff input</p>	<p>\$1,200,000</p> <p>\$515,000</p> <p>10 person-months</p> <p>5 person-months</p> <p>2 person-months</p> <p>5 person-months</p> <p>7 person-months</p> <p>3 person-months</p> <p>3 person-months</p> <p>2 person-months</p> <p>20 person-months</p> <p>20 staff-days per year</p>	<p>ADB disbursement records</p> <p>TA progress reports</p> <p>Consulting contract and billing records</p> <p>Technical assistance performance report</p>	<p>(A) Availability of counterpart support</p>

ADB = Asian Development Bank, DOE = Department of Energy, ERC = Energy Regulatory Commission, EPIRA = Electric Power Industry Reform Act, IPP = independent power producer, MW = megawatt, NPC = National Power Corporation, PSALM = Power Sector Assets and Liabilities Management Corporation, TA = technical assistance, TRANSCO = National Transmission Corporation.

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Foreign Exchange	Local Currency	Total Cost
A. Asian Development Bank Financing^a			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	870	0	870
ii. Domestic Consultants	0	80	80
b. International and Local Travel	50	10	60
c. Reports and Communications	10	0	10
2. Software, Equipment ^b	55	5	60
3. Training, Seminars, and Consultations	20	10	30
4. Contingencies	80	10	90
Subtotal (A)	1,085	115	1,200
B. Counterpart Financing			
1. Office Accommodation	0	220	220
2. Counterpart Staff	0	190	190
3. Secretarial Support and Communication	0	65	65
4. Consultation and Workshops	0	40	40
Subtotal (B)	0	515	515
Total	1,085	630	1,715

^a Financed by the Japan Special Fund, funded by the Government of Japan.

^b Relevant computer software will be acquired to support the automation of Energy Regulatory Commission (ERC)'s business process. Equipment to be purchased includes the required server, desktop and laptop computers, and related accessories. All the software and equipment procured will be turned over to ERC upon completion of the technical assistance.

Source: Asian Development Bank estimates.

DETAILED TERMS OF REFERENCE FOR CONSULTANTS

A. Capacity Building for the Energy Regulatory Commission

1. Part A of this technical assistance will require the services of the following consultants.

1. Regulatory Institutional Expert/Team Leader (international, 10 person-months)

2. As team leader, the regulatory institutional specialist must have expertise and extensive experience in the administration and operational processes of energy regulators and in the organizational, fiscal, and administrative operation of a comparable regulatory body in other countries, including relevant experience in the Philippines. The consultant will undertake the following tasks:

- (i) Coordinate technical assistance implementation, including training activities, and ensure timely delivery of all tasks by team members.
- (ii) Review and reassess the responsibilities, organizational setup, internal administrative processes and regulatory procedures of the Energy Regulatory Commission (ERC).
- (iii) On the basis of the reassessment, develop and help implement a plan for ERC's institutional strengthening relative to organizational structure, operations, systems, program resources, and resource management (including financial, technological, human, and physical resources), internal audit, and accountability mechanisms.
- (iv) Review existing budgetary constraints, identify new sources of revenues, and formulate a program for complete self-funding and financial accountability.
- (v) Inventory and assess existing revenue sources, rates, collection system and procedures, institutional arrangements and resources, and accounting/monitoring procedures.
- (vi) Implement changes to the revenue management scheme and define assumptions to be used in pricing the services to be rendered by ERC, improve pricing configuration of existing revenue sources, and formulate pricing configurations for new revenue sources.
- (vii) Develop change management schemes, including system installation, training, operation, hand-holding, and maintenance; and assist other regulatory experts in preparing the administrative, regulatory, or statutory amendments needed to implement the systems.
- (viii) Assist ERC in developing a code of ethics and professional conduct for the entire ERC and a separate code of judicial conduct for ERC officers exercising quasi-judicial functions; assist ERC in developing codes of corporate governance for ERC and all entities it regulates.
- (ix) Design and assist ERC to implement a training curriculum to enhance technical competence of ERC staff in the following areas: performance-based rate setting methodology, evaluation of utilities performance and monitoring of compliance with service standards, monitoring of competitive markets, and protection of consumers' and industry's interests.

2. Regulatory Quasi-Judicial Process Expert (international, 5 person-months)

3. The regulatory quasi-judicial process expert must have expertise and extensive experience in handling dispute and consumer complaints, with relevant experience in the Philippines. The consultant will undertake the following tasks:

- (i) Review, rationalize, and streamline current administrative and regulatory rules of procedure for due process and automation purposes, complete drafting of all necessary rules of procedure, and codify all of ERC's rules of procedure.
- (ii) Review ERC's existing procedures for resolving consumer complaints, develop and strengthen the consumer complaints mechanism and the quasi-judicial grievance and dispute resolution mechanisms, and, if warranted, establish a mediation mechanism for disputes among market participants.
- (iii) Establish a case-flow management and tracking system for handling all regulatory and quasi-judicial processes.
- (iv) Review, rationalize, and streamline current administrative and regulatory rules of procedure for due process purposes.
- (v) Propose measures and prepare the implementation instruments to make ERC's decision-making processes more efficient, transparent, consistent, and predictable.
- (vi) Develop a staff operational manual for implementing the transmission wheeling rate guidelines, and a staff operational manual for implementing the distribution wheeling rate guidelines.
- (vii) Develop a staff operational manual for market monitoring and surveillance including rate monitoring.
- (viii) Conduct hands-on training on the above manuals and guidelines.

3. Utilities Regulation and Market Monitoring Expert (international, 2 person-months)

4. The utilities regulation and market monitoring expert must have expertise and extensive experience in the regulation of power utilities in a competitive market. The consultant will undertake the following tasks:

- (i) Develop a staff operational manual for implementing the transmission wheeling rate guidelines, and a staff operational manual for implementing the distribution wheeling rate guidelines.
- (ii) Develop a staff operational manual for market monitoring and surveillance including rate monitoring.
- (iii) Conduct hands-on training on the above manuals and guidelines.

4. Information Technology Expert (international, 5 person-months)

5. The information technology (IT) expert must have extensive experience with e-commerce and business automation. The consultant will undertake the following tasks:

- (i) Develop a comprehensive communication plan to improve monitoring of regulated and nonregulated entities by providing adequate and sufficient information periodically, including distribution of information kits on relevant issuances of ERC to the appropriate industry participant.

- (ii) In coordination with the regulatory quasi-judicial processes expert, automate and improve the existing case management and tracking system for handling all regulatory and quasi-judicial processes.
- (iii) Develop and enhance IT resources and infrastructure based on a formulated e-commerce plan and the corresponding business models, including cost estimates and an implementation plan.
- (iv) Procure necessary IT equipment including software.

5. Legal and Regulatory Specialist (domestic, 6 person-months)

6. The legal and regulatory specialist will advise all international consultants on current law and the legality of the reform proposal. The consultant will also help draft the administrative, regulatory, or statutory amendments or enactments necessary to implement or strengthen the reforms proposed by the other consultants, and work with the organizational expert on the review of the legal purview of the Department of Budget and Management, Civil Service Commission, and Commission on Audit over the reform proposals to strengthen the institutional capacity of ERC.

6. Information Technology/Business Process Engineer (domestic, 6 person-months)

7. The engineer will assist the international IT expert to develop IT resources and infrastructure based on a formulated e-commerce plan and the corresponding business models, and assist in procuring IT equipment including software.

B. Advisory Services to PSALM

8. Part B of this technical assistance will require the services of the following consultants.

1. Privatization Advisor/Team Leader (international, 7 person-months)

9. As team leader, the privatization advisor must have extensive experience with privatization of power companies, with relevant experience in the Philippines. The consultant will undertake the following tasks:

- (i) Coordinate technical assistance implementation, including training activities, and ensure timely delivery of all tasks by team members.
- (ii) Review and draw lessons from the experience of the last 3 years and recommend necessary adjustments, if necessary, in the methods, sequence, and timing of privatization of generation and transmission assets.
- (iii) Advise PSALM in the privatization of generation and transmission assets, and make relevant recommendations based on best international practices.
- (iv) Propose and design necessary credit enhancement schemes based on feedback from potential investors.
- (v) Assess PSALM's independent power producer (IPP) liabilities and propose mitigating measures to minimize PSALM's liabilities in competitive markets.
- (vi) Assist PSALM in selecting of IPP administrators.
- (vii) Coordinate and undertake revaluation of the generation assets of National Power Corporation (NPC).
- (viii) Assist PSALM in preparing and filing petitions on generation tariff adjustment to ERC before NPC's privatization.

2. Financial Advisor (Asset Valuation) (international, 3 person-months)

10. The financial advisor will have expertise and experience in valuation of power utilities' assets, with relevant experience in the Philippines. The consultant will undertake the following tasks:

- (i) Advise PSALM in the privatization of NPC's generation and transmission assets and make relevant recommendations based on best international practices.
- (ii) Propose and design necessary credit enhancement schemes based on feedback from potential investors.
- (iii) Assist PSALM in computing and filing universal charges for NPC's stranded debt and costs.
- (iv) Evaluate and recommend appropriate methods of asset valuation for purposes of accounting, tariff rate setting, taxation, insurance, and transfer of assets to be privatized.
- (v) Review NPC's existing records of assets and, by applying appropriate tests and inquiries, form an opinion on the completeness of the asset valuation base and its adequacy for the valuation exercise; make appropriate updates/adjustments to the existing asset records.
- (vi) Revalue the categories of fixed assets in accordance with NPC's listing of plant accounts on a current value basis due to price movements, technological advances, currency exchange rate movements, and other factors in accordance with sound, accepted, and consistently maintained methods of valuation.
- (vii) Provide replacement cost new, depreciation calculation and sound value of NPC's fixed assets, and the fair market value of each power station/generation asset, NPC's transmission network, including land, buildings and all assets in other categories needed to establish the identity of and allow its operation as a separate entity.
- (viii) Conduct detailed depreciation analysis of NPC's assets and recommend the assets' economic lives and remaining useful lives.
- (ix) Conduct inspection and determine the physical condition of the assets based on the guidelines on the condition of property prescribed by the Commission on Audit.
- (x) Provide appropriate training to PSALM/NPC personnel on the valuation methodology adopted for the power generation assets of NPC.

3. Technical Advisor (Power Generation) (international, 3 person-months)

11. The technical advisor on power generation will undertake the following tasks:

- (i) Advise PSALM in handling privatization of NPC's generation assets and make relevant recommendations based on best international practices.
- (ii) Assist PSALM in assessing necessary generation capital expenditure during the transition period before the privatization of NPC's assets.
- (iii) Advise PSALM in dispersing the IPP contract portfolio in a manner to promote competition and to assure potential investors in generation that NPC's IPP portfolio does not represent a dominant player in the generation market.
- (iv) Assist PSALM in negotiations with potential investors.
- (v) Inspect and determine the physical condition of the assets based on the guidelines on the condition of property prescribed by the Commission on Audit

and lead the field inventory of a representative number of high-value generation assets in Luzon, Visayas, and Mindanao to inspect the physical condition of these assets to determine their present condition, obsolescence, and other observable losses in value and to translate these observations in terms of the assets' remaining useful lives.

- (vi) Provide appropriate training to PSALM/NPC personnel on the valuation methodology adopted for the power generation assets of NPC.

4. Technical Advisor (Power Transmission) (international, 2 person-months)

12. The technical advisor on power transmission assets will undertake the following tasks:

- (i) Advise PSALM in handling privatization of transmission assets and make relevant recommendations based on best international practices.
- (ii) Assist PSALM in assessing necessary transmission capital expenditure during the transition period before the entry of a private concessionaire for TRANSCO and assist PSALM in negotiating an appropriate system expansion program with the potential bidder.
- (iii) Recommend options for the role of system operator and its relations with market operator and TRANSCO's concessionaire.
- (iv) Participate in field inventory of a representative number of high-value generation assets in Luzon, Visayas, and Mindanao with particular focus on transmission system facilities of NPC.

5. Accountants/Asset Valuation Specialist (domestic, 8 person-months)

13. The specialist will undertake the following tasks:

- (i) Collect all relevant documents, data, and information that are necessary for the revaluation exercise.
- (ii) Participate and assist in field inventory of a representative number of high-value generation assets in Luzon, Visayas, and Mindanao.
- (iii) Assist the international consultants in organizing training workshops.
- (iv) Perform other activities as assigned by the team leader.