

ASIAN DEVELOPMENT BANK

TAR:VIE 34343

TECHNICAL ASSISTANCE
(Financed by the Government of France)

TO THE

SOCIALIST REPUBLIC OF VIET NAM

FOR THE

ROAD MAP FOR POWER SECTOR REFORM

November 2001

CURRENCY EQUIVALENTS

(as of 5 November 2001)

| | | |
|---------------|---|------------|
| Currency Unit | – | Dong (D) |
| D1.00 | = | \$0.000067 |
| \$1.00 | = | D15,040 |

ABBREVIATIONS

| | | |
|-----|---|-------------------------|
| ADB | – | Asian Development Bank |
| EVN | – | Electricity of Viet Nam |
| MOI | – | Ministry of Industry |
| TA | – | technical assistance |

NOTES

- (i) The fiscal year (FY) of the Government ends on 31 December.
- (ii) In this report, "\$" refers to US dollars.

I. INTRODUCTION

1. The Government of the Socialist Republic of Viet Nam has requested advisory technical assistance (TA) from the Asian Development Bank (ADB) to prepare a Road Map for Power Sector Reform. The TA Fact-Finding Mission, conducted from 21 to 29 May 2001, reached an understanding with the Government on the objectives, scope, financing plan, implementation arrangements, and terms of reference of the TA. The TA will help the Government to identify the major issues involved in power sector reforms and to prepare a plan or road map to resolve these in a progressive manner. These reforms are in line with the Country Assistance Plan for Viet Nam (2001-2003) and the new Country Strategy and Program,¹ which include support for reform of state-owned enterprises, for policy reforms that encourage more private investment, and for some public power projects. The TA is included in the 2001 TA Program for Viet Nam.²

II. BACKGROUND AND RATIONALE

2. The Government began restructuring the nation's power sector with the establishment of Electricity of Viet Nam (EVN) in 1995. EVN is a holding company with many units, which operate with limited managerial and financial autonomy. The Government also adopted a Power Sector Policy in December 1995, which included objectives for developing a regulatory framework; including an electricity law; adopting cost-based tariffs; promoting private sector participation in power supply; increasing rural access to electricity; and undertaking demand-side management. The Government prepared an updated Power Sector Policy Statement in August 1997, which outlines legal and regulatory reforms in the sector, and espouses a progressive evolution in the structure of the power sector as well as commercialization and improved efficiency of the operating units. A high-level steering committee and a working group were also established in 1997 to prepare an electricity law. The draft Electricity Law has been revised and refined several times, and is now in its 14th draft. Draft decrees have also been prepared on various subjects under the Electricity Law. The Government approved a new Decree on Electricity Activities and Usage in August 2001, which provides rules for electricity development planning and investment, electricity production and transmission, power purchase contracts and tariff setting, state management of electric activities, etc. The work on the new electricity law and the associated regulatory framework has been supported by TA from both the World Bank and ADB.³ The Electricity Law will establish the legal foundation for transforming the power sector into a more market-oriented structure. However, the law does not explicitly define the proposed new structure and market model for the power sector. It stipulates that electricity suppliers are required to apply for separate licenses for generation, bulk supply sales, transmission, distribution, and retail supply sales activities, but it allows considerable scope for different power sector models under this general framework.

3. The draft Electricity Law does not deal with transition and implementation issues. In the worldwide power sector reform experience, transition issues are recognized as one of the most important problem areas that need attention. To address the issues described above, another TA is required to prepare a "road map" for power sector reform, which will determine in more

¹ A new Country Strategy and Program is being finalized.

² The TA first appeared in *ADB Business Opportunities* (internet version) on 11 June 2001.

³ ADB has provided assistance through TA VIE 2888: *Improvement of Power Sector Regulatory Framework*, for \$800,000, approved on 7 October 1997, and largely completed with the final report submitted in August 2000. Under that TA, draft subsidiary legislation (decrees) and regulations were prepared for the operation of the planned Electricity Regulatory Commission, plus procedures for tariff setting and demand-side management. The World Bank has provided TA on the drafting of the law itself. The decrees and the new law will be presented together to the National Assembly for final approval, expected in late 2002.

detail the most appropriate and acceptable new framework and model for power sector operations in Viet Nam; to prepare a detailed action plan to implement the agreed upon restructuring; and to resolve transition issues. This will be the first road map for this sector.

4. The TA will support several elements of ADB's new Country Strategy and Program for Viet Nam. It will support the reform of state-owned enterprises; it will improve the accountability and governance of power sector management and operations; and the power sector reforms supported by the TA will have indirect impacts on poverty reduction by improving the efficiency of power sector operations, which will eventually reduce tariffs, and by attracting more private lending and investment in the power sector, which will enable limited public sector financing to be used in other social sectors with high impact on poverty reduction.

III. THE TECHNICAL ASSISTANCE

A. Objectives

5. The TA will help the Government to define a clear and more detailed vision of the desired future power sector and market structure 5 and 10 years ahead, and to establish the steps to accomplish the reform objectives and implement restructuring with specific timetables and responsibilities assigned. This will include the following actions: (i) review the Government's Power Sector Policy Statement of 1997, and update and expand this policy paper as appropriate; (ii) review and refine power sector reform objectives; (iii) prepare a management and organization model for the power sector in Viet Nam; (iv) identify the main problems and issues that need to be resolved regarding the planned structure and market model of the power sector in the near term and in the long term, and the roles of the Government, utilities (EVN and power companies), the private sector, and other industry stakeholders; and (v) prepare detailed programs and preliminary plans (a road map) to resolve these issues and implement the restructuring, which include all the intermediate steps required to move from the current sector structure to the desired future industry and market structure in a coherent, integrated manner. The road map must recognize that power sector reform should be based on gradual development of the sector through several intermediate stages of increasing complexity and commercialization. The TA framework is presented in Appendix 1.

B. Scope

6. The consultants under the TA will assist the Government with the preparation of a "road map" to establish plans for power sector reform, and to implement these reforms. A number of problems need to be resolved ultimately in this reform program, including the important ones and the tasks listed in Appendix 2. The TA scope does not provide for detailed and final plans to solve each particular problem. Rather, the TA will prepare a road map containing a coordinated and systematic plan for addressing and resolving these problems. The TA will include the following steps:

- (i) Review the power sector reform objectives, and determine if revisions need to be made.
- (ii) Review the progress made to date in the planning and implementation of power sector reforms; and also review previous TAs on power sector reform in Viet Nam and the progress made under them.
- (iii) Determine the main reform tasks and transition issues that need to be addressed and solved in the near future, and in the longer term, in order to implement the reforms in an effective manner.

- (iv) Establish priorities in addressing these problems, and prepare a detailed program to address and resolve these tasks in an integrated manner (the “road map”).
- (v) Prepare brief task reports for the important tasks that need to be resolved soon, which should include a description of options and alternative solutions, and a review of international experience with similar reforms. Conduct workshops to discuss the options, and reach consensus on the best solutions for Viet Nam.
- (vi) Prepare descriptions of the scope and terms of reference for more detailed studies on each of the major reform tasks.
- (vii) Prepare a final report that summarizes the current policies and overall plans for power sector reform, and that describes the program of future work required to address each of the major tasks and transition issues involved in the reform. The program, or road map, should describe time schedules for each task, various milestones, who is responsible for each task, the interrelationships between the different tasks, and the work required to complete each task.
- (viii) Organize a seminar to present the final draft report of the TA with participation of international experts, representatives from ADB and the World Bank, and concerned Government officers.

7. The consultants’ first task will be to prepare an inception report with a detailed work plan for conducting the TA. They will also prepare task reports on various subjects as required in para. 6 (v). They will conduct several workshops to discuss the reform program and to reach consensus on the overall framework for reforms and the road map to implement it. The consultants, together with the Reform Working Group (para. 11), will prepare reports that describe the scope and terms of reference of future work required on specific tasks in the reform program. They will also prepare a final report that summarizes the recommended and agreed upon power sector reform program, and that describes the road map to implement it. The final report, or an executive summary thereof, should be suitable for publication as an ADB paper. Outline terms of reference for the consultants are in Appendix 2.

8. The TA should lead to agreement on more clearly defined goals and market structure for the power sector in Viet Nam. Detailed work plans and programs should be developed to solve the various problems and issues described above. These work plans should include timetables; transition phases; and the respective roles and responsibilities of government agencies, EVN, and the private sector for implementing power sector reform. The TA will facilitate the implementation of sector reforms, help resolve transition issues, and lead to effective achievement and operation of a restructured power sector.

9. The conclusions and recommendations of the final report, with the detailed road map to implement power sector reform, should be based on the consensus of the Reform Working Group, who will need to review and approve the final report. ADB, the World Bank, and other aid agencies will then be asked to support the reform program in principle, and also to prepare future loans and TA projects that support major components under this program. The road map will be critical in focusing all stakeholders, both within the Government and among funding agencies, on the same jointly agreed upon reform program.

C. Cost Estimates and Financing Plan

10. The estimated total cost of the TA is \$500,000, of which the foreign exchange cost is \$376,000 and the local currency cost is \$124,000 equivalent. Cost details are shown in Appendix 3. The Government of France will provide \$400,000 equivalent to cover all foreign

exchange costs and \$24,000 equivalent in local currency costs. The Government of Viet Nam and EVN will contribute \$100,000 in local currency equivalent in the form of services and facilities, including the travel and per diem of counterpart staff and the costs of local workshops.

D. Implementation Arrangements

11. The Ministry of Industry (MOI), which is responsible for state management of the power sector in Viet Nam, will be the Executing Agency for this TA. The minister and vice-minister of MOI will provide guidance to the Reform Working Group and consultants, and will help to organize meetings for review and comments from other government offices. MOI will appoint a Reform Working Group of about 12 people, led by a project manager who will be a senior professional, to work with the consultants on the road map on an intensive basis. The Reform Working Group will include representatives of not only MOI and EVN, but also of other ministries and offices concerned with state-owned enterprise reform and private investment in infrastructure. The Reform Working Group will also include adequate technical and management expertise in the power sector. This group will be established before the international consultants are appointed. Representatives of the private sector will also be consulted as appropriate to seek their views on the best plans for power sector restructuring.

12. It is important to emphasize that primary responsibility for decisions on reform objectives, and the design of the road map to implement these reforms, lies with the Government and its appointed representatives. The Reform Working Group must decide on the detailed reform objectives; it must evaluate the alternative options for implementation of the reforms; and it must be responsible for preparing detailed plans to implement the reforms. Ownership of and commitment to these planned reforms is essential if they are to succeed. The role of the consultants is not to make these decisions and prepare the detailed plans for the Reform Working Group, but to help guide them in their discussions on these problems, and focus the participants on the key issues to be addressed, to facilitate discussions, to brief the Vietnamese about international experience on how other countries have planned and implemented similar reforms, to help develop and evaluate alternative scenarios for power sector development, to advise as appropriate, and to assist the Reform Working Group in preparing more detailed plans and a road map to implement the agreed upon power sector reforms.

13. ADB will recruit international consultants to provide assistance under this TA in accordance with its *Guidelines on the Use of Consultants*. The consultants will have to be experienced in the issues related to power sector reform that are described above. About eight person-months of international consulting services will be financed under the TA budget, as well as four person-months of domestic consultants. The domestic consultants will be recruited during the inception mission under arrangements satisfactory to ADB. The TA will be implemented over a period of eight months, to commence in March 2002.

IV. THE PRESIDENT'S DECISION

14. The President, acting under the authority delegated by the Board, has approved ADB administering technical assistance to the Government of the Socialist Republic of Viet Nam in an amount not exceeding the equivalent of \$400,000, to be financed by the Government of France on a grant basis, for the purpose of designing the Road Map for Power Sector Reform, and hereby reports such action to the Board.

**VIET NAM: ROAD MAP FOR POWER SECTOR REFORM
TECHNICAL ASSISTANCE FRAMEWORK**

| Design Summary | TA Targets | Project Monitoring Mechanisms | Risks/Assumptions |
|---|--|---|--|
| <p>1. Goal</p> <ul style="list-style-type: none"> To support the establishment of a competitive, commercially managed, financially viable, and efficient power sector | | | |
| <p>2. Purpose</p> <ul style="list-style-type: none"> To prepare and reach agreement on detailed plans for reform of the power sector structure | <ul style="list-style-type: none"> Finalize new Electricity Law to unbundle sector operations. Establish independent and transparent sector regulation. Depoliticize tariff setting. Encourage more private investment in power sector. | | <ul style="list-style-type: none"> Political will is required, including willingness to allow private ownership of public infrastructure. |
| <p>3. Outputs</p> <ul style="list-style-type: none"> Road map to plan power market structure in detail Road map to plan power sector regulation in detail | <ul style="list-style-type: none"> Determine critical issues for reform of management and operation of the distribution sector. Determine critical issues for reform of transmission and dispatch operations. Determine critical issues for reform of generation and bulk power supply operations. Review if a national energy policy council is needed for policy making, and prepare initial plans. Determine requirements to ensure that the planned new energy regulatory authority is independent and effective. Determine who should be responsible for long-term power supply planning. | <p>Consultants will produce</p> <ul style="list-style-type: none"> Inception report Briefing papers on various problems and subjects Final report with plans and schedules for reform <p>ADB review missions to</p> <ul style="list-style-type: none"> discuss inception report attend some workshops attend final workshop <p>ADB will also review briefing papers.</p> <p>The World Bank will also join in reviews and workshops.</p> | <ul style="list-style-type: none"> New Electricity Law needs to be approved. Energy regulatory authority needs to be established. If commitment to reform is weak, program will be delayed and only partly implemented. |

Reference in text: page 2, para. 5)

| Design Summary | TA Targets | Project Monitoring Mechanisms | Risks/Assumptions |
|--|--|-------------------------------|-------------------|
| <ul style="list-style-type: none"> Road map to clarify tariff and pricing principles | <ul style="list-style-type: none"> Guidelines for distribution tariff setting that provide incentives for efficiency improvement, yet recognize differences in costs of supply and need for national equity. | | |
| <p>4. Activities</p> <ul style="list-style-type: none"> Appoint consultants. Identify issues and options, and prepare briefing papers. Discuss these in workshops and reach consensus on required reforms. Prepare plans for reforms. Prepare required reports, review these, and reach final agreement on road map. | <ul style="list-style-type: none"> Inception report of consultants with detailed work plan Briefing papers on various topics Workshops on the major reform issues Final workshop on draft final report | | |
| <p>5. Inputs</p> <ul style="list-style-type: none"> Consulting services with 8 person-months of international and 4 person-months of domestic consultants. Total TA budget of \$400,000 Substantial inputs from Ministry of Industry and Government officials, and ADB and World Bank staff throughout the TA | | | |

ADB = Asian Development Bank, TA = technical assistance.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

A. Introduction

1. After the consultants have been appointed, their first task will be to conduct an initial assessment of the work required and prepare an inception report with a detailed work plan to conduct the technical assistance (TA).
2. The consultants and the Reform Working Group appointed by the Government will review the power sector reform objectives, and determine if revisions to these need to be made. The consultants will review the progress made to date in the planning and implementation of power sector reforms, and also review previous TAs on power sector reform in Viet Nam and the progress made under them.

B. Major Tasks Under Power Sector Reform Program

3. The consultants will determine the main reform tasks and transition issues that need to be addressed and solved in the near future, and in the longer term, in order to implement the power sector reforms in an effective manner. These problems can be grouped into four general subjects: market structure, regulation, tariff policy, and institutional capacity, which are described in the following subsections. Very detailed plans for the reform and operation of each of these components are not expected to be prepared under the road map TA due to budget limitations, but preliminary plans should be prepared for the most urgent tasks. The main purpose of describing these components is to better understand the nature of the problems and tasks involved in power sector reform that will have to be solved in the future, and to ensure that these are included in the road map.
4. The consultants will establish priorities for addressing these problems, and prepare a detailed program to address and resolve these tasks in an integrated manner (the “road map”). They will prepare briefing notes for the important tasks that need to be resolved soon, which should include a description of options and alternative solutions, and a review of international experience with similar reforms. They will conduct workshops to discuss the options and reach consensus on the best solutions for Viet Nam.

1. Power Market Structure

5. This involves restructuring the state-owned enterprises in the power sector, i.e., Electricity of Viet Nam (EVN) and its subsidiary power companies; unbundling of EVN into separate generation, transmission, and distribution business units, with independent management and financial accounts; and then creating separate generation, transmission, and distribution companies in the long run. The market structure issues for each subsector are as follows:

- (i) For generation operations, important features of Viet Nam's power sector are that EVN currently owns and operates most power plants that supply public power, and about 60 percent of this generating capacity is hydroelectric, which includes several multipurpose projects. EVN's power plants currently operate as dependent accounting units within EVN. EVN also has power purchase agreements with some private power plants, which in 2002 will supply about 7 percent of EVN's total net generation requirements. Power purchase agreements have been signed for build-operate-transfer development of some new, large

(Reference in text, page 2, para. 6; and page 3, para. 7)

private thermal power projects, but none of these have reached financial closing or started construction yet. The private projects currently planned will operate under long-term power purchase agreements with EVN. The plans for future market structure of the generation subsector need to consider and decide upon several issues:

- (a) Determine if EVN's hydropower projects should be transformed, ultimately, into independent companies that are allowed to compete for power sales in a competitive power pool market. How would multipurpose hydro projects operate? How would several hydro projects in cascade on the same river operate? What efficiency improvements can be expected if independent companies are established? How would tariffs for such independent companies be established? If such hydro project companies sell into a competitive power pool market, total costs of bulk power supply would probably increase, since the competitive power pool prices that are set by the marginal costs of new thermal power plants will be much higher than the average accounting cost now for power from these EVN-owned hydro projects.
 - (b) Determine if and when EVN's thermal power plants should be transformed into independent companies that are allowed to compete for power sales in a competitive power pool market. What efficiency improvements would be expected? How would tariffs for such independent companies be established? The ultimate purpose of making these thermal power plants independent would be to ensure fair competition with the private sector for dispatch in a competitive power pool. When should such competition be introduced in Viet Nam? If the new independent power projects operate under long-term power purchase agreements for some period of time, with take-or-pay provisions, would continued EVN ownership of its thermal power plants represent a conflict of interest during this phase? At what stage does continued EVN ownership of its old thermal power plants create unfair competition? Should these thermal power plants be sold to the private sector at that stage, or should they simply be transformed into independent state-owned enterprises; but then how would their independence be assured?
 - (c) Determine the appropriate duration of bulk power supply contracts for new private power projects: whether these should all be long-term power purchase agreements for a period of 20 years; or whether the market structure for private power sales should change at some stage so that all bulk power is sold into a power pool with short-term contracts and spot market prices; or whether a mix of short-term, medium-term, and long-term contracts should be allowed, depending on buyer and seller preferences.
 - (d) Prepare guidelines for the private development of hydro projects, including procedures for issuing exploration licenses and development licenses, and guidelines for power purchase agreements.
- (ii) For transmission and dispatch operations, the issues are to
- (a) Determine if the responsibilities for transmission system management and dispatch, divided among four transmission companies at present should be consolidated and integrated, and if so, how this should be done.

- (b) Determine the best model to manage bulk power purchases in a competitive market for bulk power supply, considering the following options: (i) a national integrated transmission company could become the single buyer of power produced by EVN's generating companies and the private power plants; it would dispatch these as required, and sell all bulk power supply to the distribution companies; or (ii) a separate bulk power trading company, nonprofit and government-owned, could be established to manage all bulk power purchases and sales to distribution companies, with the transmission company providing only transmission services; or (iii) direct contracts could be made between the power plants and the distribution companies, and the transmission company would transmit these at an allowed tariff. A staged development is also an option, which would begin with stage (i) above, then move to stage (ii), and then to stage (iii).
 - (c) Determine the requirements for a grid code for operation of the national transmission system at various stages in the power sector restructuring, and prepare draft terms of reference for it.
- (iii) For the distribution subsector, the issues are to determine
- (a) how many distribution companies should be established; how their areas of coverage should be established; and if rural distribution should be separated from urban distribution;
 - (b) a reasonable basis for tariff setting and allowed profitability of distribution companies that will promote efficiency improvements, will ensure fair tariffs to consumers, will ensure a reasonable self-financing ratio, and could attract private investment if these companies are privatized;
 - (c) if diversified ownership of distribution should be planned in the future, and if so, when and how;
 - (d) if distribution cooperatives in rural areas are feasible, and if so, how such cooperatives should operate;
 - (e) if special assistance or subsidies for rural electrification will be required and justified after restructuring; and
 - (f) how the objectives of the Government's Rural Electrification Policy paper of 2000 can be achieved.

2. Power Sector Regulation

6. State management functions in the electricity sector should be categorized into three general areas: policy making, regulation, and ownership of state-owned enterprises and assets in the power sector. Primary responsibility for these distinct management functions should be allocated to separate agencies in a manner that overcomes current problems with overlapping responsibilities and the associated conflicts of interest. These functions are described further:

- (i) The establishment of a national energy policy council has been proposed to formulate policies for the energy sector. This council would include very senior government officials: the Prime Minister could be the chairman, and other councilors would be at the minister or deputy minister level. The road map for power sector reform needs to consider such a proposal. If this is agreed to, then it will be necessary to determine the functions and scope of responsibility of such a council, and to prepare a plan for a permanent office and staff (a secretariat) of appropriate size to support the operation of such a council.

- (ii) The creation of an independent new regulatory agency is one of the primary objectives of the new Electricity Law. To ensure the independence and credibility of this regulatory agency, the Electricity Law should reflect the following basic decisions, which need to be determined on a priority basis under the power sector road map:
 - (a) Appropriate location of the regulatory agency. This should be separate from and independent of the agencies that perform the ownership function (EVN and Ministry of Industry [MOI]). However, in the immediate term, it may be more practical for the regulatory agency to operate initially within MOI, and then transfer in a year or two to an independent location.
 - (b) Decision making powers and authority of the regulatory agency. This agency should have sufficient authority to make final decisions based on economic and technical considerations, within the framework of the new Electricity Law and government policy as determined and promulgated by the national energy policy council.
 - (c) Procedures for the appointment and removal of commissioners to the regulatory agency.
 - (d) Functions of the regulatory agency. These will include some transfer of responsibilities for such functions as tariff approvals from other agencies that have been involved in such activities in the past.
- (iii) It must be decided which agency or offices will be responsible for long-term power supply planning, including load forecasting, planning for generation expansion, transmission planning, and negotiation of power purchase agreements for new private power projects. The role of the new regulatory agency in reviewing and approving these plans also needs to be determined.

3. Power Tariff and Pricing Principles

7. The power sector reform program needs to establish fair, equitable, and transparent criteria and procedures for developing and approving electricity tariffs that allow for full cost recovery and that promote efficiency and gradual removal of subsidies. Tariff rates will need to be considered at several levels, including tariffs for bulk power supply from EVN or government-owned power plants, transmission tariffs, bulk power supply tariffs to various distribution companies, and retail tariff levels for various consumer categories.

8. Detailed procedures for setting tariffs for EVN's existing power plants have been prepared under recent World Bank TA.¹ EVN issued a regulation in April 2001 to implement these new tariffs by 1 January 2002, initially for the purpose of internal transfer pricing, and to implement commercial practices in these operations. Power plant tariffs will include a fixed capacity charge and an energy charge, with incentives to promote efficiency improvements and share cost savings with power plant staff.

9. EVN's distribution companies currently charge a uniform retail tariff throughout the country. EVN's bulk transfer price to each distribution company is set at a level that will allow it to earn a reasonable net profit, based on its current costs of operation with some adjustment for agreed upon norms. Distribution companies are allowed to retain net earnings and to use some

¹ See "Generation-Transmission Transfer Pricing System," Final Report, April 2001, prepared for EVN by Economic Consulting Associates, United Kingdom.

of these for staff bonuses, with the balance for investment in expansion. Improvements in distribution tariff design are required to bring tariffs closer to actual costs of service for each region and each consumer group, although some cross-subsidies may continue; to refine the norms for target efficiency; and to link staff bonuses to improvements in efficiency, rather than simply an automatic share of total “net earnings.”

10. The general principles for design of transmission tariffs have also been reviewed,² but such tariffs have not yet been implemented. Proper tariff setting procedures are essential in all subsectors to provide incentives required for efficiency improvements and economy at each level of power supply operations and consumption, and also to attract investment and provide retained earnings to finance sector expansion.

4. Institutional Capacity

11. The consultants will:

- (i) Assess the needs and recommend programs for capacity building and training of the institutions involved in the power sector reform program to ensure that the reforms will be implemented properly and efficiently, and will be sustainable.
- (ii) Identify cross-cutting civil service issues that will have to be resolved to implement the planned power sector restructuring, and make recommendations on how these could be addressed in the broader context of civil service reforms.

C. Main Outputs

12. The consultants will prepare task reports on various power sector reform subjects as required. They will conduct several workshops to discuss the reform program and reach consensus on the overall framework for reforms and the road map to implement this. The consultants, together with the Reform Working Group, will prepare reports that describe the scope and terms of reference of future work required on specific tasks in the reform program. They will also prepare a final report that summarizes the current policies and the recommended and agreed upon overall plans for power sector reform, and that describes the program of future work required to address each of the major tasks and transition issues involved in the reform. The program, or road map, should describe time schedules for each task, various milestones, who is responsible for each task, the interrelationships among the different tasks, and the work required to complete each task. The consultants will also participate in a seminar to present the final draft report of the TA with participation of concerned government officers and representatives from the Asian Development Bank (ADB) and the World Bank. The final report, or an executive summary thereof, should be suitable for publication as an ADB paper.

² See report on “Generation-Transmission Transfer Pricing System” and also report on Improvement of Power Sector Regulatory Framework, completed August 2000 by Hagler Bailly Consultants under ADB TA 2888.

COST ESTIMATES AND FINANCING PLAN
(\$'000)

| Item | Foreign Exchange | Local Currency | Total Cost |
|---|---------------------|-------------------|---------------|
| A. Government of France Financing | | | |
| 1. Consultants | | | |
| a. Remuneration and Per Diem | | | |
| i. International Consultants | 246.0 | 0.0 | 246.0 |
| ii. Domestic Consultants | 0.0 | 10.0 | 10.0 |
| b. International and Local Travel | 40.0 | 5.0 | 45.0 |
| c. Reports and Communications | 8.0 | 4.0 | 12.0 |
| 2. Study Tour and International Training | 25.0 | 0.0 | 25.0 |
| 3. Administration and Support Costs | 5.0 | 2.0 | 7.0 |
| 4. Representative for Contract Negotiations | 2.0 | 0.0 | 2.0 |
| 5. Contingencies | 50.0 | 3.0 | 53.0 |
| Subtotal (A) | 376.0 | 24.0 | 400.0 |
| B. Government Financing | | | |
| 1. Office Accommodation and Transport | 0.0 | 7.0 | 7.0 |
| 2. Local Communications | 0.0 | 2.0 | 2.0 |
| 3. Local Workshops | 0.0 | 20.0 | 20.0 |
| 4. Services of Government Staff | 0.0 | 71.0 | 71.0 |
| Subtotal (B) | 0.0 | 100.0 | 100.0 |
| Total | 376.0 | 124.0 | 500.0 |