

Greater Mekong Subregion
Third Meeting of the Subregional Electric Power Forum
Kunming, Yunnan Province, People's Republic of China
12-13 December 1996

Summary of Proceedings

I. Introduction

1. The Third Meeting of the Subregional Electric Power Forum (EPF) was held in Kunming, Yunnan Province, People's Republic of China (PRC) on 12 -13 December 1996. The Meeting was hosted and organized by the Government of the PRC and the Government of Yunnan Province, with the assistance of the Asian Development Bank (ADB). The Meeting was chaired by Mr. Wang Xinmao, Deputy Director General, Planning Department, Ministry of Electric Power, PRC, and co-chaired by Mr. James Rockett, Manager, Energy Division (West), ADB. A Joint Opening Session was held for the Third Meeting of the EPF and the Third Meeting of the Subregional Transport Forum which was held concurrently.

2. The objectives of the Meeting were: (i) to review the progress of implementation of subregional projects and initiatives in the energy sector ; (ii) to consider ways of enhancing the effectiveness of subregional cooperation; (iii) to coordinate with activities of other international organizations involved with energy cooperation in the GMS; and (iv) to discuss the environmental and social issues in subregional hydropower projects. The agenda of the Meeting is attached as Appendix 1.

3. Participants included delegations from Cambodia, the People's Republic of China, Lao People's Democratic Republic (Lao PDR), Myanmar, Thailand, and Viet Nam. ADB staff and consultants also attended. Representatives from the Government of Indonesia, the Government of Japan (Overseas Economic Cooperation Fund or OECF, and Export Import Bank or EXIMBANK); the ASEAN-MITI Working Group on Economic Cooperation in Cambodia, Laos, Myanmar (AEM-MITI CLM WG); the Mekong River Commission (MRC), the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP); and the World Bank (WB) attended as observers. The list of participants is attached as Appendix 2.

II. Opening Session

4. H.E. Mr. Niu Shaoyao, Vice Governor of Yunnan Province welcomed the participants and observers to the STF and EPF Meetings. The Vice Governor noted that the Greater Mekong Subregion (GMS) is becoming increasingly recognized internationally as rapid growth area offering very favorable investment opportunities, and urged step-by-step removal of bottlenecks to subregional development. The Vice Governor noted that the transport and energy sectors are key to subregional economic

cooperation, and the subregion's potential for development could be greatly enhanced by the transport and energy infrastructure activities planned under the GMS Cooperation Program. For its part, the PRC is investing heavily to ensure improved domestic and regional linkages. The Vice Governor reaffirmed PRC's support for the GMS Program and the Government's commitment to implement opening policies that would contribute to the development and prosperity of the subregion.

5. In his Opening Statement, H.E. Mr. Wang Shucheng, Vice Minister, Ministry of Electric Power, PRC outlined the rapid growth in the subregion --- spurred by major economic reforms in neighboring countries. China has always maintained friendly relations with her neighboring countries in promoting the shared goal of stability and development. The subregion is rich in natural resources and is of great interest to foreign investors. The Vice Minister noted Yunnan Province's extensive hydropower potential and the involvement of Thai investors in harnessing this potential. To further encourage foreign investment, new regulations have been introduced to create a more favorable and secure investment climate.

6. In his Opening Statement, Mr. Noritada Morita, Director, Programs Department (West), ADB, expressed the Bank's appreciation to the Government of the People's Republic of China and Yunnan Province for hosting the Meetings of the Subregional Transport and Electric Power Forums. Mr. Morita noted that the GMS Program of Economic Cooperation is gaining momentum. Of particular importance with respect to the transport sector has been the progress in identifying non-physical barriers to the cross-border movement of goods and people, progress in advancing the East-West Corridor now that agreement has been reached on the route, and progress in undertaking the necessary engineering studies for the Bangkok-Phnom Penh-Ho Chi Minh-Vung Tau Road. Of particular importance to the energy sector has been the public/private sector partnership in promoting the Thailand-Jinghong Transmission Line via Lao PDR, the commencement of the basin studies for the Xe Kong/Xe San and Nam Theun river basins, the completion of the Mekong Integrated Transmission Interconnection Study by the Mekong River Commission (MRC) with financial support from Japan, and the decision by Lao PDR to establish a national grid company. Mr. Morita concluded his opening statement by noting several challenges ahead, including the need to ensure that environmental and social issues are fully addressed.

III. Status Report on Subregional Power Activities

7. Mr. Bellana Karunaratne, Senior Project Engineer, Energy Division (West), ADB, reported that since the Second Meeting of the EPF held in Vientiane, Lao PDR in December 1995, substantial progress has been achieved in subregional power sector activities.

A. Xe Kong/Xe San and Nam Theun River Basin Studies Including Transmission Interconnection Studies

8. ADB has approved in August, 1996 a technical assistance grant of US\$2.5 million for the Xe Kong-Xe San and Nam Theun river basin studies, with co-financing of US\$2.0 million from the Government of France, and with the participation of the Mekong River Commission (MRC) as Coordinating Agency. The study will develop a least-cost hydropower master plan for the three river basins, taking into account the need to balance total regional power demand with hydropower potential, as well as the cumulative environmental and social impacts that may result from the development of the river basins. Consultants have been engaged by ADB and will begin their work in January 1997.

9. Based on earlier agreements on the institutional arrangements for facilitating project implementation, the Bank requested, and the GMS countries agreed, to designate their respective Project Directors before the consultants begin their work in mid-January 1997. The Meeting also agreed that the two country representatives to the Project Steering Committee would also be members of the EPF to ensure proper coordination and feedback. Representatives from MRC and ADB are also members of the Steering Committee.

B. Theun-Hinboun Hydropower Project

10. The commercial financing arrangements for the Theun-Hinboun project has been completed and the project is proceeding on schedule with commercial operation expected in early 1998.

C. National Grid Company of Lao PDR

11. The Lao PDR's request for ADB's technical assistance in the establishment of a National Grid Company is in an advanced stage of processing. The first project to be undertaken by the new Company could be a study on feasibility, design and construction of a HV transmission line from Nam Ngum basin to interconnect with the 500 KV system of Thailand.

D. Nam Leuk Hydropower Project

12. The Bank has approved a US\$52 million loan for the 60 MW Nam Leuk Project in Lao PDR in September 1996. The project will generate 215 GWh of electricity annually, and increase the diverted water flow for energy generation at the existing Nam Ngum power station downstream of Nam Leuk by 30 GWh. The project is expected to be completed in late 1999. Although the project output is intended to meet local demand, there will be a substantial initial surplus which will be exported to Thailand.

IV. Country Presentations

13. The GMS countries each presented a paper which describes the status of its energy sector. In spite of the wide diversity in power demand and resources among the countries, it was clear that certain common views are shared. All countries agree that their economies should generally be market driven, but that stringent safeguards must be in place to protect the environment and, to varying degrees, the most vulnerable sectors of society. The GMS countries welcomed the participation of the private sector in power development activities. In this context, Thailand has a well developed policy for integrating Independent Power Producers (IPPs), while Cambodia and Lao PDR explained that they were still developing their policy framework. It was noted that policy consistency is required to promote an effective approach to subregional power development over the long-term.

14. The Meeting discussed the need to improve the compatibility of the regulatory frameworks covering power sector in the GMS countries. The Meeting further agreed to begin with the exchange of information on existing regulatory frameworks and planned modifications. Additional activities to facilitate cooperation on this issue, including possible roles of ADB and other interested aid agencies, can be considered in the future.

V. Mekong Integrated Transmission Study

15. The final report of the Mekong Integrated Transmission Study was presented by Dr. Nguyen Duc Lien, Senior Project Engineer, MRC. The study focuses on the lower Mekong basin countries of Cambodia, Lao PDR, Thailand and Viet Nam, although it also covers in a limited manner the upper basin countries of Myanmar and Yunnan Province in PRC. It covers power demand and supply forecasts; identification of transmission interconnection options; and preliminary economic evaluation for an overall long range plan. The following are the major findings and recommendations of the study:

- The study identified an overall 500 KV regional transmission network, comprising eight regional linkages among the six Mekong countries for the period up to 2020, and selected the four most viable options for implementation in the short and medium term up to 2010. Among these four, two were studied at pre-feasibility level by the MRC Secretariat.
- The first is interconnection (ITLV-1), with some 430 km to 530 km in length, for transmitting power from Sekong hydropower projects in Laos to Thailand, via either Ubon Ratchathani or Mukdahan, and to Southern Viet Nam, via the existing Pleiku 500 KV substation. The second line (ITLV-2) of 360 km would link Nam Theun hydropower projects in Laos to Mukdahan in Thailand, and to northern Viet Nam, via Ha Tinh's existing 500 KV substation. A feasibility study of the two most viable options, estimated to cost US\$1.3 million, would be required.

- With respect to institutional arrangements, the study proposed the establishment of a Preparatory Committee to precede the establishment of the proposed Mekong Coordinative Organization (MCO). The establishment of a Mekong Power Development Public Corporation (MPDPC) was also proposed to support long-term cooperation.

16. ADB indicated that it is prepared to consider technical assistance to support the identification and assessment of options for an appropriate institutional/organizational framework for the development and management of the GMS interconnection network.

VI. Proposed Subregional Power Market Study

17. Representatives from the World Bank --- Messrs. Enrique Crouisillat, Senior Energy Economist, Jean-Pierre Charpentier, Senior Energy Specialist, and Jamie Carstairs, Specialist in Power Trade, made a presentation on the WB initiatives in the area of power trade and explained the framework for a proposed study for the GMS that would look into the power market, assess the potentials and impediments to power trade and the possible establishment of an electric power pool, and present options for structuring the power market in the subregion.

18. The Meeting endorsed the WB initiative and proposed that further progress on the study will be discussed at the next meeting of the EPF.

VII. Update on Jinghong Transmission Study

19. Mr. Zhu Zhiqiang, Director General, Yunnan Electric Power Bureau provided an update on the power projects in Yunnan Province in general, and the ongoing feasibility study for the Jinghong Transmission line in particular. The study is conducted by the Electricity Generating Authority of Thailand (EGAT) and South-West Electric Power Design Institute of China (SWEPTDI). The Jinghong Hydropower Project, with an installed capacity of 1500 MW, is expected to export 80 percent of its output, about 1200 MW to Thailand. The balance of 20 percent will be for meeting the local demand in the Jinghong area.

20. The feasibility study started in 1996 and is expected to be completed in August 1997. As agreed during the last meeting of the EPF, the Bank's role in this project would be as facilitator during the consultation process among the concerned countries.

VIII. Environmental Issues in Subregional Hydropower Projects

21. Mr. Robert Dobias, Environmental Specialist, Environment Division, ADB presented a paper on "Environmental Aspects of Subregional Hydropower Projects". He presented an overview of environmental issues and policies associated with hydropower development in the context of the Bank's recent experience. The presentation broadly illustrated the types of environmental issues that are faced in the hydropower sector and in this connection, cited the Bank's experience with the Nam

Leuk Hydropower Project in Lao PDR. He presented the Bank's policies for promoting environmentally sound development, the procedures for public access to and review of environmental documentation, and the contents and processes involved in environmental assessments, including the investigation of cumulative impacts and the integration of environmental enhancement measures .

22. Mr. Dobias also described a proposed regional technical assistance (RETA) on "Environmental Strategy for the GMS". The objective of the technical assistance is to ensure the environmental sustainability of economic development undertaken within the context of the GMS Program by preparing a subregional environment strategy to promote the integration of environmental considerations in economic development planning and implementation. He invited comments and suggestions from GMS countries on the proposed RETA.

IX. Social Issues in Subregional Hydropower Projects

23. Ms. Anita Kelles-Vittanen, Manager, Social Development Division, ADB, led a session on social concerns in the energy sector. Her presentation highlight the need to include social concerns in the energy sector; including the promotion of integration and social harmony, sustainable development (which includes social sustainability and acceptability); and the creation of a more positive image of energy projects with NGOs and the media. The social considerations for opening geographic areas were highlighted and the Bank's policies on involuntary resettlement were explained, along with gender concerns. Details of Bank guidelines were provided on land acquisition and resettlement concerns; processes for the early identification of issues, areas, and affected persons; and compensation principles for affected peoples. Since the GMS is rich in cultural diversity with a variety of ethnic groups, relevant ethnic considerations also need to be addressed in power projects. The diversity of culture, language and ecological adaptation presents a real challenge to development planners and requires the setting up of effective consultation mechanisms and procedures. The importance of social participation was highlighted as an important dimension for ensuring the success of infrastructure projects. It was conveyed to the participants that the Bank would be pleased to assist in building participatory capacity and in addressing social concerns in the planning and implementation of infrastructure projects.

X. Other Matters/Next Steps

24. Recognizing the importance of private sector participation in subregional power development, the Meeting agreed that the next EPF meeting would include presentations by the private sector, including private financial institutions, involved in power development.

25. Consistent with a Ministerial-level decision at the Inception Meetings of the Subregional Transport and Electric Power Forums held in Myanmar in 1995, and to consolidate the progress made in the energy sector to date, as well to assist in future decisions, the Meeting recognized the need for up-to-date information on developments in the sector, including the status of on-going projects. Consistent with

the earlier Ministerial-level agreement, the Meeting requested ADB to develop an appropriate information system to monitor developments in the sector , and to disseminate this information to the participating countries. To assist in this task, the Meeting agreed that each country designate a national focal point to coordinate with ADB.

XI. Date and Venue of the Next Meeting

26. The next meeting of the EPF will be held in Hanoi, Viet Nam around September or October 1997.

XII. Closing Session

27. Mr. James Rockett thanked the Government of PRC and Yunnan Province for the excellent arrangements made for the Meeting. He also expressed appreciation to the delegates and observers for their valuable contributions to the Meeting.

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