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REG: Greater Mekong Subregion (GMS)

Summary of Proceedings: 5th Meeting of the GMS Subregional Energy Forum (SEF-5)

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Asian Development Bank

Summary of Discussions Fifth Meeting of the Subregional Energy Forum (SEF-5) Ho Chi Minh City, Viet Nam, 11 November 2011

Objectives

1. The SEF-5 meeting discussed the following: (i) country developments in the energy sector, and national targets under the GMS Road Map for Expanded Energy Cooperation; and (ii) the inception report and implementation plan for RETA 7679: Promoting Renewable Energy (RE), Clean Fuels (CF) and Energy Efficiency (EE) in the GMS. Knowledge sharing sessions focused on (i) Harmonization of Power Distribution Systems (PDS) in the GMS; and (ii) Renewable Energy Feed-In Tariff Options for the GMS Countries.

2. The SEF-5 meeting was held in Ho Chi Minh City, Viet Nam on 11 November 2011 and co-organized by the Electricity Regulatory Authority of Viet Nam (ERAV)/ Ministry of Industry and Trade (MOIT) and the Asian Development Bank (ADB). It was attended by SEF nominees of the six GMS member countries, as well as by representatives of ADB, Agence Francaise de Developpement (AFD), Enel Distribution Network Technologies Development, International Copper Association- Southeast Asia (ICASEA), Lahmeyer International, Mekong River Commission (MRC), and Swedish International Development Cooperation Agency (Sida). Attached is the agenda and program of the meeting (Annex 1) and the list of SEF-5 participants (Annex 2).

3. The SEF-5 meeting was co-chaired by newly-elected SEF Chair H.E. Tun Lean, Director General of Energy, Ministry of Industry, Mines and Energy (MIME), Cambodia, and Mr. Jong-Inn Kim, Lead Energy Specialist, Energy Division (SEEN), Southeast Asia Department (SERD), ADB.

Opening Session

4. Mr. Dinh The Phuc, Deputy Director General, ERAV/ MOIT, Viet Nam, welcomed the participants and thanked ADB for its support to the SEF. He recalled the GMS countries' efforts to expand cooperation beyond the power sector in order to improve energy security and to enhance the utilization and sustainable development of the subregion's energy resources. He stressed that GMS energy cooperation to develop the needed infrastructure and the required policy/ institutional framework toward a more integrated GMS energy market will substantially contribute to improving the general business environment. He briefly previewed the SEF agenda and looked forward to GMS members working together to ensure the meeting's success.

5. Mr. Jong-Inn Kim, Lead Energy Specialist, SEEN, ADB, recalled the GMS Energy Road Map's progress since its adoption in June 2009, and stressed its critical role in the GMS region's climate change response. He said the election of a fixed-term Chair and Vice Chair to oversee the SEF's work program would ensure follow-through of vital initiatives, while the traditional country presentations could indicate areas where the SEF could do more work. For the inception report for the RETA promoting renewable energy (RE), clean fuels (CF) and energy efficiency (EE), the meeting would look into the RETA's activities and outputs, ensuring close matching with the SEF's work program, since the RETA will support strengthening of the SEF particularly in capacity building and knowledge dissemination. He briefed on the knowledge sharing sessions, the first on harmonizing power distribution systems and the second on RE

feed-in tariff options. He noted other important areas for knowledge sharing which the SEF could tackle in the future, such as RE advocacy, clean coal, and gas development.

Election of Chair/ Vice Chair of SEF

6. The meeting agreed to the alphabetical sequence for the Chair/ Vice Chair with Cambodia as first Chair of SEF and PRC as Vice Chair. It was agreed that the Vice Chair will take over after the two-year term of the Chair and ADB as a Co-Chair. Cambodia nominated H.E. Tun Lean, Director General of Energy, Ministry of Industry, Mines and Energy (MIME). PRC was asked to name the Vice Chair before the next SEF meeting.

Country Presentations: Developments in Energy Sector and Targets under the GMS Energy Road Map (Annex 3)

7. **Viet Nam**. The presentation on developments in Viet Nam's energy sector and targets showed projections (up to 2030) for primary energy demand, generation capacity, RE development and energy saving. It presented solutions for energy security, which included use of coal, LNG and nuclear energy for power, regional power trade cooperation, development of RE, issuance of legislation on EE, and implementation of demand side management (DSM)/ EE programs. It discussed the policy and road map for energy sector development, highlighting the Viet Nam Competitive Generation Market (VCGM) to be commenced from early 2012.

8. **PRC**. The National Energy Administration (NEA) provided the status of PRC's energy industry and highlighted improvements in energy technology and equipment levels, EE/ energy conservation (EC) and RE (e.g., wind, solar, hydropower, and biomass/ biofuels). It briefed on the elements of PRC's 5-year energy development plan, which included changing the country's energy structure, consolidating the traditional energy supply base, developing emerging energy industry, narrowing the rural-urban access gap and expanding the power network reach. Among priority focus areas mentioned were: application of advanced EC/ EE technology; RE/ clean energy development; implementation of SEA/ energy assessment systems; acceleration of R&D; and enforcement of vehicle consumption limits.

9. **Thailand**. The presentation by the Department of Alternative Energy Development and Efficiency (DEDE), Ministry of Energy, discussed Thailand's renewable energy (RE) status and policies, covering the overview of the 15-year RE Development Plan (2008-2022) and targets/ initiatives for various energy forms and areas such as wind, solar, hydro, biomass, biogas, etc., as well as issues to be addressed. The presentation on energy efficiency (EE) status and policies discussed the various measures to promote EE (legal, promotional/ supporting, and capacity building/ public relations). It also presented future measures to be implemented such as direct subsidy, revolving fund, energy conservation in government buildings and tax incentives.

10. **Myanmar**. The presentation by the Ministry of Energy (MOE), discussed the institutional and policy framework for the energy sector in Myanmar. It briefed on the country's oil and gas sector (offshore and onshore activities), the electricity subsector, coal production and RE subsector (fuelwood, biofuels) and EE/ EC activities. It showed the energy saving targets by subsectors (industrial/ commercial/ residential/ transport/ power).

11. **Lao PDR**. The presentation by the Department of Energy Promotion and Development, Ministry of Energy and Mines (MIME), briefed on the country's power sector policy, and history of power sector development. It discussed the current institutional structure of the Lao power sector and its current operating structure. It enumerated the various challenges and the priorities for the sector, including the proposed institutional structure at the policy level, and the various interconnections for future power trading. It presented the modality and priority for establishing the Power Grid Company to serve as the Transmission System Operator (TSO).

12. **Cambodia**. The presentation by MIME showed the status of present electricity supply, consumption and price in Cambodia and the share of petroleum products in consumption. It discussed industry energy use, RE promotion efforts (e.g., cook stoves, bio-digester program) and RE development (e.g., hydro, biomass, solar) and showed hydropower development prospects. It discussed the rural electrification policy/ program and the Rural Electrification Fund (REF), and described the program and results for the Sustainable Rural Electrification Plan (SREP) for the country. It discussed the opportunities for energy sector investments.

13. **Comments**. Viet Nam elaborated on the various aspects of the VCGM in response to the query from PRC. Sida inquired about Viet Nam's plan for achieving more competitive tariffs (and reducing subsidies). Viet Nam noted that actions toward reflecting the real cost of power are specified in the country's energy road map. It added that cost-based tariffs are being implemented, but are currently low given the low cost of production from old hydropower plants.

Inception Report and Implementation Plan for RETA 7679: Promoting RE, CF and EE in the GMS (Annex 4)

14. The presentation by Lahmeyer International, a consulting firm for RETA 7679, showed the proposed layout for the SEF website (<u>www.gms-sef.org</u>) and its navigation map, and invited suggestions for further improvement. It discussed the project's purpose and objectives and the expected impact, outcome and outputs in its design and monitoring framework (DMF). It related the project's aims in relation to the policy objectives, policy framework and medium term thrusts of the GMS Road Map for Expanded Energy Cooperation. It detailed the consultant's approach for the five tasks: (i) knowledge development and dissemination; (ii) establishment of database; (iii) setting of performance targets; (iv) resource assessments and project pipelines; and (v) business models and pilot project proposals. It showed the reporting timeline, consulting time, and arrangements for focal points and cooperation with other ADB projects. Timing and venues for the proposed various regional and national workshops would be finalized after SEF discussions. Lahmeyer requested for nominees to be focal points for the RETA.

15. **Discussions and Comments**. The meeting raised the following issues/ points:

- a. ADB (Mr. Kim) provided additional background information on the objectives and key activities of the project.
- b. GMS countries submitted names of their focal persons for the project, as follows: Cambodia- Mr. Victor Jona (MIME); PRC- Ms. Long Qing (CSG Coordinator); Lao PDR- Mr. Vilaysone Sourigna, Interim (MEM); Myanmar- U Htin Aung (Ministry of Energy); Thailand- Dr. Prasert Sinsukprasert (DEDE), Ms. Munlika Sompranon, Alternate (DEDE); and Viet Nam- Mr. Trinh Quoc Vu, Interim (ERAV).
- c. The meeting agreed on the tentative venues and dates of the various project workshops (listed in revised Annex 4).
- d. Cambodia noted the need to improve translation of project outputs in regional context into the content of national plans and programs.
- e. In response to query from Thailand, consultant explained the mechanism to update website content and the objectives and process of regional target setting.

- f. In response to the query from PRC, consultant clarified that clean fuels include biofuels, gas and coal liquefaction.
- g. AFD highlighted the strong links between this RETA (7679) and the RETA 7764 (Ensuring Sustainability of GMS Regional Power Development) and looked forward to close coordination in their implementation.
- h. Sida noted the important role of the RETA in sharing knowledge that already exists and in supporting the evolution of RE/EE policies in the GMS. It noted many of the RE/ EE technologies are mature and the challenge is in organizing, sustaining and financing their use.
- i. Lahmeyer followed up on the completion of the questionnaires by the SEF members.

Subregional Energy Forum (SEF) Knowledge Sharing Session: Harmonization of Power Distribution Systems (PDS) (Annex 5)

16. The presentation by ICASEA briefed on its organization, offices and strategic partnerships. It discussed the strategic considerations for harmonizing PDS and the role of ICASEA in the harmonization program in the Lower Mekong Subregion (LMS)¹, which has realized a number of major milestones (e.g., feasibility study, strategic road map, capacity building, technical working groups, technical handbooks, codes/ standards, and conversion/ implementation). It discussed the plans going forward, including the Joint GMS Energy Forum and LMS Harmonization Forum in 2012, formation of LMS Harmonization subworking group, and inclusion of LMS Harmonization Program in the GMS Program.

Discussions and Comments. In response to Lao PDR's query, ICASEA clarified that it 17. has not firmed up the time frame for inclusion of LMS Harmonization in the GMS Program. ADB explained the purpose of the ICASEA presentation, which was to bring to the SEF's attention the need of synery for loss reductionbetween GMS transmission and distribution systems. PRC noted it would not be useful to define a subset of the GMS such as the "LMS"; ICASEA clarified that the LMS subset was proposed to be able to test the system within a more limited geographic scope for Southeast Asia given resource constraints. Thailand supported by Lao PDR, suggested priority be given to capacity building for power distribution systems. Thailand added that harmonization work be undertaken in conjunction with work of RPTCC WGs on the grid code (under MOU-2), to be supported by ADB and other partners. It was concensed that the proposed both formation of LMS Harmonization subworking group under the GMS program and joint GMS energy forum and LMS Harmonization forum are not appropriate at this stage. But, knowledge sharing would be continued with ICASEA if needed as reduction in technical loss for the power distribution system is one of crucial elements for forming efficient power delivery system.

Subregional Energy Forum (SEF) Knowledge Sharing Session: Renewable Energy Feedin Tariff: Options for the GMS Countries (Annex 6)

18. Lahmeyer International's first presentation on <u>Feed-in Tariffs (FITs) in Europe and</u> <u>Germany</u> gave the European perspective on RE policy making design (e.g., defining targets and choosing instruments, considering trade-offs) and policy options, incentives and support. It presented advantages of FIT systems (effectiveness, efficiency, flexibility, etc.) but which comes with some problems. It discussed the RE promotion experience in Europe and showed targets for RE shares in gross final energy consumption (RES-E) in different European states, including

¹ The Lower Mekong Subregion includes Cambodia, Lao PDR, Thailand and Vie Nam.

options to comply with said targets. It briefed on the RE promotion instrument used in Europe and analyzed the RES-E policy success factors.

19. The second presentation <u>Feed-in Tariff (FIT) Methodologies and Financing: Options for</u> <u>GMS Countries</u> by Lahmeyer International discussed the range of RE promotion policies from fiscal incentives to regulatory policies, and showed evolution of regulatory policies consistent with market structures in developed and developing countries. It presented various feed-in tariff design options with FIT as guaranteed price over fixed period of time and payment differentiation and supplementary design options, and demonstrated their application for solar PV, wind power, biomass power, and hydropower projects. It discussed the FIT funding options with dual objectives of funding stability and minimizing consumer impacts, showed FIT funding in Asian countries, and presented options for GMS countries in terms of combination of policy instruments, FIT policy design consistency and FIT funding.

20. **Discussions and Comments**. AFD shared the experience with FITs in France, which showed reduced effectiveness in terms of building the RE industry and market. Lahmeyer noted that FIT instrument was used for mixed policy objectives in Germany and this has clouded the appreciation of the long run impact of the policy.

Closing Session

21. **Synthesis of Discussions/ Agreements.** ADB (Mr. Kim) provided a summary of the highlights of the SEF meeting, as follows: (i) election of Chair and Vice Chair; (ii) GMS countries' presentations, which showed marked progress in GMS energy development; (iii) RETA 7679 inception report, focused on knowledge sharing, needs assessment, and implementation plan for workshops/ reports; (iv) knowledge sharing on power distribution harmonization; and (v) knowledge sharing on FIT experience in Europe and how this can be applied in GMS region.

22. **Consideration and Adoption of Proceedings**. Mr. Kim announced the distribution of the draft summary of proceedings for review by the participants. After the SEF reviewed the draft summary of proceedings, and after incorporation of suggested changes, the body therefore approved the minutes of the SEF-5 meeting *ad referendum*.

23. **Closing Remarks.** H. E. Tun Lean thanked the participants for their substantive contributions to the discussions, leading to the meeting's resounding success. He thanked the Government of Viet Nam and ADB for successfully hosting and organizing the meeting, which achieved substantive outcomes. He wished everyone a safe return journey.