



South Asia Regional Initiative for Energy Integration

Quarterly Update – January to March 2017

ACCOMPLISHMENTS FOR THE QUARTER

EXECUTIVE EXCHANGE : LOAD FORECASTING – EXAMINING BEST PRACTICES IN THE GERMAN ELECTRICITY MARKET

SARI/EI conducted an “Executive Exchange: Load Forecasting: Examining Best Practices in the German Electricity Market”, January 16 – 19, 2017 in Dusseldorf and Berlin, Germany. Sixteen utility executives from Afghanistan, Bangladesh, Bhutan, Nepal, Pakistan, and Sri Lanka participated in the activity, which was organized by the U.S. Energy Association. The program was tailored for the South Asian delegates to provide them with tools to improve the quality of their electricity distribution and transmission operations and planning, as well as to assist them in the transition for expanded cross-border electricity trade. The program provided an opportunity for SARI/EI executives to learn from German best practices on how to develop load forecasts and maximize their benefits, as well as present opportunities for sharing experiences between Germany and South Asia.



German transmission system operator TenneT hosted the SARI/EI delegation from Afghanistan, Bangladesh, Bhutan, Nepal, Pakistan, and Sri Lanka in a meeting to share their load forecasting practices in the German power sector.

Participants:

Afghanistan

- Mr. Abdul Wakil Nasery, Acting Chief Commercial Officer, Da Afghanistan Breshna Sherkat (DABS)
- Mr. Mohd Masood Seediqyar, Head of Corporate Planning and Controlling, DABS

Bangladesh

- Mr. Md. Sumon Kabir, Sub-Divisional Engineer, Power Grid Company of Bangladesh Ltd.
- Mr. Rifath Ahmed Khan, Assistant Engineer, Power Grid Company of Bangladesh Ltd.

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Bhutan

- Mr. Ugyen Chophel, Engineer, Department of Hydropower & Power Systems, Bhutan Ministry of Economic Affairs
- Mr. Ugyen Thinley, Engineer, Hydropower Development Division Department of Hydropower Systems, Bhutan Ministry of Economic Affairs
- Mr. Kinley Jamtsho, Engineer, Department of Hydropower & Power Systems, Bhutan Ministry of Economic Affairs
- Mr. Ugyen Tshring, Senior Manager, Bhutan Power System Operator, Bhutan Power Corporation Ltd.
- Mr. Kinley Tenzin, Civil Engineer, Department of Hydropower & Power Systems, Bhutan Ministry of Economic Affairs
- Mr. Bhaskar Pradhan, Executive Engineer, Druk Green Power Corporation

Nepal

- Mr. Keshab Dhoj Adhikari, Joint Secretary, Water & Energy Commission Secretariat, Government of Nepal
- Mr. Anil Rajbhandary, Director, Corporate Planning and Monitoring Department, Nepal Electricity Authority

Pakistan

- Mr. Talha Khalid, Staff Officer Technical to CEO, Pakistan Central Power Purchasing Authority
- Mr. Tauseef Ur Rehman Khan, Assistant Manager, Load Forecast, National Transmission and Despatch Co. Ltd.

Sri Lanka

- Mr. Don Saman R. Alahakoon, Deputy General Manager of System Control, Ceylon Electricity Board
- Mrs. Urupaw Gamlath, Chief Engineer of Planning & Development, Ceylon Electricity Board

German participating organizations:

- Innogy SE
- Amprion
- Bundesnetzagentur
- NordPool
- TenneT
- Renewables Grid Initiative

LAUNCH OF “ECONOMIC BENEFITS OF NEPAL – INDIA ELECTRICITY TRADE” REPORT – KATHMANDU, NEPAL

The report on “Economic Benefits from Nepal-India Electricity Trade” was finalized and released in Kathmandu, Nepal on January 19, 2017 by Michael Gonzales, Chargé d’ Affaires, Embassy of the United States of America. Also present were Dr. Swarnim Wagle, Member, National Planning Commission, Government of Nepal, and Smt. Mala Narendra, Second Secretary, Indian Embassy, Nepal. The report analyzes the potential of cross-border electricity trade (CBET) between Nepal and India, and its feasibility and impact on the economy, power systems and power infrastructure of both countries. The report release was extensively covered in the Nepali media.

(<http://www.irade.org/Media-News-Paper-Coverage-of-Report-Release-event.pdf>)



Launch of Report on Economic Benefits of Nepal-India Electricity Trade, Kathmandu, Nepal

CAPACITY BUILDING IN POWER TRADING

After the successful completion of two rounds of a capacity building program on power trading, and based on huge demand and request from the SARI/EI countries, the United States Energy Association (USEA) organized another round of similar training. The first two of three modules of the “Capacity Building Program for Designing, Managing and Operating a Power Trading Entity” took place on January 30 – February 2017 and March 20 – 24, 2017. As in the previous rounds, this training was also conducted jointly by PTC India Ltd. and the National Power Training Institute (NPTI) in Faridabad, India. The objective of the program was to improve the institutional and human capacity to design and manage a power trading entity showcasing the Indian power sector and its trading activities. Mr. J.S.S Rao, Principal Director, NPTI, welcomed the delegates and thanked USAID, USEA and PTC for trusting in NPTI to conduct the program. He highlighted the need and impact of such programs that boost cross border energy cooperation in South Asia.

While addressing the delegates, Mr. Harish Saran, Executive Director, PTC India Ltd., highlighted the activities of PTC, including the developments in cross border power trading and engagement that is going on between PTC and countries such as Bhutan, Nepal and Bangladesh.



Participants of Module-1 of the Capacity Building Program for Designing, Managing and Operating a Power Trading Entity - National Power Training Institute, Faridabad, India

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The participating team included seven delegates from Bhutan, five from Bangladesh and one each from Afghanistan, Nepal, and Sri Lanka. Faculty comprised of senior energy sector professionals from government and private organizations. Classroom lectures included a range of topics from the inception of Indian power sector to power trading.



While Module 1 focused on the overall background, and rules and regulations that govern the Indian power sector as a whole, Module 2 was designed to provide an in-depth understanding on power trading entities, power purchase and sales, drafting of power purchase agreement and the tariff models for competitive bidding etc.

Specific topics included:

- An overview of regulatory commissions in India
- Energy audit and demand side management
- Functions of load dispatch centers
- Electricity Act 2003
- Open access
- Availability based tariff
- Roles and functions of power traders
- Setting-up of a power trading entity
- Trading license
- Short/medium/long term power purchase
- Sales through power exchanges
- Drafting power purchase and sales agreements
- Legal framework for operating power trading entity
- Tariff models for competitive bidding
- Project financing
- Human resource requirements

Key presenters:

1. Mr. V. K. Kharbanda, SARI/EI Project Director, IRADe
2. Mr. Hitesh Sachdeva, Partner, Deal Advisory Infrastructure, KPMG
3. Mr. Manish Chaudhary, Asst. Chief Finance, Central Electricity Regulatory Commission (CERC)
4. Mr. B.P. Bhandari, Director, National Productivity Council (NPC)
5. Mr. Ghanshyam Prasad, Chief Engineer, Central Electricity Authority (CEA)

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6. Mr. G. Chakaravarty, General Manager, Power System Operation Corporation (POSOCO)
7. Mr. S. C. Shrivastava, Chief, Engineering, CERC
8. Mr. T.N. Thakur, Ex. CMD, PTC India Ltd.
9. Ms. Shilpi Dewan, Indian Energy Exchange (IEX)
10. Mr. Harish Saran, Executive Director Marketing, PTC India Ltd.
11. Mr. M. N. Ravishankar, President, Power Trading & Regulatory, Jindal Power Ltd.
12. Mr. A. Mohan Menon, Balsa Consulting,
13. Mr. J. K. Jethani, Principal Scientific Officer, Ministry of New & Renewable Energy

Participants:

Afghanistan

1. Mr. Khwaja Mozafar Sediqi, Tarakhail Power Plant Manager, Da Afghanistan Breshna Sherkat (DABS)

Bangladesh

1. Mr. Nur Mohammad Shamsuzzoha Kabir, Deputy Director (XEN), Bangladesh Power Development Board
2. Mr. Md. Fhisal Ahamed, Assistant Engineer, Bangladesh Power Development Board
3. Mr. C F K Musaddeq Ahmed, Director (Private Power), Power Cell, Dhaka
4. Mr. Sardar Md. Moazzem Hossain, Sub-Divisional Engineer, Power Grid Company of Bangladesh Ltd.
5. Mr. Md. Haronur Rashid, Deputy Director (Power), Bangladesh Energy Regulatory Commission (BERC)

Bhutan

1. Mr. Karma Namgyel, Officiating Chief Engineer, Department of Hydropower & Power Systems, MoEA
2. Ms. Tshering Yangki, Dy. Executive Engineer, Department of Hydropower & Power Systems, MoEA
3. Mr. Passang, Executive Engineer, Department of Hydropower & Power Systems, MoEA
4. Ms. Sangay Zangmo, Assistant Engineer, Department of Hydropower & Power Systems, MoEA
5. Mr. Jambay Lhundup, Executive Engineer, Department of Hydropower & Power Systems, MoEA
6. Mr. Rinzin Chopel, Assistant Engineer, Druk Green Power Corporation Limited
7. Mr. Kunzang Tobgye, Superintendent Engineer, Bhutan Power Corporation Limited

Nepal

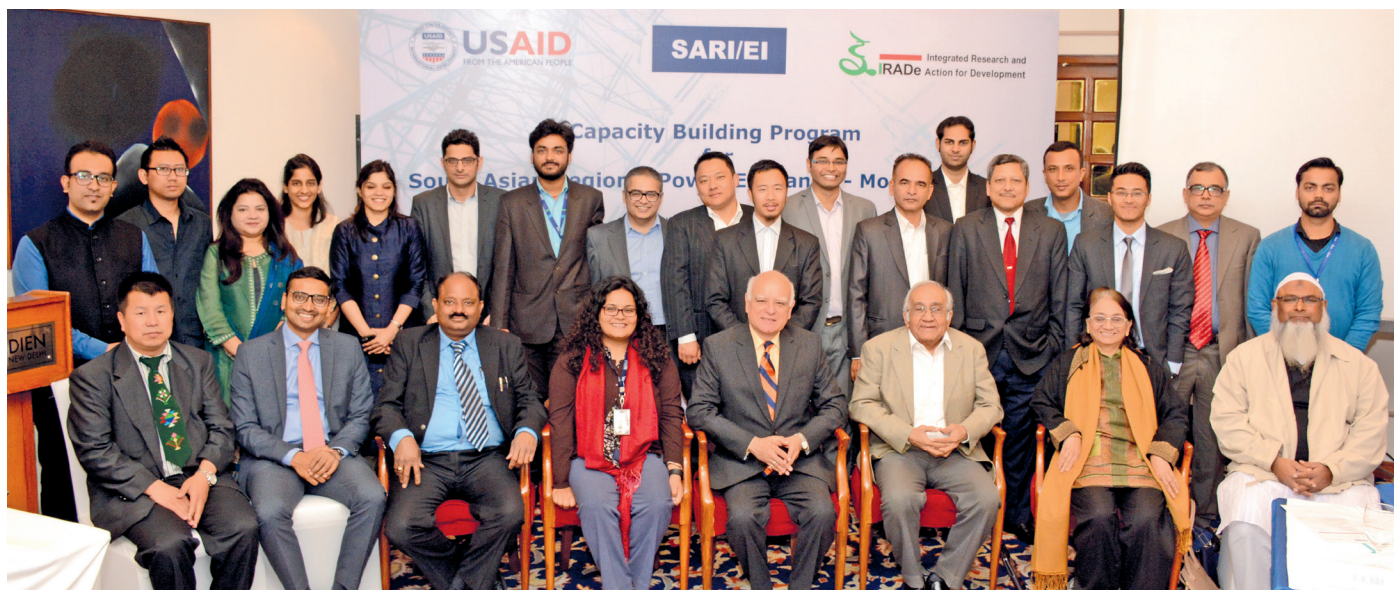
1. Ms. Bhabani Wagle, Engineer, Nepal Electricity Authority (NEA)

Sri Lanka

1. Mr. A. J. De Z. Wickramaratne, Chief Engineer (Energy Purchases), Ceylon Electricity Board

SOUTH ASIAN REGIONAL POWER EXCHANGE (SARPEX) MOCK EXERCISE CAPACITY BUILDING PROGRAM – NEW DELHI, INDIA

A mock exercise was held in New Delhi, India on February 7 – 9, 2017 as part of the South Asian Regional Power Exchange (SARPEX) for core team members. The exercise covered various aspects of power exchange operation and participation (particularly in the context of the SARPEX). Chief Guest Mr. Anil Razdan, Ex-Secretary, Ministry of Power (MoP), India, inaugurated the bidding portal of SARPEX. Ten members of the core team from Bangladesh, Bhutan, and Nepal participated in the program. The participants also visited Indian Energy Exchange (IEX), a leading power exchange in India, to understand the process and real exposure of power exchange.



Participants of the South Asian Regional Power Exchange (SARPEX) Mock Exercise Capacity Building Program - New Delhi, India

The capacity building program covered the evolution of the Indian power sector and its operational features. The core team members prepared bids for one day based on their country's data. Then, the members became familiar with the process of uploading bids on the SARPEX portal. The portal was extensively used during the program and will be the platform for running of the mock exercise.

CAPACITY BUILDING IN HYDROPOWER PROJECT APPRAISAL

On February 20 – 24, 2017, energy executives from SARI/EI countries of Afghanistan, Bhutan and Nepal participated in the second of the three modules of the Techno-Economic Hydro Power Project Appraisal Training. Module 2 of the training was organized by the United States Energy Association (USEA) and conducted jointly with PTC India Financial Services Ltd. (PFS) and the National Power Training Institute (NPTI) in Faridabad, India.

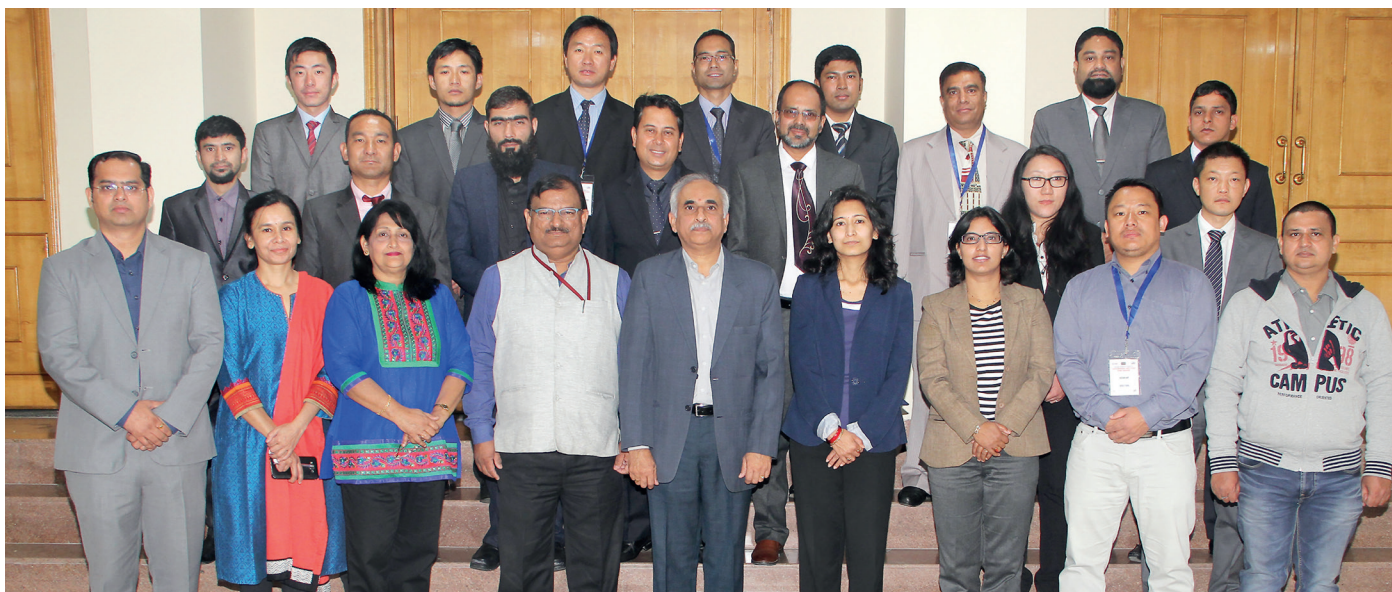
Day 1 began with an informal address by Mr. J S S Rao, Principal Director, NPTI. Mr. Rakesh Kalsi, Assistant Vice President, PFS briefed the delegates on the outline of the module. He indicated that feedback from Module-1 was taken into consideration while developing the topics for Module-2.

Lectures included project scheduling and monitoring including software tools; construction management and equipment technology; best practices and benchmarks in hydro project development; mobilizing funds; short/long/medium term power procurement and trading; rehabilitation and resettlement; risk assessment and mitigation; system design; and critical aspects of tariff fixation. A case study on Likhu IV hydro power project was also presented.

Presentations were made by the following faculty:

1. Mr. S. K. Agarwal, Chief Engineer, Civil, NHPC Ltd.
2. Mr. Sanjay Kalgaonkar, Executive Director, NHPC Ltd.
3. Mr. Ashish Datta, Manager, Electricals, Planning Division, NHPC Ltd.
4. Mr. Raghunath Rao, Director, BMR & Associates LLP
5. Mr. Harish Saran, Executive Director, PTC India Ltd.
6. Mr. Gaurav Kumar, Manager, Environment, NHPC Ltd.
7. Mr. Devesh Singh, Asst. Vice President, Risk Dept., Prabhat Financial Services Ltd.

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Participants of the Training on Techno Economic Hydro Power Project Appraisal - National Power Training Institute, Faridabad, India

8. Mr. S. K. Agarwal, Chief Engineer, Civil, NHPC Ltd.
9. Mr. Rahul Pandey, Asst. Prof., NPTI
10. Mr. Vikas Garg, Associate Director, KPMG
11. Mr. Gaurav Kaushik, Asst. Vice President, Risk Dept., Prabhat Financial Services Ltd.
12. Mr. Rakesh Kalsi, Asst. Vice President, PTC India Financial Services Ltd.

Participants:

Afghanistan

1. Mr. Khalid Khorsand, Director of Hydropower Plants, DABS
2. Mr. Zalmay Jan Hassnzi, Engineer, Naghlu Hydropower Plant, DABS

Bhutan

1. Mr. Karma Tshewang, Chief Engineer, Department of Hydropower & Power Systems, MoEA
2. Mr. Kinley Tenzin, Engineer, Department of Hydropower & Power Systems, MoEA
3. Mr. Sonam Tshering, Executive Engineer, Department of Hydropower & Power Systems, MoEA
4. Mr. Denkar, Engineer, Department of Hydropower & Power Systems, MoEA
5. Mr. Heruka Zangpo, Senior Manager, Renewable Energy Department, Bhutan Power Corporation
6. Mr. Krishna Prasad Timsina, Engineer, Department of Hydropower & Power Systems, MoEA
7. Ms. Kuenga Choden Dorji, Engineer, Department of Hydropower & Power Systems, MoEA
8. Mr. Phub Tshering, Engineer, Department of Hydropower & Power Systems, MoEA

Nepal

1. Mr. Hari Krishna Uprety, Senior Community Relation Officer, Investment Board of Nepal (IBN)
2. Mr. Sunil Shrestha, Computer Officer (Admin and Account) IBN
3. Mr. Neelesh Shrestha, IBN
4. Mr. Hari Prasad Rimal, Public Relation Officer, IBN
5. Mr. Parmeshwar Pant, Manager, Corporate Credit, Kumari Bank
6. Ms. Suman Joshi, Senior Relationship Manager, NMB Bank Ltd.

7. Mr. Pawan Kumar Acharya, Chief Project Financing Officer, Sanima Bank
8. Ms. Pragya Pandey, Head of Corporate Credit and Infrastructure, Mega Bank Ltd.

STAKEHOLDER CONSULTATION OF “REGIONAL INVESTMENT FRAMEWORK AND POLICY GUIDELINES FOR PROMOTING INVESTMENT IN CBET PROJECTS OF SOUTH ASIA” – KATHMANDU, NEPAL

SARI/EI organized a round table stakeholder consultation meeting on “Regional Investment Framework and Policy Guidelines for Promoting Investment in South Asian Power and in Cross-border Electricity Trade (CBET) in South Asia” on March 17, 2017 in Kathmandu, Nepal. The objectives of the meeting were to: (a) deliberate on key issues and concerns impacting investment in regional power development, the Nepal’s power sector and CBET projects; and (b) assess, analyze and gather key concerns of investors, lenders, multilateral development banks (MDBs), and project developers for promoting investments in the South Asian power sector, and in particular, the regional power projects and CBET projects with a view to develop a regional investment framework and policy guidelines for promoting investment in the South Asian power sector and CBET.



Participants of the Stakeholder Consultation of the Regional Investment Framework and Policy Guidelines for Promoting Investment in CBET Projects of South Asia - Kathmandu, Nepal

The round table was inaugurated by Mr. Maha Prasad Adhikari, CEO, Investment Board of Nepal (IBN). SARI/EI Consultant Deloitte provided a presentation on the background, scope and approach, and key draft findings of the study.

This was followed by a panel discussion on investment and financing challenges, risks associated with Nepal power sector, and CBET projects, such as key policy, regulatory, investment frameworks, investment challenges and risks. Experts from the Independent Power Producers’ Association Nepal (IPPAN), IBN, International Finance Corporation (IFC), Hydroelectricity Investment and Development Co. Ltd. (HIDCL) also participated in the panel discussion. More than 30 experts from Nepal representing ministries, investors, lenders, private power developers, independent power producers, financial institutions, banks and other relevant agencies deliberated extensively on various investment issues and challenges, and on the draft findings of the study. The participants provided valuable inputs and suggestions to promote investment in CBET projects in South Asia. The report will be finalized after incorporating the suggestions and inputs made by the stakeholders.

BHUTAN DEPARTMENT OF HYDROPOWER AND POWER SYSTEMS EXECUTIVES ATTEND “ADVANCE POWER PURCHASE AGREEMENT EXCELLENCE 2017” TRAINING – Dubai, UAE

Stemming from a scoping mission to Bhutan in September 2016, the SARI/El program sponsored two executives from the Bhutanese Ministry of External Affairs (MOEA) Department of Hydropower & Power Systems (DHPS) to attend the “Advance Power Purchase Agreement Excellence 2017”, on March 20 – 22, 2017 in Dubai, United Arab Emirates.

The United States Energy Association (USEA) coordinated the attendance of Mr. Sonam Phuntsho Wangdi, Director General, and Mr. Sonam Tshering, Executive Engineer, Department of Hydropower & Power Systems, Ministry of Economic Affairs to attend the three-day program.

Discussions focused on:

- Global trends driving Power Purchase Agreements (PPAs), electricity market designs and merchant power investments
- An introduction to PPAs
- Pre-operation period (permits and licenses, construction, delays, commissioning and inspection, representations and warranties)
- Operations and maintenance
- Technical details in the PPA
- Power price dynamics
- Financial terms in the PPA
- Risk allocation in the PPA
- Dispute resolution
- Ancillary agreements
- Structuring independent power projects and the role of the power purchase agreement
- Power plant valuation approaches
- Specialized PPAs
- Overview of environmental and social considerations
- Effective contract management

STATUS OF DEMAND DRIVEN STUDIES

Task Force 1 Studies:

- Study 2: The process of stakeholder consultations has been completed and the second study on “Regional Investment Framework and Policy Guidelines for Promoting Investment in South Asian Power Sector and in CBET Projects in South Asian Region” is being finalized.
- A “White Paper on South Asian Forum of Electricity Regulators (SAFER)” has been finalized and is under process for designing and printing. The study on White Paper on SAFER has been completed and is under designing and printing.

Task Force 2 Studies:

- The study on “Assessment of Trading Potential in South Asian Countries” to find out the economic benefits and reduction in CO2 emission has been awarded to ICF international. The draft report is expected by April 2017.
- Study 2: The report on “Harmonization of Grid Codes, Operating Procedures and Standards to Facilitate/

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Promote CBET in South Asia Region” has been completed. The report has been printed and is expected to be released in May 2017.

Task Force 3 Studies:

- Study 1: The report on “Assessment of Commercial Terms and Conditions for CBET and Suggested Model of Power Exchange in South Asian Region” has been completed. Model PPA, Model TSA, and a model for a power exchange has been shared for copy editing and designing. The power pricing mechanism and recommendation report has been drafted. The executive summary of the report is being prepared and is in the design and publishing stage.
- Study 2: The pilot market/mock exercise of South Asian Regional Power Exchange (SARPEX): The main objective of this exercise is to explore the feasibility of a regional power exchange in South Asia, develop the draft market rules and design for the regional market, as well as build the capacity of the participating countries in working on an exchange platform. The draft design and market rules has been discussed and finalized with TF members and the Market Advisory Committee (MAC). The process for forming a Market Advisory Committee (MAC) and core team members has been completed. The first training for core team members was conducted on February 7 – 9, 2017. A stakeholder consultation meeting is being planned in April & May 2017.

Implementation of SARI/EI Task Force recommendations and Article of SAARC Framework Agreement on Energy Cooperation:

- **Developing the framework and guidelines for a non-discriminatory open access regime in transmission and grant of open access to initiate power trading and facilitate CBET in the South Asian countries**

The study on “Developing the Model Framework Guidelines for Non-discriminatory Access/Open Access Regime in Transmission and Grant of Open Access in South Asian Countries” was awarded to Deloitte. The consultant has submitted the draft report on the international practices related to open access in other regions of the world, which is under review. First stakeholder consultation meeting is planned in Dhaka, Bangladesh during next quarter.

- **Developing a model framework for trading license regime and guidelines for grant of trading license to initiate/advance power trading in South Asian countries and facilitate CBET in the South Asian countries**

The study on “Developing the Model Framework for Trading License Regime and Guidelines for Grant of Trading Licence in South Asian Countries” was awarded to Deloitte in February 2017. The first draft report is expected by April 2017.

- **Developing BIM STEC Energy Outlook:** The study started in February 2017 with a focus on developing an energy outlook for the BIM STEC region and analysing it for future scenario. The report will be finalized during the next quarter.

SARI/EI Analytical Studies:

- **Economic Benefits from Bangladesh-India CBET:** A stakeholder consultation workshop was conducted in Dhaka in February 2017. The comments and suggestions provided at the consultation have been used to finalize scenarios and update the results of the technological and the macroeconomic models for Bangladesh. Scenario simulations of the Bangladesh Technological and Macro model is currently under progress.

Think Tank Forum:

As a part of its outreach and stakeholder engagement strategy, SARI/EI commissioned short term assignments to the following five think tanks in Bangladesh, Bhutan, India, Nepal, and Sri Lanka for activities related to research/impact studies, stakeholder engagement and media engagement.

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- QED Group, Bhutan for assignment on a “Brown Bag Seminar Series on Energy and Energy Integration in South Asia”.
- Syclan Trust, Sri Lanka for assignment on “Implementation of NDCs for Renewable Energy in Sri Lanka: Addressing Gaps in Policies & Regulation”.
- Independent University, Bangladesh for assignment on “Research/impact Research on Cross Border Electricity trade (CBET) and National Events (meetings/workshop) to encourage CBET”.
- Institute for Integrated Development Studies (IIDS), Nepal for assignment on “Media Engagement for Creating Awareness on Benefits of CBET between Nepal and India”.
- CUTS International, India for assignment on “Impact Research on CBET (“Assessment of Impact of CBET on Livelihoods and Gender Concerns: Case Study Approach”) and a regional event (dissemination workshop on “Boosting CBET in the Bangladesh, Bhutan, India, Nepal (BBIN) region: Dialogue leading to Actions”.

ONGOING AND UPCOMING ACTIVITIES

1. SARPEX Workshop and Stakeholder Consultation meeting, Nepal (April 11 – 12, 2017).
2. SARI/EI participation in the HAPUA-UNESCAP Workshop, Jakarta, Indonesia (April 17 – 19, 2017) as speaker on the topic on (a) Energy Integration in South Asia Region: Progress, Key Achievements and Way Forward and (b) Experiences and Learnings from Power Market Development in South Asia
3. Final module of the “Capacity Building Program for Designing, Managing and Operating a Power Trading Entity”, coordinated by USEA, New Delhi, India (April 17 – 21, 2017)
4. Stakeholder Consultation Workshop on “India – Bangladesh Analytical Study with Bangladesh Stakeholders” (May 17, 2017)
5. The third module site visit portion of the “Techno-Economic Hydro Power Project Appraisal Training” coordinated by USEA, will take place in Brazil (June 6 – 9, 2017)
6. SARI/EI, through USEA, will be sponsoring two Bhutan Electricity Authority executives to attend the “42nd International Training Program Utility Regulation and Strategy” course taking place in Gainesville, Florida (June 12 – 23, 2017)
7. USEA awarded a contract to the National Regulatory Research Institute (NRRI) to conduct a peer review & short term technical assistance on tariff calculation for the Bhutan Electricity Authority (June 19 - 23, 2017)
8. SARPEX Workshop and Stakeholder Consultation Meeting, Bhutan (June 29 – 30, 2017)
9. Combined Stakeholder Consultation Workshop on (a) developing the framework and guidelines for non-discriminatory open access regime in transmission and grant of open access for power trading and facilitate CBET in the South Asian countries: and (b) developing model framework for trading license regime for power trading and facilitate CBET in the South Asian countries, Kathmandu, Nepal (July 18, 2017)
10. SARPEX Workshop and Stakeholder Consultation Meeting, Bangladesh (July 18 – 19, 2017)
11. Release of Task Force-2 report on “Harmonization of Grid Codes, Operating Procedures and Standards” Nepal (July 18, 2017)
12. 6th Task Force-1 meeting on “Coordination of Policy, Legal and Regulatory Framework”, Kathmandu, Nepal (July 2017)
13. Monitoring and evaluation to track the progress of the assignments in the Think Tank Forum
14. Publication of workshop proceedings for the SARI/EI Think Tank Forum Workshops
15. Deloitte Touche Tohmatsu India LLP (DTTILLP) was awarded the subcontract by USEA to conduct the “Linking South Asia with Burma & Southeast Asia to Advance Cross Border Electricity Trade: A Political Economy Study“. The study, which is scheduled to be completed in July, will focus on understanding the political, economic and institutional considerations in South Asia and Southeast Asia that need to be

resolved if the prospects of cross-border energy trade are to be improved. The political economy analysis report will aim to situate development interventions on sub-regional energy trade within an understanding of the prevailing political and economic processes in the region.

ABOUT SARI/EI

The SARI/EI program, funded by the United States Agency for International Development (USAID), promotes integration of energy systems and enhances cross-border energy trade among the South Asian countries by focusing on the following three development outcomes for overall socio-economic development of the region:

Harmonize Policy, Legal and Regulatory Issues

The key result of the Harmonization of Policy, Legal and Regulatory Issues component is to create the enabling systemic conditions for a sustainable market for investment and implementation of cross-border energy trade.

Advance Transmission System Interconnections

The key result of the Advancement of Transmission System Interconnections component is to create the enabling, systemic conditions for a sustainable market for investment and implementation of subregional bilateral transmission interconnections beginning with the Eastern Subregion of South Asia.

Establishment of South Asian Regional Electricity Markets

The key result of this component on Establishment of South Asian Regional Energy Market is to create the enabling and systemic conditions for a sustainable market for energy trading and exchange among the South Asian countries.

The overarching objective of the SARI/EI program is to develop a common template for technical and commercial aspects of power exchange among the South Asian countries. It intends to create the right enabling environment to support the establishment of a South Asian electricity market, gain consensus and support from the key decision makers and stakeholders in the South Asian region.

SARI/EI WEB PAGE

For current information on SARI/EI, please visit the web page: www.sari-energy.org.

BACKGROUND

Over the last two decades, South Asia has been one of the fastest growing regions in the world, with an average annual growth rate of 6% as measured by GDP per capita. Yet despite this impressive macroeconomic growth, the energy sector in the region has not been able to keep pace, and continues to experience chronic problems of supply shortage and poor quality of service. South Asia's energy security dilemma is one of the single energy development challenges of the 21st century critical to the economic future of almost 1.5 billion people. Given this dilemma, the only long-term solution is the sustained increase in regional energy cooperation among the South Asian countries.

USAID's South Asia Regional Initiative for Energy's (SARI/E) role over the past decade in advocating energy cooperation in South Asia has transitioned to the next phase of advancing regional energy integration and cross-border energy trade (CBET) in eight South Asian countries (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka).

This new phase titled South Asia Regional Initiative for Energy Integration (SARI/EI) is designed to build upon USAID SARI/Energy's successful implementation in the past decade to move South Asian countries towards increased regional energy security. The program will address policy,



legal, and regulatory issues related to energy in the region; promote transmission interconnections; and work towards establishing a regional market exchange for electricity.

CONTACT INFORMATION

Director, Regional Office of Economic Growth and Trade, USAID/SARI/EI

Mr. Michael Satin

msatin@usaid.gov

Regional Program Manager

Ms. Monali Zeya Hazra

mhazra@usaid.gov

SARI/EI Country Coordinators:

Afghanistan	Mr. Abdul Rasool Wardak	rwardak@usaid.gov
Bangladesh	Mr. A.K.D. Sher Mohammad Khan	sherkhan@usaid.gov
Bhutan	Ms. Monali Zeya Hazra	mhazra@usaid.gov
India	Ms. Monali Zeya Hazra	mhazra@usaid.gov
Maldives	Ms. Nihani Riza	nriza@usaid.gov
Nepal	Mr. Shankar Khagi	skhagi@usaid.gov
Pakistan	Ms. Monali Zeya Hazra	mhazra@usaid.gov
Sri Lanka	Ms. Nihani Riza	nriza@usaid.gov

Implementing Partners:



IRADe Integrated Research and
Action for Development

Mr. V.K. Kharbanda
Project Director, IRADe
vkkharbanda@irade.org



Ms. Sarah Blanford
Senior Program Coordinator, USEA
sblanford@usea.org



USAID
FROM THE AMERICAN PEOPLE

SARI/EI

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*South Asia Regional Initiative for Energy Integration (SARI/EI)
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United States Agency for International Development (USAID)*

American Embassy
Chanakyapuri
New Delhi 110 021
India
Phone: +91 11 2419 8000

