





Presentation on Updates on the TOR of the SAFIR Working group: Plan for Implementation of Key Activities

by

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Second Meeting of SAFIR Working Group on

"Regulatory Cooperation to Facilitate Knowledge sharing, addressing Cross cutting Energy/Electricity Regulatory Issues and Capacity Building in South Asia"

4th Dec, 2019, Hotel Radission, Dhaka, Bangladesh







Content

- About SARI/EI Program (Extended Phase 2018-2022)
- Brief about the SAFIR Working Group and It's TOR
- Key Activities of the Working Group







Overview South Asia Regional Initiative for Energy Integration (SARI/EI) Program (Extended Phase 2018-2022)

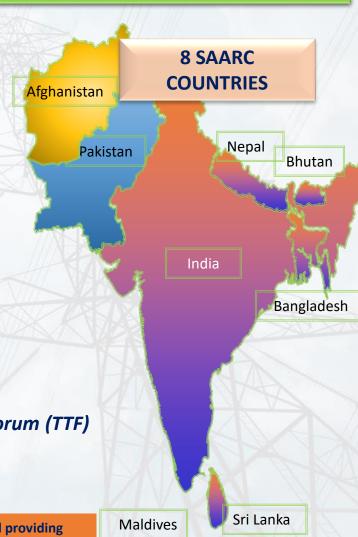






Overview South Asia Regional Initiative for Energy Integration (SARI/EI) Program

- SARI/E is a long standing program of USAID started in the year 2000.
- Program has consistently strived to address energy security in South Asia by focusing
 - 1) Cross Border Energy Trade
 - 2) Energy Market Formation and
 - 3) Regional Clean Energy Development.
- Phase IV (Extended Phase 2018-2022): Key Activities: Expected Development Outcomes:
 - Harmonize Policy, Legal and Regulatory Issues (Task Force-1)
 - Advance transmission interconnections (Task Force-2)
 - Establish South Asia Regional Electricity Markets (Task Force-3)
 - Transfer clean energy innovations to the region
 - **Expand SARI/EI technical studies to South East Asia (BIMSTEC region)**
 - Socialize power trade benefits to create public consensus and support through Think Tank Forum (TTF)
 - Analytical study to assess the potential of gas for regional energy cooperation.
 - Develop Skilled Workforce to support regional projects



The focus of the Extended phase will be on establishing and strengthening institutional mechanisms to carry forward the legacy of SARI/EI and providing secretariat functions to transfer knowledge/learning from USAID/India's bilateral projects to rest of the region.







Objective of the SAFIR Working Group





Objective of the SAFIR Working Group

The SAFIR Working Group works on



Enhancing Regulatory Cooperation to Facilitate Knowledge sharing;



Addressing Cross cutting Energy/Electricity Regulatory Issues and Capacity Building in South Asia;



Facilitate transparent regulatory framework, promoting investment in the South Asia Region.





TOR of the SAFIR Working Group

To facilitate regulatory capacity building among member countries at both national and regional levels through information knowledge sharing and skills training.

To facilitate the development of -electricity/energy regulations by identifying and addressing cross cutting energy/electricity regulatory issues for advancing Exchange of Electricity/Energy in South Asia region.

To provide inputs on policy & regulations/regulatory opinions/regulatory guidelines and to develop model regulations.

To undertake research work on issues relevant to electricity /energy sector regulation through in-house/ outsourcing.





TOR of the SAFIR Working Group

Prepare a detailed road map along with various regulatory interventions needed in South Asian countries for effective energy cooperation in the region to prepare annual status report and updates on regulatory cooperation in the South Asia Region.

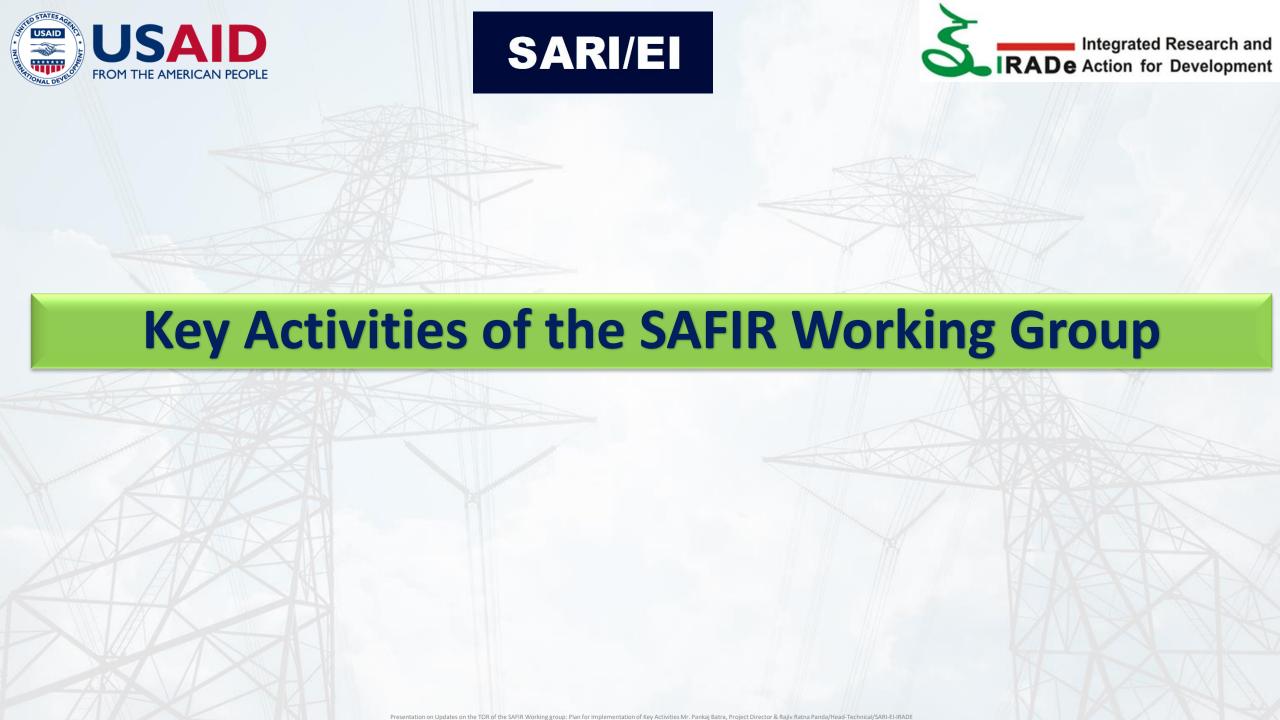
Create data bank/knowledge repository on energy/electricity related issues.

Prepare South Asia Energy/Electricity Regulatory Compendium.

To develop web portal on "South Asia Energy/Electricity Knowledge Resource Database".

SAFIR-Regulatory Monthly Newsletter to enhance regulatory knowledge sharing.

Any other work assigned by SAFIR.









Working group

Key Activities of the SAFIR Working Group

- Study /Research on South Asia energy/electricity regulations to develop regulatory pathway/Road Map for Electricity/Energy exchange and Energy Cooperation (EC) in South Asia.
- Organizing "South Asia Energy Sector Training and Capacity Building program on energy regulation for Energy Cooperation and exchange of electricity in South Asia "
- South Asia Energy/Electricity Regulatory Compendium.
- SAFIR-Regulatory newsletter and web portal "South Asia Energy/Electricity Knowledge Resource Database"
- Organizing two/three meetings of SAFIR Working Group.







Study / Research on South Asia energy/electricity regulations under SAFIR Working Group





Study /Research on South Asia energy/electricity regulations

Two studies are proposed to be conducted by the SAFIR Working Group

□ Regulatory interventions for Grid discipline and Grid reliability in the South Asian region and

☐ Study Cross Border Trade of Electricity.

☐ Study /Research on South Asia electricity/electricity regulations to develop regulatory pathway/Road Map for Electricity/Energy exchange and Energy Cooperation (EC) in SA





Study/Research on Regulatory interventions for Grid discipline and Grid reliability in the South Asian region

Objective:

☐ To review and analyse all the existing relevant electricity regulations, mechanisms and technical frameworks with respects to Grid discipline and Grid reliability of each South Asian Countries both from the perspective of integration/unification of regional grids of domestic power system of a country as well as cross border power grid integration.

Deliverable:

- Detailed set of Regulatory measures/Intervention and Mechanism needed for enhancing Grid discipline & Grid reliability in SA region along with detailed explanatory memorandum.
- Roadmap (regional and country wise) and action plan for implementation of above suggested Regulatory measures /Intervention.

Time Period: 6 Months from the date of award. will be awarded by December 2019 through a competitive bidding process.







Study on Cross Border Trade of Electricity

Objective:

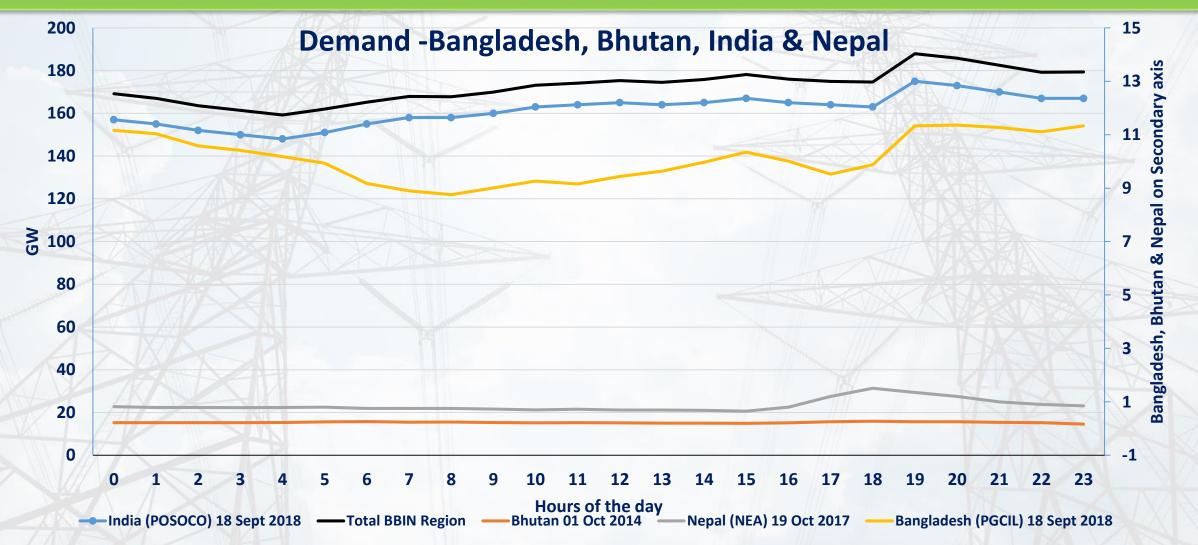
- ☐ To review and analyze the load and generation patterns in all neighboring countries and study the season-wise trade/barter of power between the countries to ensure 24x7 supply to all countries and optimum utilization of generation assets, including quantification of benefits for all countries.
- ☐ This may also cover planning of generation resources and anticipated import/export for 10 years ahead.
- □ Work out the savings in generation reserves for all countries, with the objective of providing 24x7 supply to all consumers.
- ☐ Calculate the reduction in cost of supply for each country.

Time Period: 3-4 Months from the date of award. Study is expected to start by Jan/Feb 2020





Demand Diversity: Load Profile of Bangladesh, Bhutan, India & Nepal









Study /Research on South Asia electricity/electricity regulations to develop regulatory pathway/Road Map for Electricity/Energy exchange and Energy Cooperation (EC) in SA

Objective:

- ☐ To review, study and analyze the existing energy/electricity regulations of each South Asian countries to develop regulatory pathway/Road Map for Electricity/Energy exchange, cross border electricity/energy trade and Energy Cooperation (EC) in South Asia.
- Identify and analyze the relevant provisions in all existing energy/electricity regulations that have an impact on optimal, reliable and economic Electricity/Energy exchange, cross border electricity/energy trade and carry out a detailed gap analysis for the same, from the perspective of enhanced cross border electricity/energy trade.
- ☐ Suggest and recommend the necessary changes/additions or new regulations that is required in the respective countries' for advancing Electricity/Energy exchange, cross border electricity/energy trade and Energy Cooperation (EC) in South Asia.

Time Period: 6 Months from the date of award. ToR Drafted by SARI/EI, Study is expected to start by March 2020







South Asia Energy Sector Training and Capacity Building program on energy regulation for Energy Cooperation and exchange of electricity in South Asia





South Asia Energy Sector Training and Capacity Building program on energy regulation for Energy Cooperation and exchange of electricity in South Asia

Key Topics to be Covered (Regulatory Aspects of Energy Cooperation and exchange of electricity)

- ✓ Transmission Planning
- ✓ Coordinated System Operation
- ✓ Licensing Regimes
- √ Tariff Frameworks
- √ Grid Codes
- ✓ Open access
- √ Transmission Pricing
- ✓ Imbalance Settlements
- ✓ Power Trading and Power Exchange Mechanism.
- ✓ Power Market Regulations
- ✓ International Experiences

- √ 4-5 days Training Programme
- ✓ Working Groups Members and Regulators of South Asian Countries
- ✓ Site Visit to Load Dispatch Centers/Power Utilities etc.
- ✓ One Training Program in a Year

Proposed to be held in the Month of March/April 2020







SAFIR-Regulatory newsletter and web portal "South Asia Energy/Electricity Knowledge Resource Database"









SAFIR-Regulatory newsletter

✓ Aims to Increase Regulator Knowledge exchange in the SA region



- ✓ Track and Compile various Energy Regulatory and Policy Developments in the Region .
- ✓ Analysis on the Energy Regulatory and Policy Developments in the Region.
- ✓ It includes power, oil and gas sector.
- ✓ Will be circulated among the Regulatory Commission/policy makers of SA counters in electronic format. (to be Issued Monthly/Quartely)

Proposed to Start by March, 2020







Web portal "South Asia Energy/Electricity Knowledge Resource Database"







Web portal on "South Asia Energy/Electricity Knowledge Resource Database"

Aims to Create a Energy/Electricity Sector Data Base/ Dashboards

Track and Compile various Energy/Electricity Sector Data of the Region such as (but not limited to):

- ✓ Energy/Power Demand, supply
- ✓ Energy Balance
- ✓ Installed capacity (total and fuel wise)
- ✓ energy and peak deficits, load sheading
- ✓ CBET in MW/MWhr, Energy Losses
- ✓ Per Capita Energy Consumption
- ✓ Generation and Transmission Projects Planned
- ✓ Power Market Data
- ✓ Renewable Energy Related Data
- ✓ Key Policy and Regulations

- ✓ Web portal with data Analytic, Indicative Graphs, pie charts and Figures, Info graphics etc .
- ✓ Data to provided by the Working Group Members .
- ✓ Will be available in Public Domain

Proposed to Start by March 2020







South Asia Energy/Electricity Regulatory Compendium





South Asia Energy/Electricity Regulatory Compendium

- ☐ Compilation has been done.
- ☐ Currently is under review and designing
- Documents has been sourced from respective regulatory commission websites.

For ease of reference, the regulations are classified under the following categories for each of the countries:

- 1. Primary legislation, key policies, rules and guidelines
- 2. Cross Border Electricity exchange/Trade
- 3. Technical Standards
- 4. Grid Code and System Operation
- 5. Transmission Investments and Pricing
- 6. Open Access
- 7. Power Trade, Exchanges and Markets
- 8. Licensing
- 9. Generation and Transmission Tariffs

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^{*} Even though the compendium focuses on regulations that enable, or have the potential to enable energy exchange/trade, it also tries to include relevant primary legislations, relevant policies and regulations that are not necessarily linked to CBET.

^{*}In case of some of the documents, official / non-official English translations were not available, due to which only the available native language version of such documents are included

^{**} The Compendium serves merely as a collection/compilation of already published/notified electricity regulations for ease of reference with an aim enhance have better understanding/knowledge sharing about the electricity regulations of SAARC/SAFIR member countries.









SAFIR Working Group Meetings

We have planned to organized three meetings for the year

- ✓ 2nd Meeting of SAFIR Working Group in Dec,2019
- ✓ 3rd Meeting of SAFIR Working Group in March ,2020
- √ 4th Meeting of SAFIR Working Group in September,2020

Continuous Interaction

Regular meetings are essential for ensuing a Consultative and participatory process



^{* 1}st Meeting of SAFIR Working Group held on 15th & 16th May'2018, Hotel Taj Samudra, Colombo, Sri-Lanka

