





South Asia Regional Energy Integration (SARI/EI): Task Force-3 Roadmap

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Background

The Core objective of the SARI/EI Program is to promote integration of Energy System and enhance Cross border Electricity Trade (CBET) among the South Asian Nations.

The current phase of the USAID SARI/EI initiative is to create the right "Enabling environment to support the establishment of a South Asian Electricity Market and gain consensus and support from the key decision makers and stakeholders".

The program will catalyze enabling systemic conditions for regional integration through three task forces.

The Project will focus on three components through three task forces:

- Coordination of Policy, legal and Regulatory framework- TF1
- Advancement of Transmission system Interconnection TF2
- South Asia Regional Electricity Market TF3







Task Force-3 Goal

To create the enabling and systematic conditions for a sustainable market for energy trading and exchange in South Asia. The focus will be on :-

- 1. Development of Cross Border power exchanges and related market mechanisms to enhance the bilateral and multilateral power trade.
- Market driven commercial practices in the field of power trading, including long term contractual
 instruments and medium/short term power trading.







Task Force-3 Roadmap on "South Asian Regional Electricity Market"







Background of the Roadmap:-

In the first TF-3 meeting various issues were discussed by the members. These included the following among other: -

- The evolution of power sector in India with emphasis on the power market/ trading
- The commercial aspects of power trading and long term PPA's principles.
- The importance of UI and ABT mechanism.
- During discussions, it was felt the commercial terms and conditions, existing institutional structures, operating procedures, dispute resolution mechanism were different in different South Asian Nations.
- It was realized that in order to create the enabling and systemic conditions for a sustainable market for energy trading and exchange in South Asia a step by step process needs to be followed.
- A roadmap was prepared for the same and circulated to all TF-3 members...
- The roadmap was finalized based on the feedback/suggestions received by the members.







The Roadmap

<u>Phase-1</u>. Assessment of Preparedness of each SA nations and identification of commercial principal/aspects required for regional electricity market and selecting a suitable model of power exchange for the South Asian Region.

<u>Phase-2</u>. Development of SA Power Market Rules and Pilot market design. This will also address the issues related to trading of renewable energy such as wind and solar power or the related products.

<u>Phase-3</u>. Running and Finalization of Pilot Market followed by the revision and finalization of the market rules and overall market design.







Phase-1:

Assessment of preparedness of each South Asian country -(SAC) for Cross Border Electricity
Trade (CBET) and to recommend commercial terms and conditions, principles and procedures for short, medium and long term CBET in the South Asian Region and for selecting suitable models/options for power trading including a power exchange for the SAC

Related Study:

- 1. Based on phase-1 requirement, the detailed TOR of the study/deliverables was prepared in consultation with Task Force-3 members.
- 2. The Study had been awarded to PwC and second milestone of study-draft report has been submitted. (Subsequent presentation will detail it)







Activities being covered in Phase-I



Assessment of all commercial terms and conditions relating to electricity market prevailing presently in each SA nation such as transmission charges allocation, allocation of losses, payment security mechanisms, institutional structure etc. in case of each SA countries.

This will cover all commercial terms and conditions relating to long term, medium term and short term electricity trade.



The assessment will specifically focus on both bilateral as well as the trade through exchanges. In assessing the same, other than commercial terms and conditions, the concept and methodology behind the fixation of the tariffs related to power trading etc. also shall be taken into consideration. The study shall cover the entire South Asian Region.



Compare and Identify gaps in the areas mentioned above.



Based on the above assessment and the prevailing institutional set up, suggest the most suitable structure for a South Asia regional power market.









Suggest remedial measures to have minimum uniform compatible commercial terms and conditions and institutional set up required across SA nations for CBET based on the assessment carried out.



Recommended the model of the regional power exchange and its corresponding institutional set up for the South Asian Region .



Recommend the Institutional structure of the market in the medium and long term along with the related commercial terms and conditions.







Activities of Phase-2: Development of SA Pilot market



Develop the pilot market based on:

- 1. The exchange model as agreed in Phase -1.
- 2. Rule and laws of power market.
- 3. Best practices from various International power exchanges.



- 1. Assessment of the renewable energy market in each South Asian nation.
- 2. Explore possibility of trading of renewable energy among South Asian nations as a distinct segment..







Deliverable of Phase-2



The recommended set of draft market rules for the power exchange



The recommended draft design of the pilot power market.



Recommend the design and market rules for a separate market or a trading mechanism for renewable energy product.







Phase-3. Running and Finalization of Pilot Market



Setting up of the pilot market-Based on the market rules and agreed pilot market design in the phase-



The running of pilot market and its performance vis-à-vis market rules and overall design of the pilot market shall be evaluated and documented.



Based on the evaluation of the performance of the pilot market operation, the market rules and overall market design shall be revised







Further Activities under phase -3

The revised market rules and market design shall be shared with all stakeholders such as power companies, traders, investors, grid operator, bankers and financers etc for obtaining their feedback/suggestions.

The final result shall be the Design of South Asian Power Exchange which along with Market Rules document shall form the basis of the actual market.

Based on the data generated by running of the pilot market a Statement of Opportunity for the investor and the consumers shall be prepared highlighting opportunity emerging out of a regional power market





















