

Institutionalizing the regulatory process of cross border electricity trade in South Asia Region

Policy Brief

Why important, Key Issue/problem in focus:

Power sector in South Asia is highly regulated and regulation in each country are governed through their national/state regulatory commissions /authorities and therefore they are primarily focussed for domestic operations and not aligned for Cross Border Electricity Trade. A transparent stable regional regulatory framework for CBET supported through a regional regulatory Institutional mechanism such as forum/association /agency of electricity regulators is critical for smooth and rapid expansion of trade of electricity among the south Asian Countries and for creating a conducive environment for investment. Formation of Regional Forum of Electricity Regulators will help in developing a robust CBET framework that would require well defined coherent energy policies and enabling legal and regulatory framework across all the south Asian Countries.

Policy/Regulatory Provisions and Institutional frameworks required for promoting/facilitating CBET exist in some South Asian Countries (SACs) but are not exhaustive in nature. Currently, South Asian Countries are at different stage of power sector reforms and have different Electricity Regulatory environment. To enhance CBET within two or more countries in South Asia, there is a need to have common/coordinated set of Regulations which facilitates/addresses the mechanism of cross border interconnection. There is a need to have Common /Coordinated set of Regulations, Policies, and Legal Framework which addresses the mechanism of interconnection, recognizes the CBET, Open access to transmission Network, licensing, imbalance settlement mechanism, coordinated procedures for integrated system operation, dispute resolution, etc.

Moreover the existing electricity regulatory, policy and legal frameworks of SACs primarily address domestic power sector issues and are not necessarily developed to address issues related to CBET.

Without consistent and coherent regional regulatory framework in place, investment opportunities and consequently large scale CBET between nations that could benefit both importing and exporting nations may not happen. In the South Asian regional context, the risks associated with forging an intraregional, CBET project would be greatly minimized if each participating country adopts complementary regulatory frameworks to facilitate cross border interconnection and electricity trade.

A transparent, stable regional regulatory framework for CBET supported through a regional regulatory institutional mechanism such as forum/agency /association of electricity regulators to take care of CBET regulations is critical for smooth and rapid expansion of trade of electricity among the south Asian countries and for creating a conducive environment for investment in CBET.

SARI/EI Research findings/ Summary/Analysis:

Based on the detailed and comprehensive review and analysis of Electricity Laws, Policies and Regulatory framework of South Asian Countries (SAC) undertaken under SARI/EI program from the perspective of Cross Border Electricity Trade (CBET), Regional Regulatory Guidelines (RRGs) was published among others such as gap in policies/regulations, suggested changes/ amendments in laws/policies, global learning /experiences etc. The Regional Regulatory Guidelines (brief summary is described as figure-1) developed aims to Establish transparent regulatory

environment to promote CBET, provide a common course of action that can be referred for decision making on CBET by the regulators in their respective countries, ensure consistency in the transactions and remove delays on account of unclear and complicated regulatory regimes.

1	Licensing CBET	<ul style="list-style-type: none"> • Recognition of Trading as a separate licensed business activity • Grant of licence for CBET through a well defined process • License requirements and the underlying rules/limitations
2	Non-discriminatory open access	<ul style="list-style-type: none"> • Setting of fair rules and procedures for non-discriminatory open access • Modification/amendment of applicable regulations and gradually legally binding provisions • Defining application process, eligibility criteria, priority order and nodal agency for QA
3	Transmission Pricing	<ul style="list-style-type: none"> • Transmission pricing mechanism based on a country's requirement and acceptability • Setting up principles and mechanism for determination of economically efficient transmission pricing regime based on concept of location specific pricing • Adoption of tariff framework in respective country power system through enabling regulations
4	Transmission Planning	<ul style="list-style-type: none"> • Development of regional coordination forum of National Transmission Utilities to coordinate between Member Countries on transmission planning aspects • Development of a database of information that enables coordination and cooperation towards transmission planning • National Transmission Plans to also include details of cross border transmission lines (specially for CBET) and associated infrastructure • Sharing of the national transmission plan at the regional level and progress towards developing a regional level master plan.
5	Imbalance Settlement	<ul style="list-style-type: none"> • Member countries to develop a common set of procedures for Imbalance Settlement for CBET transactions • This will include preparation of scheduling, dispatch, energy accounting and settlement procedures for both AC-AC and AC-DC interconnections in the region.
6	Harmonization of Codes	<ul style="list-style-type: none"> • Harmonization through formulation of guidelines on technical standards for interconnection of power systems on aspects related to voltage standards, frequency tolerance, thermal limits etc. • Sharing of technical characteristics and system specific data among the member countries • Rules on metering standards, communication technologies, Protection Schemes etc.
7	Dispute Resolution	<ul style="list-style-type: none"> • Dispute Resolution process should primarily be in accordance with the agreements or through amicable settlement • Referring the disputes to the SAARC Arbitration Council in case the member countries are unable to resolve disputes through amicable settlement
8	Taxes & Duties	<ul style="list-style-type: none"> • Countries to gradually move towards a zero tax regime

Fig-1: Brief Summary of Regional Regulatory Guidelines

For implementation of RRGs and for coordination/harmonization of electricity regulations for promoting CBET, needs a strong institutional sponsor and the study has recommended formation of forum of regulators i.e. “South Asian Forum of Electricity Regulators” (SAFER). This Forum of Regulators i.e. SAFER is proposed to manage the process of coordination of regulations with various regional bodies i.e. SAARC Energy Secretariat, Regulatory Commissions/authorities in each SACs and other relevant institutions in member countries in the area of facilitating cross border electricity trade. The Body/forum/Association of electricity/energy regulators in South Asia can play a key role in cross cutting of energy/electricity regulations, knowledge sharing, capacity building etc. towards integration of regional power systems and development of regional power markets. To take this forward, under SARI/EI Program, a detailed whitepaper/study on the regional regulatory institution by identifying its role, institutional structure and the way forward for formation of such a regional regulatory body/forum was also carried out.

International experiences

International Best Practices on Regional Regulatory Institutional Mechanism (fig-2) also shows that various regional power systems in the globe have taken steps to form regional regulatory institutional structures/mechanisms to coordinate regulations for promoting CBET. In Europe, the Agency for the Cooperation of Energy Regulators (ACER) is an independent agency, which fosters cooperation among European energy regulators and ensures that market integration and the coordination of regulatory frameworks are achieved within the framework of the EU’s energy policy objectives and issues non-binding opinions and recommendations to national energy regulators and transmission system operators for facilitating CBET. Similarly the Regional Electricity Regulators Association (RERA) of Southern African Development Community looks after regulatory coordination and ensure that the regulatory & contractual aspects done through common set of regulatory guidelines.



Figure 2 International Best Practices on Regional Regulatory Institutional Mechanism

Recommendations:

Given the importance and urgent need to create such a forum/association in the South Asia region within minimum time frame:

- i) In the Short to Medium term: To create a working group with focused approach under the aegis of an existing regional forum/authority/Associations such as South Asia Forum for Infrastructure Regulation (SAFIR) and SAARC/SAARC Energy Regulators consisting of members from national regulatory commissions/authorities of energy/electricity to take forward the work of cross cutting of energy /electricity regulations, knowledge sharing and capacity building etc.
- ii) In the long term: While the above solution is an immediate step, there is a need to formally establish a full-fledged regional regulatory forum/body clearly identifying its function, role and responsibilities as brought out in SARI/EI report based on international experience for developing harmonized /coordinated regulation, cross cutting of energy/electricity regulations, knowledge sharing, capacity building which is necessary for development of a regional power markets in the region.

Prepared by V. K. Kharbanda & Rajiv Ratna Panda
Mentor & Guide : Dr K Parikh & Dr Jyoti Parikh

