





# Framework for Trading License Regime to facilitate Cross Border Electricity Trade in South Asia Region

#### **Policy Brief**

#### 1. Back Ground:

In the last few decades, Cross Border Electricity Trade (CBET) in South Asian region have become more established, with the quantum of trade also seeing an increasing trend. For some countries, CBET has become a crucial revenue source to aid in the overall economic growth of the country; while for some other countries, CBET has become a necessary tool to tide over energy shortages. CBET in South Asia, especially in the BBIN sub-group (Bhutan, Bangladesh, India and Nepal), relies on power trading licensees as intermediaries for arranging the trade. However, even though multiple countries in South Asian region participate in CBET, involvement of power traders is more or less limited to trading licensees of India. Though the central role of India in CBET in South Asian region is a key reason, another factor behind this disparity is that none of the other countries in South Asian region has a well-developed trading license regime in their power markets. In this backdrop, it becomes important to work towards creating an enabling framework for Trading License Regime for CBET in SA. In 2014, the SAARC member countries signed the SAARC Framework Agreement for Energy Cooperation (Electricity) which laid a formal foundation for cooperation among South Asian countries in the electricity industry. The agreement accepts trading licensees as one of the "Buying and Selling Entities", which shall be allowed to engage in CBET subject to the laws and regulations of the concerned member countries. The agreement between the Government of Nepal and India on electric power trade, cross-border transmission

interconnection and grid connectivity, commonly referred as Power Trade Agreement (PTA) mentions that Article-IV-The Parties shall allow the authorized /licensed electricity producers/buyers /traders of each country to engage in cross-border electricity trading, including that through Power Exchanges, and to seek cross-border transmission access as per the laws of the respective country

### 2. Need of Trader and Trading License (TL):

Electricity trading by traders plays a crucial role in the optimum utilization of energy resources and in the introduction of competition and vibrancy in the power market. Key role and functions of traders are: a) act as counter party in the transaction, b) introduce market liquidity, c) offer risk mitigation options, d facilitate capital mobilization e) bring in market transparency, f) remove information asymmetry, and, g) expand business opportunities. The role of traders from buyers and seller's perspectives varies, though complementary. From a buyers perspective, traders a) arrange off-take of power made available by the seller; b) Identify buyer for off-take and back to back of contracted capacity; c) manage entire transactional chain such as open access, scheduling and energy accounting including system compliance/approvals; d) co-ordinate with relevant agencies for transfer of power; e) facilitate sale of power to third party from alternate sources in case of short off-take by original buyer; f) ensure payment security; g) facilitate energy settlement; and, h) ensure power for testing and commissioning of power station/transmission lines. Additionally, from a seller's perspective, traders a) arrange power as per requirement of buyer; b) identify seller for supply of contracted capacity and enter into requisite commercial agreement on back to back basis; c) ensure supply reliability and quality standards (contract performance); and d) arrange supply of power to bulk consumers. Trading is generally a licensed activity that enables oversight by regulatory agencies to ensure that the rules and conditions of competitive and fair electricity market operations is complied with in the interest of national and regional security. Typically, the licensing framework depends upon existing policy and legislation in force in a country. It requires that the licensee complies with any relevant planning, technical, and market rules in order to achieve grid and market discipline for the benefit of all participants. Licenses, in essence, are permissions required under law and not agreements in themselves. Licenses guide the outcome that a regulator expects from a certain activity

## 3. Current approach for trading license framework in South Asian Countries

The review and analysis of SA countries, reveals that other than India, none of the South Asian countries have a properly developed regulatory, operational and institutional framework for trading license regime (fig -1 below).

**Current Trading License Framework in South Asian Countries** 

Country	Legal Framework	Regulatory Framework	Operational Framework	Institutional Framework
Afghanistan	x	×	x	×
Bangladesh	x	×	×	×
Bhutan	✓	x	×	x
India	✓	✓	✓	✓
Maldives	x	x	x	x
Nepal*	•	x	×	x
Pakistan	x	x	x	x
Sri Lanka	x	x	×	x

(\*In case of Nepal, trading is recognized as a distinct licensed activity in their Electricity Regulatory Commission Act, 2017. However, licensing is dealt with in Nepal's Electricity Act, 1992 which have not yet been amended to support the provisions of Electricity Regulatory Commission Act, 2017.)

The above analysis clearly points out the inadequacy of existing framework for trading license regime in South Asian countries, other than India.

In case of Bhutan and Nepal, trading is recognized as

a distinct licensed activity in their legislation, though associated regulatory framework is yet to be evolve. Electricity industry in South Asia (SA) is heavily regulated, and therefore trading activity also requires a proper licensing regime in line with that for other activities such as transmission and distribution. In this context, the SA countries (other than India) can draw lessons from other countries in institutionalizing trading license regimes. SARI/EI approach believes that, there is a need to have a Framework for comprehensive Trading License Regime to facilitate Cross Border Electricity Trade in South Asia Region. To address the above, SARI/EI has conducted a study on the above subject and have recommended a Model Framework for Trading Licence Regime and Guidelines for grant of trading licence to facilitate Cross Border Electricity Trade in South Asia Region.

## 4. International Experience Trading License (TL)

While India offers the best reference, considering its matured trading market and similarity in industry structure with those of other SA countries, lessons can also be drawn from participants of international power pools such as West African Power Pool (WAPP), South African Power Pool (SAPP) and the Central American Electrical Interconnection System (SIEPAC). A study of the trading licence regimes in the respective domestic power sectors and the manner of their integration into cross border trade arrangements can offer learning to all the SA countries. Based on the international experience, the key ingredient for evolving a trading license frame/regime are 1) Legal framework for licensing and regulation of trading activity 2) extensibility of trading licence regime to cover cross border trade 3) Power market structure that encourages competition 4) Institution for grant of licences, and for regulation and monitoring of the licensees 5) Segregation of licensees into different categories 6) Technical and financial requirements for grant of licence 7) Frameworks governing grant, amendment, renewal or revocation of licences 8) Market monitoring arrangements and 9) Dispute resolution mechanism

# 5. Recommended Model framework for trading license regime in South Asia:

The model framework for trading licence regime is given in fig-2 and guidelines for grant of trading licence to initiate / advance power trading in SA countries and facilitate CBET in the SA region is expected to serve the following purposes 1) As a guidance document for regulators in power sector of South Asian countries on issues related to power trade licence regime b) As a model document for discussions on trading licence regime in both international and domestic contexts c) As an initial framework on trading licence regime it is open for further refinements to suit the requirements of each nation and d) As a non-binding instrument for regulatory harmonization among power trading licence regimes in South Asia.

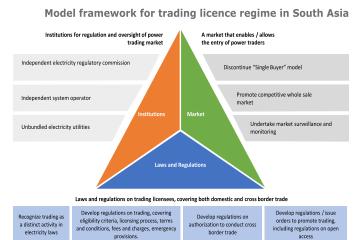


Figure 2 Model framework for trading license regime in South Asia

## 6. Recommended Guidelines for trading license regime in South Asia:

The brief summary of the Recommended Guidelines for trading license regime in South Asia is given below

No.	Guideline	Summary
1	Operationalization of legal and regulatory framework for trading licensees	Introduce trading as a defined and allowed activity under statutory legislation.     Empower the respective national level electricity regulators to exercise market oversight and price control in trading market through measures such as trading margin cap and emergency provisions.
2	Extending / applying the trading licence framework in the context of cross border trade	<ul> <li>Introduce the concept of "authorization for cross border trade", so that trading licensees can conduct cross border trade.</li> </ul>
3	Categories of trading licensees and qualification criteria	<ul> <li>Categorization of trading licensees to be based on proposed annual trading volume.</li> <li>Authorization for cross border trade to be given initially to only traders falling in the highest category</li> </ul>

No.	Guideline	Summary
4	Grant and revocation of trading licence	• Clearly define the procedures for issue, renewal, amendment and revocation of trading licences.
5	Terms, conditions and obligations of trading licensees	<ul> <li>Trading licensees to be made responsible for fair, transparent and competitive market operations and safe grid operation through terms and conditions and obligations specified in legal / regulatory framework.</li> </ul>
6	Market development	<ul> <li>Hurdles in the introduction and participation of power traders may be removed through legal / regulatory changes and institutional restructuring.</li> </ul>
7	Encouraging regional mechanisms for co-ordination in CBET	Ensuring co-operation and support in the operationalization of regional forums for collaboration in CBET

Figure 3 brief summary of the Recommended Guidelines

#### 7. Roadmap and action plan

It does not seem feasible to complete the institutionalization and operationalization of trading licence regime in South Asian countries at the same time, as different countries are at different levels with respect to the trading licence regimes and market development. Therefore the following roadmap is proposed, which may be further refined by the respective countries.

#### Roadmap and action plan for trading license regime in South Asia

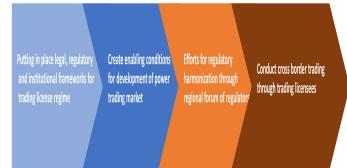


Fig.-4 Roadmap and action plan for trading license regime in South Asia

The countries may set up the legal, regulatory and institutional frameworks required for trading in a gradual manner, including 1) Making provision in laws, identifying trading as a distinct and licensed activity 2) Defining the regulatory authority for trading 3) Notifying regulations for trading licensees, including the requirements for obtaining authorization for cross border trade 4) Creating enabling conditions for development of power trading market 5) Efforts for regulatory harmonization through regional forums 6) Conducting cross border trade through trading licensees 7) developing a transitional mechanisms for institutional framework

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