





## **Draft Agenda**

# **Regional Conference on Enhancing Energy Cooperation & Integration in South Asia**

30<sup>th</sup> – 31<sup>st</sup> August'2018, Hotel Le Meridien, New Delhi

| Day 1 –30 <sup>th</sup> August'2018   |  |   |
|---|--|---|
| 0900-0945Hrs  | Registration                             |   |
| 0945 – 1100 Hrs   | SESSI                                    | ON I- INAUGURAL   |
|   |  | LAMP LIGHTNING  |
| 0945 – 0955Hrs  | Welcome Address                          | Dr. Jyoti Parikh, Executive Director, IRADe               |
| 0955-1005 Hrs   | Brief Presentation on SARI/EI<br>Program | Mr. V. K. Kharbanda, Project Director, IRADe, SARI/EI     |
| 1005 – 1015Hrs  | Special Address                          | H.E. Kenneth I. Juster, US Ambassador to India.           |
| 1015-1025 Hrs   | Special Address                          | Mr. Ali Hader Altaf, Director of SAARC                    |
| 1025 – 1035Hrs  | Special Remarks                          | Ms. Preeti Saran, Secretary, Ministry of External Affairs |
| 1035-1045 Hrs   | Special Remarks                          | Mr. Ajay Kumar Bhalla (Secretary), Ministry of Power, GOI |
| 1045– 1100Hrs   | Key Note Address                         | Mr R. K. Singh, Hon'ble Minister of Power, Govt. of India |
| 1100 – 1105Hrs  | Vote of Thanks                           | Mark A White, Mission Director, USAID                     |
| 1105- 1130 <u>Group Photograph&amp; Tea Break</u>   |  |   |
| Day 1 - 30 <sup>th</sup> August'2018  |  |   |
| 1130 – 1300Hrs  | Session II                               |   |
| Policies/, Regulations and Institutional Mechanisms for promoting Energy Cooperation & Cross Border Electricity Trade in South Asia |  |   |







The power sectors of the South Asian (SA) nations are at different stages of reforms in terms of policy, regulatory and legal Frameworks. Lack of a coordinated frameworks among these countries is a key factor hampering the growth of cross border electricity trade (CBET). A consistent, credible, compatible and investor-friendly policy, regulatory and legal framework willen courage investors, developers and multilateral development banks to participate in development of Resources and associated transmission infrastructure in the region. SARI//EI undertook number of analysis and studies during in the last six years has done various research studies to develop regional regulatory guide lines, suggested changes/amendment required in each country's laws, framework on Open Access and trading License identified suggested changes/amendment required in each country's laws and developed model regulations and compendium of South Asia regulations, etc. to promote CBET. This session will focus on:

1. Initiatives taken by SA countries in policy, regulatory and legislation reforms to promote CBET;

2. Need for Institutional mechanisms and entities to support coordination of regulations, building capacity and knowledge sharing etc. and

3. Way forward to develop such coordinated frameworks and mechanisms.

|                | Session Chair                           | Mr. Girish Pradhan, Former Chairman, CERC, India                                |  |
|----------------|---|---|--|
|                | Theme Context (10-15 Minutes)           | V. K. Kharbanda, PD & Rajiv Panda, PC, SARI/EI, IRADe                           |  |
|                | Remarks by Panelists ( About 7-10       | ) Minutes Each)   |  |
|                |   |   |  |
|                | 1. Ms. Geetu Joshi, C                   | Chief (Economist), CERC, India  |  |
|                | 2. Mr. Samdrup K Th                     | inley, CEO, Bhutan Electricity Authority , Bhutan                               |  |
|                | 3. Mr. Mohamad Ho                       | ssain, Director General, Power Cell, Bangladesh                                 |  |
|                | 4. Mr Dinesh Kumar                      | Ghimire, Joint secretary, MOE, Nepal  |  |
| Open Discussio | on                                      |   |  |
|                | Closing remarks by Session Co-<br>Chair | Mr. Salim Mahmud, Chairman, Appellate Tribunal ,BERC , Bangladesh<br>Bangladesh |  |







#### 1400– 1515Hrs

## Investments in Infrastructure for Cross Border Projects: Catalyzing Private Investments and Mitigating risks"

**Session III** 

South Asia is blessed with diverse Energy Resources Coal, Hydro, Gas, Renewable (Solar and Wind) etc. and in particular, there is vast untapped clean hydropower potential in the SA region,-around 350 GW, of which India accounts for 150 GW, Nepal for 83GW, Pakistan for 60 GW, Afghanistan for 25 GW and Bhutan for 30 GW, can be commercially exploited in a sustainable manner. To tap this hydropower and Renewable potential, huge capital outlay is required for developing the generation facilities and associated transmission infrastructure for evacuation of power and CBET. However, there are many issues and risks associated with financing of hydropower projects and related infrastructure such as geological impediments, land acquisition, environmental impacts, right of way, etc. This session will therefore focus on:

- 1. The key challenges to the development of cross-border generation and transmission projects and associated investment risks;
- 2. Potential for private sector investments in all of the energy sources for cross-border power trade
  - 3. Need for investor-friendly frameworks and institutional mechanism for promoting investment in Cross border Infrastructure projects

| Session Chair                           | Mr. Rajeev Sharma, CMD, PFC                                      |  |
|---|--|--|
| Theme Context ( 10-15 Minute            | Mr. V.K. Kharbanda, PD, SARI/EI, IRADe                           |  |
| Remarks by Panelists ( About 5          | 5-7 Minutes Each)  |  |
| 1. <b>Mr. Jiv</b>                       | van Acharya , Senior Energy Specialist, ADB                      |  |
|   | nrvinder Manocha, COO, GMR Energy                                |  |
| 3. <b>Mr. An</b>                        | t Singh Bindra, Director(Finance), SJVNL<br>Poudyal , MCC, Nepal |  |
| 4. Mr Sar                               |  |  |
| 5. Mr Ash                               | nish Khanna, ED & CEO, Tata Power Solar                          |  |
| Open Discussion                         |  |  |
| Closing remarks by Session Co-<br>Chair | - Mr. Ajay Shanker, Ex Secretary, GOI                            |  |
| 1515Hrs-1530 HrsTea <u>Break</u>        |  |  |
|   |  |  |

4. Possible solutions / mechanisms to mitigate the risks of investment in cross-border power trade projects.







### 1530 – 1645Hrs

Session IV

Coordinated interconnection transmission planning and need for a Technical Institutional Mechanism in South Asia for secure reliable Grid interconnection

Coordinated Transmission Planning along with secure and reliable operation of the grid interconnection is critical for the success of power trade in the region. - For long term sustainability of Cross border electricity trade, it is important that there should be coordinated transmission planning, development of a regional master plan and harmonization of grid codes for interconnection and operation of the power system. Further, there is also need to create an Association or Forum of Transmission Utilities at the regional level for coordinating and developing regional master plan for grid interconnection in the South Asia for smooth integration and trade of electricity in the South Asia region. This session will focus on:

1. Challenges in integration of transmission grids South Asia Power System and its operation;

2. Need for harmonization of Grid code, operating procedures, scheduling and despatch etc. and a Technical institution for coordinated transmission planning and power system operation;

|                 | Session Chair                           | Mr. Pankaj Batra, Chairman, CEA, India   |  |
|-----------------|---|--|--|
|                 | Theme Context -15 Mins                  | Mr. Rajiv Ratna Panda, PC, SARI/EI, IRADe  |  |
|                 | Remarks by Panelists ( About 5 -7 N     | Ainutes Each)  |  |
|                 | 3. Mr. Karma Tshewa                     | CIL , India<br>aha, Chief Engineer, PGCB, Bangladesh<br>ang, Chief Engineer, Bhutan<br>Grivastva, Director, Ministry of Power, India |  |
| Open Discussion |   |  |  |
|                 | Closing remarks by Session Co-<br>Chair | Mr. S K Soonee, Advisor, POSOCO  |  |







## 1645-1800 Hrs

Session V

## "Electricity Trade in BBIN region- Long term trading volume and prospects"

Each of the South Asian Country has its own concerns on energy security and economic growth. Multi-lateral trade provides a larger market and diversification of electricity import sources. It also helps in operating the power systems of each of the South Asian countries in a more efficient manner and results in optimal utilization of the natural resources in the region. The SARI/EI study highlights these technological benefits to the participating countries in the BBIN region and its impacts.

- 1) The volume and capacity requirement for Electricity Trade among BBIN countries and its economic benefits
- 2) Efficiency and cost reduction achieved due to Trade in BBIN region?
- 3) What are future economic and technological uncertainties that can impact electricity trade in BBIN region?

|                 | Session Chair   | Dr. Kirit Parikh, Chairman, IRADe                              |
|-----------------|---|--|
|                 | Theme Context -15 Mins  | Dr. Probal Ghosh and Mr. Vinay Saini                           |
|                 | Remarks by Panelists ( About 5 -7 Minutes Each)   |  |
|                 | <ol> <li>Shri Ghanshyam Prasad, MOP, India</li> <li>Mr Khasru, IPAG, Bangladesh</li> <li>Mr. Shamsul Alam, Member , Planning Commission , Bangladesh</li> <li>Representative from NITI Aayog</li> </ol> |  |
| Open Discussion | •   |  |
|                 | Closing remarks by Session Co-<br>Chair   | Dr. Swarnim Wagle, Former Chairman, Planning Commission, Nepal |
| 1800 -1830      |   | High Tea Break   |

| Day-2 - 31 <sup>st</sup> August'2018 |
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#### 0930-1045 Hrs

#### **Session VI**

"South Asian Regional Power Market- Market Instruments and Regional Power Exchange"

Cross-border power trade in South Asia is largely limited to bilateral trade and the tariffs are based on cost plus or negotiated basis in most of the cases. Some quantum of trades taking place through Indian traders like PTC and NVVNL. There is a need for a transparent and reliable regional power market to promote CBET.

It is noted that there is a change in the environment related to the basis of the Cross Border trade. The Cross Border players are seen to have access to the Indian market beyond the ambit of G to G agreements. In particular, a desire to participate in exchange based power trading is now gaining ground. Indian Government also has a positive view in this matter as can be seen from the Draft Gol notification of CBET. In the options available for CBET, exchange based trades are a missing link

As the regional grid gets strengthened, there is a need for clarity on the commercial terms and conditions and systems and procedures. Investors also seek fair, steady and risk mitigated short- and long-term returns on their capital. Hence it is necessary to have clarity on tariff structure and various commercial terms & conditions for promoting CBET

This session will therefore focus on:

- 1. Commercial terms & conditions, systems and procedures including tariff, DSM etc. for regional power trade.
- 2. Need of Power Exchange in south Asia Region in particular a Day Ahead Market
- **3.** Issues/ Challenges for operationalizing the Day Ahead Market in the South Asian region

| Session Chair   | Mr. Rajib K Mishra, Director, PTC                                |
|---|--|
| Theme Context   | By Mr. S.K. Ray, TS, & Mr. Gaurav Jain, SRA, SARI/EI, IRADe      |
| Remarks by Panelists ( About 5 Min                              | utes Each)   |
| 1. Mr. Rajnish Bhagat   | , CEO, NVVNL   |
| 2. Mr. S. N Goel, MD  | & CEO, IEX   |
| 3. Mr Anil Raj Bhanda   | ary , DMD,NEA<br>ssain, Director General, Power Cell, Bangladesh |
| 4. Mr. Mohamad Hos  |  |
| 5. Mr K L R C Wijayasinghe, Director, Power & Energy, Sri-Lanka |  |
| Open Discussion   |  |
| Session Co-chair  | Mr. Anil Razdan, Former Secretary Power, India*                  |







1045 – 1100 Hrs Tea Break

### 1100 – 1215Hrs

Session VII

## Linking South Asia with South-East Asia and synergizing regional/sub-regional initiatives for Energy Cooperation

As energy cooperation in South Asia, especially on the Eastern Grid (Bangladesh, Bhutan, India and Nepal), has become a reality, there is an opportunity to look beyond South Asia to South-East Asia. Myanmar is the gateway to South East Asia Region for the South Asia. Integrating both these regions could provide further economic and social benefits to each of the participating countries.

Several efforts are on in both these regions through various institutions to promote cooperation in economic, social, and technical aspects and provide a platform for the people to work together in the spirit of friendship, trust, and understanding. Energy cooperation, and integration is critical to economic cooperation. These regional institutions include SAARC, BBIN, SASEC, BIMSTEC, ASEAN are all focused on promoting energy cooperation, a common goal. It is therefore important that regional institutions should synergies to find potential opportunities to develop energy resource and enhance connectivity to promote energy integration and links between the two regions. Some of the issues covered will include

- Potential and challenges for linking South Asia with South East Asia
- Role of India in driving this integration
- How to have better coordination and synergies so that these regional institutions are building on each other's efforts.

|                 | Session Chair  | Mr. Michael Satin, Director ,USAID-                  |
|-----------------|--|--|
|                 | Theme Context ( 10-15 Minutes)                               | Context presentation by SARI/EI (USEA/Deloitte)      |
|                 | Remarks by Panelists ( About 7-10                            | Minutes Each)  |
|                 |  |  |
|                 | 1. Mr. Ali Haider Alta                                       | f, Director, SAARC                                   |
|                 | 2. Mr. Lei Lei Song, Ro                                      | egional Economic Advisor, South Asia Department, ADB |
|                 | 4. Mr. P.S. Mhaske , Member ,CEA , India                     |  |
|                 | 5. Mr. K. V. S. Baba , Chairman & Managing Director, POSOCO* |  |
| Open Discussion |  |  |
|                 |  | Ms. Meera Shankar ,Former Indian Ambassador          |







Closing remarks by Session Co-Chair

## 1215-1330 Hrs Session VIII

## "Role of Think Tanks in enabling conducive environment and consensus building for CBET in South Asia"

South Asia Think Tank Forum for Energy Co-operation was founded under SARI/EI as an outreach and dissemination forum to engage with policy makers, media, parliamentarians, bureaucrats, civil society and citizens to help prioritize, fast track and push the agenda for CBET. Think Tanks support in bringing disparate stakeholders together, bridging communication gaps, mobilize public opinion as well as disseminate societal benefits of power trade through media engagement. The role of Think Tanks is critical to sustain discourse on CBET in enhancing energy access in the region for socio-economic development. The session will deliberate on -

- 1. Lessons learnt challenges and solutions
- 2. Strategies to sensitize Stakeholders and build awareness on benefits of CBET
- 3. Narratives of socio-economic development for media engagement
- 4. Way forward to sustain required co-ordination and actions.

| Session Chair  | Ms. Sripriya Rangarajan, Joint Secretary , India |
|--|--|
| Theme Context ( 10-15 Minutes)   | Rohit Magotra, Deputy Director, IRADe            |
| <b>Remarks by Panelists</b> ( About 7-10 Minutes Each)                                 |  |
| 1. Dr. Bishnu Pant, ED, IIDS, Nepal  |  |
| 2. Ms. Monali Hazra, Regional Energy Manager and Clean Energy Specialist, USAID, India |  |
| 3. Mr. Sagar Prasai, Country Representative, Asia Foundation                           |  |
| 4. Dr. Pradeep Perera, Head Energy India, ADB  |  |
| 5. Mr. Prabir Neogi , Chief Executive, FICCI ,India                                    |  |







| Open Discussion   |   |   |
|-------------------|---|---|
|                   | Closing remarks by Session Co-<br>Chair | Dr. Jyoti Parikh, Executive Director, IRADe |
| 1330 Hrs-1430 Hrs | <u>Lunch Break</u>                      |   |
| 1430 – 1545Hrs    | Session IX                              |   |
|                   |   |   |

Enhancing Regional energy cooperation & integration : Future Strategies & Way forward "

The eight South Asian (SA) nations (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka) collectively account for over one-fifth of the world's population, and the region is one of the fastest growing in the world, with an average annual growth rate of 6% as measured by GDP per capita. Yet despite this impressive macroeconomic growth, due to inadequate availability and sub-optimal usage of energy resources - both domestic and imported, these nations suffer from shortages of reliable and quality power supply. Combined with poor access to electricity for consumers, this impedes various development pursuits ranging from economic progress and scientific research, to education, healthcare, quality of life, prosperity and happiness in the region. Fortunately, the region has a host of energy resources including coal, gas, hydro, solar, wind, etc. and is endowed with significant hydropower potential (350GW) that has largely remained untapped. Sustainable exploitation of resources and development of associated cross-border electricity transmission infrastructure will lead to optimal investment in generation and transmission, capacity utilization, and significant reduction in the carbon footprint of the region.

At present, limited bilateral cross-border energy trade (CBET) is underway between Bangladesh-India (660 MW), Bhutan-India (1416 MW), and Nepal-India (150 MW), though the total potential for CBET is immense. Creating Technical Institution for coordination of regulations, transmission planning and integration and transparent settlement of Dispute Resolution mechanism are also other important ingredients to be implemented. This session will therefore focus on :

1. Key learnings from past and current CBET projects;

2. Opportunities to promote investments in the development of various energy resources, in particular hydropower; renewable energy sources, and associated cross-border transmission infrastructure;

3. Importance of institutions for coordination such as South Asia Forum of Regulators/ South Asia Forum of Transmission Utilities

4. Future strategies and way forward to promote Energy Security and trade of electricity in the South Asia Region.







|               | Session Chair  | Mr. Amitab Kant, CEO,NITI Aayog             |
|---------------|--|---|
|               | <b>Remarks by Panelists</b> ( About 5 -7 Minutes Each)                                 |   |
|               | Mr. Yeshi Wangdi, Secretary Power ,MoEA, Bhutan  |   |
|               | Mr. Mohamad Hossain, Bangladesh  |   |
|               | Mr. Dinesh Kumar Ghimire ,Joint Secretary Nepal  |   |
|               | Mr. Sulakshana Jayawardena, Director, Ministry of Power and Renewable Energy Sri Lanka |   |
|               | Ms. Bharati, Joint Secretary, Ministry of Power, India                                 |   |
| Sessio        | n Co-Chair   | Dr. Jyoti Parikh, Executive Director, IRADe |
| 1545-1600 Hrs |  | Tea Break                                   |

|                                       | 1600-1700 Hrs   | Session X Valedictory Session |
|---------------------------------------|---|-------------------------------|
| Remarks by Mark A<br>Remarks by H.E M | r. Kirit Parikh, Chairman, IRADe<br>White, Mission Director, USAID<br>r. Bharat Kumar Regmi, Chargé d'Affaires a.i, Eml<br>ss by Mr. Suresh Prabhu, Minister of Commerce, |                               |
| -                                     | V. K. Kharbanda, Project Director, SARI/EI, IRAD  |                               |
| 1700-1730Hrs                          | <u>High Tea</u>   |                               |