

# **MINUTES OF MEETING OF THE 18<sup>TH</sup> EXECUTIVE COMMITTEE MEETING OF SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION**

**Date: 5<sup>th</sup> DECEMBER 2019**

**Venue: Board Room, Hotel Radisson Blue Water Garden, Dhaka, BANGLADESH**

The meeting was chaired by Mr. Monowar Islam, Chairperson, South Asia Forum of Infrastructure Regulation (SAFIR) & Bangladesh Energy Regulatory Commission (BERC). List of participants is enclosed at **Annexure-I**.

In his opening remarks and welcome address, Mr. Monowar Islam, Chairperson, SAFIR and Chairperson of BERC welcomed all dignitaries to the meeting. He thanked Mr. Saliya Mathew, Former Chairman of SAFIR/ Chairman of PUCSL, Sri Lanka for his effective leadership of SAFIR for last 2 years. He also thanked Mr. P K Pujari, Chairperson of CERC/ SAFIR Secretariat for proposing the name of Chairman, BERC as Chairman, SAFIR. As Chairman, SAFIR, Mr. Islam expressed his gratitude and commitment to strengthen the SAFIR and sought cooperation from all members for the same. Mr. Islam also briefed the ECM members on the power sector scenario in Bangladesh. He added that as Nepal has good potential for hydro power in the region and as there is great enthusiasm amongst the investors on this issue, the regional power situation can be strengthened by utilising hydro power. He informed the members that he had met the Chairperson of Electricity Regulatory Commission of Nepal and requested him to become a member of SAFIR. He also stressed the need to strengthen the membership of SAFIR and requested SAFIR Secretariat to explore options to include Myanmar to become member of SAFIR. Mr. Islam also acknowledged support of SARI/EI and IRADe for supporting the activities of the SAFIR Working Group and thanked the members of the Working Group for their activities. He further informed the members that the ECM proposes to discuss the proposal

of World Bank to support the Working Group of SAFIR for the regional power cooperation and the reference received from US State Government to support the activities of SAFIR. Mr. Islam expressed his regret for not being able to attend the ICER meeting in Lima, Peru and stressed that SAFIR needs more cooperation and association with International Regulatory Associations.

In his address, Mr. P.K.Pujari, Chairperson, CERC/ SAFIR Secretariat thanked Mr. Islam for his hospitality and hosting this meeting in Dhaka, Bangladesh. Mr. Pujari stated that SAFIR members look forward to work with Mr. Monowar Islam as Chairperson, SAFIR. He appraised the members of ECM on the latest developments in the Indian power sector especially w.r.t. market development. He also informed that CERC has issued various papers on the Real time market, Ancillary market etc. He also informed the members that subsequent to the issues being sorted out between SEBI (Financial Regulator in India) and CERC, new products like Forward contracts are likely to be introduced in the power market very soon. As there are more opportunities for cross border trade of electricity on the power exchanges, institutions like World Bank and US Government are also looking to assist SAFIR on the same issues through formation of working groups. As regards introduction of Real time market in India, Mr. Pujari informed the members that after a mock exercise of 3 months, the Real time market will be effective from 1<sup>st</sup> April 2020.

In his address, Mr. SamdrupThinley, CEO, Bhutan Electricity Authority thanked Mr. Islam for the excellent hospitality arrangements in convening the 18<sup>th</sup> ECM of SAFIR. He also thanked Mr. Islam for his leadership and discussion on a number of agenda items for strengthening SAFIR. He also invited the Electricity Regulatory Commission of Nepal to join SAFIR as its member.

The Forum thereafter took each of the agenda items for consideration.

**Agenda 1: Confirmation of the minutes of the 17th Executive Committee Meeting held on 26th April 2019 at New Delhi , India.**

The minutes of the 17<sup>th</sup> Executive Committee Meeting and Action Taken Report as circulated were confirmed, with the direction that SAFIR Secretariat should continue to follow up with Myanmar, Afghanistan and Maldives for seeking their membership in SAFIR emphasizing on the importance of being a part of SAFIR.

**Agenda 2: Approval and adoption of the Audited Accounts of SAFIR for the F.Y. 2018-19**

Dy Chief (RA), CERC/ SAFIR Secretariat explained the salient features of the Balance Sheet and Income & Expenditure Account for the financial year 2018-19. After discussion, the Annual Accounts of SAFIR for the financial year 2018-19 were considered and adopted (*Annexure –II* ). Chairperson, SAFIR/ BERC directed SAFIR Secretariat to conduct more programs for the SAFIR members in addition to the Core Course as there should be optimal and productive utilization of fund.

**Agenda 3 : Membership**

- a) Inclusion of Electricity Regulatory Commission of Nepal in the Executive Committee and Steering Committee of SAFIR**
- b) Membership fee of SAFIR in ICER**
- c) Outstanding membership fees**
- d) Proposal for re-appropriation of budget for FY 2019-20**

- a. The Members were apprised of the proposal to include the Electricity Regulatory Commission of Nepal (ERCN), both as Steering Committee Member and Executive Committee Member. Member, ERCN informed the ECM members that the proposal is being actively considered by Government of Nepal and as soon as the approval is received, SAFIR Secretariat will be informed and membership fees will be paid.

- b. As regards the membership fees of US\$1200 to be paid to ICER towards membership fees of SAFIR, the ECM members agreed that association with International Regulators will entail rich learning experiences for the sector. Hence, SAFIR Secretariat was asked to make the payment of fees to ICE.
- c. As regards long standing membership fees to be received (outstanding for more than 3 years and above) from Members, ECM directed that all such members may be sent letters intimating discontinuation of their membership in SAFIR. Member of ERCN stated that Electricity Tariff Fixation Commission of Nepal does not exist any more. The Water Supply Tariff Fixation Commission of Nepal though not proactive, is functioning. Hence, ERCN will take it up with the Water Supply Tariff fixation Commission to assess if they are keen to continue in SAFIR. As regards outstanding membership fees for FY 2018-19, SAFIR Secretariat was directed to follow up for receipt of pending fees.
- d. With regard to re-appropriating funds from the budget head of “Administration costs” to “Core course expenses”, the ECM permitted the same in view of the proposed increased expenditure for the Core Course to be held at IIM Ahmedabad, Gujarat, India and also due to the fact that the overall budget figures did not change (*Annexure – III*).

**Agenda 4:        Proposal of US Department of State received by BERC for potential cooperation with SAFIR**

Dy Chief (RA), CERC/ SAFIR Secretariat updated the ECM members regarding the proposal received by BERC from US Department of State’s Energy Resource Bureau under the ENR’s Power sector Program in support of the US Government’s Asia EDGE initiative. ENR had proposed to support SAFIR on various activities such as tailoring activities, assessments, providing training and assistance in drafting regulations or norms as well as review of any existing regulations. ENR’s initiative could also provide assistance related to natural gas and imported LNG regulatory frameworks. In addition, ENR was keen to support the region’s effort to increase regional power trade, enhancing

regulations for integration of cleaner technologies, distributed generation, competitive procurement, tariff re-design, utility performance improvement guidance etc.

The ECM expressed appreciation to the US department of State for proposing to support SAFIR on a variety of issues. The ECM also deliberated upon the issue of assistance to SAFIR by multiple agencies such as USAID, World Bank, IRADeetc and it was emphasized that there should be no overlap of issues for the proposed support to be given by ENR. Hence, to begin with, the ECM decided that assistance from ENR will be taken for capacity building of SAFIR. SAFIR Secretariat was directed to ascertain from ECM members on the proposed areas of capacity building required under the broad ambit of the services proposed by ENR. SAFIR Secretariat was also directed to correspond with US Department of State by conveying the interests of the ECM members in associating with ENR and also to invite representatives from ENR in the next meeting of ECM for further discussions.

**Agenda 5: Reference from World Bank – Formation of Working Group on development of South Asian Power Trade.**

Dy. Chief (RA), CERC/ SAFIR Secretariat updated the EC members regarding the proposal received from World Bank to create a Joint Working Group of the Regulators in the BBIN Sub-region to study and formulate recommendations for facilitating Power trade development in South Asia. World Bank has further stated that they would support couple of meetings of the Working Group in one or more of the BBIN locations which

would include travel, hotel accommodation, arrangement of meetings, analysis of the cross border electricity trade development agenda etc.

The EC also felt that the development of the South Asia Power trade is key to take advantages of the synergies in the region so that the development of the sector is addressed and so are the interest of the consumers in the BBIN region. Therefore, the EC decided to accept the proposal of World Bank for formation of a Joint Working Group at the level of Chairman/Member with supporting costs for the same. Therefore, SAFIR Sectt.is directed to formally write to World Bank conveying the acceptance of the EC of SAFIR. The EC also proposed that there could be a Joint Technical Group, which could assist the Joint Working Group. While Chairman, Bangladesh Energy Regulatory Commission nominated Member Mr. Md. Mizanur Rahman to the Working Group, the EC directed SAFIR Secretariat to write to other EC member countries seeking nominations to the Joint Working Group at the level of Chairman/ Member and also to the Joint Technical Group.

The convenor to the Joint Working Group would be decided by the members of the Joint Working Group in its first meeting.

On receipt of nominations from EC member countries, the SAFIR Secretariat would communicate the same to the World Bank.

## **Agenda 6: Presentation on Guidelines and Regulations on CERC (Cross Border Trade and Electricity) Regulations, 2019**

In view of revised guidelines issued by the Ministry of Power for trading of power with neighboring countries, CERC notified the Cross Border Trade of Electricity Regulations, 2019. In order to disseminate the salient features of these Regulations amongst the ECM members, CERC made a presentation (*Annexure IV*). The Regulations permit sale and purchase of power between India and the neighboring countries through mutual agreements between local entities and the entities of the neighboring countries through bilateral agreements between two countries, bidding route or through mutual agreements between entities.

The ECM appreciated the presentation and hoped for early implementation and trade of power between neighboring countries.

## **Agenda 7: Status update on**

- a. Infrastructure Conference**
- b. SAFIR Core Course**
- c. Ext meeting of ECM**

- a. The ECM members were appraised that the next Infrastructure Conference is proposed to be conducted on 19<sup>th</sup> February 2020 at New Delhi, India. This conference is being facilitated by USAID, SARI/EI, IRADe and a detailed program agenda is expected to be received soon.
- b. The ECM was informed that the SAFIR Core Course will be conducted from January 20-23, 2020 at Indian Institute of Management, Ahmedabad, Gujarat and a proposal has been received from Gujarat Electricity Regulatory Commission to this effect. ECM member countries requested to accommodate additional participants from their countries for whom they would bear the cost.

- c. Shri Ram Krishna Kathiwada, Member, Electricity Regulatory Commission of Nepal (ERCN) proposed to host the next ECM of SAFIR in Pokhara, Nepal sometime in April-May 2020. SAFIR Secretariat was directed to coordinate with ERCN for finalising the dates in consultation with ECM members.

**Agenda 8 : Presentation of the updates of the SAFIR Working Group activities by IRADe**

**Agenda 9 : Presentation on the Common Minimum Grid Code for South Asia by IRADe**

Mr. Pankaj Batra, Project Director, SARI/EI and Mr. Rajiv Ratna Panda, Technical Head, SARI/EI made presentations on updates on various technical activities of SAFIR Working Group and action plan and the key features of Common Minimum Grid Codes for facilitating cross border electricity trade in the South Asia region ( *Annexure V*).

A. The SAFIR working group is working on the following and the same are in various stages for completion:

- i. Study on South Asian electricity regulations to develop regulatory pathway for Electricity/ energy exchange and Energy Cooperation in South Asia;
- ii. Study on Regulatory interventions for Grid discipline and Grid reliability in the region;
- iii. Study on Cross Border Electricity Trade;
- iv. Organizing a South Asia Energy Sector Training and Capacity Building Programme on Energy Regulation for Energy Cooperation and Exchange of Electricity in South Asia;
- v. Developing South Asia Energy/Electricity Regulatory Compendium;
- vi. SAFIR-Regulatory Newsletter;
- vii. Creating a web portal on South Asia Energy/ Electricity Knowledge Resource Database;



B. The presentation on Common Minimum Grid Code covered the following:

- i) Objective of the Draft Grid Code would be to lay down the rules, guidelines and standards to be followed by various South Asian countries for cross border trade of electricity while ensuring that the power system is most secure and reliable;
- ii) The Common Grid Code would be applicable to all countries in South Asia; and
- iii) The structure would cover Connection Code, Operating Code, Scheduling and Despatch Code and Administration of the Grid Code.

Thus, the Draft Code is expected to

- i) facilitate cross border trading of power, while ensuring secure, reliable, economic and efficient operation of the grid;
- ii) Facilitate coordinated optimal operation of the South Asian grid; and
- iii) Facilitate coordinated optimal maintenance planning of generation and transmission facilities in the South Asian grid.

The ECM appreciated the activities of the SAFIR working group and the Draft Common Minimum Grid Code as both these will play a strong role in enhancing regulatory cooperation and cross border energy trade in the region.

With regard to the activities of SAFIR working group,

- i. The ECM members stated that the activities may be implemented in an accelerated manner which will be immensely useful, timely and will complement the various efforts being undertaken for work enhancing cross border energy trade in the region.

- ii. Chairman, SAFIR/ BERC suggested that the Working Group should also consider working on methods to reduce cost of supply. This could be added as an objective in the Study on Cross Border Trade of Electricity.
- iii. The Working Group could also assess as to how balancing costs can be reduced due to the flexibilisation of thermal power so that there is no economic loss.
- iv. On the development of web portal for SAFIR, Chairperson, SAFIR/ BERC suggested that they could also cover topics such as Access to Electricity, Transmission and Distribution losses, tariff cost of consumers especially average cost for four classes of consumers, i.e Domestic, Agriculture, Industry and Commercial.
- v. At the request of SARI/EI/IRADe, the ECM members agreed to create a separate Tab in the website of SAFIR for highlighting the activities of the SAFIR Working Group. SAFIR Secretariat was directed to enable this tab by taking inputs from the team of SARI/EI/IRADe.

On the presentation on the Draft Common Minimum Grid Code,

- i. Chairperson, SAFIR/ BERC suggested that the Code could also cover quarterly and yearly reports.
- ii. The ECM recommended that each member country may form a Grid Code Review Committee consisting of all the stakeholders to discuss various features of the draft.
- iii. Considering that the Grid Code is a crucial document and as per the suggestion of ECM, SARI/EI/IRADe were requested to do more detailed and comprehensive consultation with the grid code review committee of each country as well as with all stakeholders (utilities, system operators, planners, regulators and policy makers etc.) so that the process of finalization of Draft Common Minimum Grid Code can be effected. The Electricity Regulatory Commissions in Member countries will help facilitate consultation with other stakeholders in their respective countries.
- iv. To begin with, SAIR/EI/IRADe may start working with other member countries first and later work with the Indian stakeholders.

At the end of the meeting, Mr Monowar Islam, Chairperson, SAFIR/ BERC thanked all ECM members of SAFIR for their participation in the meeting. He thanked his team from BERC for their support in organizing and making all arrangements for the meeting. Mr. Islam further thanked Mr. P.K. Pujari, Chairman, CERC/ SAFIR Secretariat for his kind advices to Mr. Samdrup Thinley, Chairperson of BEA and to Mr. Ramakrishna Khatiwada of ERCN for attending the meeting and giving valuable suggestions. Mr. Islam also appreciated the efforts of Dy Chief (RA), CERC/ SAFIR Sectt. for effectively updating the ECM members on the agenda items. Mr. Islam also thanked the team from SARI/EI/IRADe for their contribution to the activities of SAFIR.

Mr. P.K. Pujari, Chairman CERC/ SAFIR Secretariat thanked Mr. Monowar Islam, Chairperson SAFIR/ BERC for the wonderful hospitality arrangements. He also thanked the officials of BERC for their painstaking efforts in conducting the ECM. He also thanked the officials and staff of the SAFIR Secretariat for their arduous efforts in coordinating with BERC for organizing the meeting.

The meeting ended with a vote of thanks to the Chair.

(Monowar Islam)  
Chairman, SAFIR  
&  
Chairman, BERC

**List of Participants in 18<sup>th</sup> Executive Committee Meeting held at  
Dhaka, Bangladesh**

**1. Shri Monowar Islam**

Chairman, SAFIR and Chairman, Bangladesh Energy Regulatory Commission,  
Bangladesh

**2. Shri P.K.Pujari**

Chairperson  
Central Electricity Regulatory Commission & SAFIR Sectt.  
India

**3. Shri Samdrup K Thinley,**

Chief Executive Officer  
Bhutan Electricity Authority  
Bhutan

**4. Shri Ramkrishna Khatiwada**

Member  
Electricity Regulatory Commission of Nepal,  
Nepal

**5. Ms. Rashmi Somasekharan Nair**

Deputy Chief, Regulatory Affairs  
Central Electricity Regulatory Commission & SAFIR Sectt  
India

**6. Mr. Md Firoz Zaman**

Deputy Director  
Bangladesh Energy Regulatory Commission  
Bangladesh

## **Special Invitees**

### **1. Shri Pankaj Batra**

Project Director  
SARI/EI/IRADe, India

### **2. Shri Rajiv Ratna Panda**

Technical Head,  
SARI/EI/IRADe, India

\*\*\*\*\*

# **AUDITOR'S REPORT**

The Members of Executive committee of  
**SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION (SAFIR)**  
New Delhi

We have audited the attached Balance sheet of **SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION (SAFIR)** New Delhi, as at **31<sup>st</sup> March 2019** and the income and expenditure account for the year ended on that date annexed thereto. These financial statements are the responsibility of the Society's Management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion and to the best of your information and explanations given to us, the financial statement read with Notes to accounts, gives a *True and Fair view* in conformity with the accounting principles generally accepted in India:-

- a) In the case of the Balance Sheet, of the state of affairs of the Society as at **31<sup>st</sup> March 2019** and
- b) In the case of the Income & Expenditure Account, of the surplus for the year ended on that date.

**For R.K. RAMAN & Co.**

RK RAMAN

Chartered Accountant

MNo : 504962

Place : New Delhi

Date : 18.10.2019

UDIN : **19504962AAAADC7464**



SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION (SAFIR)  
 Sectt.: C/o Central Electricity Regulatory Commission (CERC)  
 Ground, 3rd & 4th FLOORS, CHANDERLOK BUILDING, 36 JANPATH, NEW DELHI - 110 001.

**BALANCE SHEET AS ON 31st MARCH, 2019**

LIABILITIES	AMOUNT (in ₹)		AMOUNT (in ₹)		ASSETS	AMOUNT (in ₹)			
	AS ON 31.03.2019	AS ON 31.03.2018	AS ON 31.03.2019	AS ON 31.03.2018		AS ON 31.03.2019	AS ON 31.03.2018		
<b>GENERAL FUND</b>					<b>FIXED ASSETS (SCHEDULE-1)</b>				
Opening Capital	189,66,426	161,09,402			Fixed Assets WDV as on 01.04.18	578	963		
Add: Excess of Income over Expenditure	29,25,843	28,57,024	218,92,269	189,66,426	Less: Depreciation during the year	232	385		
					<b>Net Fixed Assets</b>	346	578		
<b>CURRENT LIABILITIES</b>					<b>CURRENT ASSETS</b>				
Audit Fees Payable	21,500	21,500			Fixed Deposits (FCRA Account)	134,84,863	106,07,396		
Advertising Expenses Payable	-	-			Auto Sweep FDRs	69,05,000	66,54,733		
Income Tax Refund Received (SCHEDULE-7)	6,94,406	6,24,810			Corporation Bank - SB A/c No. 185840	11,771	11,368		
Legal Fees Payable	10,000	5,000			Corporation Bank - SB A/c No. 388195	29,297	29,035		
Salary Payable	55,950	73,300			Corporation Bank - SB A/c No. 000076	1,844	1,340	204,32,775	173,03,872
Meeting Expenses Payable	-	-			<b>LOANS &amp; ADVANCES (SCHEDULE-6)</b>	112,80,298	117,48,655		
Office Expenses Payable	-	14,76,031							
Professional Fees Payable	37,729	48,474							
Professional Fees Payable (Staff Consultant)	45,000	-							
Honorarium Payable (Staff)	5,000	8,750							
TDS Payable on Contractors	4,799	3,272							
TDS Payable on Professional Fees	6,970	-							
TDS Payable on Salary	24,750	-							
Telephone Expenses Payable	-	-							
Travelling Expenses Payable	2,90,000	2,96,071							
Labour (outsourcing) Expense payable	1,18,227	3,49,488							
Provision for Tax (SCHEDULE-7)	85,06,819	71,79,983							
			98,21,150	100,86,679					
			317,13,419	290,53,105					
						317,13,419	290,53,105		

Significant Accounting Policies & Notes on Account (Schedule- 8)

As per audit report of even date attached.



Date: 30 September, 2019  
 Place: New Delhi

UDIN : 19504962AAAADC7464

For SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION

Hon. Secretary

Hon. Treasurer



SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION (SAFIR)  
Sectt.: C/o Central Electricity Regulatory Commission (CERC)  
Ground, 3rd & 4th FLOORS, CHANDERLOK BUILDING, 36 JANPATH, NEW DELHI - 110 001.

INCOME AND EXPENDITURE ACCOUNT  
FOR THE PERIOD 01st APRIL, 2017 to 31st MARCH, 2019

Description	Schedule	Amount (in ₹)		Description	Amount (in ₹)	
		AS ON 31.03.2019	AS ON 31.03.2018		AS ON 31.03.2019	AS ON 31.03.2018
Administrative Costs (Secretariat)	2	22,05,056	27,44,323	Subscription & Membership Fees (TDS = NIL)	88,69,770	93,01,771
Salary, Establishment Expenses and other Services	3	9,33,037	8,34,527	Participation Fees (Core Course) (TDS = NIL)	-	-
Steering Committee Expenses	4	27,17,683	14,84,945	Interest from Auto Sweeps FDRs (TDS = ₹ 39,135/-)	3,91,305	3,26,423
Core Course Expenses	5	-	12,48,057	Interest Received from Fixed Deposit (TDS = ₹ 77,572/-)	7,75,717	6,64,324
Depreciation		232	385	Interest Received from Savings Bank Account	17,127	26,286
Provision for Tax (F.Y. 2018-19)		13,26,836	12,77,598	Excess Provision Written Off (Net)	1,046	681
				Foreign Exchange Gain/Loss	53,722	1,27,374
<b>Excess of Income over Expenditure</b>		<b>29,25,843</b>	<b>28,57,024</b>			
		<b>101,08,687</b>	<b>104,46,859</b>		<b>101,08,687</b>	<b>104,46,859</b>

Significant Accounting Policies & Notes on Account  
As per our report of even date attached.

7


For R.K. RAMAN & CO.  
Chartered Accountants

R.K. RAMAN  
M.NO. 504962

Date: 30 September, 2019  
Place: New Delhi

UDIN: 19504962 AA AADC7464

For SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION

  
Hon. Secretary

  
Hon. Treasurer



SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION (SAFIR)  
Sectt.: C/o Central Electricity Regulatory Commission (CERC)  
Ground, 3rd & 4th FLOORS, CHANDERLOK BUILDING, 36 JANPATH, NEW DELHI - 110 001.

**SCHEDULE-1**

**Fixed Assets Schedule as at 31st March 2019**

Particulars	WDV as on 01-04-2018	Additions during the year ( < 180 days)	Additions during the year ( > 180 days)	Sales/ Transfers	Total	Amount (in ₹)	
						Depreciation for the year	WDV as on 31-03-2019
Apple i-Pad	479	-	-	-	479	192	287
Printer	99	-	-	-	99	40	59
<b>Total</b>	<b>578</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>578</b>	<b>232</b>	<b>346</b>
Figures for the previous year	963	-	-	-	963	385	578

As per our report of even date attached.

For R.K. RAMAN & CO.  
Chartered Accountants

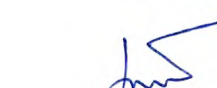
R.K. RAMAN  
M.NO.: 504962

Date: 30<sup>th</sup> September, 2019  
Place: New Delhi

UDIN: 1950 4962 AAAAD C7464

For SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION

  
Hon. Secretary

  
Hon. Treasurer

SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION (SAFIR)  
Sectt.: C/o Central Electricity Regulatory Commission (CERC)  
Ground, 3rd & 4th FLOORS, CHANDERLOK BUILDING, 36 JANPATH, NEW DELHI - 110 001.

SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2019

PARTICULARS	AMOUNT (in ₹)	AMOUNT (in ₹)
	AS ON 31.03.2019	AS ON 31.03.2018
<b><u>SCHEDULE - 2 (Administrative Costs Secretariat)</u></b>		
Advertisement Expenses	22,05,056	27,44,323
Audit Fees	-	16,419
Bank Charges	21,500	21,500
Conveyance Expenses	21,247	5,565
e-TDS Filing Fees	2,776	500
Legal Fees	400	358
Meeting Expenses	5,000	5,000
Office Maintenance	-	1,146
Printing & Stationary	14,60,814	25,47,195
Professional Fees	-	4,375
Professional Fees (Staff Consultants)	45,696	45,732
Telephone Expenses	5,98,333	-
Website Expenses	-	6,729
	49,290	89,804
<b><u>SCHEDULE - 3 (Salary, Establishment Expenses and other Services)</u></b>		
Salary	9,33,037	8,34,527
	9,33,037	8,34,527
<b><u>SCHEDULE - 4 (Steering &amp; Executive Committee Expenses)</u></b>		
Meeting Expenses	27,17,683	14,84,945
Travelling Expenses	19,32,248	9,96,855
	7,85,435	4,88,090
<b><u>SCHEDULE - 5 (Core Course Expenses)</u></b>		
Core Course Expenses	-	12,48,057
Travelling Expenses	-	9,36,019
	-	3,12,038
<b>TOTAL (Schedule 2 to 5)</b>	<b>58,55,776</b>	<b>63,11,852</b>

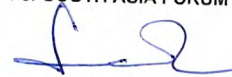
As per our report of even date attached.



Date: 30 September, 2019  
Place: New Delhi

UDIN: 1950 4962AAAA DC7464

For SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION

  
Hon. Secretary

  
Hon. Treasurer

SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION (SAFIR)  
Sectt.: C/o Central Electricity Regulatory Commission (CERC)  
Ground, 3rd & 4th FLOORS, CHANDERLOK BUILDING, 36 JANPATH, NEW DELHI - 110 001.

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2019

Schedule - 6

Loans and Advances

PARTICULARS	Amount (in ₹)	Amount (in ₹)
	AS ON 31.03.2019	AS ON 31.03.2018
GST (INPUT)	88,014	12,602
Interest Accrued on Auto Sweep FDRs	3,62,322	3,01,644
Interest Accrued on FDs (FCRA Account)	89,124	15,090
Labour (Outsourcing) Expenses Receivable	-	7,04,536
Membership Fee Receivable	20,18,369	33,96,250
Prepaid Expenses (Website)	14,874	17,465
Provision for Income Tax (A.Y. 2010-2011)	29,647	29,647
<b><u>Tax Deducted at Source</u></b>		
Tax Deducted at Source (AY 2010-11)	94,821	94,821
Tax Deducted at Source (AY 2012-13)	56,618	56,618
Tax Deducted at Source (AY 2013-14)	46,000	46,000
Tax Deducted at Source (AY 2014-15)	7,000	7,000
Tax Deducted at Source (AY 2015-16)	16,453	16,453
Tax Deducted at Source (AY 2016-17)	49,124	49,124
Tax Deducted at Source (AY 2017-18)	73,771	73,771
Tax Deducted at Source (AY 2018-19)	1,31,796	1,31,796
Tax Deducted at Source (AY 2019-20)	1,16,707	-
Self Assessment Tax (AY 2008-09)	3,43,163	3,43,163
Self Assessment Tax (AY 2009-10)	3,73,670	3,73,670
Self Assessment Tax (AY 2010-11)	1,84,867	1,84,867
Self Assessment Tax (AY 2013-14)	40,180	40,180
Self Assessment Tax (AY 2014-15)	2,01,459	2,01,459
Self Assessment Tax (AY 2015-16)	5,75,400	5,75,400
Self Assessment Tax (AY 2017-18)	22,34,720	22,34,720
Advance Tax (AY 2016-17)	15,72,277	15,72,277
Advance Tax (AY 2018-19)	12,70,102	12,70,102
Advance Tax (AY 2019-20)	12,65,000	-
Tax Deducted at Source (IGST) (AY 2019-20)	24,820	-
<b>Total</b>	<b>112,80,298</b>	<b>117,48,655</b>


As per our report of even date attached.



Date: 30 September, 2019  
Place: New Delhi

UDIN: 19504962AAAA DC7464

For SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION

  
Hon. Secretary

  
Hon. Treasurer

SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION (SAFIR)  
Sectt.: C/o Central Electricity Regulatory Commission (CERC)  
Ground, 3rd & 4th FLOORS, CHANDERLOK BUILDING, 36 JANPATH, NEW DELHI - 110 001.

SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH 2019

Schedule - 7  
Current Liabilities

PARTICULARS	Amount (in ₹)	Amount (in ₹)
	AS ON 31.03.2019	AS ON 31.03.2018
<b><u>Income Tax Refund Received</u></b>		
Income Tax Refund Received (A.Y. 2014-2015)	85,370	85,370
Income Tax Refund Received (A.Y. 2015-2016)	4,82,800	4,82,800
Income Tax Refund Received (A.Y. 2016-2017)	56,640	56,640
Income Tax Refund Received (A.Y. 2018-2019)	69,596	-
<b>Total</b>	<b>6,94,406</b>	<b>6,24,810</b>
<b><u>Provision for Tax</u></b>		
Provision for Tax (A.Y. 2012-2013)	2,98,038	2,98,038
Provision for Tax (A.Y. 2013-2014)	10,93,221	10,93,221
Provision for Tax (A.Y. 2014-2015)	2,08,450	2,08,450
Provision for Tax (A.Y. 2015-2016)	5,91,840	5,91,840
Provision for Tax (A.Y. 2016-2017)	16,06,602	16,06,602
Provision for Tax (A.Y. 2017-2018)	21,04,234	21,04,234
Provision for Tax (A.Y. 2018-2019)	12,77,598	12,77,598
Provision for Tax (A.Y. 2019-2020)	13,26,836	-
<b>Total</b>	<b>85,06,819</b>	<b>71,79,983</b>

As per our report of even date attached.

For R.K. RAMAN & CO.  
Chartered Accountants

R.K. RAMAN  
M.NO. : 504962

Date: 30<sup>th</sup> September, 2019  
Place: New Delhi

UDIN: 1950 4962AAAA DC7464

For SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION

  
Hon. Secretary

  
Hon. Treasurer



SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION (SAFIR)  
Sectt.: C/o Central Electricity Regulatory Commission (CERC)  
Ground, 3rd & 4th FLOORS, CHANDERLOK BUILDING, 36 JANPATH, NEW DELHI - 110 001.

**Bank Reconciliation Statement**

FROM 01-04-2018 TO 31-03-2019

CORPORATION BANK - SAVING A/c No. 520143000000076

**BALANCE AS PER BANK BOOK**

Amount (₹)	
DR	CR
	1,843.96

**Add:** CHEQUES ISSUED, BUT NOT PRESENTED IN BANK:

DATE	PARTICULARS	CHEQUE NO.	Amount (₹)	Date of Clearance
31.03.2019	TDS Payable on Salary	450345	10,000.00	05.04.2019
31.03.2019	TDS Payable on Professional Fees	450346	6,550.00	05.04.2019
			16,550.00	
			18,393.96	-

**BALANCE AS PER BANK STATEMENT**



**SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION (SAFIR)**  
**Sectt.: C/o Central Electricity Regulatory Commission (CERC)**  
**Ground, 3rd & 4th FLOORS, CHANDERLOK BUILDING, 36 JANPATH, NEW DELHI - 110 001.**

**Bank Reconciliation Statement**

FROM 01-04-2018 TO 31-03-2019

CORPORATION BANK - SAVING A/c No. 520281000388195 (FCRA Rcpt. Account)	Amount (₹)	
	DR	CR
BALANCE AS PER BANK BOOK	29,296.71	-
BALANCE AS PER BANK STATEMENT	-	29,296.71



**SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION (SAFIR)**  
**Seckt.: C/o Central Electricity Regulatory Commission (CERC)**  
**Ground, 3rd & 4th FLOORS, CHANDERLOK BUILDING, 36 JANPATH, NEW DELHI - 110 001.**

## Bank Reconciliation Statement

**FROM 01-04-2018 TO 31-03-2019**

**CORPORATION BANK - SAVING A/c No. 520101071185840 (FCRA Expd. Account)**

**Amount (₹)**

DR

CR

**BALANCE AS PER BANK BOOK**

11,771.00

**BALANCE AS PER BANK STATEMENT**

- 11,771.00



## SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION (SAFIR)

### Schedule: 8 (Forming part of Balance Sheet as at 31st March, 2019)

#### Background of SAFIR

*The South Asia Forum for Infrastructure Regulation (SAFIR) was established in May, 1999 with the support of World Bank. It is an Association of Person (AOP). It exists for the benefit of members inter se.*

SAFIR aims to:

- Provide a platform for experience sharing amongst the regulators in the sectors like electricity, natural gas, telecommunications, water, transport, etc. of the region;
- Build regulatory decision-making and response capacity in South Asia;
- Facilitate the regulatory process;
- Conduct training programmes to serve regulatory agencies and other stakeholders;
- Spur research on regulatory issues; and
- Provide a databank of information relating to regulatory reform processes and experiences.

#### Significant Accounting Policies & Notes on Account

##### a. Method of Accounting

Accounts, in general, are being prepared under the fundamental assumption of Accrual basis, Going Concern and Consistency. Also the mandatory Accounting Standards issued by ICAI & notified by the Govt. of India from time-to-time are materially complied.

##### b. Recognition of Income

###### (i) Recognition of Membership Fees

Association charges membership fees from each member, year on year basis as prescribed from time to time. Such fees recognized in the books of accounts on accrual basis.

###### (ii) Recognition of Other Incomes

(A) Similarly, other incomes, such as sponsorship fees, core course fees, etc. are recognized as and when they are received by the Association.

(B) Interest earned on the auto sweep / flexi deposits is being recognized on accrual basis by the Association.

##### c. Fixed Assets and Depreciation

The Association owns fixed assets depreciated using W.D.V. Method of Depreciation, at the rates prescribed in the Income Tax Rules, 1962.

##### d. Events occurring after the Balance Sheet date

No significant events which could affect the financial position as on 31.03.2019 to a material extent has been reported by the Association, after the balance sheet date till approval of Accounts.





## Significant Accounting Policies & Notes on Accounts (Contd.)

**e. Prior period and Extraordinary Items**

Errors and Omission in the preparation of the financial statements for the one or more period of past years shall be dealt as per AS-5.

**f. Overall Valuation Policy**

The accounts have been prepared on historical cost basis and on the assumption of going concern.

**g. Foreign Exchange Transactions**

The foreign currency transactions are recorded as per Accounting Standard 11.

**h. Retirement Benefits**

All employees are on contractual basis. Based on the terms of their contract, no retirement benefit is payable to them and hence not provided for.

**i. Investments**

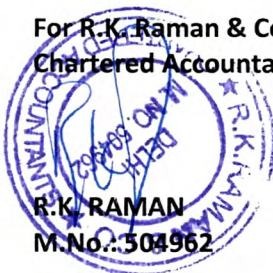
Investments are stated at cost and the interest accrued on the same is shown under the Current Assets.

**j. Taxation**

As SAFIR has not been granted exemption by the Income Tax Department, provision for tax has been provided in the books of accounts of SAFIR.

**k. Figures have been regrouped and rearranged wherever necessary.**

For R.K. Raman & Co.  
Chartered Accountants



Date: 30<sup>th</sup> September, 2019  
Place: New Delhi

UDIN: 19504962AAAA DC7464

For SOUTH ASIA FORUM FOR INFRASTRUCTURE REGULATION

A blue ink signature of the Hon. Secretary.

Hon. Secretary

A blue ink signature of the Hon. Treasurer.

Hon. Treasurer

STATUS FOR THE F.Y. 2018-19 (Actual receipts & expenditures till 31.03.2019) and PROPOSED BUDGET FOR THE F.Y. 2019-20 [REVISED]												
		(in INR)					(in USD) [Amount in \$ 1 = Rs. 64.2776 as on 25.04.17]				Proposed Budget for FY 2019-20 (in INR)	Proposed Budget for FY 2019-20 (in USD) [Amount in \$ 1 = Rs. 69.28 as on 31.03.19]
S.No.	Head	2018-19				2018-19						
		Approved Budget for FY 2018-19	Actual Receipts (from 01.04.2018 to 31.03.2019)	Expected/Projected Receivables (i.e. for the F.Y. 2018-19)	TOTAL	Approved Budget for FY 2018-19 (@Rs.65.14/USD as on 31.03.18)	Actual Receipts (from 01.04.2018 to 31.03.2019)	Expected/Projected Receivables (i.e. for the F.Y. 2018-19)	TOTAL			
RECIPTS												
1	Subscription Fee (less: GST) <sup>1</sup>	9228343	7966396	0	7966396	141669	122297	0	122297	10617936	153261	
2	Interest received from SB Accounts and Auto Sweep/Flexi Deposits <sup>2</sup>	1000000	882457	0	882457	15352	13547	0	13547	1000000	14434	
	TOTAL (1 to 2)	10228343	8848853	0	8848853	157021	135844	0	135844	11617936	167695	
S.No.	Head	2018-19				2018-19				Proposed Budget for FY 2019-20 (in INR)	Proposed Budget for FY 2019-20 (in USD) [Amount in \$ 1 = Rs. 69.28 as on 31.03.19]	
		Approved Budget for FY 2018-19	Actual Expenditure (from 01.04.2018 to 31.03.2019)	Expected/Projected Payables (i.e. for the F.Y. 2018-19)	TOTAL	Approved Budget for FY 2018-19 (@Rs.65.14/USD as on 31.03.18)	Actual Receipts (from 01.04.2018 to 31.03.2019)	Expected/Projected Receivables (i.e. for the F.Y. 2018-19)	TOTAL			
EXPENDITURE												
1	Administrative Costs (Secretariat) <sup>3</sup>	4550494	4270827	0	4270827	69857	65564	0	65564	3518365	50785	
2	Administrative Costs (Steering/ Executive Committee Meetings) <sup>4</sup>	3000000	2652082	0	2652082	46055	40714	0	40714	1340000	19342	
3	Professional Services	630000	548333	0	548333	9671	8418	0	8418	650000	9382	
	TOTAL (1 to 3)	8180494	7471242	0	7471242	125583	114695	0	114695	5508365	79509	
4	Core Course Expenses <sup>5</sup>	2000000	18430	0	18430	30703	283	0	283	5117320	73864	
	TOTAL (1 to 4) <sup>[i to iii]</sup>	10180494	7489672	0	7489672	156286	114978	0	114978	10625685	153373	

\* (i) For the F.Y. 2018-19, an amount of Rs.13.59 lakh (appox. on cash basis) is the projected surplus.

1359181 (FY 18-19) EST. SURPLUS

(ii) There is a surplus budgeting for the F.Y. 2019-20, amounting to Rs. 9.92 lakh (appox. on cash basis).

992251 (FY 19-20) SURPLUS \*

(iii) The current (projected) Reserves & Surplus of SAFIR will be Rs. 2.14 Crore (appox. on cash basis) as on 31.03.2020.

**Notes:**

- 1 For the F.Y. 2019-20, membership fees is expected to be received from 33 Members, i.e. amounting to **Rs.89.02 lakh** (i.e. based on the Members from whom membership fee is being received on year-to-year basis). Further, a statement indicating subscription fee still receivable from Members of SAFIR (i.e. for the previous years) is placed at "**Appendix-1**" and it is unlikely that the Members who have not paid their membership fee, will pay the fees. Also, a statement indicating subscription fee still receivable from Members of SAFIR (i.e. for the F.Y. 2018-19) amounting to **Rs. 17.15 lakh (excluding GST)** is placed at "**Appendix-2**" and it is likely that the Members will pay the same during the F.Y. 2019-20. Therefore, the total membership fees for the F.Y. 2019-20 is projected as **Rs. 106.17 lakh (i.e Rs. 89.02 lakh + Rs. 17.15 lakh)**.
- 2 The interest income varies depending upon the withdrawals/payments/utilisation of funds and prevailing rate of interest, during the financial year. Therefore, based on the same, the interest income for the F.Y. 2019-20 is only a conservative projection and the actual interest income will vary depending upon the withdrawals/payments/utilisation of funds and prevailing rate of interest.
- 3 Against the budget of **Rs. 45.50 lakh** for F.Y. 2018-19, an amount of **Rs. 42.71 lakh (appox.)** has been spent. Further, a budget of **Rs. 35.18 lakh** is being proposed for the F.Y. 2019-20, i.e. a decrease of **Rs. 10.32 lakh** as compared to F.Y. 2018-19, which is mainly due to non-payment of secretariat costs to CERC. Further, the distribution of the proposed budget for the F.Y. 2019-20 of **Rs. 35.18 lakh** is Advertisement Expenses (Rs.0.50 lakh), Conveyance Expenses (Rs.0.01 lakh), e-TDS filing expenses (Rs. 0.01 lakh), Salary (Rs.10.60 lakh), Labour (Outsource) Expenses (Rs. 20.95 lakh), Printing & Stationery (Rs.0.10 lakh), Professional Charges (Rs. 1.14 lakh), Others (Rs.0.10 lakh), Telephone Expenses (Rs.0.25 lakh), Travelling Expenses (Rs.0.05 lakh), Website Expenses (Rs. 1.18 lakh) and Audit Fees (Rs.0.30 lakh).

- 4 Expenses for the F.Y. 2018-19 has been incurred on account of conducting the following Executive Committee Meetings and Steering Committee Meeting :

Particulars	Expenditure incurred (in Rs.)
(a) 15th Executive & 24th Steering Committee Meeting held in Bangladesh on 10.05.18 (i.e. meeting-cum-travelling expenses) (appox.)	2051009
(b) 16th Executive Committee Meeting held at Bhutan on 22.11.18 (i.e. meeting-cum-travelling expenses) (appox.)	565002
<b>TOTAL</b>	<b>2616011</b>

For the F.Y. 2019-20, the budget under the head has been revised/reduced to **Rs. 13.40 lakh**. The same is on account of 1 Executive Committee Meeting (ECM) & 1 Steering Committee Meeting (SCM) held on 26.04.2019 in India, for which an expenditure of **Rs.3.5 lakh** was proposed. Further, 1 Executive Committee Meeting is proposed to be held outside India, for which an expenditure of **Rs. 7 lakh** is proposed. Further, the budgetary expenditure also includes travelling reimbursement amounting to **Rs. 2.90 lakh** due to be paid to the participants who attended the 22nd SCM of SAFIR held on 14.01.2016 (i.e. **Rs.60,000/- appox.**), 23rd SCM of SAFIR held on 12.05.2017 (i.e. **Rs.60,000/- appox.**), 14th ECM of SAFIR held on 12.05.2017 (i.e. **Rs.50,000/- appox.**), 24th SCM of SAFIR held on 10.05.2018 (i.e. **Rs.30,000/- appox.**) & 16th ECM of SAFIR held on 22.11.2018 (i.e. **Rs.90,000/- appox.**), due to want of their claims. Further, as has been decided during the 24th SCM of SAFIR held at Bangladesh on 10.05.18, no reimbursement on account of stay & travel will be made by SAFIR to the Members of SCM from India, whenever meetings are held in India. Therefore, the budgeted expenditure for the F.Y. 2019-2020 (**viz. Rs.13.40 lakh**) is less than the budgeted expenditure for the F.Y. 2018-2019 (**viz. Rs.30 lakh**).

- 5 In the budget for F.Y. 2018-19, an estimated expenditure of **Rs. 20 lakh** was proposed for the 17th Core Course of SAFIR, but the same could not be held during the said year. The same was actually held during 05th-08th April, 2019 and an expenditure of **Rs. 18.57 lakh (appox.)** has been incurred, which has been carried forward and included in the budget for the F.Y. 2019-20. For the F.Y. 2019-20, the budget under the head has been increased/re-appropriated to **Rs. 32 lakh** towards the 18th Core Course of SAFIR being held in association with IIM, Ahmedabad in December, 2019. Also, travelling reimbursement amounting to **Rs. 60,000/- (appox.)** is due to be paid to the participants who attended the 16th Core Course of SAFIR held on 28.04.2017, due to want of claims. Therefore, a total budget of **Rs. 51.17 lakh** is being proposed for the F.Y. 2019-20 (**i.e. Rs. 18.57 lakh + Rs. 32 lakh + Rs. 0.60 lakh**).
- # During the Statutory Audit of SAFIR for the F.Y. 2014-15, the Statutory Auditor has highlighted the issue regarding the applicability of service tax on the membership fee of SAFIR. In this regard, SAFIR has taken an informal advise from a Tax Consultant (Service Tax expert). He has informed that service tax was leviable on the membership fee of SAFIR since 01.07.2012 and prior to that date, services were not taxable. The same was due for payment on the basis of billing, i.e. on or before 6th of the subsequent month, in which the bills were raised. Therefore, in case any service tax liability arises in the future, the same will be met from the Reserve & Surplus of SAFIR.

**Additio (a) The current Fee Structure is as follows:**

**nal** Consumer Bodies/NGOs - **500 USD**

**Notes:** Academic Institutions - **2000 USD**

Regulatory Bodies - **4000 USD**

Corporates/Utilities - **5000 USD**



# Cross Border Trade of Electricity (CBTE)

P. K. Pujari

Chairman

Central Electricity Regulatory Commission, India

05/12/2019

# INDIA'S BILATERAL CBTE IN SOUTH ASIA REGION

---

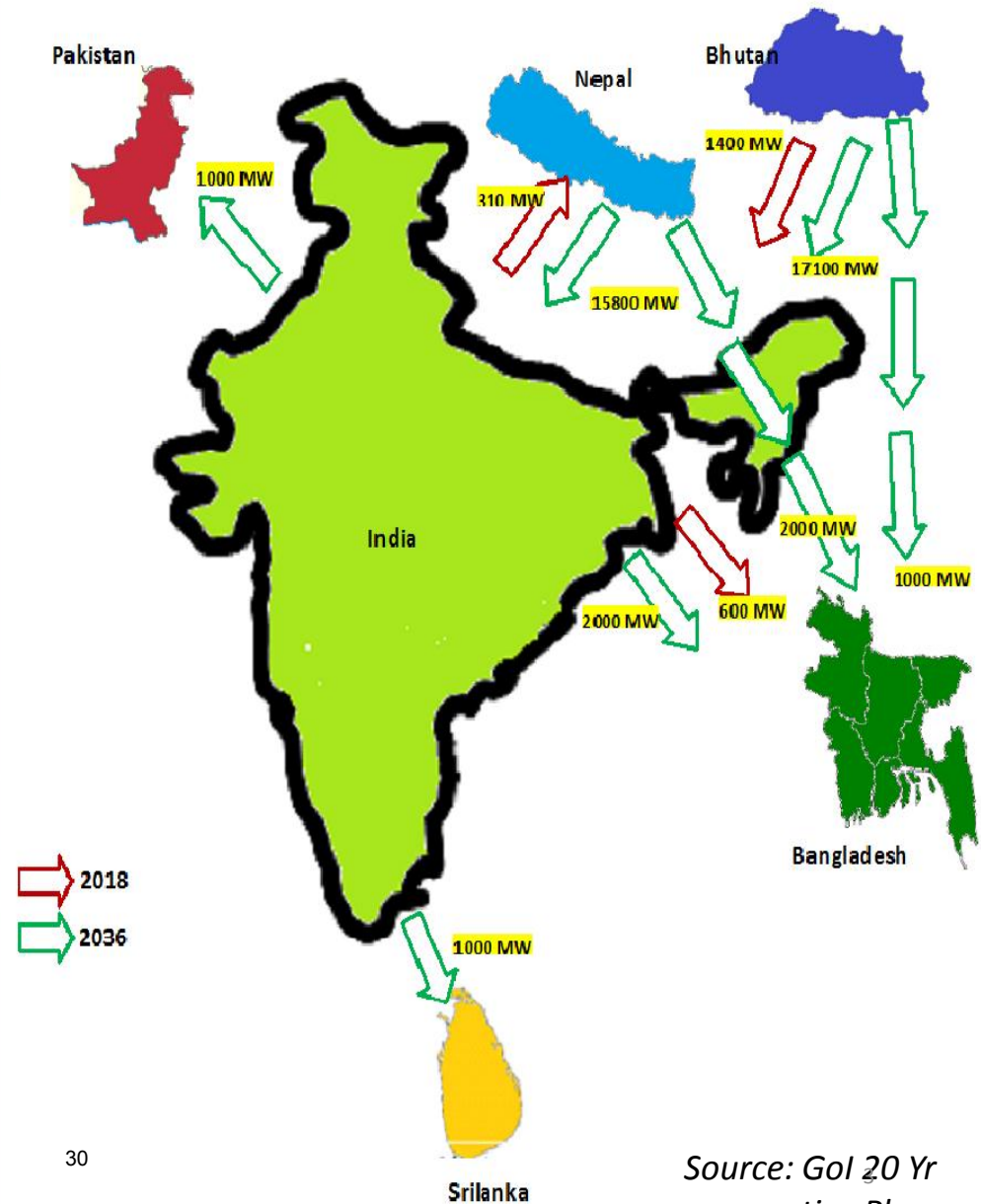
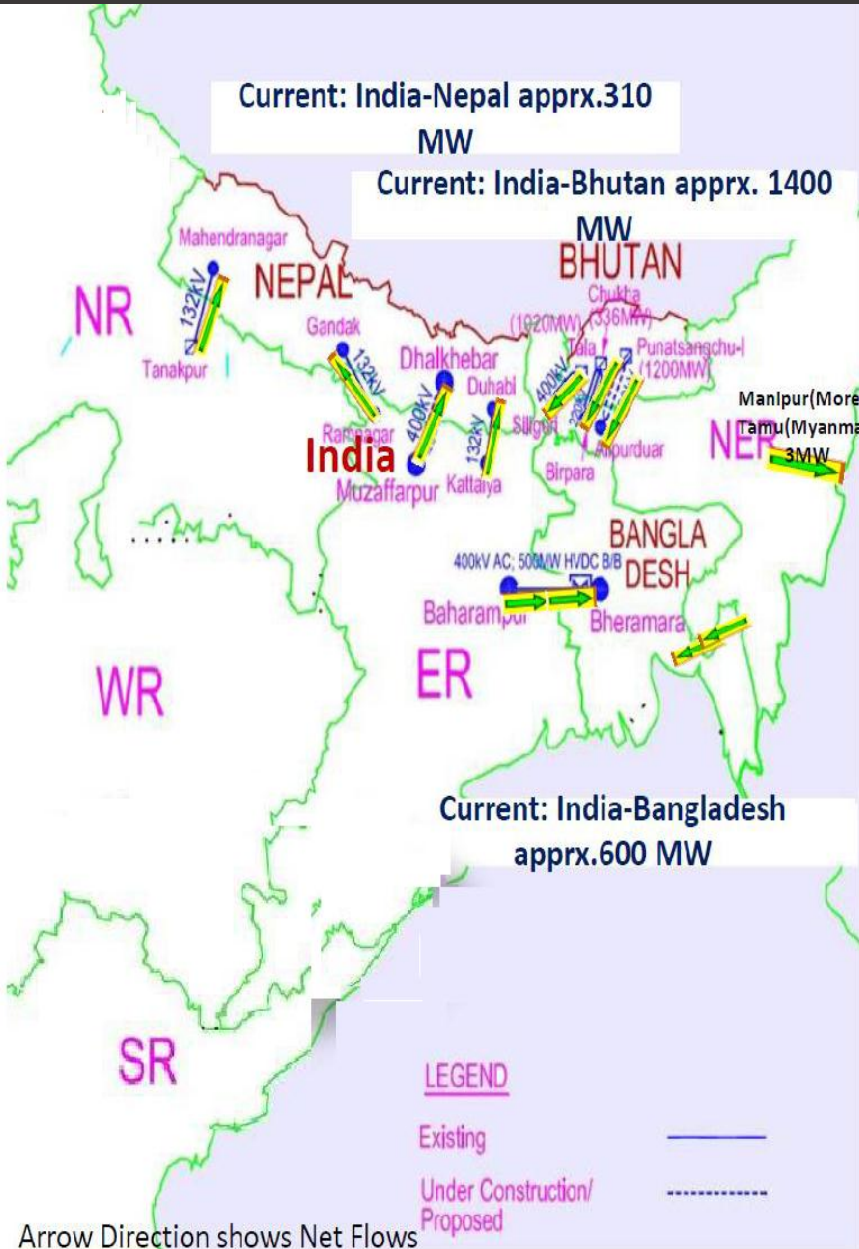
Export to Bangladesh - 1150 MW  
Export to Nepal - 700 MW  
Import from Bhutan - 2400 MW  
Export to Myanmar - 3 MW

## EXPECTED BY 2036

Export to Bangladesh - 2000 MW  
Export to Sri Lanka - 100 MW  
Import from Nepal - 5800 MW  
Import from Bhutan - 17100 MW



# Current Status & Future Projection of CBTE



# REQUIRED PRE-CONDITIONS FOR HIGHER CBTE

---

- ▶ Appropriate Policy / Regulatory Frameworks
- ▶ Infrastructure
  - Transmission Networks & Inter-Connections
  - Communication & Safety Protocols
  - Metering Mechanism
- ▶ Congestion Management Procedures
- ▶ Tariff Determination Mechanism
- ▶ Dispute Resolution Mechanism

# Guidelines on CBTE: Objectives

- ☐ Promote transparency, consistency and predictability in regulatory mechanism pertaining to import/ export of electricity;
- ☐ Evolve a dynamic and robust electricity infrastructure for import/ export of electricity;
- ☐ Reliable grid operation and transmission of electricity for import/ export.



# Guidelines on CBTE: Key Highlights



- ❑ **Regulatory Framework** - Regulations framed with adequate stakeholder consultations
- ❑ **Institutional Framework** - Designated Authority shall be the nodal agency to co-ordinate with the nodal agency of neighbouring countries
- ❑ **Cross Border Trade through Bilateral & Tripartite Agreements** – Trading allowed involving two neighbouring countries across India
- ❑ **Participation allowed in Indian Power Exchange** – Multilateral trading allowed

# Guidelines on CBTE: Key Highlights



- ❑ **Tariff** – Tariff through competitive bid/ G-to-G negotiation/ Regulatory Commission
- ❑ **Cross Border Transmission Link** – CBTL to be planned by the Transmission Planning Agencies of India and neighbouring countries in a co-ordinated manner. Each country shall be responsible for implementation of CBTL within their respective country
- ❑ **Interconnection between Pooling Sub-stations** – To be monitored and controlled by respective system operator
- ❑ **Dispute Resolution-** Mutually agreed or at International Arbitration Centre

Bilateral & Tripartite Agreement allowed  
(India as transit)

Tariff can be decided based on Competitive Bidding/Govt. to Govt. negotiation/Commission

Multilateral Trading allowed through Indian Power Exchanges

## Key Highlights

Mechanism for coordination at operational level for managing issues viz. System Operations, Energy Accounting & Settlement related issues

Cross Border Transmission Links to be developed in a coordinated manner with Government to Government Discussion

Indian Rules & Regulations shall apply only after the power crosses the Indian border (within Indian territory)

# **Central Electricity Regulatory Commission (Cross Border Trade of Electricity) Regulations, 2019**

## Designated Agency

- ☐ Coordinate with Neighbouring countries
- ☐ Facilitate in approval process and lay down procedures for cross border trade
- ☐ Plan for Cross Border Transmission Lines

## Settlement and Nodal Agency

- ☐ Shall be responsible for settling all charges pertaining to grid operations with a particular neighbouring country

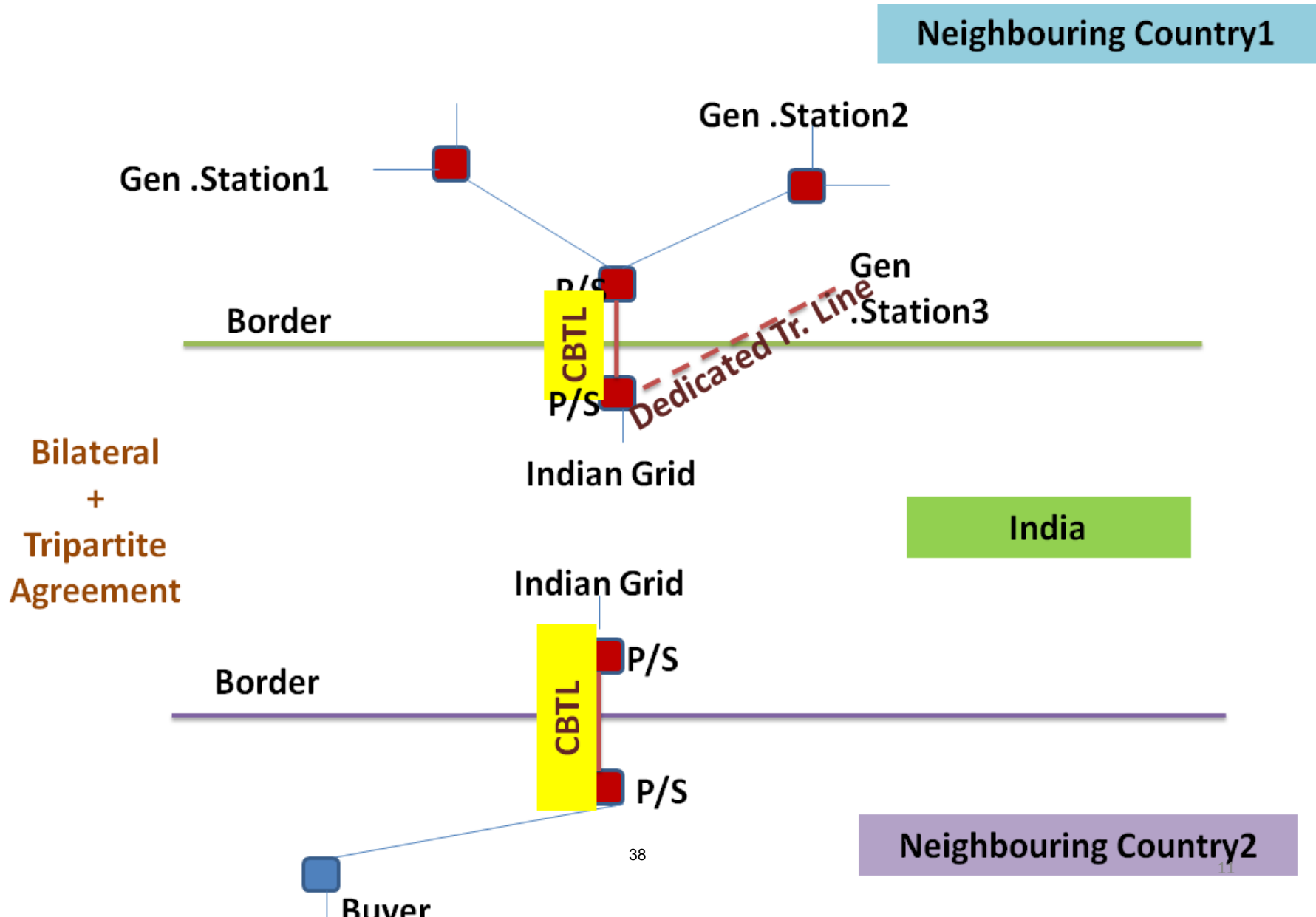
## National Load Dispatch Centre

- ☐ System operator for cross border trade of electricity between India and the neighbouring countries
- ☐ Responsible for granting short term open access to the participating entities

## Central Transmission Utility

- ☐ Shall be responsible for granting Connectivity, long-term access and medium-term open access with respect to cross border trade of electricity

# Transmission Planning



- ❑ Tariff of the electricity shall be determined through:
  - Competitive Bidding, or
  - Government to Government negotiation, or
  - In case of hydro generating station, the Central Commission on a cost plus basis, or
  - Mutual agreement between the entities under the overall framework of agreement signed between India and the neighbouring countries
  
- ❑ Tariff for Cross Border Transmission Link from pooling station in India to the Indian border shall be determined based on either competitive bidding or by the Central Commission or Government to Government negotiations

## ❑ Connectivity

- A Participating Entity located in neighbouring country and getting connected to the Indian grid
  - through dedicated transmission system for cross border trade of electricity shall be required to apply for Connectivity to the Indian grid.
  - through Cross Border Transmission Link shall not be required to apply for Connectivity to the Indian grid.

## ❑ Long-term Access

- An Applicant seeking long-term access for cross border trade of electricity shall be required to furnish to the CTU an Access Bank Guarantee valid for 5 years from the date of operationalization of long term access, for an amount of INR Rs. 5 Lakhs/MW corresponding to the quantum of long-term access sought.
- In case augmentation of transmission system is required, the Applicant shall furnish a fresh Access Bank Guarantee valid for 5 years for an amount equivalent to the cost of such augmentation (the initial ABG will be returned)



- ❑ Participating entities from the neighbouring countries can participate in Indian Power Exchanges through Trading licensee of India.
  - Participation may take place in multiple power exchanges across all the product segments
  - Quantum of cross border electricity trade through power exchanges to be approved by the designated authority (Central Electricity Authority).

## Market Segments in Power Exchange

### Day Ahead Market

Since June 08

- Delivery for next day
- Price discovery: Closed, Double-sided Auction

### Term Ahead Contracts

Since Sep. 09

### Extended Markets introduced

20<sup>th</sup> July, 2015

- **Day Ahead Contingency:** Another window for Day Ahead
- Trading window increased to 1500-2300 Hrs
- **Intra Day:** Round the clock market
- **Daily Contract:** For rolling 7 days (Delivery starting after 4 days upto 11 days)
- **Weekly Contract:** For 1 week

- ☐ Treatment of delay in Transmission system and Generation Projects
- ☐ Cyber Security
- ☐ System Security Aspects
- ☐ Declaration of Transfer Capability
- ☐ Scheduling, Metering, Energy Accounting & Settlement
- ☐ Coordination Between System Operators
- ☐ Payment of Transmission charges and other charges
- ☐ Transmission Losses
- ☐ System Operation Fees and Charges
- ☐ Dispute Settlement and Resolution mechanism

# Thank You

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

## Common Minimum Grid Code for South Asia And Updates on the SAFIR Working group Activities

Mr. Pankaj Batra, Project Director, SARI/EI IRADe  
&  
Mr. Rajiv Ratna Panda, Technical-Head, SARI/EI IRADe

*18th SAFIR Executive Committee Meeting  
5th Dec, 2019, Hotel Radisson, Dhaka, Bangladesh*



## Common Minimum Grid Code for South Asia

- The Common Minimum Grid Code for South Asia lays down the rules, guidelines and standards to be followed by various South Asia country participants in the system for cross border trading in electricity, while operating the power system, in the most secure, reliable, economic and efficient manner.



# Applicability and Organizational Framework

- Applicable to all countries of South Asia, who get connected to the South Asia grid through a *synchronous* or *a-synchronous* (i.e. HVDC) connection.
- Each country will initially be represented by a **single point of contact** for the initiation of implementation of the Common Minimum Grid Code.
- Single point of contact will be supported by the **relevant Ministry** dealing with power, the **Regulator** of the respective country, the **transmission agency** of the respective country, the **system operator** of the respective country and the **accounts settlement/market operator** of the respective country.

# Organizational Framework

- Later, to formalize the process of implementation, Regional coordination bodies need to be formed for South Asia, i.e. **South Asia Forum** at the Government level, at the **Regulator** level, at the **planning body** level, **transmission utility** level, at the **system operator** level and at the **accounts settlement/market operator** level.
- A South Asia Power Portal would be made for information of all South Asian countries. This would be maintained by the South Asia Forum at the planning level.



# Objective

- Facilitation of cross border trading of power, while ensuring secure, reliable, economic and efficient operation of the grid.
- Facilitation of the coordinated optimal operation of the South Asian Grid.
- Facilitation of coordinated and optimal maintenance planning of generation and transmission facilities in the South Asian grid.



# Structure of the Common Minimum Grid Code for South Asia

- Connection Code,
- Operating Code,
- Scheduling and Despatch Code and
- Administration of the Grid Code.

## Connection Code

- a) To ensure the safe operation, integrity and reliability of the connected South Asia grid.
- b) Any new country getting connected to the South Asia grid shall neither suffer unacceptable effects due to its connectivity nor impose unacceptable effects on the South Asia grid.
- c) Any new country seeking connection to the South Asia grid is required to be aware, in advance, of the requirements for connectivity to the South Asian grid and also the standards and conditions its system has to meet for being integrated into the grid.



## Connection Code

- Require to apply for Connectivity to SAFTU.
- SAFTU will carry out system studies and state whether any augmentation in the transmission system is required.
- Must have provision to implement generation and/or load control mechanisms to be able to control cross border power flows.
- Must abide by the Regional under frequency load shedding schemes to ensure commensurate load shedding
- Must abide by the Regional islanding schemes and system protection schemes, which would be decided by the South Asian Forum of Planning bodies, which are involved in operation planning.

## Connection Code

- Must ensure installation of Data Acquisition System, disturbance recorders and sequence-of-events recorder at the interconnection points and other significant points
- Must ensure robust, redundant and reliable communication between countries, so that voice and data communication takes place instantly and seamlessly across countries. This would be mutually decided by the points of contacts of the South Asian countries.
- Every connection of a country's system to the South Asian grid shall be covered by a Connection Agreement between the SAFTU and the national transmission utility of the country seeking connection.



# Operating Code

- Frequency Band - 49.9 - 50.05 Hz
- Voltage Band for 400 kV at interconnection point - 380-420 kV
- System Security - Protection Coordination & periodic Protection testing
- Operation liaison.
- Restoration Plans including Black Start.
- Periodic Reports - Daily, Monthly Reports.
- Outage Planning.

## Scheduling and Despatch Code

- Each country to regulate their generation and/or consumers' load so as to maintain their actual drawal from the South Asia grid close to the above schedule.
- Penalty for violations in accordance with a Deviation Settlement mechanism.
- Reactive power drawals to be controlled at inter-country connection points.
- Scheduling and Despatch Procedure.

# Administration of the Grid Code

- Committee for Review of the Grid Code.
- Ultimately, the Forum of South Asia Regulators would do that.



# Updates on the SAFIR Working group Activities





# 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.**



## 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.**

# 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.



# Key Activities of the 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.





# Meeting Held so far- SAFIR Working Group



**First Meeting 15th-16th May, 2018, Hotel Taj Samudra, Colombo, Sri Lanka**



# Meeting Held so far

**SAFIR Working Group on “Regulatory Cooperation to Facilitate Knowledge sharing, addressing Cross cutting Energy/Electricity Regulatory Issues and Capacity Building**



**Had presentation and discussion on**

- ❖ **Common Minimum Grid code**
- ❖ **Evolution of Cross Border Electricity Trade in South Asia and Future Outlook.**
- ❖ **The Working Group members from Bangladesh, Bhutan, India made presentations on their respective country's Energy /electricity Regulatory framework**
- ❖ **various technical activities of SAFIR working group**
- ❖ **Annual Work Plan for next year.**

**Second Meeting, 4<sup>th</sup> December, 2019 at Hotel Radisson, Dhaka, Bangladesh**

# **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.



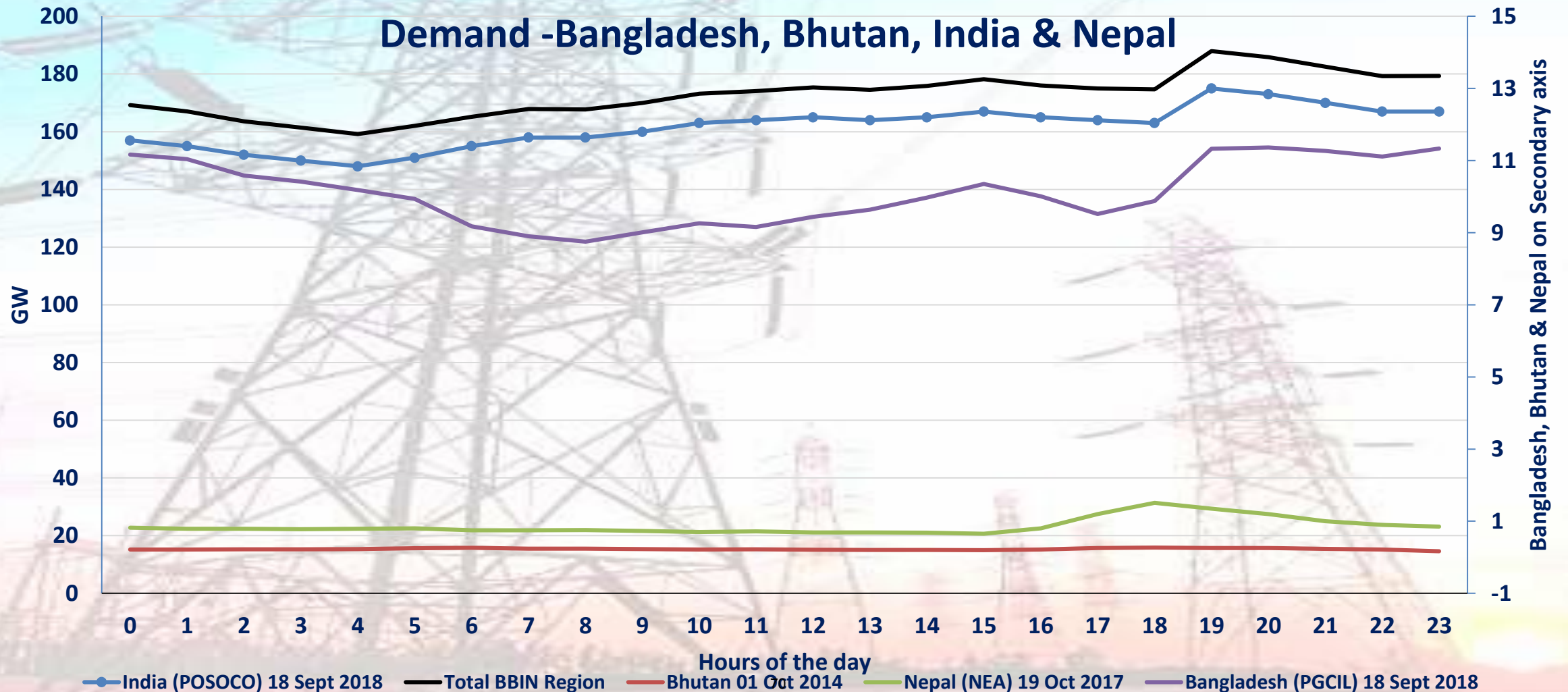
# Study on Cross Border Trade of Electricity

## 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

# 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

\* 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 understanding/knowledge sharing about the electricity regulations of SAARC/SAFIR member countries.

# ***SAFIR Working Group Meetings***



# ***SAFIR Working Group Meetings***

**We have planned to organized three meetings for the year**

- ✓ **2<sup>nd</sup> Meeting of SAFIR Working Group in Dec,2019**
- ✓ **3<sup>rd</sup> Meeting of SAFIR Working Group in March ,2020**
- ✓ **4<sup>th</sup> Meeting of SAFIR Working Group in September,2020**

## **Continuous Interaction**

**Regular meetings are essential for ensuing a Consultative and participatory process**





# Thank You!

Pankaj Batra

Email ID: [pbatra@irade.org](mailto:pbatra@irade.org) Contact No.: +91- 11-

26692713 SARI/EI/IRADe PROJECT SECRETARIAT

B-44, Shivalik, Malviya Nagar, New Delhi-110 017, India

Rajiv Ratna Panda

Email ID: [rajivratnapanda@irade.org](mailto:rajivratnapanda@irade.org) Contact No.: +91-

11- 26692713 SARI/EI/IRADe PROJECT SECRETARIAT

B-44, Shivalik, Malviya Nagar, New Delhi-110 017, India

