

# THE REPORT

















Virtual Consultative Workshop on

"Cross Border Electricity Trade in SAARC Region: Challenges and Investment Opportunities"



11 November 2021 Organized by SAARC Energy Centre Islamabad

#### **11 November 2021**

**SAARC Energy Centre** 697, Street 43, Sector E-11/4 (NPF), Islamabad, Pakistan www.saarcenergy.org

#### Introduction

- 1. SAARC Energy Centre (SEC), Islamabad successfully conducted a virtual consultative workshop on "Cross Border Electricity Trade in SAARC Region: Challenges and Investment Opportunities" on Thursday, 11 November 2021. Agenda of the event is available at Annexure-I.
- 2. Focus of this online workshop was to develop a consultative approach towards the Cross-Border Electricity Trade (CBET) among SAARC Member States. The purpose of the event was to share the current status, barriers, impact of national electricity sector policies, transmission pricing, challenges and investment opportunities for cross-border electricity trade projects.

#### Participation

3. The workshop was attended by delegates from Member States Afghanistan, Bhutan, Nepal, Pakistan. Experts from UN ESCAP, ADB and Research Triangle Institute India also presented during the workshop. The list of participants is available at Annexure-II.

#### Description

4. The workshop was started with introductory remarks by Programme Coordinator, Ahmad Talha, Research Fellow (Technology Transfer) of SEC. The event comprised of two sessions. In the first session, representatives of the Member States shared the current status of ongoing CBET projects and challenges faced by the respective Member State. In the second session, expert from regional organisations presented the regional outlook on CBET projects, future outlook and ongoing work being done by their respective organisations to facilitate and promote CBET in the region. The presentations were followed an interactive discussion and Q&A session. The Programme Coordinator offered closing remarks of appreciation to all the delegates of the Member States and experts from regional organisations.

## **Proceedings**

#### Session - 1: Updates and Highlights on Cross Border Connectivity in SAARC Region

5. Representatives from Member States were invited in the alphabetical order to present their respective country's perspective on CBET. Mr. Ahmad Sameer Hairan, Director of Plan & Policy Directorate and Mr. Nangialai Miakhil, Deputy of Planning and Engineering, from Da Afghanistan Breshna Sherkat (DABS) presented on behalf of Member State Afghanistan. They apprised the participants of the progress made in Afghanistan's power sector, particularly regarding the implementation of renewable energy projects, and on CBET projects, such as CASA-1000 and TUTAP that are connecting Central Asia with South Asia through Afghanistan.

- 6. Ms. Tshering Yangki, Executive Engineer, Department of Hydropower and Power Systems, Ministry of Economic Affairs presented on behalf of Member Status Bhutan. She provided an overview of power sector in Bhutan covering the institutional arrangement and relevant policies and status of the hydropower and other renewable energy projects under implementation. She apprised that under construction four major hydropower projects (nearly 3,000 MW total capacity) are bilateral and joint-venture projects with Government of India. She also highlighted that investment in CBET projects in Bhutan is mostly through bilateral window with Government of India. She concluded her presentation with the challenges faced such as huge investment required for hydropower projects, seasonal nature of run-of-river hydropower projects and constraints of transmission network.
- 7. Mr. Raju Maharjan, Chief Divisional Engineer, Ministry of Energy, Water Resources and Irrigation presented Nepal's perspective in workshop. He started his presentation with an overview of Nepal's power sector. He explained the future power sector expansion plan of Nepal, which is targeting to add 4,717 MW by year 2025/26. He briefed the participants about the existing Nepal-India CBET interconnections, 836 MW in total and power exported/imported over these interconnections in the last five years. He also highlighted the Nepal's power trading through day-ahead market in Indian Energy Exchange, which is a recent development in Nepal-India CBET. As Nepal will be surplus in power generation throughout the year by 2023/24, Mr. Raju emphasized the need to grow CBET market so that the region can benefit from clean energy sources of Nepal.
- 8. Mr. Tauseef ur Rehman, Deputy Manager, National Transmission and Dispatch Company (NTDC) from Pakistan also presented in the workshop. He presented an overview of the power sector of Pakistan, in particular NTDC system. He highlighted salient features of long-term generation plan of Pakistan (by 2040); e.g., higher utilization of hydropower (up to 40% by 2040) and other renewables (16% by 2040), reduction of imported fuel usage for power generation, reducing the electricity price through better utilization of indigenous resources. He emphasized the rationale of CBET from Pakistan's perspective by showing the opportunity of power export in winters when domestic demand is low. He concluded his presentation by stressing the importance of enhancing CBET in South Asia through sharing the examples from other inter-connected regions such as Middle East, Central Asia and Europe.

## Session - 2: Discussion on Mitigation of Challenges and Attracting Investment for Cross Border Electricity Trade Projects

9. Mr. Rajiv Ratna Panda is an energy expert, electrical engineer, management, research, public policy, and strategy professional with multi-regional energy system expertise. He currently works for USAID South Asia Regional Energy Partnership (SAREP) for Research Triangle Institute (RTI), India. He presented on mitigation of challenges and attracting investment for CBET projects. In his presentation, he focused on USAID's support

for promoting CBET in South Asia (SARI/EI and SAREP programmes), future outlook and challenges for CBET in South Asia and how these challenges may be overcome. He suggested that in the wake of COP26 and given the vulnerability of South Asia to climate change, CBET projects should also tap into Climate Finance and a joint fund on regional level may also be created for this purpose.

- Mr. Jiwan Acharya is Principal Energy Specialist from South Asia Energy Division, Asian Development Bank (ADB). He currently focuses on developing and implementing energy efficiency, renewable energy and other broader energy sector projects in India and Nepal. He is also serving as focal person for Regional Cooperation and Integration for Energy in South Asia. Mr. Jiwan appreciated the knowledge sharing efforts of SEC. He reiterated ADB's commitment to the prosperity of South Asia and promotion of CBET in the region. He described some of the initiatives undertaken by ADB to support the Member States in this regard. He emphasized that Member States should work on investment-ready projects so that financing challenges may be mitigated.
- 11. Mr. Matthew David Wittenstein is Chief of Section for Energy Connectivity at the UN Economic and Social Commission for Asia and the Pacific (UN ESCAP). In his role, Matthew supports to improve the sustainability and security of their energy systems through increased cross-border power system integration. During his presentation, he stressed on the rationale for power system connectivity and presented some of the associated challenges. He detailed the work done by UN ESCAP to facilitate the growth of CBET in the region and the planned initiatives for the future.

#### Closing

Mr. Ahmad Talha, Research Fellow (Technology Transfer), SAARC Energy Centre

12. Mr. Ahmad Talha closed the webinar with a thank you note to everyone attending the workshop. He reiterated for the information of all the participants that the presentations will be available on SEC's website. He requested the participants to suggest topics through email for the future events.

# Annexures

# **Agenda**

#### Virtual Consultative Workshop on

# "Cross Border Electricity Trade in SAARC Region: Challenges and Investment Opportunities"

# Thursday, 11 November 2021

Time	Contents
10:00 - 10:05	Opening
	Dr. Nawaz Ahmad, Director, SAARC Energy Centre
	Session - 1: Updates and Highlights on Cross Border Connectivity in SAARC Region
10:05 – 11:00	Representatives of Member States
	Session - 2: Discussion on Mitigation of Challenges and Attracting Investment for Cross Border Electricity Trade Projects
11:00 – 11:30	Mr. Rajiv Ratna Panda
	USAID South Asia Regional Energy Partnership (SAREP) - Research Triangle Institute (RTI)
11:30 – 12:00	Mr. Jiwan Acharya
	Principal Energy Specialist, South Asia Energy Division, Asian Development Bank (ADB)
12:00 – 12:30	Mr. Matthew David Wittenstein
	Chief of Section, Energy Connectivity, Energy Division, United Nations Economic and
	Social Commission for Asia and the Pacific (UN ESCAP)
12:30 – 12:50	Panel Discussion
12:50 – 13:00	Closing

<sup>\*</sup> All times mentioned in agenda are according to Pakistan Standard Time (PKT).

# **List of Participants**

Sr. No.	Name	Designation and Organisation	Country
1.	Mr. Ahmad Sameer	Director of Plan & Policy Directorate,	Afghanistan
	Hairan	Plan & Policy Directorate,	
		Da Afghanistan Breshna Sherkat (DABS)	
2.	Mr. Nangialai Miakhil	Deputy of Planning and Engineering,	Afghanistan
		COO,	
		Da Afghanistan Breshna Sherkat (DABS)	
3.	Ms. Tshering Yangki	Executive Engineer,	Bhutan
		Department of Hydropower and Power	
		Systems,	
		Ministry of Economic Affairs	
4.	Mr. Tshering Tashi	Deputy Executive Engineer,	Bhutan
		Department of Hydropower and Power	
		Systems,	
		Ministry of Economic Affairs	
5.	Mr. Raju Maharjan	Chief Divisional Engineer	Nepal
		Ministry of Energy, Water Resources and	
		Irrigation	
6.	Mr. Tauseef ur	Deputy Manager	Pakistan
	Rehman	National Transmission and Dispatch Company	
		(NTDC)	
7.	Mr. Mansoor Ahmed	Assitant Manager	Pakistan
	Subhani	National Transmission and Dispatch Company	
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	Mr. Daiiy Datna Danda		
9.	IVII. Rajiv Ratha Pahua		
10	Mr. liwan Acharya		
10.	Wir. Siwari Acriarya		
11	Mr Matthew David		
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9. 10.	Mr. Asadullah Uz Zaman  Mr. Rajiv Ratna Panda  Mr. Jiwan Acharya  Mr. Matthew David Wittenstein	Assistant Manager (Market Pricing & Simulations) Policy & Planning Central Power Purchasing Agency USAID South Asia Regional Energy Partnership (SAREP) - Research Triangle Institute (RTI) Principal Energy Specialist South Asia Energy Division, Asian Development Bank (ADB) Chief of Section, Energy Connectivity, Energy Division, United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP)	Pakistan