

Bangladesh India Interconnection: Financing and Other Issues

Dr. Salim Mahmud

Chairman, Bangladesh Energy Regulatory Commission Tribunal



Background

Continued power shortages hamper growth prospects. Seven of the eight South Asian countries face a persistent energy shortage and outages that account for a loss of more than 2 percent of GDP

Regional decision makers recognized that they lag behind in energy integration. South Asian Association for Regional Cooperation (SAARC) countries in the 12th summit agreed on the “energy ring” concept.

Energy Diversification is a key driver. Several countries are spending more than 10% of their forex spend on fossil fuel imports. This makes a combined, diversified regional approach to resource use critical to energy security.

Economies of scale. In Western Europe close to 10% of the cost of production of electricity is saved by regional interconnections.

Regional complementarity. South Asia is endowed with diverse energy resources with different countries possessing complementary resource to others.

Seasonal Imbalances.

South Asia- A Least Integrated Region in the World

From regional energy cooperation perspective, South Asia has been vulnerable as compared to most regions in the world

Cross Border Power Trade has been very limited in the region

SARI played a Role Similar to the Role of Florence Forum and Madrid Forum in the EU Context providing advocacy for promoting cross border power trade in the region.

Bahrampur-Bheramara Transmission Link

- South Asia's first high voltage direct current (HVDC) interconnection between two countries and a key step forward in regional power sharing and cooperation.
- A key milestone for South Asia as it looks to set up a regional energy market to make the best use of its diverse and unevenly distributed energy resources.
- The interconnection includes about 112 kilometers (km) of 400 kilovolt (kV) double-circuit transmission line between the electrical substations at Baharampur in India and Bheramara in Bangladesh, a 400 kV switching station at Baharampur, a 500 megawatt (MW) back-to-back high-voltage direct current (HVDC) substation (400/230 kV) at Bheramara, and associated infrastructure on both sides
- Creation of 40 km of 400 kv DC transmission lines from Bheramara (Bangladesh) to Indian border
- Long term agreement (25 years) for power transfer between Bangladesh and India

Financing of the Interconnection

- Initial financing was estimated at \$ 159 million (ADB loan-\$100 million and GOB - \$59 million)
- Subsequently it became \$199 million for interconnection facilities in Bangladesh with a \$112 million loan from ADB. (PGCB being the Executing Agency for the Project)
- Contribution in Total interconnection cost: ADB (51%), GOB (30%) (i.e., Total cost in Bangladesh side 81%) and Indian part (19%)
- The Power Grid Corporation of India Limited built and financed the infrastructure in India.
- ADB loan interest during implementation is 4%.
- ADB loan for expansion of the project upto 1000 MW capacity has already been approved.

Financing of the Bangladesh Part

- Responsibility of the Transmission Company (PGCB)
- Management of the cost through tariff adjustment

The background of the slide features a dense pattern of light blue water droplets of various sizes. At the top, there is a decorative blue wave graphic that transitions from a lighter cyan on the left to a darker blue on the right.

Importance of the Project

The background features a dense pattern of light blue water droplets of various sizes. At the top, there are stylized blue waves in shades of cyan and blue, with a thin white line separating them from the droplet pattern.

Thank you all