Cross Border Electricity Transmission with High Voltage Direct Current (HVDC) Executive Exchange

September 18 – 20, 2011
Dhaka, Bangladesh

Hosted by
POWER GRID COMPANY OF BANGLADESH (PGCB)

Coordinated by
UNITED STATES ENERGY ASSOCIATION (USEA)

Funded by
U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID)
SOUTH ASIA REGIONAL INITIATIVE FOR ENERGY (SARI/ENERGY)
BANGLADESH PARTICIPANTS:

1. Mr. Md Abu Taher, Chief Engineer (PSC), Bangladesh Power Development Board
2. Mr. Md. Abul Kashem Mahmod, Executive Engineer, System Planning, Bangladesh Power Development Board
3. Mr. Nur Mohammad Samsuzzoha Kabir, Sub-Divisional Engineer, Design & Inspection, Bangladesh Power Development Board
4. Mr. Md. Rafiqul Islam, Deputy General Manager, Design, Power Grid Company of Bangladesh
5. Mr. Chowdhury Alamgir Hossain, Deputy General Manager, SPMC, Power Grid Company of Bangladesh
6. Mr. Md. Abdus Salam, Deputy General Manager, TMCC, Power Grid Company of Bangladesh
7. Mr. Arun Kumar Saha, Deputy General Manager (I/C), Planning, Power Grid Company of Bangladesh
8. Mr. A.K.M. Gause Mohiuddin Ahmed, Manager, SSD, Power Grid Company of Bangladesh
9. Mr. Md. Alamgir Hossain, Manager, Grid Interconnector Project, Power Grid Company of Bangladesh
10. Mr. Md. Jamil Ahmed, Manager, SPMD-1, Dhaka, Power Grid Company of Bangladesh
11. Mr. Md. Shaﬁqul Islam, Manager, GMD – Ishurdi, Power Grid Company of Bangladesh
12. Mr. Md. Rafiqul Islam, Manager, SPMD-2, Dhaka, Power Grid Company of Bangladesh
14. Mr. Sayed Shahriar Abdullah, Deputy Manager, Design, Power Grid Company of Bangladesh
15. Mr. Md. Abdul Hamid Rana, Deputy Manager, Design, Power Grid Company of Bangladesh

INDIA PARTICIPANTS:

1. Mr. Vikram Bhal, Chief Manager, PowerGrid Corporation of India Ltd. (vsbhal@powergridindia.com)
2. Mr. Mange Ram Chauhan, Chief Design Engineer, PowerGrid Corporation of India Ltd. (mrchauhan61@gmail.com)
3. Mr. Mohammad Arshad, Design Engineer, PowerGrid Corporation of India Ltd. (arshad@powergridindia.com)
4. Mr. Pradip Kumar Chatterjee, DGM (Engg-S/S), PowerGrid Corporation of India Ltd. (pkc@powergridindia.com)
5. Mr. Prince Jain, Design Engineer, PowerGrid Corporation of India Ltd. (pric_mit@yahoo.com)
6. Mr. Praveen Ranjan, Resident Project Manager, India-Bangladesh Inter-connector Project, Power Grid Corporation of India Ltd.

SRI LANKA PARTICIPANTS:

1. Mr. D.A.U. Daranagama, Additional Secretary (Planning & Development), Ministry of Power & Energy (upali@energy.gov.lk)
2. Mr. B.N.I.F. Wickramasooriya, General Manager, Ceylon Electricity Board (gm@ceb.lk)
3. Mr. R.H.R. Lokubalasooriya, Additional General Manager (Tr.), Ceylon Electricity Board (agmtr@ceb.lk)
4. Mr. D.K.B.S. Thilakasena, Additional General Manager (CS), Ceylon Electricity Board (agmcs@ceb.lk)
5. Mrs. T.A.K. Jayasekera, Chief Engineer (Tr. Planning), Ceylon Electricity Board (cetp@ceb.lk)
6. Dr. P.N. Fernando, Sri Lanka.
RESOURCE PERSONS:

1. Mr. SK Zadoo, General Manager, Siemens Ltd. (sk.zadoo@siemens.com)
2. Mr. Nandan Mahimkar, Vice President, HVDC Business Development, ABB Ltd. Chennai, India (nandan.mahimkar@in.abb.com)
3. Mr. Gunnar Persson, Sr. Project Manager, HVDC Sales, ABB AB, Sweden (gunnar.persson@se.abb.com)
4. Ms. Dipti Khare, Manager, HVDC System Design, ABB Ltd. (dipti.khare@in.abb.com)
5. Mr. Md. Helal Uddin, Project Manager, ABB Limited, Dhaka (helal.uddin@bd.abb.com)

Saturday, September 17, 2011
Delegates arrive into Dhaka, Bangladesh

Lodging: Ruposhi Bangla Hotel
1 Minto Road, Dhaka-1000, Bangladesh
telephone ++880 2 8330001 / 8358060 ext: 4204 | facsimile ++880 2 8331371

Program Venue: Ruposhi Bangla Hotel
1 Minto Road, Dhaka-1000, Bangladesh
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Sunday, September 18, 2011

Program Venue: Bakul Hall, Ruposhi Bangla Hotel (former Sheraton hotel), Shahbag, Dhaka

08:45 am Registration
09:00 am Welcome address by U.S. Energy Association
09:10 am Welcome address by Mr. Md Jamal Ullah, MD, Power Grid Company of Bangladesh
09:20 am Welcome address by Mr. ASM Alamgir Kabir, Chairman, Bangladesh Power Development Board
09:30 am Welcome address by Ms. Ramona El Hamzoui, Deputy Director, Office of Economic Development, USAID/Bangladesh
09:40 am Inaugural address by Chief Guest - Secretary, Power Division, Ministry of Power, Energy and Mineral Resources
10:00 am Coffee/tea break & group photo
10:15 am  **Overview of High Voltage Direct Current (HVDC) Transmission Systems**  
Speaker: Mr. SK Zadoo, General Manager (India), Siemens Ltd.

This session will serve as a snapshot of the HVDC industry. Topics will include:
- Today’s challenges for transmission
- HVDC advantages over AC transmission
- What the future holds for HVDC in improving the grid
- HVDC for renewables

11:30 am  **Converter operations and performance, HVDC Classic and VSC**  
Speaker: Mr. Gunnar Persson, Sr. Project Manager, HVDC Sales, ABB AB, Sweden

12:30 pm  **HVDC system control and protection**  
Speaker: Ms. Dipti Khare, Manager, HVDC System Design, ABB Ltd.

1:30 pm  Lunch break

2:30 pm  **Requirements of reactive power and control of harmonics**  
Speaker: Ms. Dipti Khare, Manager, HVDC System Design, ABB Ltd.

3:30 pm  **Coffee/tea break**

3:45 pm  **Review of ABB & Its HVDC projects**  
Speakers: Mr. Nandan Mahimkar, Business Development Manager, HVDC, ABB Ltd.  
& Mr. Gunnar Persson, Sr. Project Manager, HVDC Sales, ABB AB, Sweden

4:45 pm  Q & A

5:30 pm  Adjourn

7:30 pm  **Welcoming Dinner hosted by Power Grid Company of Bangladesh & U.S. Energy Association**

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**Monday, September 19, 2011**

9:00 am  **Key concepts of HVDC substation components**  
Speaker: Mr. SK Zadoo, General Manager (India), Siemens Ltd.

10:30 am  **Coffee/tea break**

10:45 am  **Performance of AC and DC filter and harmonics control**  
Speaker: Mr. Prince Jain, Design Engineer, Power Grid Corporation of India Ltd.

12:00 pm  **Insulation coordination**  
Speaker: Mr. Mohammad Arshad, Design Engineer, Power Grid Corporation of India Ltd.

1:30 pm  Lunch
Overview of India Preparations for Interconnections with Bangladesh & Sri Lanka
Speaker: Mr. Mange Ram Chauhan, Chief Design Engineer & Mr. Vikram, Bhal, Chief Manager, PowerGrid Corporation of India Ltd.

Overview of Sri Lanka Preparations for Interconnection with India
Speaker: Mrs. Jayasekera, CEB

Overview of Bangladesh Preparations for Interconnection with India
Speaker: Arun Saha, Power Grid Company of Bangladesh

Coffee/tea break

Review of Siemens & its HVDC projects
Speaker: Mr. SK Zadoo, General Manager (India), Siemens Ltd.

Operation, Maintenance and trouble shooting of an HVDC System: A Utility Perspective
Speaker: Mr. Praveen Ranjan, Resident Project Manager, India-Bangladesh Interconnector Project, Power Grid Corporation of India Ltd.

Coffee/tea break

Continuation of previous topic (Opn, Maint & trouble shooting of HVDC system)

Lunch

Continuation of previous topic (Opn, Maint & trouble shooting of HVDC system)

Visit to National Load Despatch Center of Bangladesh

Adjourn

Participants depart for home country.