PAST, PRESENT AND FUTURE OF HIGH VOLTAGE DC (HVDC) POWER TRANSMISSION

UPCOMING EVENTS OF SAARC ENERGY CENTRE

8TH JAPAN SAARC ENERGY SYMPOSIUM

MR. MUHAMMAD NAEM MALIK
DIRECTOR
SAARC ENERGY CENTRE

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About SAARC Energy Centre

05.
A holistic view of the energy situation in South Asia reveals that optimal utilization of indigenous resources of the Region needs to be prioritized since it would ensure and endure energy security and maximize the socio-economic benefits for the people of this region. Consequently, interdependence in terms of resources and expertise, and sustained cross border energy trade/exchanges are the most viable way out for South Asia like the rest of the world. Energy security could bring invaluable stability in South Asia both in terms of political and development advancement.

Studying and reviewing prevailing electricity laws and harmonizing relevant regulations in the SAARC Member States thus remain the critical pre-requisite for regional as well as bilateral power interconnections to promote competition, rationalize electricity prices and incentivize public and private sector participation in cross border power trade. Through a series of interventions including workshops and studies, SAARC Energy Centre has been working on sensitizing the Member States with the objectives to transform the regulatory regimes seamlessly for transcending different power sectors and borders. Similarly there is a need to improve energy trade efforts between the member states for the socio-economic benefit of people of this region.

I commend the efforts of my team to complement the overall mission of SAARC Energy Centre and with the collaborative effort of the whole SAARC Region, I see SAARC Energy Centre emerging as a real centre of excellence in the SAARC region.

Mr. Muhammad Naeem Malik
Director
South Asia is a region of enormous prosperity, growth and economic
development. It has a long cultural heritage of strong bonding. This
region is endowed with huge natural resources in and around.

Energy cooperation is a driver for the SAARC process
leading to durable peace in the region. SAARC Energy
Centre has been created through Dhaka Declaration
in 2005, as the Special Purpose Vehicle to realize the
vision of SAARC leaders to establish an Energy Ring
in South Asia. It has started journey from 1st March
2006 in Islamabad. SAARC energy cooperation program
provides a major substantive element for economic
prosperity of South Asia through meeting the energy
demand of the countries. SAARC Energy Centre is
converting energy challenges into opportunities for
development. It is the platform involving officials,
experts, academia, environmentalists and NGOs to tap
potentials of cooperation in energy sector including
development of hydropower, renewable and alternative
energy, promoting technology transfer, energy trade,
energy conservation and efficiency improvement in the
region.

SAARC Energy Centre is presently working on the
following five thematic areas to achieve its envisioned
goals:

- Programme on “Energy Trade between the SAARC
  Countries” (PENT);
- Programme on “Integrated Assessments of Energy,
  Transport, and Environment” (PETREN);
- Programme to “Minimize Oil Imports (PROMO)
  through Improvements in Energy Efficiency and
  Fuel Substitution”;
- Programme to “Successfully Implement Technology
  Transfer”(POSIT);
- Programme on “Rural Electricity for Poverty
  Alleviation” (PREPA).
The primary objective for the establishment of the Centre is to have a regional institution of excellence for the initiation, coordination and facilitation of SAARC programs in energy.

**OBJECTIVE**

The primary objective for the establishment of the Centre is to have a regional institution of excellence for the initiation, coordination and facilitation of SAARC programs in energy.

- To strengthen South Asia’s capacity to collectively address global and regional energy issues.
- To facilitate energy trade within the SAARC region, through the establishment of a regional electricity grid and natural gas pipelines.
- To promote more efficient use of energy within the SAARC region.
- To enhance cooperation in the use of new and renewable energy sources in the region, thereby contributing towards more sustainable development in the SAARC member countries.
- To serve as a focal point for providing reliable energy data for the individual member countries and the South Asian region.
- To enhance SAARC expertise in energy development and management.
- To promote private sector investment and participation in energy activities in the region.
- To undertake programs to achieve the goals mentioned above.

**VISION**

The Centre is envisioned as a catalyst for the economic growth and development of South Asia region by initiating, coordinating and facilitating regional as well as joint and collective activities on energy.

**MISSION**

The Centre will provide technical inputs to the SAARC Working Group (and other) meetings on Energy, and will facilitate accelerating the integration of energy strategies within the region by providing relevant information, state-of-the-art technology and expertise.
Mr. Muhammad Naeem Malik is a Chemical Engineer by profession with 34 years experience in the petroleum sector. He has practical experience in Industrial Operations, Regulation of upstream and downstream Oil and Gas Sector, and Policy Formulation and Implementation. He started his career in the private sector petro-chemical industry and then joined the Ministry of Petroleum & Natural Resources in 1981 where he has worked on various important assignments and represented the Ministry at various international forums. He has remained Director General (Gas), Director General (Oil), Director General (Special Projects) Director General (Petroleum Concessions), Managing Director/CEO of Oil & Gas Development Company Limited (OGDCL) and Chairman and Managing Director of Pakistan Mineral Development Corporation (PMDC). He has also served as Additional Secretary in Ministry of Petroleum and Natural Resources.

Mr. Malik brings with him diversified experience of upstream, midstream and down-stream oil and gas sector. He served as a Director on the Boards of almost all the public sector petroleum companies in Pakistan including Sui Northern Gas Pipeline Limited- SNGPL, Sui Southern Gas Company-SSGCL, Pirkoh Gas Company, Pakistan Petroleum Limited-PPL, Oil and Gas Development Company-OGDCL, Hydro-Carbon Development Institute of Pakistan- HDIP, Pakistan Medical and Dental Council- PMDC and Mari Gas Company Limited- MGCL etc.
Mr. Shoaib Ahmad joined SAARC Energy Centre as Deputy Director on 28 July, 2015. He is an aeronautical engineer, with two MS level degrees; and a PhD in technology management of renewable-energies.

Before joining SEC, Mr. Shoaib Ahmad has served in many national and international organizations as system-support engineer. He has 28 years of diversified experience in management of professional teams, engineering projects, institutional development, total quality management and integrated logistics support. He has served as a team leader for many high cost, high value projects, R&D/reverse engineering teams, and renewable energy projects (bio-ethanol, biodiesel, wind mills, solar PV, solar thermal). His professional strengths are in policy making, strategy formulation, organizational development, engineering design and systems engineering.

He has also taught in engineering universities and has three internationally published research papers to his credit. He has done various professional development courses and is a member of many professional bodies.
Ms. Saira Ahmed has joined SAARC Energy Centre (SEC) as Communication Specialist on 22 July 2015. Graduated from International Islamic University and completed Master of Business Administration degree in Information Technology Management from Islamabad, Pakistan.

Before joining SEC, Ms. Saira has served for five years in various wings of National Disaster Management Authority in Prime Minister’s Office-Government of Pakistan mainly as Program Officer in Gender & Child Cell, Disaster Risk Reduction Coordinator in DRR Wing, Focal Person of OXFAM and UN Agencies in Pakistan & Assistant Director (Assessment) in Recovery & Rehabilitation Wing; served for two years in Pakistan Television Corporation as English News Anchor & News Editor; one year as Assistant Director & Focal Person for Media at the National Accountability Bureau Headquarters, two years as Research Analyst & Editor of International Magazine in SAMENA Telecommunications Council and one year as Lecturer of Communications & Networking in International Islamic University, Islamabad. She has expertise in Programme Management, Humanitarian Development, Media & Communications & Gender. She has organized many International high level conferences in NDMA and hosted almost every conference of NDMA. She has participated and represented Pakistan in a number of workshops, conferences, seminars and trainings mainly in India, Kazakhstan, US and UK.
Brick Kiln Policy and Advocacy Network (PAN) Workshop

18th - 20th February 2015, Kathmandu, Nepal

ICIMOD in collaboration with the CCAC’s Brick Production Initiative, organized a Policy and Advocacy Network (PAN) workshop in Godavari Village Resort, Kathmandu from 18-20 February 2015, the main objectives of the Workshop being Identification of main development concerns posed by brick production; Articulation of a common vision for the brick sector; Development of an understanding of policy approaches/ specific policies adopted by various countries; and Prioritization of regional actions and prepare an action plan to be undertaken by the PAN.

On Behalf of SAARC Energy Centre (SEC), Mr. Suresh Shrestha, Research Fellow (ETE), made a presentation on “Regional Partnership Networks in Promotion of Cleaner Brick Production”. He shared through the presentation the activities SEC has been carrying out in the area of Energy Efficiency with a particular focus on the SEC Study on Evaluating Energy Conservation Potential of Brick Production in the Selected Member States (Bangladesh, India, Nepal and Pakistan).

The Workshop included the Brick experts, government officials, representatives of international organizations, and brick kiln owners from Asia, Africa and Latin America.
The Embassy of Japan in Pakistan in collaboration with SAARC Energy Centre (SEC) and National University of Sciences and Technology (NUST) organized the 8th Japan-SAARC Energy Symposium on 10 and 11 March, 2015 at NUST Campus, Islamabad, Pakistan. The theme for the symposium was “Medium Term Vision for Energy Connectivity in the SAARC Region”.

8th Japan-SAARC Energy Symposium

10th - 11th March, 2015
NUST Campus, Islamabad

Honourable State Minister for Water and Power, Government of Pakistan, Ch. Abid Sher Ali inaugurated the Symposium. Director (ETS), SAARC Secretariat, Mr. Ahmar Ismail represented the Secretary General, SAARC for this Symposium. Director General (S-A & SAARC), Ministry of Foreign Affairs, Pakistan, Mr. Mohammad Nafees Zakaria offered welcome address during the inaugural session. Parliamentary Vice-Minister for Foreign Affairs, Government of Japan Mr. Kazuyuki Nakane and Director, SEC Mr. Muhammad Naeem Malik delivered keynote addresses setting the perspective for a critical debate on the strategic way forward with respect to energy connectivity in the SAARC region. Delegates from all the SAARC Member States, experts and professionals from Pakistan participated in the Symposium and contributed through presentations and lively discussions.
Study Visit of SEC Professionals to India

13th -18th April 2015, India

The main purpose of the activity was to visit the energy related institutes in India to learn from the Indian experiences in the energy sector so that the resources and expertise in India could be utilized to enhance the capacity of the professionals in the region and to explore and identify ways and means to collaborate with them for the development of Energy Sector in the region.

Dissemination Workshop

‘Designing Management & Monitoring Framework for Regulatory Compliance by Power Transmission Utilities in the SAARC Region’

29th - 30th April 2015, Colombo, Sri Lanka

SAARC Energy Centre, Islamabad under its program for FY 2015 organized a two days dissemination workshop ‘Designing Management & Monitoring Framework for Regulatory Compliance by Power Transmission Utilities in the SAARC Region’ in Colombo, Sri Lanka on 29-30 April 2015. The event was arranged at Hotel Galadariin collaboration with Ceylon Electricity Board, Sri Lanka.

SEC undertook this dissemination workshop with the aim to proactively close any gaps and mitigate any risks that a regulated power transmission utility may face while complying with its regulatory requirements. Engr. Salis Usman, Program Coordinator, on behalf of Director, SEC, welcomed the resource persons and all the delegates from SAARC Member States for this dissemination workshop. Study team comprised of a senior Power Planner, Analyst and Regulatory Expert from Pakistan, Engr. Hassan Jafar Zaidi, assisted by Engr. Omair Khalid and Salis Usman. Mr. Rashid Aziz, former Senior Energy Economist, World Bank contributed as the peer-reviewer. The Guest of Honour, Mr. AnuraWijepala, Chairman, Ceylon Electricity Board, Sri Lanka inaugurated the workshop.

03 – 05 June, 2015, Thimphu, Bhutan

UNDP CO Bhutan and the Department of Renewable Energy (DRE), Ministry of Economic Affairs, Bhutan organized an International Symposium on “Renewable Energy and Energy Efficiency Initiatives: Policies, Technologies and Sustainability” on June 03 – 05 June, 2015 at Thimphu, Bhutan to discuss issues related to Renewable Energy and Energy Efficiency challenges and opportunities. Mr. Suresh Shrestha, Research Fellow (ETE) represented SEC in the symposium and made a presentation on “Energy Efficiency and Road Transport in the SAARC Region”, which focused on the alarming increasing demand for petroleum fuels in the transport sector due to the fast growing economy in the region.

Combined Meeting of South Asia Regional Initiative for Energy Integration (SARI/EL) Tasks Forces

Mr. Muhammad Naeem Malik, Director, SAARC Energy Centre and Mr. Salis Usman, Research Fellow (Energy Efficiency) joined the combined meeting of SARI/EL Task Forces, as per following details, on 5-6 August 2015 at New Delhi, India in
response to the invitation extended by USAID SARI/EI:
• 5th Meeting of Task Force 1 on “Coordination of Policy, Legal & Regulatory Framework”,
• 4th Meeting of Task Force 2 on “Advancement of Transmission Systems interconnections”; &
• 2nd Meeting of Task Force 3 on “South Asian Regional Electricity Market”

On this occasion, Director, SAARC Energy Centre in his Keynote Address pointed out that he is highly encouraged to see the enthusiasm, spirit and the participation by the professionals of the SAARC member states, who have joined for this combined meeting of SARI/EI task forces. He said SEC will certainly look forward to maintain linkages with the future programs. He thanked USAID/SARI/EI for organizing the combined meeting of task forces which hold a very high strategic importance from the perspectives of regional electricity interconnections in South Asia.

Mr. Salis Usman, Research Fellow, SEC, made a presentation on Program Activities of SEC. He shared a) SAARC Vision b) Thematic areas of program activities of SEC c) Program activities 2013-2015. He explained various research studies and training program being conducted by SEC. He highlighted on the first distance learning certificate course on Power System Planning and Analysis. He briefed that ADB is carrying out the study on regional grid master plan and the draft report was shared with SARI/EI/IRADe.

The SEC professionals team visited NTDC office in Lahore and had a meeting with Managing Director- NTDC- Mr. Arshad Chaudary.

The SEC Professionals visited state-of-the-art production, graphics, editing, transmission, archiving facilities of the Virtual University-Lahore. Various future programs to increase the reach of the university were discussed.
Past, Present and Future of High Voltage DC (HVDC) Power Transmission

SAARC Energy Centre, Islamabad under its program for FY 2015 organized a two days perspective workshop Past, Present and Future of High Voltage DC (HVDC) Power Transmission in Lahore, Pakistan on 30 September - 01 October 2015. The event was arranged at Hotel Avari in collaboration with the National Transmission and Dispatch Company Limited, Pakistan as the Knowledge Partner. SEC envisaged this training workshop, aiming at strengthening the power transmission engineers and planners of the SAARC Member States with the following major objectives:

- Inform the professionals of transmission utilities of the new developments, trends and challenges with respect to the bulk power transmission.
- Exchange the latest experience of the experts with the Member States in opting the HVDC or HVAC for their future power transmission projects particularly regional power inter-connections.
- Creating opportunity for power transmission professionals to enhance their knowledge through interactive sessions based on regional and international experiences.

The workshop started with the Inaugural session chaired by Mr. Abid Sher Ali, Honorable State Minister for Water and Power, Government of Pakistan. The event was closed with the Valedictory Session on second day of the event i.e. 1st October 2015, chaired by Ch. Muhammad Arshad, Managing Director, NTDCL, Pakistan.

Mr. Muhammad Naeem Malik, Director, SAARC Energy Centre shared his strong belief that this Perspective Workshop will help the South Asian power professionals in moving ahead on the road to modern technology and regional energy connectivity through complementing efforts of professionals.

Mr. Abid Sher Ali, State Minister for Water and Power, Government of Pakistan chaired the Inaugural Session. In his inaugural address, the Chief Guest acknowledged the critical importance of the HVDC workshop in the background of sharp gap between power demand and supply in Pakistan and most of the SAARC Member States.

On the second day of the workshop, Ch. Muhammad Arshad, Managing Director, National Transmission and Dispatch Company Limited graced the occasion as Chief Guest. He congratulated SAARC Energy Centre for organizing this invaluable opportunity for achieving and maximizing the knowledge sharing opportunities. He commented that SAARC Energy Centre is playing a vital role to enhance cooperation to address regional energy issues, to promote energy trade among the Member States and to enhance SAARC knowledge base in energy development and management.
<table>
<thead>
<tr>
<th>Month</th>
<th>Date(s)</th>
<th>Event Description</th>
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<tr>
<td>October</td>
<td>8th - 9th Nepal</td>
<td>SAARC Dissemination Workshop on the Study for Development of a Potential Regional Hydro Power Plant in South Asia</td>
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<td>5th - 6th Afghanistan</td>
<td>SAARC Seminar on Application of on-grid Biogas Technologies</td>
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<td>16th - 17th Pakistan</td>
<td>10th Meeting of Governing Board of the SAARC Energy Centre (SEC)</td>
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<td>19th Islamabad, Pakistan</td>
<td>11th Meeting of the Selection Committee</td>
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<td>26th - 27th Islamabad</td>
<td>3rd Meeting of the Expert Group on Renewable Energy</td>
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<td>26th - 27th New Delhi, India</td>
<td>SAARC Training Workshop on Experience Sharing on Coal bed Methane, Underground Coal Gasification and Coal Extraction Methodology</td>
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<td>November</td>
<td>1st - 2nd Maldives</td>
<td>SAARC Workshop on Energy Based Livelihoods Contributing to Economic Empowerment of the Marginalized Sectors and Women in the SAARC Region</td>
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<td>8th, Pakistan</td>
<td>Celebration of 31st Charter Day of SAARC</td>
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<td>20th - 21st Bangladesh</td>
<td>SAARC Workshop on Role of Energy in Transport Sector in SAARC Member States</td>
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<td>December</td>
<td>21st - 22nd Nepal</td>
<td>50th Session of Programming Committee of SAARC</td>
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<td>22nd - 23th Bangladesh</td>
<td>SAARC Dissemination Workshop ‘Comparative Study on Rural Electrification Policies in SAARC Member States’</td>
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<td>Pakistan</td>
<td>SAARC Technical Training Course for Power System Planners and Analyst through Distance Learning</td>
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<td>All Member States</td>
<td>Promotion of SAARC Chullahs (Improved Cooking Stoves-ICS) for their Commercialization / Marketing / Scaling up in the SAARC Member States</td>
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**Regional**

**India power link will help Sri Lanka meet peak load shortages**
A proposed submarine link between India and Sri Lanka would help meet peak hour power shortage in the island country accounting for 7-15% of its annual power requirement. more...

**India-Nepal discuss issues regarding Power Trade Agreement**
Stakeholders recently attended a conference organised by Confederation of Indian Industry and the Indian Ministry of Power to discuss issues in the implementation of Power Trade Agreement signed between Nepal and India in October 2014.

**Nepal**

**InvestBank acquires majority stake in hydropower projects in Nepal**
InvestBank has acquired 70% equity stake in Tila-1 and Tila-2 hydro power projects being constructed by SC Power Company Limited. The two project will have a total installed capacity of 860 MW.

**India**

**JSW Energy to acquire 500 MW thermal power from Jaiprakash Power Ventures**
JSW Energy will pay $583 million to acquire the Bina thermal power project which has the required infrastructure to increase generation capacity to 1.5 GW.

**Pakistan**

**Pakistan to add 5.6 GW capacity under China Pakistan Economic Corridor program**
Projects will include hydro, solar, and thermal power plants with total investment of around $10 billion.

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