





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

SARI/EI Program: An over view, progress & work plan of 2013-14





#### **Outline of Presentation**

- SARI/EI Program- Background
- SARI/EI Program- Approach & Framework
- IRADe Cooperative Agreement
- Overall Working Methodology of PSC, Task Force and update:
  - Outcomes of 1st and 2nd Meeting of Task Force -1
  - Outcomes of 1st Meeting of Task Force-2
- Conference and Its Outcome
- Work Plan for 2013-2014





#### SARI/EI -Background

- > SARI Program started in year 2000
- > First Three phases of the Program emphasised on:
  - Phase-I ( 2000-2003 ) Building Trust and Confidence
  - Phase-II (2004-2006) Advocacy
  - Phase III (2007-2012) Energy Security
- Covers 8 SAARC Countries: Afghanistan, Pakistan, Bangladesh, India, Bhutan, Nepal, Sri Lanka, Maldives.
- ▶ Phase IV (2012-2017) SARI/EI Program Integration & increase of Cross Border Electricity Trade.

The objective of the Phase IV "To create the right 'enabling' environment to support establishment of a South Asia Electricity Market and gain consensus and support from the key decision makers by engaging a wide variety of stakeholders"





#### SARI/EI -Approach

- 1. Program to focus on three Development Outcomes:
  - i. Coordination of policy, legal and regulatory issues.
  - ii. Advance transmission interconnections (Generation and Transmission Planning)
  - iii. Establish regional electricity markets.
  - 2. SARI/EI to play the convening role -Task Force for each development outcome
  - 1. Task Forces are heart of the Program.
  - 3. Demand Driven 'Bottom Up' Approach







### **Cooperative Agreement: Highlights**

- > IRADe, a regional organization, is implementing partner
- Program goal and objective :
- 1. Regional Energy Integration.
- 2. Cross border Electricity trade.
- 3. Establishment of South Asia Electricity Market.

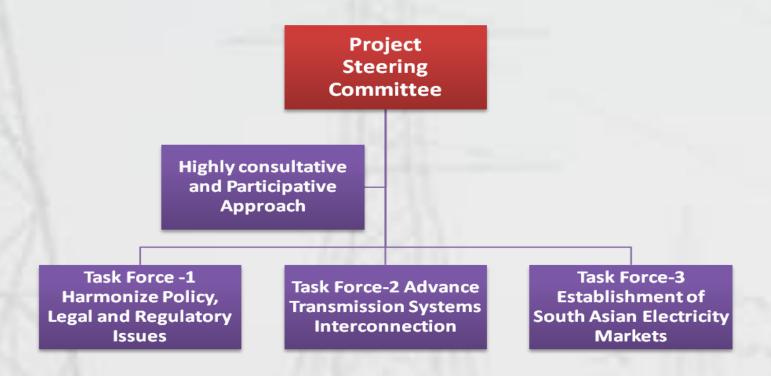
- Effective from 1st October,2012
- Period -5 years (2012-2017)
- Fourth and Final Phase of SARI.







## SARI/ EI Framework



- ➤ Task Force 1: Harmonization of Policy, Legal and Regulatory Issues
- > Task Force 2: Advancement of transmission system interconnection
- > Task Force 3: Establishment of South Asian Regional Electricity Market







### **Project Steering Committee**

- Project Steering Committee (PSC) is the apex body of the program and provides overall strategic directions.
- PSC members consist of
  - Senior level officials from the country governments
  - Representative of regional institutions like SAARC Energy Center
  - Representative of multilateral donor like ADB
  - Independent Energy Experts/Diplomats
- PSC held its first meeting on March 12, 2013 and second meeting on January 08, 2014
- In the meetings, the PSC members imparted a sense of direction to the program. They provided their inputs to the Terms of References of the Task Forces and agreed to build consensus about regional energy integration and cross-border energy trade in the region.







## Overall Working Methodology of Task Force: Bottom Up Approach and Building Strategic ownership.

- ➤ Task force are the heart of the SARI/EI Program.
- > TF will follow a highly structured and participatory approach.
- Members are the owners of the Task Force and its outcomes.
- Members are the point of contact for their country and will carryout out the various work pertaining to the activities of the taskforces.
- >Members if want to carryout a study to get the work done for the Task force, may ask the need for doing the same.
- ➤IRADe will provide technical and coordinating support for carrying out the study if needed.
- ➤ PSC committee will also be consulted and their guidance/directives will also be taken for activities of the Task Forces.





#### **Task Forces**

- TFs will act as the platforms for structured, concerted, and demand-driven discussion
- TF1 and TF2 already formed, held their meetings and started their work

"TF1 and TF-2 consist of representatives of country governments and power utilities, Members from participating nation's power ministries, Regulating commission/Regulating Authorities and other policy making bodies who are key decision makers and well versed with policy, legal and regulatory practices in the area"

Two meetings of TF-1 and one meeting TF-2 has been organized.

Process for TF3 formation is at advanced stage.







#### Task Force 1: Coordination of Policy, Legal and Regulatory Issues

#### **Key Deliverables:**

- Aligning National Electricity Policy to recognize CBET as an integral part of the national electricity plan by reviewing existing electricity plan and review of laws, acts, policies for identifying specific provision/clauses that impacts CBET.
- Develop regulation and Policy Coordination Template and Develop a regulatory pathway/Road Map for establishment of a South Asian Regional electricity Market starting with the minimum set of enabling regulatory and legal provisions.
- Investment guidelines and policies applicable across South Asia. Risk analysis and mitigation policies.
- Compilation of South Asian Electricity Policies.
- Standard formats for Bid Documents and Power Purchase Agreements.





Task Force-1 on Coordination of Policy, Legal & Regulatory Framework on 24<sup>th</sup>- 25<sup>th</sup> July, 2013 Dhaka, Bangladesh: Findings

 TOR and methodology proposed by IRADe for TF 1 finalized and accepted.

- Members will identify the provisions contained in their laws, policies and regulations on the various aspects as elaborated by Dr. Salim having implication on CBET.
- Members agreed to make Country wise presentation on the above in the 2nd meeting of TF 1.







2<sup>nd</sup> meeting of Task Force-1 on Coordination of Policy, Legal & Regulatory Framework held on 19th & 20th February, 2014 | Colombo, Sri Lanka: Draft Findings

- Scope of work(SOW) of the study finalized
- Members to present Investment related issues pertaining to their country in the next TF1 meeting
- In the Third meeting Draft findings of the study shall be discussed.









# Task Force-2: Advancement of Transmission System Interconnection (Generation and transmission planning)

☐ In the first meeting members finalized the TOR and key deliverables

Key Deliverables of TF-2:

 Prepare Regional Electricity plan in 25-30 year time frame in periods of 5 years based on National plans

- Assess CBET opportunities in 25 30 year time frame
- Develop Standard Technical specifications for requirements of different voltage levels with parameters and list of codes to be prescribed for cross border requirements.
- Develop coordinated system operating procedures to be adopted for import export tie lines.









#### **Formation of Task Force 3**

- TF3 will have one representative each from the most appropriate authorities from the respective South Asia countries .
- TF-3 would be formed in the second quarter and First meeting of the Task Force 3 planned to be held in April 2014.
- Terms of Reference has been finalized
- TOR for TF3 will be presented during the first Task Force 3 meet and will be finalised based on the inputs from members.







## **Conference Background**







## **Conference Background**

- The conference was inaugurated by Dr. Montek Singh Ahluwalia, Deputy Chairman, Planning Commission, Government of India (GoI).
- Conference witnessed active participation from the high level representatives/delegations from the SA governments.
- Speakers and delegates were from both the public and private sector, Asian Development Bank (ADB), World Bank and regional SAARC Energy Centre etc.







## **Conference Background**

#### The objective of the conference:

- To launch the phase IV of SARI/EI Program
- To initiate a concrete and constructive discussion on the vision and road map for the South Asian Electricity Market (SAEM)
- To build consensus among the decision-makers of the region.
- To identify key areas for policy, regulatory, and technical interventions required in the SA countries
- Discuss the best practices and experiences from Regional Power System Integration such as Europe, SAAP,GMS etc.







## **Key Outcomes**







## **Key Outcome**

- High level officials acknowledged the work of SARI/EI and suggested the need institutionalise the process to advance the cause of CBET in the SA region in an effective manner.
- Electricity to be recognized as trading commodity and policies related to pricing and subsidies need to be aligned in the context of CBET.
- Different countries follow different regulatory practices, which leads to difference in electricity pricing in the region. This calls for need for harmonization/coordination.
- Review of respective electricity import and export policies by the participating nations for facilitating CBET.
- Distorted prices due to subsidies to sizable population of poor in the SA region can be a constraint for investments in power sector which impacts the scope of CBET, therefore needs to be reviewed.
- Requirement of investors to take up large projects in hydro sector for sustainable cash flows which can be done by investment friendly policies in the region.







### **Key Outcomes**

- Greater role envisaged for private sector including Public Private Partnerships as the governments alone will not be able to bridge the demand-supply gap. Some basic policy reforms are needed to achieve this.
- The grid codes and technical standards need to be coordinated to ensure reliable regional power system operation.
- Need for establishment of South Asia regional power grid and power exchanges.
- Need to Learn-from the best practices from established international energy markets for establishment of a SAEM.







#### IRADe AWP-2013-2014

#### Plans 2013-2014: Key Activities Planned

Essence

#### Work Plans 2013-2014: Key Activities Planned

Inaugural conference on 4-5 October 2013, Release of Background Paper

**Organising Project Steering Committee meetings** 

Formation of Task Force 3

Country visits in the SA region

**Organising Workshops** 

#### **Task Force Meetings**

TF-1 and TF-2: Tangible outputs by the end of Year: 2013-2014.

Supportive exercises/assignments to achieve the deliverables of the Task Ford







#### **Plans 2013-2014: Essence**

"Plans for 2013-2014 is focused on intensive task force meetings where each of the task forces will work to address the specifics issues concerning CBET and achieve the deliverables as defined in the terms of reference of Task Forces"







#### Plans 2013-2014: Key Activities Planned

- ➤ Inaugural conference on 4-5 October 2013, Release of Background Paper during the Inaugural Conference
- Organising Project Steering Committee meetings
- ➤ Formation of Task Force 3
- > Country visits in the SA region
- Organising Workshops
- ➤ Task Force Meetings
- > Supportive exercises/assignments to be carried out to achieve the deliverables of the Task Forces.





## **Task Force Activities**







#### TF-1: Tangible outputs from by the End of Year: 2013-2014

- Members findings on review of existing Acts, Policies, regulations and clear recommendations on changes ( country wise ) to be made (including institutional changes if any ) to facilitate CBET and **draft** report of the same.
- Members findings on minimum regulatory/legal/ policy requirements needed to enhance expansion of CBET and report on a common/ coordinated legal, policy, regulatory frame work for CBET in SA and draft report of the same.
- Country specific actions plans and strategies for buy in of recommendations of the report on "Review of existing Acts, Policies and other regulations and clear recommendations on changes to be made".
- Draft outline Task force 1 report.







#### TF-2: Tangible outputs from by the End of Year: 2013-2014

- Member's findings on Demand supply Projections vis-a-vis trading potential for the region over a time period of next 20 years in each 5 year horizon and final report on the same.
- Based on the trading Potential available, member's findings and agreement on interconnection Transmission lines and export and import points for power trade.
- Member's draft findings on coordination procedures/guidelines/mechanisms and standards (country wise) needs to be adopted for import export tie lines and allow feasible cross border power trade draft report on the same.
- Draft report on long term south Asia electricity master plan.







# Supportive exercises/assignments to be carried out to achieve the deliverables the Task Force

#### **Supportive exercises/assignments for Task Force 1:**

 Review of existing acts, policies, other regulations and agreements to identify inconsistencies that could have an impact on CBET and suggest corrective measures.

2. Exercise on minimum regulatory/legal/ policy requirements. Scope of the exercise will be finalised in third Task Force 1 meet and the findings of the study will be discussed in fourth TF1 meet.







# Supportive exercises/assignments to be carried out to achieve the deliverables the Task Force

#### **Supportive exercises/assignments for Task Force 2:**

- 1. Exercise to identify trading potential of the SA region by reviewing the demand-supply projections of South Asian countries
- 2. Exercise on review of current power generation scheduling and dispatch procedures, grid code, technical standards, protection systems and energy accounting systems etc.
- 3. Exercise on coordination procedures, harmonization mechanism for harmonious regional power systems operation.





# Thank You