## The 16<sup>th</sup> FNCA Ministerial Level Meeting (MLM)

#### Trends and Challenges in National Nuclear Energy Policy

### 7-8 December 2015

Engr. Md. Monirul Islam Chairman, Bangladesh Atomic Energy Commission

## Introduction

- To achieve the country's vision of 2021 and 2041 to become a higher middle-income, electricity demand requires growth at a rate of 9 -12 %;
- "Electricity for all by 2021" is a vision of our country;
- Fuel diversification of, and access to, clean and more efficient sources of energy" is adopted as a strategy for the Post-2015 Development of Bangladesh;
- Power System Master Plan (PSMP) projected the electricity generation about 24,000 MW by 2021 and 40,000 by 2030
- Current Installed capacity: 11,877 (as of October 2015)
  Peak Load : 8000 MW

#### **Power Generation Plan: Primary Fuel Sources by 2030**

SI. No.	Description	Capacity (MW)	%	Possible Location (s)
1	Domestic Coal	11,250	51	North West Region at Mine Mouth
2	Imported Coal	8,400		Chittagong and Khulna
3	Domestic Gas/LNG	8,850	23	Gas- Near Load Centers LNG- Near Costal Area
4	Regional Grid	3,500	9	Bahrampur - Bheramara, Silchar - Fenchuganj, Purnia- Barapukuria- Bongaigaon, etc.
5	Nuclear Energy	4,000	10	<b>Rooppur NPP Site</b> and another site
6	Others (Oil, Hydro and Renewable)	2,700	7	Near Load Centers
Total		38,700		

- The National Parliament passed a resolution in 2010 : "In order to overcome the increasing power crisis in the country nuclear power plant shall be established immediately";
- Nuclear energy can only be implemented within an appropriate work, establishment of a technical, legal and institutional framework and with strong government commitment;
- Decision taken to build the country's first NPP, the Rooppur NPP through bilateral cooperation with Russian Federation;

- A Framework Agreement on Peaceful Uses of Atomic Energy between the government of Bangladesh the Russian Federation signed on 21<sup>st</sup> May 2010;
- A Cooperation Agreement Concerning the Construction of a Nuclear Power Plant between Russian Federation and Bangladesh signed on 2 November, 2011.

#### Customer

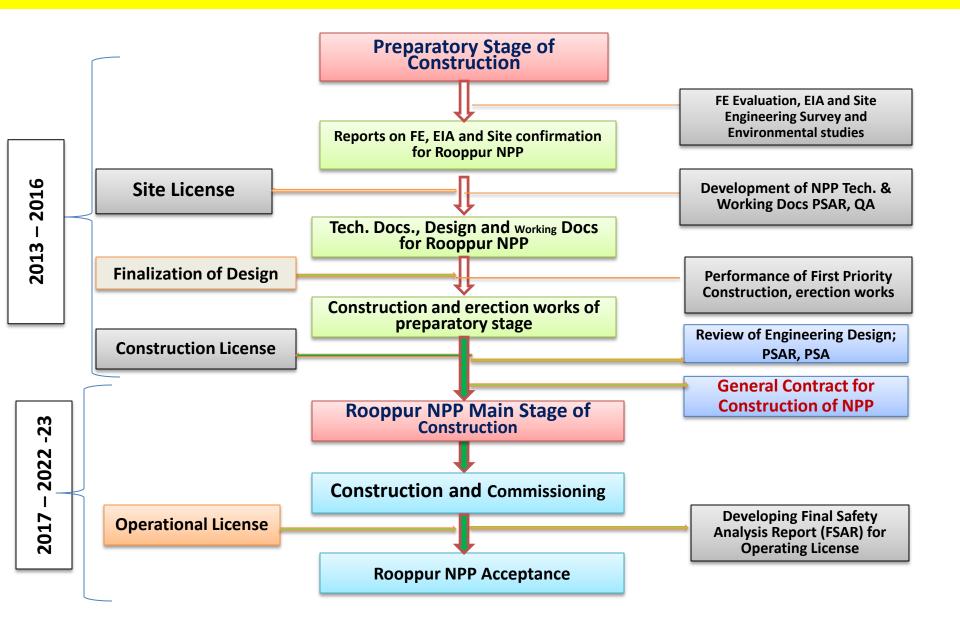
- Bangladesh Atomic Energy Commission
- MOST is the Competent Authority

#### Contractor

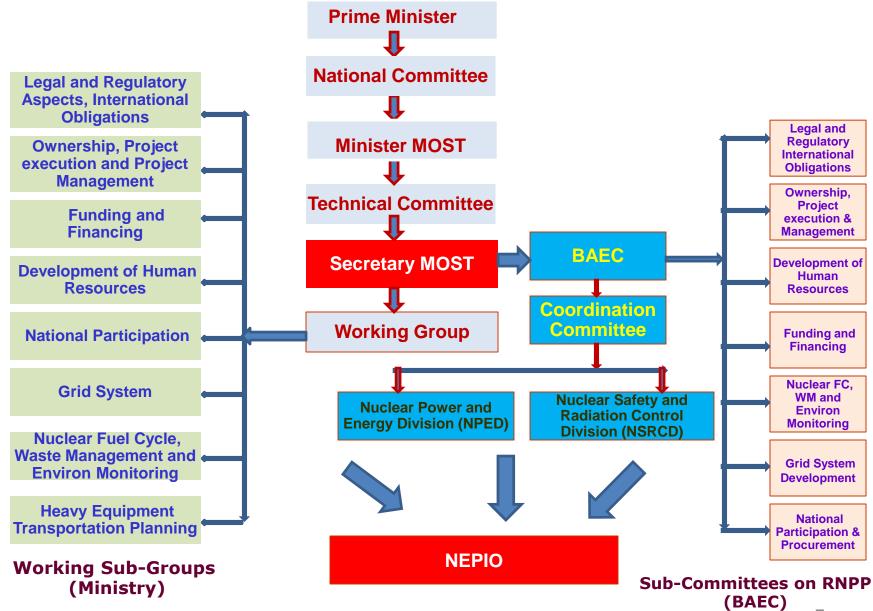
- JSC Atomstroyexport
- ROSATOM is the Competent Authority



### **Two Stages of Rooppur NPP Construction**



## **Power Infrastructure Development**



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## **Challenges**

#### **Conditions in Bangladesh:**

- No nuclear units in under construction or operation
- Not sufficiently developed nuclear infrastructure
- Lack or insufficient project management experience
- Safety culture is still to be cultivated
- NPP Project management system is to be developed

## **Conclusions**

- Bangladesh faces a huge challenge in implementing the Rooppur NPP and its total nuclear power;
- Practical steps towards building "Rooppur NPP" by 2022-2023 have been taken;
- A preliminary assessment has been chalked out a plan to find out methods that can be applied to find out our gaps and then fill them up;
- Bangladesh seeks cooperation in the form of bilateral arrangements in establishing infrastructure for "Rooppur NPP" building;

# Thank you for your kind attention !!