15th FNCA Ministerial Level Meeting, 17-19 November, Sydney, Australia

Nuclear Power Program of Bangladesh

Engr. Md. Monirul Islam

Chairman



Bangladesh Atomic Energy Commission

Country's Vision and Strategy for Nuclear Power (1/2)

Long-term policy for nuclear energy

- Bangladesh is committed to the peaceful usages of nuclear technology for its socioeconomic development. Being mandated by P.O. 15 of 1973, BAEC has, since then, been trying to do the needful so as to make the country embark on NP program.
- Recent Policy Documents of the Government, such as Outline <u>Perspective Plan 2010-2021</u>, <u>National</u> <u>Energy Policy and PSMP 2010</u>, have taken nuclear into consideration for electricity generation.
- The matter of implementation of country's first NPP at Rooppur site has been approved by the National Parliament in December 2010.

Country's Vision and Strategy for Nuclear Power (2/2)

Nuclear Power Program

- The Government has taken measures for embarking on NP program following the guidelines of the <u>IAEA 'Milestone Documents'</u> and <u>BANPAP</u> (Bangladesh Nuclear Power Action Plan):
 - An independent regulatory body has been established on 12 February
 2013 under the provision of BAER Act.
 - Formation of a <u>National Committee</u> headed by the Hon'ble Prime Minister.
 - A <u>Technical Committee</u> formed headed by Hon'ble State Minister, MOST.
 - Working Group and Subgroups formed headed by Secretary, MOST;
 - Formation of Several Committees and Subcommittees in BAEC to address the IAEA Milestone issues.
 - These committees along with relevant Ministries constitute the NEPIO in the country.
- A series of Agreements, MOUs, Negotiations have been taken place in this context with the Russian Federation (RF).

Current & Future Plans for NPP Deployment

Power System Master Plan-2010 (PSMP – 2010) proposes long-term fuel-mix as follows [4000 MWe from RNPP by 2030]

Energy	2010	2021 (20,00	2021 (20,000 MW)	
Gas	87.50%	30%		
Oil	06.00%	03%	This share is	
Coal	03.70%	53%	about 28% now !!	
Hydro	02.70%	01%		
Nuclear	0%	10%		
Renewable	00.50%	03%		

üBy 2021, share of nuclear will be 10% of 20,000 MW = 2000 MW üPSMP-2010 also proposes addition of another 2000 MW from Rooppur nuclear plant by 2030.



Action Plan:

- Conduction of Engineering Survey (ES) and Feasibility
 Evaluation (FE) studies and obtaining regulatory approvals
 (2013 2014) .
- Undertaking extensive measures for developing required human resources (2013 onward).
- Development of conceptual, preliminary and detailed engineering design of RNPP (2014 – 2015).
- Establishment of general contract for construction and commissioning of Rooppur NPP including the arrangements for education and training of plant personnel (2015 onward).
- RNPP Construction (2015 2020).

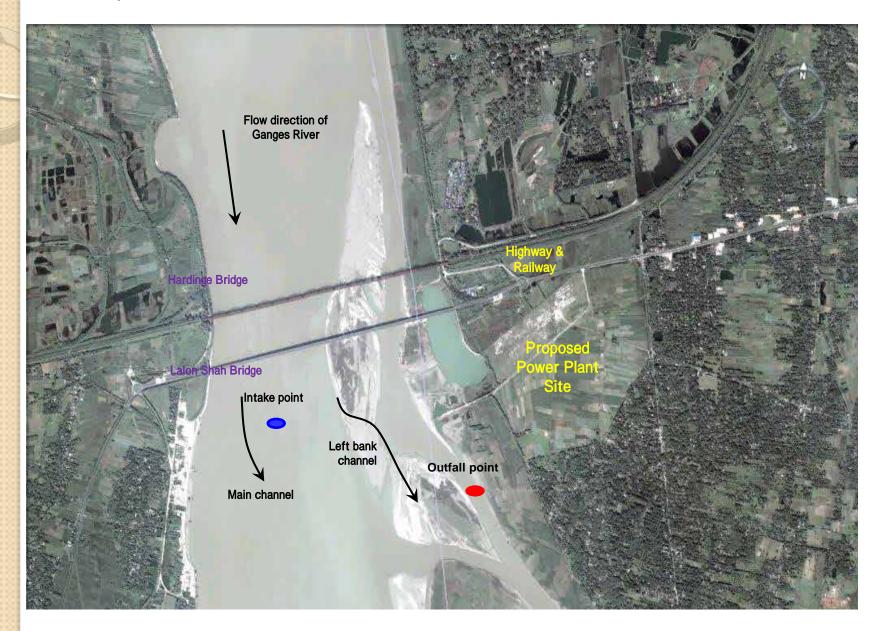
Expectation of Bangladesh: Nuclear Power

National anticipation in the next 100 years

- Bangladesh expects that global nuclear power development program will gain more and more momentum in the 21st century.
- According to the long-term fuel-mix as contained in the PSMP document, Bangladesh expects to generate about 10% of its total electricity from nuclear by 2021 and 20% by 2030. It is also expected that the percentage of nuclear will keep on increasing beyond 2030.
- Bangladesh would like to have assistances from different international co-operations in a harmonized way to expedite its national infrastructure development for building the country's first nuclear power plant, the 'Rooppur NPP' by 2020 / 21.

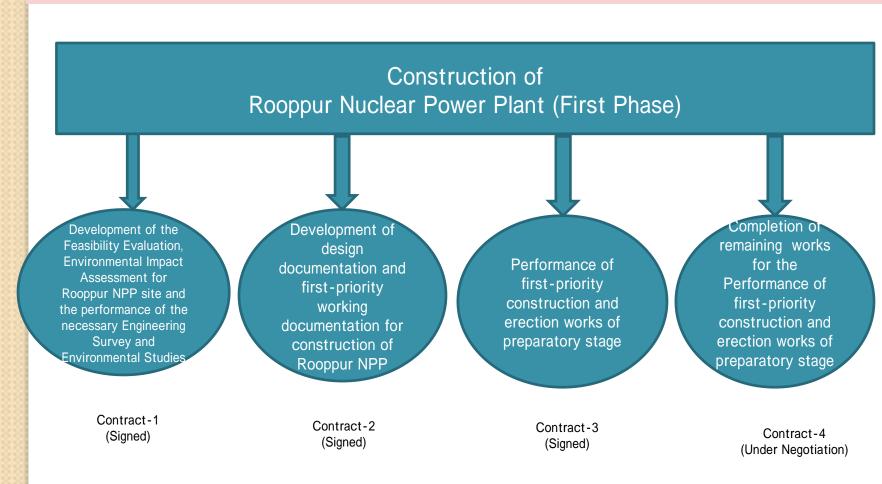
Rooppur NPP Site Overview

Satellite picture of Site Area: GPS Position: 24.06502, 89.045391



Ground Breaking Ceremony of the Construction of Rooppur Nuclear Power Plant (First Phase)

The Hon'ble Prime Minister of the People's Republic of Bangladesh has inaugurated the Construction of Rooppur Nuclear Power Plant (First Phase) on 2 October, 2013.



Expectations from FNCA

- Major Policy Implications
 - Appropriate policies are needed for ensuring safe management of spent fuel and radioactive wastes.
 - The issues of Safety, Security, and Safeguard are also need to be addressed with right attitude and commitment.
 - Development and enforcement of necessary Regulatory Framework and licensing requirements for the entire cycle of NPP project implementation.
 - The issue of emergency planning and response preparedness for events that might have transboundary effects need to be addressed properly throughout the lifecycle of the NPP.
 - Appropriate HRD for capacity building need to be continued.

Expectations from FNCA

- Regional collaboration & cooperation among the FNCA member states should be continued to promote the safe & secured nuclear technology utilization.
- Sharing of skill, knowledge & experience should be continued in each of the 10 FNCA projects.
- Japanese leadership in Nuclear related activities through FNCA need to be continued.





Thank you for your kind attention