

# INPRO Dialogue Forum on Global Nuclear Energy Sustainability: Long-term Prospects for Nuclear Energy in the Post-Fukushima Era

27-31 August 2012  
Seoul, Republic of Korea

## Status of the Nuclear Power Program of Bangladesh

Engr. M. Ali Zulquarnain

Bangladesh Atomic Energy Commission

Dhaka, Bangladesh

Email: [memberplan@baec.org.bd](mailto:memberplan@baec.org.bd) / [zmaliee@gmail.com](mailto:zmaliee@gmail.com)

# 1. National vision and strategy for Nuclear Power in the 21<sup>st</sup> century in Bangladesh



INPRO  
International Project on  
Innovative Nuclear Reactors  
and Fuel Cycles

- 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**.
  - Relevant government documents, such as **Outline Perspective Plan 2010-2021, National Energy Policy** and **PSMP 2010**, 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.



# 1. National vision and strategy for Nuclear Power in the 21<sup>st</sup> century in Bangladesh...



- Nuclear power programme
  - The Government has taken measures for embarking on NP program following the guidelines of the **IAEA 'Milestone Documents'** and the **BANPAP** (Bangladesh Nuclear Power Action Plan). The measures taken include –
    - Establishment of an **independent Regulatory Body** (An Act entitled “Bangladesh Atomic Energy Regulatory Authority Act” has already been enacted in June 2012 for this purpose).
    - Formation of a **National Committee** headed by the **Hon'able Prime Minister**; a **Technical Committee** headed by **Hon'able State Minister, MOST**; **Working Group** and **Subgroups** headed by **Secretary, MOST**; and Several Committees and Subcommittees in BAEC to address the **IAEA Milestone** issues. These committees constitute the **NEPIO** in the country.

# 1. National vision and strategy for Nuclear Power in the 21<sup>st</sup> century in Bangladesh...



- Nuclear power programme...
  - Bangladesh has taken steps to arrange **supplier's cooperation** for implementation of its first NPP at the Rooppur site through **bilateral negotiations**.
  - A bilateral Framework Agreement on co-operation in the field of peaceful usages of **atomic energy** was signed on **21 May, 2010** between Bangladesh and the Russian Federation.
  - An Intergovernmental Agreement (**IGA**) on cooperation concerning the construction of a Nuclear Power Plant has also been signed between the two countries on **2<sup>nd</sup> Nov 2011**.

## 2. Main lessons learned after Fukushima in Bangladesh



Fukushima accident has not affected Government's decision with regard to the implementation of NPP in Bangladesh.

The lessons learned from the Fukushima are as follows:

- NPP designs should be robust giving due consideration to **all sight specific historical data of natural events** and at the same time, take into account of the levels predicted by the relevant experts with regard to these events.
- **Emergency planning and response preparedness program** should be implemented meticulously throughout the **lifecycle of the NPP**.
- Periodic safety review of the NPP should be carried out involving international/regional agencies.

### 3. Bangladesh's expectations for global Nuclear Power development in the 21<sup>st</sup> century



- National anticipation in the next 100 years
  - It is the expectation of Bangladesh that global nuclear power development program **will gain more and more momentum** in the 21<sup>st</sup> century.
  - According to the **long-term fuel-mix** as proposed in the **PSMP document**, Bangladesh expects to generate about **10%** of its total electricity from **nuclear** by **2021** and **20%** by **2030**.
  - Bangladesh would like to have assistances from different international co-operations in a harmonized way so as to expedite its national infrastructure development activities for building the country's first nuclear power plant, the '**Rooppur NPP**' by **2020/21**.

### 3. Bangladesh's expectations for global Nuclear Power development in the 21<sup>st</sup> century



- Major policy implications and challenges for newcomers
  - Establishing appropriate infrastructures as well as **funding & financing**.
  - Developing policies for ensuring **reliable fuel supply, safe management of spent fuel** and **radioactive wastes**.
  - Addressing the issues of **Safety, Security, and Safeguard**.
  - Formulating and implementing **regulatory framework** and licensing requirements for the all NPP project implementation phases.
  - Planning and development of appropriate **emergency plan** and **response preparedness** program.

# The End



INPRO  
International Project on  
Innovative Nuclear Reactors  
and Fuel Cycles

# Thank you for your kind attention