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Legal Framework for Public Participation

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Introduction

- Public participation is particularly significant in the environmental decision-making process for two reasons.
  - **Firstly, there has been growing public concern about the relationship between environmental health and human well-being .**
  - **Secondly, there is increasing demand from the international community for good governance, which generally includes use of participatory dialogue process between the government and civil society.**
  - **Environmental matters affect an entire nation and public participation in such matters enhances governmental accountability and acceptability , thereby leading to less litigation, fewer delays and generally better implementation of decisions .**

Public Participation in Environmental Law in Bangladesh

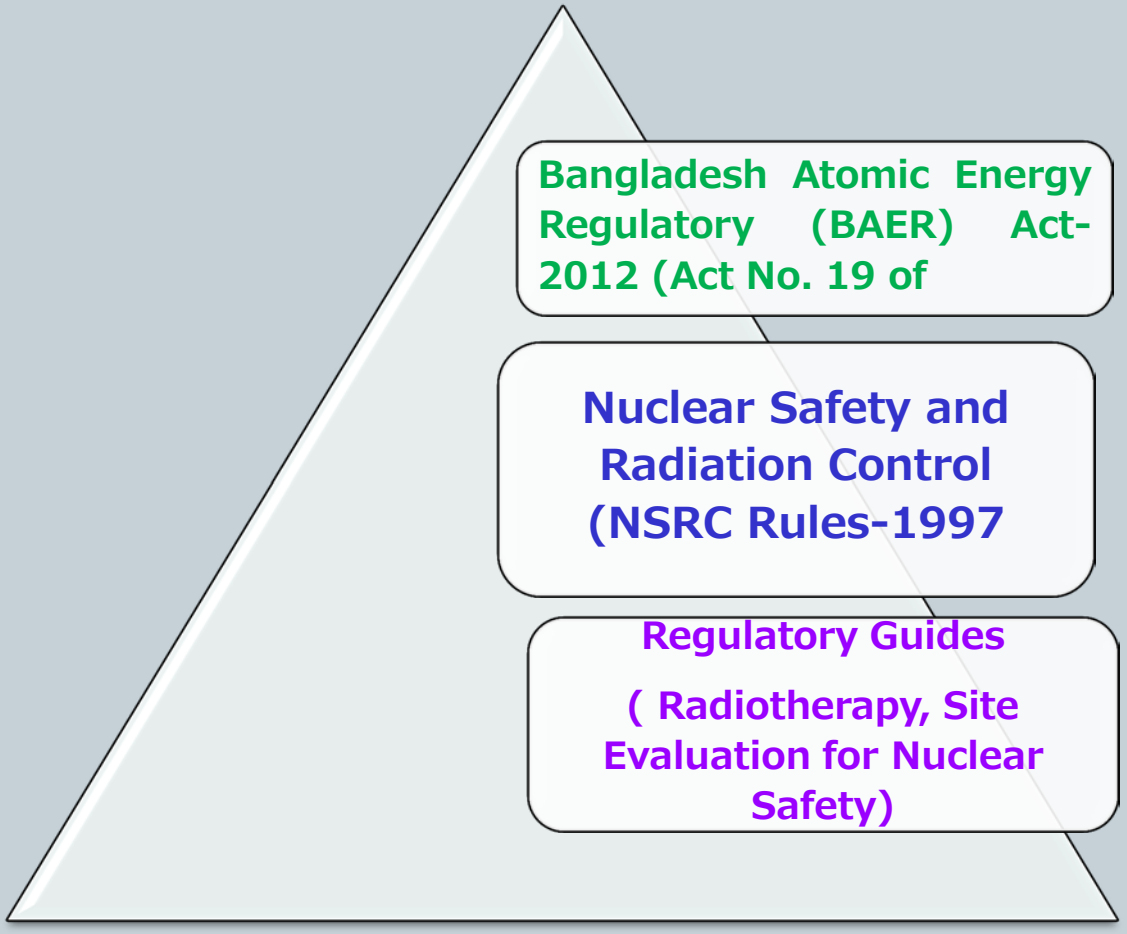
- Public participation is like the cornerstone in environmental development in Bangladesh
- In shaping any policies , in proposal of any plans and implementation, public participation play a vital role
- Although in terms of environmental development the important of public participation has been widely accepted, its importance has not been reflected properly in environmental conservation law in Bangladesh

Right of Public Participation under the Bangladesh Constitution –

- Article 31 of the Bangladesh Constitution implicitly endorses the citizens' "procedural right" to participate in the government's decision making process if such decision affects the citizens' "substantive rights", for example, the right to life under Article 32 of the Bangladesh Constitution.

Legal Framework for Public Participation in Bangladesh for Nuclear Activities

Legal Instrument for Nuclear Safety In Bangladesh



Regulatory Framework

Bangladesh Atomic Energy Regulatory Act-2012(Act no 19 of 2012)	Regulate the peaceful use of atomic energy
Nuclear Safety and Radiation Control (NSRC) Rules-1997	• Provides more detailed provisions entrusted by the Act.
Regulatory Body	• Bangladesh Atomic Energy Regulatory Body was established under section 4 of the BAER ACT-2012 for carrying out the purposes of the Act-2012

Legal Framework

Section 11 of BAER Act 2012 describe the Responsibilities and Functions of the Bangladesh Atomic Energy Regulatory Authority :

Public Participation

(a) According to section 11 (13) BAERA is responsible to establish a public participation system through seminar, workshop, electronic and print media and internet, etc for information and consultations with interested parties about the possible risks associated with facilities and activities.

(b) According to section 11(32) BAERA is responsible to publish related information and communicate with relevant agencies, the public and the media

(c) According to section 11(33) BAERA is also responsible to take initiative for creating awareness among the public concerning nuclear safety and radiation protection

Public Participation Activities in Bangladesh for Nuclear Activities

Dialogue with Public

Dialogues with the public, the people's representatives at various levels and the decision makers are being conducted and Round Table Discussion on NPP are being organized different media and professional bodies these activities establish the public acceptance level of the Project

A Round Table Discussion on N-power plant discussion organized by the Daily Star Newspaper 2009-05-10

A Meeting with local public and people's representatives in August 2010

BAEC also conducted a limited survey on public acceptance/awareness about nuclear power programme that clearly described the unique public acceptance level of the project

Stakeholders Involvements and Public Communications

I. "**Bangladesh Nuclear Power Communication Strategy (2015-2021)**" approved.

II. Communication plan for year 2015 and 2016 developed and is being implemented

Bangladesh has a clear understanding about the IAEA guidelines and international requirements for the implementation of NPP in a safe, secured and cost effective manner.

General Communication Program

- Scientific Information Division: Under BAEC, this division is working for dissemination of information regarding nuclear applications and nuclear power projects through
- Publishing booklets/ brochures,
- Press release for news media (local & International) etc.
- Response to queries placed by phone/letter/email.
- attending Science fairs/exhibition (focused on students and common People),
- TV shows; dialogue and open discussion with news media
- Seminar and round table discussion with print & electronic media also held often.

Interaction with Media at Site and National Forum

The Daily Star | MONDAY, MAY 27, 2013 | 14:10

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N-PLANT THE NEED, BUT SAFETY FIRST |

LATEST NEWS : Stocks witnessing upbeat

A A

SUNDAY, APRIL 21, 2013

N-plant the need, but safety first

Energy experts caution govt at Star roundtable

STAFF CORRESPONDENT

Participants at a roundtable "Nuclear Power in Bangladesh: Prospects and Concerns" in The Daily Star Centre in the capital yesterday. Photo: Star

Energy experts have endorsed the government plan for nuclear power plants to meet the growing energy demand but at the same time warned of the safety issues.

They emphasised the importance of trained and competent technical manpower to operate nuclear reactors and ensure their safety.

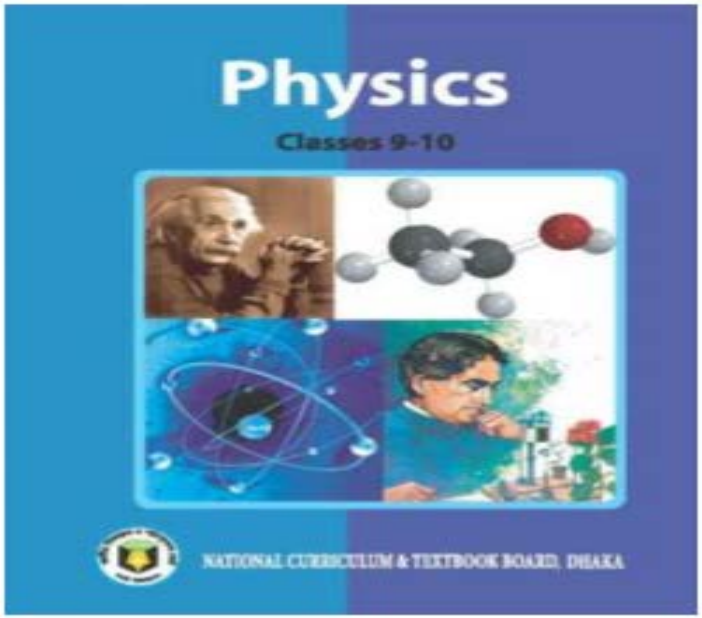
Round table discussion among BAEC officials and other national experts on Nuclear Power Programme

Interaction with Media at Site and National Forum

Interaction with Media at Site

Public Awareness Programme

- Reaching Students through TEXTbooks and Hands-on-Experience:
  - Initiative for addition of Facts about Nuclear Power Plant has been taken and expected to be included in upcoming revision Secondary/Higher Secondary Textbooks



Nuclear energy

Electricity can be produced by using the energy produced in nuclear reaction. The nuclear reaction from which the obtained energy is used to produce electricity is called nuclear fission. Here, uranium is made to react with a neutron of particular amount of energy. This reaction takes place in a nuclear reactor.

In nuclear reaction usually matter that is mass is transformed into energy. But in nuclear reaction only a small fraction of energy of the total mass is transformed into energy. If mass is transformed and E amount of energy is obtained, then,

$E = mc^2$

Here m is the mass transformed into energy.

c is the speed of light that is equal to $3 \times 10^8 ms^{-1}$.

From experiment it is known that in a fission reaction, that is, if a neutron of definite energy strikes a uranium nucleus, then almost

$200\ MeV = 200 \times 10^6 ev = 200 \times 10^6 \times 1.6 \times 10^{-19} J = 3.2 \times 10^{-11} J$ energy is released.

Since nuclear fission is a chain reaction, hence in a moment crores of reactions take place and huge amount of energy is released.

Calculation: If a substance of 1kg mass is converted completely into energy, then how many kilowatt energy will be produced? 1 kilowatt-hour (1 KWh) = 3.6×10^6 J.

The energy obtained from this reaction can be transferred to another container as the internal energy of carbon dioxide, by pumping continuously at high pressure in a controlled way. This heated gas moves around a special steam boiler and heats the steam inside which can rotate a turbine and produce electricity. The amount of energy obtained from a ton of uranium by a nuclear reaction will be equal to the amount of energy obtained from burning lots like tons of coal.

But there are some problems of nuclear power plants. The waste of nuclear fuel is extremely radioactive and so it has to be preserved for thousands of years to make it safe. Moreover, in a nuclear reactor high temperature and pressure is produced. So it has to be made of such a material that can tolerate the high temperature and pressure. Any nuclear accident is very dangerous which we can realize from the accidents of Chernobyl

Public Awareness Programme
Engagement with Local Community

Future Plan of Public Activities

❑ *Public Information issues*

- Radiation Application.
- Nuclear Safety & Environment protection.
- Nuclear Power Program Development Plan.
- Benefits of NPP project to local community.

❑ *Continuing on Media / Methodology*

- Nation wide TV / Radio / Newspaper.
- Local cable TV / Radio / Newspaper.
- Invite local people to visit "TINT Research Reactor" & radiation utilization – food, agriculture, medical.
- Invite local leaders to visit NPP & nearby community in China, Japan

Thank you for your attention