

INTERNATIONAL SEMINAR ON NUCLEAR SAFETY AND SECURITY CHALLENGES OF THE 21st CENTURY

*21-23 April, 2011
Islamabad, Pakistan*

Organized by:



Pakistan Nuclear Regulatory Authority

in cooperation with



IAEA

International Atomic Energy Agency

Scientific Secretary

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International Seminar

“Nuclear Safety and Security Challenges of the 21st Century”

21-23 April, 2011

National Center for Physics (NCP)

Islamabad

Pakistan Nuclear Regulatory Authority (PNRA) is an independent and competent body, responsible for the regulation of nuclear safety and security, radiation protection, transport and waste safety in country. The Authority devises, adopts, makes and enforces such rules, regulations, orders or codes of practice for nuclear safety and radiation protection as may, in its opinion, be necessary. It plans, develops and executes comprehensive policies and programmes for the protection of life, health and property against the risk of ionizing radiation, and regulates the radiation safety aspects of: exploitation of any radioactive ore; production, import, export, transport, possession, processing, reprocessing, use, sale, transfer, storage or disposal of nuclear substance, radioactive material or any other substance as the Authority may, by notification in the Official Gazette, specify; and equipment used for production, use or application of nuclear energy for generation of electricity; or any other uses.

Theme of the Seminar

The nuclear energy renaissance has imposed numerous challenges to nuclear industry and organizations responsible for ensuring nuclear safety and security. These challenges include: competency development, regulatory oversight, implementation of integrated management systems, awareness and involvement of public in the licensing process. The integration of nuclear safety and security in the design of NPPs is another emerging concern.

These emerging challenges stimulated PNRA to organize, as part of its 10th Anniversary celebrations, this International Seminar on “Nuclear Safety and Security Challenges of the 21st Century” to share experience on important regulatory issues.

The seminar aims to provide an opportunity to review the current practices, identify strengths, weaknesses and areas for improvement for safe and secure use of nuclear technology.

This seminar will bring together nuclear safety and nuclear security experts from operating organizations, designers, regulators and researchers and academia to discuss various ways how to improve regulatory effectiveness to ensure protection of the public and the environment.

The main theme of the seminar consists of the following topical areas:

Area 1: Current Nuclear Regulatory Challenges: This topical area will address the main regulatory challenges faced by the countries while regulating NPPs both operating and new builds. These regulatory challenges include: competency development, regulatory oversight for the sites with single & multiple units, implementation of integrated management systems, public awareness and involvement in licensing process for safe and secure use of nuclear energy.

Area 2: Regulatory Assessment of NPPs: The topics like licensing process, review & assessment during siting, design, construction, commissioning, operation, and decommissioning including radiation protection and radioactive waste management of NPPs will be addressed during the session focused on this topical area. Special emphasis will be laid on safety assessment methods both probabilistic & deterministic, and assessment of physical protection programs.

Area 3: Long Term / Beyond Design Life Operation of NPPs: The session will emphasize upon the international practices for the review of application for life extension of NPPs, requirements for life extension, ageing management of principal components, application of stress analysis in determination of residual life, irradiation embrittlement phenomenon and utilization of in-service inspection results.

Area 4: Regulatory Aspects of Innovative / Modern Design of NPPs: The session will cover the topics like innovative features of future NPPs in comparison to existing plants; safety and security aspects in design; material requirements and development of regulatory requirements for advanced reactors; consideration of beyond design basis accidents; and development of severe accident management guidelines.

Area 5: Physical Protection Practices in Regulating NPPs and SRS: The session will focus on principles of physical protection realizing the administrative and technical measures while regulating and operating NPPs and sealed radioactive sources (SRS). The session will include topics such as organizational and regulatory aspects of national infrastructures; nuclear safety and nuclear security synergies and management of interfaces between safety and security; experience in up-gradation of physical protection systems of existing nuclear power plants; and development and maintenance of nuclear security culture.

SEMINAR PROGRAMME

Day-1: Thursday

April 21, 2011

09:00-10:00	REGISTRATION
10:00 – 10:40	INAUGURAL
	<i>Welcome Remarks by</i> Chairman PNRA <i>Remarks by</i> Deputy Director General NSNS, IAEA <i>Inaugural Address</i> by the Chief Guest
10:40 – 11:10	REFRESHMENT
11:15 – 13:30	SESSION-1 NATIONAL PERSPECTIVE ON NUCLEAR SAFETY AND SECURITY
	Chair: Dr. Ansar Parvez , Chairman, Pakistan Atomic Energy Commission Pakistan's Approach Towards Nuclear Safety and Security: ACDA, Strategic Plans Division (SPD) PNRA's Contribution in Enhancing Nuclear Safety and Security: Pakistan Nuclear Regulatory Authority Nuclear Energy Scenario in Pakistan: Pakistan Atomic Energy Commission Panel Discussion
13:30 – 14:30	LUNCH AND PRAYER BREAK

<p>14:30 – 16:00</p>	<p style="text-align: center;">SESSION-2 CURRENT NUCLEAR REGULATORY CHALLENGES</p>
	<p><i>Chair: Mr. Mohammad Anwar Habib</i>, Chairman, Pakistan Nuclear Regulatory Authority</p> <p>Key Note Address <i>Mr. Denis Flory</i>, Deputy Director General, Department of Nuclear Safety and Security, International Atomic Energy Agency</p> <p>Competency Development of Plant Personnel: <i>Mr. Muhammad Atique</i>, Ex-Director General, Chashma Nuclear Power Plant (CHASNUPP-2), Pakistan</p> <p>EU Approach for Safety of New NPPs: <i>Mr. Antonio Madonna</i>, Director, ITER Consult, Italy</p> <p>Chernobyl and Beyond; Nuclear Power Renaissance and Apprehensions: <i>Mr. Naveed Maqbul</i>, Director, Directorate of Policies & Procedures, Pakistan Nuclear Regulatory Authority</p> <p>Panel Discussion</p>
<p>16:00 – 16:30</p>	<p style="text-align: center;">TEA/COFFEE BREAK</p>
<p>16:30 – 17:30</p>	<p style="text-align: center;">POSTER SESSION</p>

Day-2: Friday
April 22, 2011

<p>09:00 – 11:00</p>	<p style="text-align: center;">SESSION-3 REGULATORY ASSESSMENT OF NPPs</p>
	<p><i>Chair: Mr. Jamshed Azim Hashmi</i>, Ex-Chairman, Pakistan Nuclear Regulatory Authority, Pakistan</p> <p>Valuable Insight Tool into the Plant Safety Standards (Periodic Safety Review): <i>Mr. Tomislav Bajcs</i>, Director, ENCONET d.o.o., Croatia</p> <p>Public Awareness and Involvement in the Licensing Process for Safe and Secure Use of Nuclear Energy: <i>Mr. Faizan Mansoor</i>, Director, Directorate of Nuclear Safety, Pakistan Nuclear Regulatory Authority</p> <p>Review and Assessment of NPPs: <i>Mr. Zia Hussain Shah</i>, Project Director, Center for Nuclear Safety, Pakistan Nuclear Regulatory Authority</p> <p>Panel Discussion</p>
<p>11:00 – 11:30</p>	<p style="text-align: center;">TEA/COFFEE BREAK</p>
<p>11:30 – 12:45</p>	<p style="text-align: center;">SESSION-4 LONG-TERM / BEYOND DESIGN OPERATION OF NPPs</p>
	<p><i>Chair: Mr. Jamshed Azim Hashmi</i>, Ex-Chairman, Pakistan Nuclear Regulatory Authority</p> <p>Ageing Management of Principal Components for K-1 Life Extension: <i>Mr. Rafat Ali</i>, Senior Manager, Nuclear Safety Licensing Division, Karachi Nuclear Power Plant (KANUPP-1)</p> <p>Lesson Learned So Far from Fukushima NPPs Accident: <i>Mr. Muhammad Ayub</i>, Project Director, School for Nuclear and Radiation Safety (SNRS), Pakistan Nuclear Regulatory Authority</p> <p>Panel Discussion</p>

<p>12:45 – 14:15</p>	<p>LUNCH AND PRAYER BREAK</p>
<p>14:15 – 16:15</p>	<p>SESSION-5 REGULATORY ASPECTS OF INNOVATIVE/MODERN DESIGN OF NPPs</p>
	<p><i>Chair: Mr. Chris Price</i>, Deputy Director, Health & Safety Executive, United Kingdom</p> <p>Best Estimate Tools & Challenges of the New Reactor Designs: <i>Mr. Tomislav Bajcs</i>, Director, ENCONET d.o.o. Croatia</p> <p>Advancement in Instrumentation & Control Systems of NPPs and Reactor Safety: <i>Dr. M. Tahir Khaleeq</i>, Deputy Director, ICCC, Pakistan</p> <p>Seismic Hazards for NPPs: <i>Mr. Muhammad Javed</i>, General Manager, Geo Technical Division, National Engineering Services Pakistan (Pvt.) Limited (NESPAK)</p> <p>Radiation Assessment of Emergency Planning & Preparedness at NPPs: <i>Ms. Bushra Nasim</i>, Director, Directorate of Radiation Safety, Pakistan Nuclear Regulatory Authority</p> <p>Panel Discussion</p>
<p>16:15 – 16:45</p>	<p>TEA/COFFEE BREAK</p>
<p>16:45 – 17:30</p>	<p>POSTER SESSION</p>

**Day-3: Saturday
April 23, 2011**

<p>09:00 – 10:30</p>	<p style="text-align: center;">SESSION-6 PHYSICAL PROTECTION PRACTICES IN REGULATING NPPs</p>
	<p>Approaches for Review and Assessment of Physical Protection System during Construction and Operation of NPPs: <i>Mr. Chris Price</i>, Deputy Director, Health & Safety Executive, United Kingdom</p> <p>Nuclear Safety & Security Synergies and Management of Interfaces Between Safety and Security: <i>Mr. Jamshed Azim Hashmi</i>, Ex-Chairman, Pakistan Nuclear Regulatory Authority</p> <p>Some Thoughts on Nuclear Safety: <i>Mr. Najm us Saqib</i>, Director PSA, KANUPP Institute of Nuclear Power Engineering (KINPOE)</p>
<p>10:30 – 11:00</p>	<p style="text-align: center;">TEA/COFFEE BREAK</p>
<p>11:00 – 12:30</p>	<p style="text-align: center;">SESSION-6 PHYSICAL PROTECTION PRACTICES IN REGULATING NPPs (Continued)</p>
	<p>Organizational and Regulatory Aspects of National Infrastructures for Physical Protection Regime: <i>Mr. Muhammad Khaliq</i>, Project Director, Nuclear Security Action Plan (NSAP), Pakistan Nuclear Regulatory Authority</p> <p>Nuclear Security Education at PIEAS: <i>Dr. Tariq Majeed</i>, Principal Engineer, Pakistan Institute of Engineering and Applied Sciences (PIEAS)</p> <p>Panel Discussion</p>
<p>12:30 – 13:00</p>	<p style="text-align: center;">CLOSING</p>
<p>13:00 – 14:00</p>	<p style="text-align: center;">LUNCH</p>

GENERAL GUIDE

Internet Access:

Computers for internet access and e-mail are available for the speakers and participants in the nearby Cyber Room. Please ask the reception/help desk about the location.

Medical Aid:

If you need some urgent medical aid, please ask the reception/help desk or contact following admin person.

Mobile Phones:

Please turn off your mobile phones in the seminar hall.

Printing and CDs:

Printing facility and CDs are available for any urgent requirement.

Meals and Tea/Coffee:

Meals (Lunch) and Tea/Coffee will be served to the speakers and the participants as per time specified in the Program.

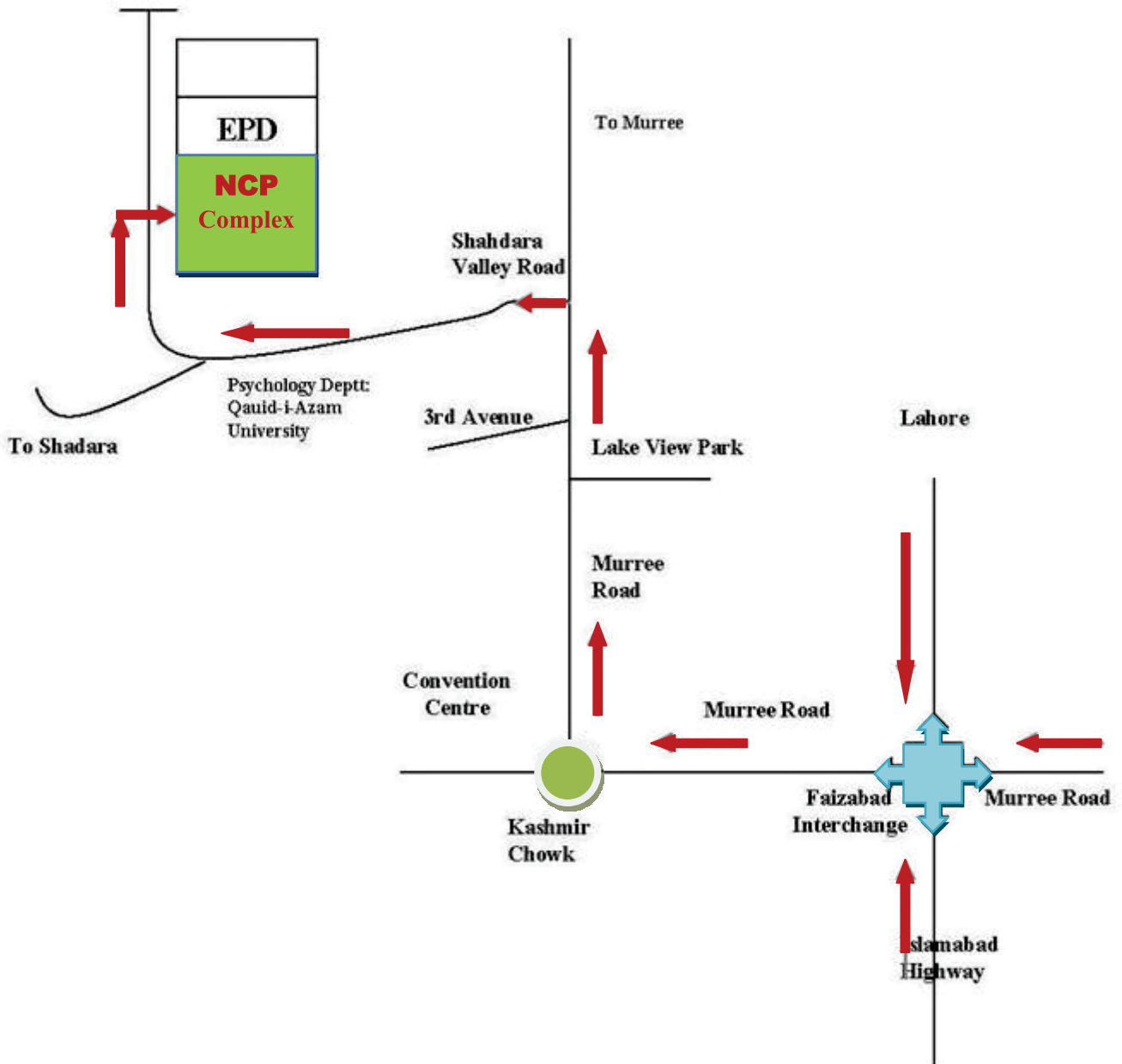
Note for Presenters:


Presenters are requested to contact IT/Media person to upload their presentations well before start of the session.

Contact Information:

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ROUTE MAP FOR SEMINAR VENUE





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