

Overview of Nuclear Safety Education and Training Material

L. W. Deitrich

Division of Nuclear Installation Safety

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IAEA

International Atomic Energy Agency

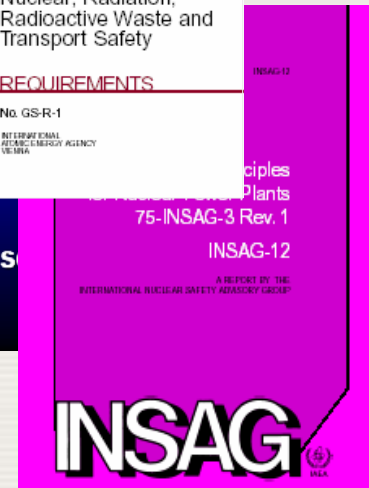
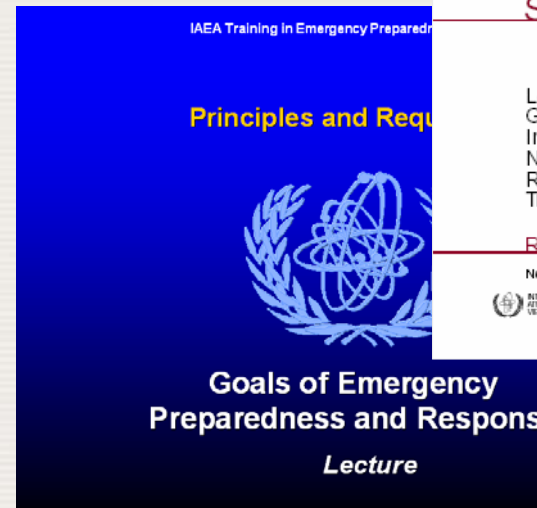
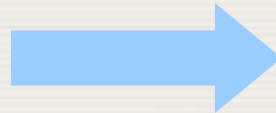
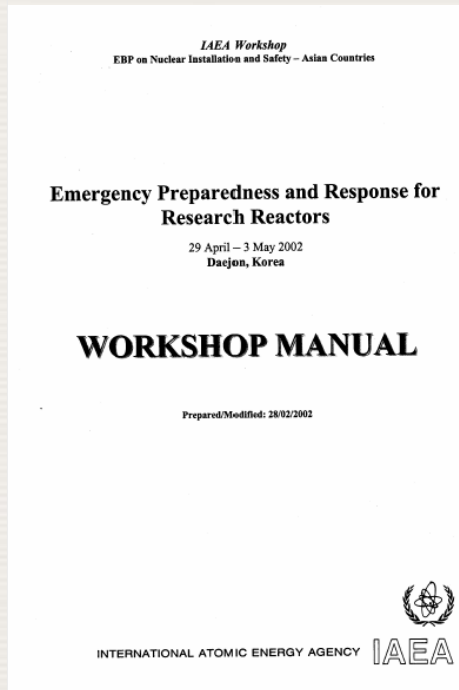
Nuclear Safety Education and Training Material

- **A wide variety of nuclear safety education and training material is now available from the IAEA.**
- **Most of the material is available on the Web and also on CD-ROM.**
- **The goal is to make all of the material available on the Web.**
- **Material is always being added and revised.**

Nuclear Safety Education and Training Material

Standard training material

- Guidelines, commented viewgraphs and material to support lecturers



Nuclear Safety Education and Training Material

Distance Learning Material:

- Training packages created as hypertext modules and as multi-media material with video and Powerpoint presentations synchronized

The screenshot displays a computer desktop with two main windows. On the left is the 'IAEA Presentation Player' window, which is playing a video. The video content shows the IAEA logo and the title 'Fire Safety in the Operation of Nuclear Power plants Safety Guide NS-G-2.1' by Miroslav Lipár, Head of the Operational Safety Section. A table of contents is visible at the bottom of the player. On the right is a 'Microsoft Internet Explorer' window displaying the 'Foreword' page of the 'NUSAFE' (Nuclear Installation Safety Net) website. The website header includes the IAEA logo and the text 'NUSAFE NUCLEAR INSTALLATION SAFETY NET REGULATORY CONTROL OF NUCLEAR POWER PLANTS'. The page content discusses the purpose of the book in supporting IAEA training and regulatory work.

IAEA Presentation Player

International Atomic Energy Agency

Fire Safety in the Operation of Nuclear Power plants Safety Guide NS-G-2.1

Miroslav Lipár
Head, Operational Safety Section

1	0:00	"Fire Safety in the Operation of Nuclear Power Plants"
2	0:18	"Safety Standards Series Hierarchy"
3	0:55	"IAEA Safety Standards: Operational Safety"
4	1:14	" "
5	1:19	" "
6	1:35	"Safety of NPPs: Operation Requirements"
7	2:22	"Fire Safety in the Operation of Nuclear Power Plants"
8	2:41	"1. Introduction, Structure"
9	3:27	"1.1. Introduction, Structure"
10	4:09	"2. Application of Defence in Depth"
11	5:21	" "
12	6:13	"2.1. Application of Defence in Depth, I"
13	6:55	"2.2. Application of Defence in Depth, II"
14	8:17	"2.3. Application of Defence in Depth, III"
15	9:24	"3. Organization and Responsibilities"
16	10:45	" "
17	11:11	" "
18	13:13	"4. Periodic updating of the fire hazard analysis"
19	14:07	"5. Impacts of plant modifications on fire safety"
20	15:39	"6. Control of combustible materials"
21	17:35	" "

Foreword - Microsoft Internet Explorer provided by the Int. Atomic Energy Agency

NUSAFE NUCLEAR INSTALLATION SAFETY NET REGULATORY CONTROL OF NUCLEAR POWER PLANTS

Search: GO

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Foreword

The purpose of this book is to support IAEA training courses and workshops in the field of regulatory control of nuclear power plants as well as to support the regulatory bodies of Member States in their own training activities. The target group is the professional staff members of nuclear safety regulatory bodies supervising nuclear power plants and having duties and responsibilities in the following regulatory fields: regulatory framework; regulatory organization; regulatory guidance; licensing and licensing documents; assessment of safety; and regulatory inspection and enforcement. Important topics such as regulatory competence and quality of regulatory work as well as emergency preparedness and public

Nuclear Safety Education and Training Material

Textbooks

Basic Professional Training Course

Basic Training on Nuclear Safety

Reg. Control of NPPs

Regulatory Control of NPPs

Safety Assessment of NPPs

Operational Safety of NPPs

Safety of Research Reactors

Hydro-mechanics Workshops

On-Site Training

Nuclear Safety Education and Training Material

- **There are three levels of material provided:**
 - **Basic knowledge;**
 - **Specialized knowledge; and**
 - **Specific expert knowledge.**
- **Specialized areas covered include:**
 - **Regulatory control of NPPs;**
 - **Safety assessment of NPPs;**
 - **Operational safety of NPPs; and**
 - **Safety of research reactors.**

Nuclear Safety Education and Training Material

- **Basic Knowledge**
 - Modules on fundamentals provide material for self-study of:
 - Reactor physics;
 - Thermal-hydraulics;
 - Safety principles.
 - Textbooks are also available:
 - Basic Professional Training Course on Nuclear Safety (Two Volumes and a Workbook);
 - EdF NPP Operating Safety Handbook;
 - EdF Memento de la Radioprotection en Exploitation.

Nuclear Safety Education and Training Material

- **Basic Knowledge (cont'd)**
 - Lectures from the Basic Professional Training Course on Nuclear Safety provide material on:
 - Reactor technology;
 - Basic concepts of nuclear safety;
 - Safety assessment;
 - Operational safety;
 - Management of safety.
 - 31 lectures are available on CD, accompanied by PowerPoint slides. They address IAEA guidance and US practice.

Nuclear Safety Education and Training Material

- **Specialized Knowledge**
 - **Ten lectures provide an overview of the IAEA Safety Standards.**
 - **Safety Standards Programme Overview (1)**
 - **Legal and Governmental Infrastructure Requirements and Guides (2)**
 - **Requirements and Guides for Design of NPPs (2)**
 - **Requirements and Guides for Safe Operation of NPPs (2)**
 - **Requirements and Guides for Site Evaluation of NPPs (3)**
 - **These lectures are available on CD.**

Nuclear Safety Education and Training Material

- **Specialized Knowledge (cont'd)**
 - **Videos with synchronized PowerPoint slides are available to cover individual Safety Standards.**
 - **Legal and Governmental Infrastructure and Regulatory Control (3)**
 - **Safety Assessment of NPPs (2)**
 - **Site Evaluation, Seismic and External Events (4)**
 - **Design Guides for NPPs (3)**
 - **Operational Safety Guides for NPPs (5)**
 - **The Code of Conduct on the Safety of Research Reactors (1)**

Nuclear Safety Education and Training Material

- **Specialized Knowledge (cont'd)**
 - Textbooks are available to provide specialized knowledge on:
 - Regulatory control of nuclear power plants (two volumes);
 - Technology and safety of TRIGA research reactors.

Nuclear Safety Education and Training Material

- **Specific Expert Knowledge**
 - **Standard Training Packages contain a manual on course organization, with viewgraphs and text to aid in preparing lectures. Topics include:**
 - **PSA Level 1 and Applications**
 - **PSA Level 2**
 - **Safety Assessment of NPPs to Aid in Decision Making**
 - **Management of Operational Safety of NPPs**
 - **Aging Management of NPP Components Important to Safety**
 - **Emergency Preparedness and Response for Research Reactors**
 - **Research Reactor Aging and Self-assessment Methodology.**

Nuclear Safety Education and Training Material

- **Other Useful Material**
 - Use of the International Nuclear Event Scale (INES)
(CD and Web)
 - Probabilistic Safety Assessment Pack (PSAPACK)
(CD and Web)
- Visit the Nuclear Safety education and training
Web-page: <http://www-ns.iaea.org/training/>.