

Working Group on the Regulation of New Reactors (WGRNR)

Regulatory Information Conference 2010

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Contents

- ◆ Mandate
- ◆ WGRNR Membership
- ◆ Program of Work (PoW)
 - Construction Experience Database/Assessment
 - Survey on the Regulation of Site Selection and Preparation
 - Licensing Process and Structure of Regulatory Activities
- ◆ Expected Use of WGRNR Results and Products

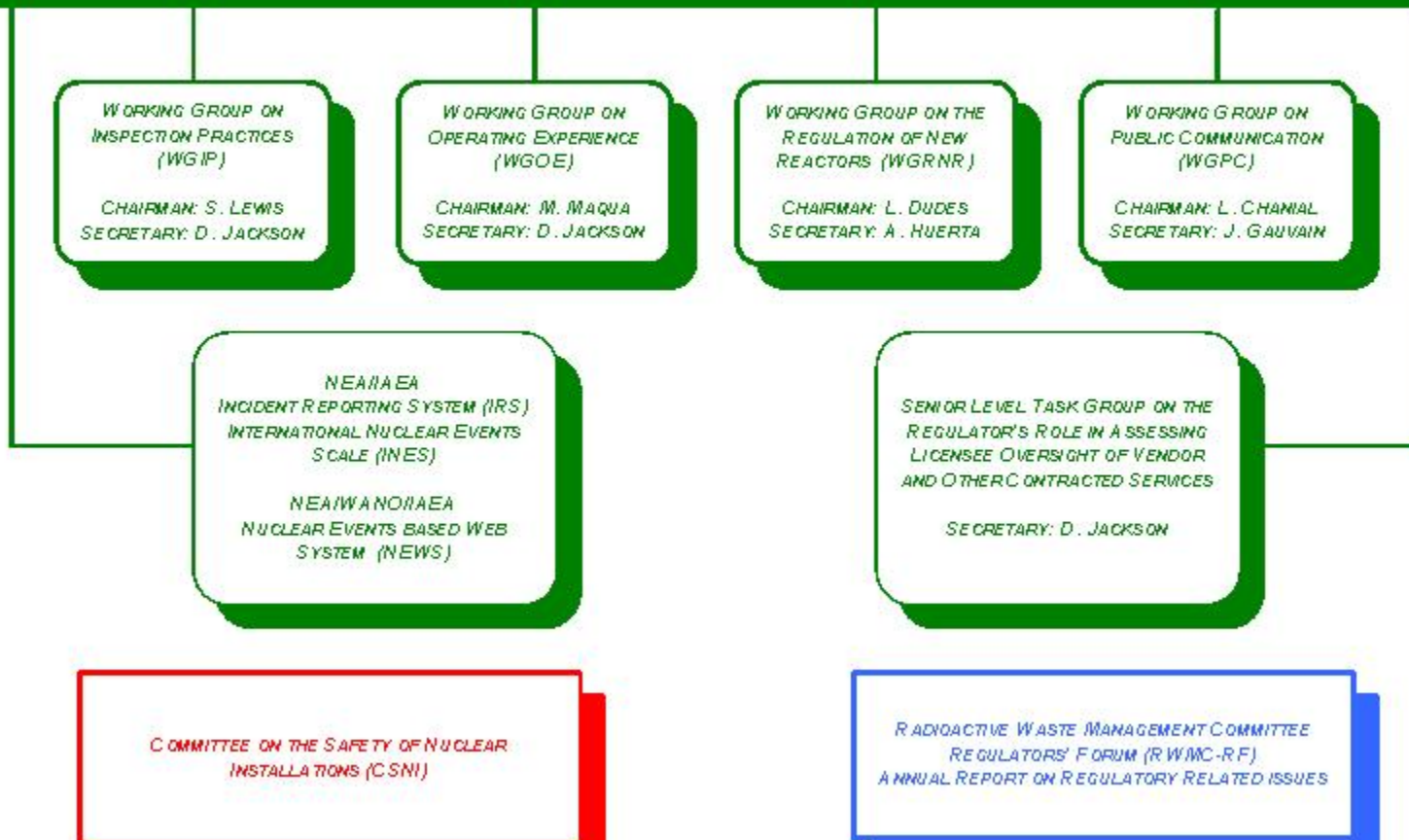
CNRA Structure

COMMITTEE ON NUCLEAR REGULATORY ACTIVITIES (CNRA)

CHAIRMAN: *M. WEIGHTMAN* - SECRETARY: *J. REIG*

CNRA BUREAU: *E. LEEDS (V-C), J.-C. NIEL (V-C), G. RZENTKOWSKI, M. HERTTRICH, M. ZIAKOVÁ & T. OHMURA*

January 2010



Mandate

The Working Group on Regulation of New Reactors (WGRNR) shall be responsible for the program of work in the CNRA dealing with regulatory activities in the primary program areas of siting, licensing and oversight for new commercial nuclear power reactors (Generation III+ and Generation IV reactors).

The working group shall constitute an international forum for exchanging information and experience and with the agreement of CNRA and will plan its work to ensure improvements in nuclear safety through more effective and efficient regulation.

Mandate

- ◆ Constitute a forum of experts for the licensing of new commercial nuclear power reactors and should facilitate a cooperative approach to identify key new regulatory issues and promote a common resolution.
- ◆ Coordinate its work with the work performed by the Multinational Design Evaluation Program (MDEP)
- ◆ Ensure that construction inspection issues and construction experience is shared through existing CNRA working groups or new working groups as appropriate.
- ◆ Plan for the transition of new reactors into the operational phase and established CNRA programs.

WGRNR Current Membership

- **CANADA**
Philip WEBSTER - CNSC
 - **CZECH REPUBLIC**
Miroslav SVAB - SONS
 - **FINLAND**
Petteri TIIPPANA – STUK
Tapani VIROLAINEN - STUK
 - **FRANCE**
Guillaume WACK - ASN
 - **GERMANY**
Florian JANSEN - GRS
Dieter MULLER-ECKER - GRS
 - **HUNGARY**
Andras TOTH - HAEA
 - **JAPAN**
Mitsuhiro KAJIMOTO - JNES
Tadao KANDA NISA - METI
Yasunori BESSHO - JNES
 - **KOREA (Republic Of)**
Woo Ho LEE - KINS
 - **POLAND**
Marcin ZAGRAJEK – PAA
 - **RUSSIAN FEDERATION**
Alexey Kovalevskiy - Rostechnadzor
 - **SLOVAK REPUBLIC**
Juraj ROVNY - UJD
Jozef KUBANYI - UJD
 - **SLOVENIA**
Andreja PERSIC - SNSA
 - **SPAIN**
Jose M. BALMISA - CSN
 - **SWEDEN**
Annelie BERGMAN - SSM
Anders HALLMAN - SSM
 - **SWITZERLAND**
Rosa SARDELLA - ENSI (Vice-Chairperson)
 - **UNITED KINGDOM**
Geoff VAUGHAN - NII
 - **UNITED STATES OF AMERICA**
Laura DUDES - NRC (Chairperson)
Eduardo SASTRE - NRC
 - **IAEA**
Gustavo CARUSO - IAEA
Stephane CALPENA - IAEA
 - **EC**
Serge VIGNE Luxembourg - ECLUX
Michel BIETH – JRC Petten
Marc NOEL – JRC Petten
 - **UNITED ARAB EMIRATES**
Ian GRANT - FANR
- CHINA, SOUTH AFRICA, ITALY**

WGRNR Integrated Plan

Item	2008	2009	2010	2011	2012	Duration	Status
Developments in programmes, regulations and policies related to licensing, construction, and oversight of new commercial nuclear power reactors							
Round table discussion (every meeting)	Yellow	Yellow	Yellow	Yellow	Yellow		Ongoing
Construction Experience Database							
Development of scope, format, data fields, procedures and infrastructure	Green	Green	Green			2 years	Ongoing
Populating the database with findings and deficiencies during construction		Yellow	Yellow	Yellow	Yellow		Ongoing
Baseline synthesize report of the current information available on construction experience			Green	Green		1 ½ years	Under development
Regulation of Nuclear Sites Selection and Preparation							
Preparation and answering the survey		Green	Green			1 year	Completed
Preparation of the report			Green	Green		1 year	Under development
Licensing structure of Regulatory Staff and Regulatory licensing process							
Preparation and answering the survey			Green	Green		1 ½ years	Ongoing
Preparation of the report				Green	Green	2 years	Ongoing
1st International WGRNR Workshop				Green	Green	1 ½ years	Ongoing

Green = original schedule

Red = delay

Yellow = continued activity

WGRNR Program of Work (1)

◆ Construction Experience Database.

Objectives are to:

- identify the major deficiencies that occurred during design and construction of nuclear power plants,
- assess the adequacy of and supplement if necessary, the current regulatory activities to detect and correct such events and prevent them from remaining undetected until the plant becomes operational, and finally
- disseminate information to ensure appropriate regulatory attention is given to the lessons learned from past events

WGRNR Program of Work (2)

◆ Construction Experience Database

The need for a dedicated database has been identified in order to tackle the specificities of the task. The main aims of this database are:

- timely sharing of experience;
- yearly analysis of the events;
- topical report on selected periods and subjects in a further development.

The database will also include good practices from construction experiences to be disseminated among the WGRNR members

WGRNR Program of Work (3)

◆ Construction Experience Database

- Baseline synthesis report containing assessment of previous construction experience plus the current content of ConEx (Spring 2010)
- Yearly report with the analysis of the recollected events, including the sharing of good practices.

WGRNR Program of Work (4)

◆ Regulation of Nuclear Sites Selection and Preparation

- Report based on a survey has been developed, covering the Evaluation and selection of sites for a new NPP, and the Preparation of the selected site for a new NPP
- The report addresses practices used by regulators in NPP siting
 - ❖ Seismicity, security, multi-units
 - ❖ Definition of construction, site preparation
 - ❖ Impact of the site on the design
- Consider regulatory practices on sites where a mixture of activities is taking place
 - ❖ Operating units, decommissioning

WGRNR Program of Work (5)

- ◆ Regulation of Nuclear Sites Selection and Preparation
 - The report includes high level summaries for the member countries describing how sites are evaluated, how the sites are selected and how is the preferred site licensed or permitted.
 - Answers to the survey by the new participants
 - Includes in appendices the countries' detailed responses

WGRNR Program of Work (6)

◆ Licensing structure of Regulatory Staff and Regulatory licensing process

Final Product

- A document that regulators with nuclear infrastructure experience can utilize to understand practices used in reactor licensing and lessons learned
 - ❖ How each member country reviews a specific topic
 - ❖ Expertise needed
 - ❖ Information that an applicant must provide

WGRNR Program of Work (7)

◆ **Licensing structure of Regulatory Staff and Regulatory licensing process**

- Survey

- ❖ Gather data from members on the level of detail needed for regulatory authorization

- ❖ Divided into 4 sections

- General

- Siting

- Design

- Divided into 16 topics

- Construction

- Member countries' responses to section 'General' January 2010

- Draft Report on the Phase 1 spring 2010

WGRNR Program of Work (8)

- ◆ International Workshop on New Reactor Siting, Licensing and Construction Experience
 - Hosted by the State Office for Nuclear Safety, Prague, Czech Republic, 21-23 April 2010
 - Objective:
 - ❖ Review and discuss recent and past construction experience, lessons learned including the regulator, vendors and licensee perspectives
 - ❖ Lessons learned in the regulation of site, selection, evaluation and site preparation
 - ❖ Review of regulatory practices for the licensing of new reactors, including the regulatory body infrastructure, staffing and expertise needed

WGRNR Program of Work (9)

- ◆ International Workshop on New Reactor Siting, Licensing and Construction Experience
 - Preliminary announcement issued.
 - ❖ Deadline for contributions middle of December 2009
 - Preliminary workshop programme:
 - ❖ Session 1 – Siting practices and issues
 - ❖ Session 2 – Construction experience
 - ❖ Session 3 – New reactor licensing process

Expected Use of WGRNR Results and Products

- ◆ Currently 3 products under development:
 - ConEx-Collection and Assessment of Construction Experience
 - ❖ Uses-Feedback for design and siting reviews and construction oversight
 - Report on the Regulation of Site Selection and Preparation
 - ❖ Provide a comparison report on current practices used in the selection and assessment of potential sites for NPPs
 - Report on licensing practices, level of review, skill sets, training. A subsequent report will include good practices and a comparison of recent experiences in review and construction activities.

WGRNR Meetings

- ◆ Schedule for upcoming meetings is as follows:
 - 5th Meeting: Prague, Czech Republic
19-20 April 2010
 - 1st International Workshop: Prague, Czech Republic
21-23 April 2010

On behalf of WGRNR:
Thank you for your attention