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 Nuclear Energy Agency
 

Working Group on the Regulation of New Reactors (WGRNR)

Regulatory Information Conference 2010

Laura Dudes, Chair
 Rosa Sardella, Co-Chair
 Alejandro Huerta, NEA Secretariat



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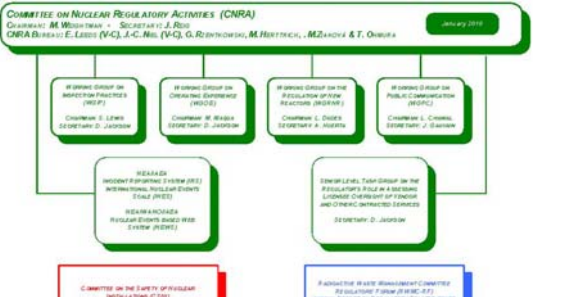
- ◆ Mandate
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- ◆ Program of Work (PoW)
 - Construction Experience Database/Assessment
 - Survey on the Regulation of Site Selection and Preparation
 - Licensing Process and Structure of Regulatory Activities
- ◆ Expected Use of WGRNR Results and Products

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CNRA Structure



COMMITTEE ON NUCLEAR REGULATORY ACTIVITIES (CNRA)
CHAIRMAN: M. MONTAUDO - SECRETARY: J. DUBOIS
 CNRA MEMBERS: E. LARSSON (VK), J.-C. NIEL (VQ), G. RABINOVICH, M. HARTRECHT, M. ZAROVA & T. OBARA



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graph TD
    CNRA[COMMITTEE ON NUCLEAR REGULATORY ACTIVITIES (CNRA)]
    WGRNR[WGRNR GROUP ON THE REGULATION OF NEW REACTORS (WGRNR)]
    WGRNR --> WGRNR1[WGRNR GROUP ON INSPECTION FACTORS (WGRNR1)]
    WGRNR --> WGRNR2[WGRNR GROUP ON OPERATING EXPERIENCE FACTORS (WGRNR2)]
    WGRNR --> WGRNR3[WGRNR GROUP ON THE REGULATION OF NEW REACTORS (WGRNR3)]
    WGRNR --> WGRNR4[WGRNR GROUP ON PUBLIC CONSULTATION (WGRNR4)]
    WGRNR1 --- WGRNR1C[CHAIRMAN: J. LEVIN  
SECRETARY: D. JAKUBOW]
    WGRNR2 --- WGRNR2C[CHAIRMAN: M. WILSON  
SECRETARY: D. JAKUBOW]
    WGRNR3 --- WGRNR3C[CHAIRMAN: L. DUBOIS  
SECRETARY: J. DUBOIS]
    WGRNR4 --- WGRNR4C[CHAIRMAN: L. CHENAIL  
SECRETARY: J. DUBOIS]
    WGRNR --- REGR[RESEARCH GROUP ON REGULATORY PRACTICES (REGR)]
    WGRNR --- REGR2[RESEARCH GROUP ON REGULATORY PRACTICES (REGR2)]
    REGR --- REGR2C[CHAIRMAN: M. WILSON  
SECRETARY: D. JAKUBOW]
    REGR2 --- REGR2C2[CHAIRMAN: L. CHENAIL  
SECRETARY: J. DUBOIS]
    WGRNR --- CSRA[COMMITTEE ON THE SAFETY OF SOLAR RADIATION (CSRA)]
    WGRNR --- FARM[FUNCTIONAL RISK MANAGEMENT COMMITTEE FOR SOLAR RADIATION (FARM)]
    
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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.

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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.



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WGRNR Current Membership

<ul style="list-style-type: none"> • CANADA Philip WEBSTER - CNSC • CZECH REPUBLIC Miroslav SVAB - SONS • FINLAND Petteri TIIPANA – STUK Tapani VIROLAINEN - STUK • FRANCE Guillaume WACK - ASN • GERMANY Florian JANSEN - GRS Dieter MÜLLER-ECKER - GRS • HUNGARY Andras TOTH - HAEA • JAPAN Mitsubishi 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 	<ul style="list-style-type: none"> • 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 <p>CHINA, SOUTH AFRICA, ITALY</p>
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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.

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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

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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

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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

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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

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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


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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

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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.

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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

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On behalf of WGRNR:
Thank you for your attention
