MDEP Conference on New Reactor Design Activities

Paris, 15-16 September 2011

André-Claude Lacoste
Chair, MDEP Policy Group
MDEP Membership

**Current MDEP members:** Canada, China, Finland, France, Japan, Republic of Korea, Russian Federation, South Africa, the United Kingdom, and the United States

**Terms of Reference** revised in Jan 2011 to define new categories for membership for potential MDEP expansion

- MDEP Members
- MDEP Associate Members
- MDEP Candidates
- Potential expansion of membership in discussion

**NEA chosen to ensure the MDEP Secretariat**

**IAEA takes part in the generic work of MDEP**
To set up for an enhanced cooperation among regulators

Proposed in 2005

Initial two-year programme approved in 2007

Converted into a long term programme in 2009 with a five-year planning window (2013) and expected interim results
**Issue and Design Specific Working Groups**

- **Issue Specific Working Groups**
  To benefit from other regulators’ experiences and to encourage harmonization in regulatory practices and requirements and in industry codes and standards.

- **Design Specific Working Groups**
  To share and cooperate on specific design evaluations and construction feedback regarding design-related issues.
MDEP Working Group Activities

- MDEP remains an effective and efficient expert network from different regulators
  - Members’ efforts maintained

- Definition of comprehensive programmes of work for each WG
  - Composed of short / medium / long term results

- Increased interactions with industry stakeholders
Design Specific Working Groups

**EPR Working Group**

**Members:** Finland, France, Canada, China, U.K., U.S.

**AP1000 Working Group**

**Members:** U.S., China, Canada, U.K.

**Accomplishments**

- Developed Common Positions (EPR Digital I&C design, AP1000 squib valves)
- Shared issues identified, questions to applicant, and drafts of evaluations
- Identified differences among various country designs
- Identified additional questions for applicants based on MDEP interactions
Issue Specific Working Group

**Vendor Inspection Cooperation (VICWG)**
- Performed approximately 30 witnessed and 1 joint inspections
- Developed Inspection Protocol for conducting inspections
- Compared quality assurance requirements used in the oversight of vendors

**Digital Instrumentation and Control (DICWG)**
- Developed DI&C common positions
- Obtained agreement from IEC and IEEE to increase cooperation and consider MDEP common positions

**Codes and Standards (CSWG)**
- Completed comparison of pressure boundary for Class 1 pressure vessels, piping, pumps, and valves in coordination with standards development organizations (SDOs)
- Obtained commitments in principle from SDOs to work together to minimize further divergence of code requirements
Common Positions

- **Design Specific Common Positions** → **Design Specific WGs**
  Each regulator responds independently to its applicant, taking the same position.

- **Generic Common Positions** → **Issue Specific WGs**
  Constitute best practices, recommended by MDEP members to IAEA and standards organizations.

- There is no obligation for any regulatory body to follow them.
- If a regulatory body chooses to adopt a Generic Common Position, it is through that country’s normal processes.
- The responsibility for regulatory decisions continues to be with the national regulator.
MDEP Interactions

Efforts to communicate MDEP activities to key stakeholders

Non-MDEP Regulators

- NEA Committees: CNRA and CSNI
- WENRA

International organizations

- IAEA (attends MDEP STC/PG and issue-specific working group meetings), GIF, EC

Industry

- Vendors, licensees, standards development organizations (ASME, JSME, AFCEN, CSA, NIKIET, KEA, IEEE, IEC, etc.), WNA and other industry organizations

Public

- Greater information displayed on MDEP public website
  [www.oecd-nea.org/mdep](http://www.oecd-nea.org/mdep)
Fukushima

- Issue discussed at the latest MDEP Policy Group and Steering Technical Committee meetings
  - Programme of work to be defined as soon as first results from national safety assessments available
  - Interactions with other international organisations to be considered
  - High expectations from nuclear industry stakeholders
MDEP Enlargement

Membership
- New regulators asked for MDEP membership
- ToR modified in advance in 2011 to manage their integration

Reactor Design
- Three regulators are needed for the creation of DSWG
- Depending on regulators attending for membership, the creation of new DSWG should be discussed and anticipated by MDEP
Expectations from Industry Stakeholders

To achieve its goals MDEP needs:

- The active involvement of all stakeholders in MDEP activities: Regulators, Vendors and Operators
- The industry stakeholder commitment for an enhanced international cooperation