

ENSREG Conference 2017 / Nuclear Safety in Europe

SESSION 2 / LICENSING OF NUCLEAR INSTALLATIONS

Licensing: Why do we need to harmonize our licensing processes? What should or could be done to harmonize different national licensing schemes?

(Introduction)

Why is MDEP included in this session on licensing, or rather on the potential for harmonisation of licensing?

I would suggest as the main reason the way MDEP indirectly contributes to harmonisation through a very efficient bottom-up approach. I will give some examples on how this has worked over the past 10 years.

But first some words on what MDEP is - and isn't.

(What MDEP is)

MDEP or "the Multinational Design Evaluation Project" was formed in 2008 to leverage the resources and knowledge of national regulators in the review of new reactor designs. There are currently 15 member countries in MDEP.

MDEP is primarily focused on design evaluation, with the work organised around five Design Specific Working Groups (EPR, AP-1000, AP-1400, VVER, ABWR), and three Issue Specific Working Groups (Digital I&C, Codes and Standards, Vendor Inspections). In addition there are technical expert subgroups in specific areas.

MDEP has been set up in a way that allows interaction and sharing of information (including proprietary information) with vendors, owners, and operators groups.

(What MDEP isn't)

MDEP does not aim to independently develop new regulatory standards, but to build upon the similarities already existing, and to support existing harmonisation, for example through the IAEA.

Also, whatever is done in MDEP, it retains the sovereign authority of each regulator to make licensing and regulatory decisions.

(Achievements)

With this scope and these limitations - what has MDEP achieved?

A key concept, and a very efficient product, are the Common Positions on topics of common interest or concern. Common Positions are developed by the working groups and approved by it's members. Working groups also develop Technical Reports to document views on specific topics.

During the past 10 years the working groups have published numerous Common Positions and Technical Reports. Examples are the EPR Working Group Common Positions on Digital I&C design of the EPR, and Common Positions on lessons learnt from the Fukushima Daiichi NPP accident.

As a specific example, a Common Position addressing First Plant Only Tests (or FPOT:s) was recently developed, providing guidance for licensees wishing to credit a test conducted in one country on a unit constructed in another country. *(The first application has been made at EPR Taishan unit 1: reactor pressure vessel internals vibration FPOT.)*

In many cases, cross-border harmonisation is not only about the requirements and modes of work of the national regulators, but is also challenged by differences caused by the different codes and standards used in different countries.

The work within the Codes and Standards working group had as it's main aim to converge code requirements related to pressure boundary components and to reconcile code differences. A spin-off was the formation of an industry counterpart under the World Nuclear Association with the same aim, as well as the formation of a code convergence group under a group of Standards Developing Organisations (SDO) looking into the possibility to further harmonise codes and standards.

A similar co-operations with IEEE and IEC is in place regarding digital I&C standards.

(Conclusions)

In conclusion, MDEP has provided a highly flexible context, allowing quick initiation and timely conclusion of work tasks. It has made it possible for the participating regulators to understand and discuss common challenges and to look for mutually acceptable answers and solutions, but also allowed extensive interaction with stakeholders that are not regulators.

MDEP has produced a number of efficient products - Common Positions and technical reports, multinational vendor inspections, joint and witnessed inspections, etc.

Thus, MDEP has been efficient in identifying and documenting national differences, as well as in identifying areas for co-operation and increased harmonisation.

Finally, I want to mention the 4th MDEP conference, which will be held in London on the 12th - 13th September this year.