MDEP activities and accomplishments on commissioning

3rd MDEP Conference
on New Reactor Design Activities
Bethesda, Maryland, USA
Tapani Virolainen, Chair of EPR Working Group
MDEP is entering to commissioning phase reviews

• Construction of new reactors has progressed in many countries
  – MDEP has been successful during the design review phases
  – Design related construction experiences have been successfully shared
  – Next step is commission of the plants

• In 2013, MDEP Policy Group asked to start a pilot project on commissioning activities, involving the EPRWG. AP1000WG joined.

Olkiluoto 3 in March 2014. Picture: TVO
EPRWG’s activities on commissioning

• EPRWG held a workshop in June 2013 in China to start discussions on commissioning
  – Members of EPRWG and EPR Family (vendors and utilities involved with EPR) participated in the workshop
  – Workshop was very useful. Main results were:
    • EPRWG should focus to design-specific issues (e.g. FPOT/FOAK*)
    • Periodic meetings of the EPRWG and EPR Family are needed
    • MDEP members could share commissioning programmes, inspection programmes and inspectors (observing tests on different sites, participating inspections)

• EPRWG met EPR Family again in November 2013
  – EPR Family explained in details their plans for FPOT
  – EPRWG decided to prepare a common position on the subject by the summer 2014

* First Plant Only Tests / First Of A Kind
AP1000WG’s activities on commissioning

• NRC and NNSA met July 2013 at Sanmen facility to start discussions about cooperation on initial test programme (ITP) and commissioning activities (other AP1000WG members attended as well as NEA)
  – Significant exchange of information regarding the licensing and inspection of the commissioning programmes
  – Several key accomplishments in sharing inspection guidance documents between the participants

• AP1000WG continued to discuss cooperation on ITP and commission test issues in the 8th and 9th AP1000WG meetings in September 2013 (Atlanta with visit to Vogtle site) and April 2014 (Paris)
  – Exchanging inspectors in order to learn about each other’s ITP and commission test activities and regulatory construction inspection oversight

• Next meeting will be at Sanmen site in September 2014 to further cooperate on the subject (same time as the 10th AP1000WG mtg)
  – AP1000WG is consequently supporting design-specific commissioning activities to be fully included within the scope of MDEP
Future co-operation in MDEP

- Design-specific issues
  - FPOT, FOAK, etc.
- Exchanges/discussions with the Industry
  - Feedback on commissioning activities
  - Impact on design
- Commissioning programme + inspections

MDEP Design-Specific WGs

- Experts meetings, expert subgroup as necessary
- Periodic meetings with the industry
- Sharing programmes and inspectors

MDEP Commissioning Workshops

- between Design-Specific WGs + reps
- to share best practices – to avoid divergence
- to summarise MDEP activities on commissioning