



Program Main Session

12:30	Welcome, <i>Monika Adsten, Energiforsk</i>
12:40	Industrial IIoT in nuclear - feasibility study, Arto Laikari, VTT
13:10	Computer Security Applications of IIoT Digital Twins for the Nuclear Sector, <i>Paul Smith, Austrian Institute of Technology</i>
13:40	Break/Join the discussion session
13:55	IoT and wireless at Ringhals NPP, Andreas Björklund, Ringhals NPP
14:15	IIoT and wireless at Loviisa NPP, Tomas Nyström, Fortum
14:35	EDF activities in IIoT, Eric Perrier, EDF
15:05	Break/Join the discussion session
15:20	GE activities in IIoT, Nathan B Askwith, GE Power
15:50	Implementation of IIoT and Wireless Technologies in US NPPs, Chad Kiger, AMS Corporation
16:20	Concluding remarks, Arto Laikari, VTT
16:30	End of webinar/join the discussion session Energifors





What is Energiforsk?

- Facilitates and communicates R&D through collaborative actions
 - Energy industry
 - Authorities
 - Suppliers, universities, consultants etc
- Owned by trading- and transmission organizations for electricity, heat and gas
- Active in the entire field of energy
 - Activities defined from industry needs
 - Close collaboration with financiers
 - From PhD to applied projects
- Visit www.energiforsk.se for more info





Digitalization

Instrumentation & Control systems

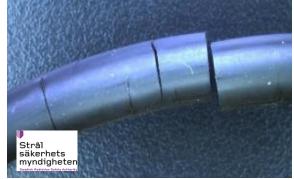




Concrete & civil works

Outlook & technology





GINO- grid interaction

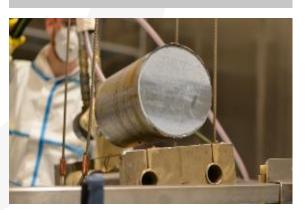
RPV embrittlement



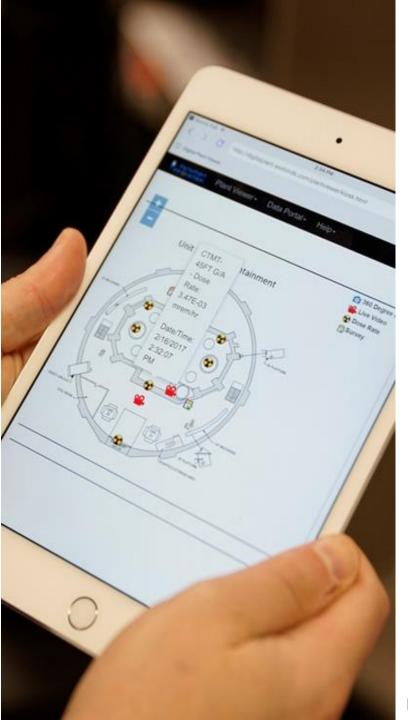


Vibrations

Polymers







Digitalization in nuclear

 Vision: Reduce maintenance and operation costs, increase availability and make nuclear an attractive industry

• Scope:

- Feasibility/mapping projects
- Strategic monitoring and knowledge transfer
- Hub for discussion for Nordic NPP experts
- Steering group with plant experts
- Activities defined by steering group and procured



Photo: Exelon



Activities

Ongoing

- Digital worker supporting the worker on-site
- Study on suitable artificial intelligence (AI) solutions for nuclear power plants
- Newsletter on digitalization in nuclear 10 times a year

Finalized

- Feasibility study IIoT in nuclear applications
- Mapping of robotics and drones in nuclear applications
- Webinar on M&D centres
- Webinar on Metal additive manufacturing
- Field trip to UK



Photo: Boston Dynamics





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Program Discussion sessions

13:40- Meet with Arto Laikari, VTT and Paul Smith,13:55 Austrian Institute of Technology

15:05- Meet with Andreas Björklund, Ringhals and15:20 Tomas Nyström, Fortum and Eric Perrier, EDF

16:30- Meet with Nathan B Askwith, GE Power and16:45 Chad Kiger, AMS Corporation



Information and house rules

- Majority of slides and videos will be published on the Energiforsk web
- Please keep microphone muted and camera switched off in main session
- You are encouraged to ask questions!
 - Raise hand or write in chat
 - When called upon by the moderator please unmute microphone, turn on camera and present yourself before asking your question
- Join discussion forum during breaks/after the webinar





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