Promoting a positive safety culture throughout the supply chain in the construction of a nuclear power plant

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Fennovoima was established in 2007. Currently 350 employees, in operation phase approx. 500.

A contract signed 2013 with Rosatom for a turn-key delivery

- Plant supplier is RAOS Project Oy, which is the subsidiary of Rusatom Overseas
- Plant is a pressurized water reactor (PWR), VVER-1200
- Site is located in Pyhäsjoki, Northern Finland

The project is called FH1. Currently the project is in licensing phase.
100 Year Life Cycle

Project preparation

- 2007-2013
  - Fennovoima established
  - Plant site selected
  - Land use planning on three levels
  - STUK’s preliminary safety assessment

- 2013-2014
  - Power plant supplier selected
  - Owners make the investment decision
  - Environmental impact assessment

Infrastructural construction and design

- 2015-2023
  - Power plant design, project planning
  - Assessment and submittal of construction license material
  - Development of supply chain
  - Work site preparation, auxiliary buildings

Construction of the power plant

- 2015-2023
  - Detailed design
  - Construction of the nuclear power plant
  - Installation work
  - Commissioning

Operation

- 2024-
  - Electricity production begins and continues for at least 60 years
  - The final disposal of spent fuel begins in the 2090s

Development of organizational and individual competences

Background surveys and research, municipal licensing
Safety culture in FH1 plant project aims at high quality operation
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1. Commitment
- Prioritize safety issues
- Comply with agreed procedures and instructions
- Show a good example

2. Awareness
- Ask if you are unsure
- Understand how your work affects to quality and nuclear safety
- Intervene if you notice something which endanger safety and report it

3. Transparency
- Do not blame for human errors
- Raise safety issues actively
- Document your actions and their reasons
-Communicate and collaborate

4. Continuous improving
- Identify development areas and propose new solutions
- Learn from the mistakes you and others make
- Develop organizational conditions

Nuclear Safety Culture Principles
Ways of working with the supply chain
Example: network analysis together with VTT
Some lessons learned

- Focus on safety culture from the very beginning – contracts and requirements
- Safety as creating preconditions for success in daily work
- Different goals – different methods – but at the same time
- Showing a good example – and not hiding the bad examples either
- Integration of diverse data in monitoring safety culture
- Trust and fairness – but in a graded manner
- Positive competition – with no losers