

Title	Safety Culture in the Finnish and Swedish Nuclear Industries – History and Present
Author(s)	Teemu Reiman (1), Elina Pietikäinen (1), Ulf Kahlbom (2), Carl Rollenhagen (3)
Affiliation(s)	1 VTT, 2 RiskPilot AB, 3 KTH
ISBN	978-87-7893-282-2
Date	March 2010
Project	MOSACA09
No. of pages	50
No. of tables	1
No. of illustrations	5
No. of references	38
Abstract	<p>The report presents results from an interview study that examined the characteristics of the Nordic nuclear branch safety culture. The study also tested the theoretical model of safety culture developed by the authors. The interview data was collected in Sweden (n = 14) and Finland (n = 16). Interviewees represented the major actors in the nuclear field (regulators, power companies, expert organizations, waste management organizations).</p> <p>The study gave insight into the nature of safety culture in the nuclear industry. It provided an overview on the variety of factors that people in the industry consider important for safety. The respondents rather coherently saw such psychological states as motivation, mindfulness, sense of control, understanding of hazards and safety and sense of responsibility as important for nuclear safety.</p> <p>Some of the respondents described a certain Nordic orientation towards safety. One characteristic was a sense of personal responsibility for safety. However, there was no clear agreement on the existence of a shared Nordic nuclear safety culture. Sweden and Finland were seen different for example in the way the co-operation between plants and nuclear safety authorities was arranged and research activities organized. There were also perceived differences in the way everyday activities like decision making were carried out in the organizations. There are multiple explanations for the differences. The industry in Sweden has been driven by the strong supplier. In Finland the regulator's role in shaping the culture has been more active. Other factors creating differences are e.g. national culture and company culture and the type of the power plant. Co-operation between Nordic nuclear power organizations was viewed valuable yet challenging from safety point of view.</p> <p>The report concludes that a good safety culture requires a deep and wide understanding of nuclear safety including the various accident mechanisms of the power plants as well as a willingness to continuously develop one's competence and understanding. An effective and resilient nuclear safety culture has to foster a constant sense of unease that prevents complacency yet at the same time it has to foster a certain professional pride and a feeling of accomplishment to maintain work motivation and healthy occupational identity.</p>
Key words	Safety culture, human and organizational factors, evaluation, safety management