

**Prof. Hyvärinen** from LUT presented the Luther concept and the rationale behind it. The concept is based on existing nuclear technologies and is designed to be a 24 MWth modular unit. The target cost level is to be cheaper than biomass heat only units and large heat pumps supplying district heating. The Luther concept has passive safety features and could supply heat/district heating up to temperature of 95 degrees. Technology could be domestically manufactured. Demo unit could be built before 2030.

**Prof. Leppänen** from VTT presented a summary of Finnish District heating grids, size classes of units producing district heating, and VTT's heat reactor concept LDR. The unit would be 50 MWth pool reactor and have passive safety features. VTT has simulated reactor behavior and operation as a part of district heating and modelled several fault situations to improve the reactor design. The pre-conceptual design phase was completed by the end of 2020.

At the end, there was a discussion of possible alternative markets for heat and of non-technical obstacles, such as acceptance.