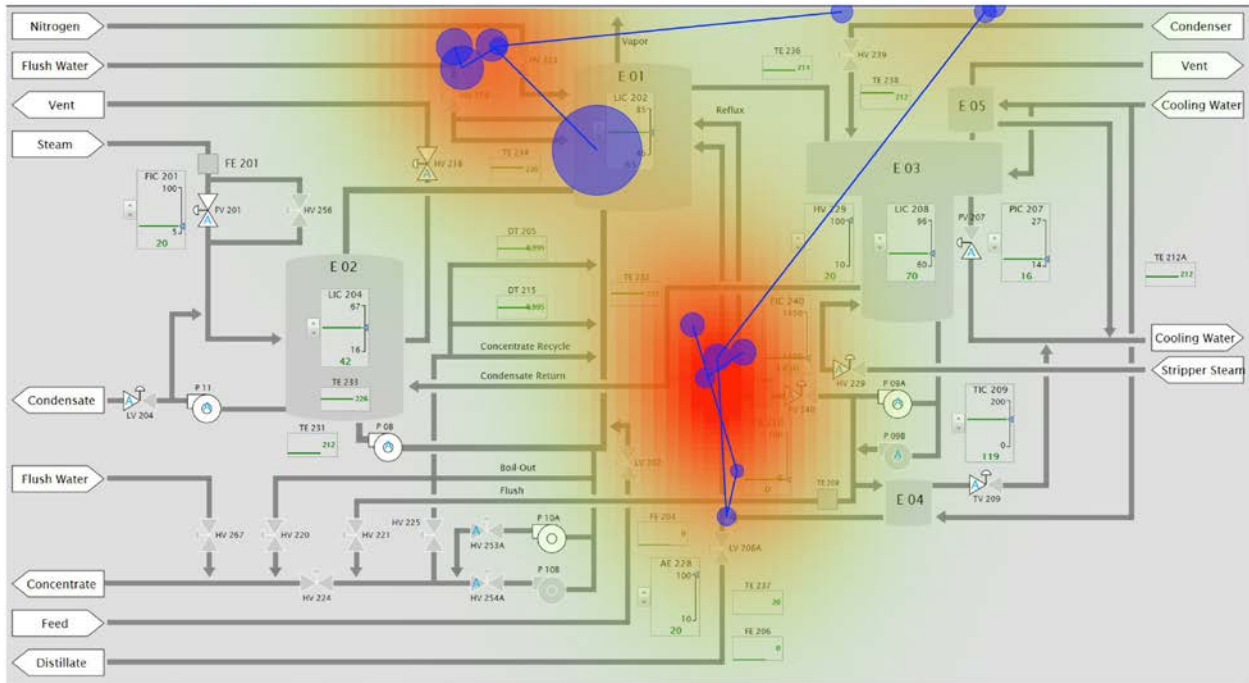


Use of eye tracking and experimental microtasks to investigate human system interfaces in advanced control rooms



- Human factors scientists at Idaho National Laboratory (INL) use eye tracking and experimental microtasks to collect human-system performance data of licensed operators to evaluate new digital control room technologies for existing and advanced reactor control room concepts.
- Eye tracking provides rich physiological measures of visual attention, cognitive workload, and situation awareness that can be used to quantify differences between different design concepts, as well as correlate to important plant events that may have impacted human-system performance.
- Microtasks enable human factors scientists to evaluate advanced control room concepts with strong experimental control to provide greater validity and confidence with interpreting key findings made about candidate human system interface designs.