

KSU SIMULATIONS

KSU Simulation – Almost Unreal

FLEXIBLE AND SECURE

An excellent tool

Simulation technology is an excellent tool when it comes to understanding dynamic processes. The simulator models can be made accessible via KSU Online which enables distributed simulator training or testing.

It is sometime desirable to reduce the scope of the simulation or to visualize the process in another way, therefore different kinds of simulator environments can be created along with pre made exercise tasks or assignments.

Options

- Simulator models accessible via **KSU Online** (SaaS)
- Technical analysis support
- PSA Simulation
- V&V Using Simulation
- Process modelling
- Simulator configurations

KSU Simulators and Applications

Full Scope Simulators (FSIM)

Used for operational training of shift teams, V&V testing and verification of changes in NPPs. FSIM is a one-to-one replica of Plant's Control Room which is driven by the high fidelity mathematical simulation models of the actual systems operated at NPPs.

Graphical Full Scope Simulator (GSIM)

Used as a complement to the Full Scope Simulator by employing flexibly configurable graphical interface, visualisation of process and FSIM's simulation models facilitating the profound learning of plant behaviour.

Part Scope Simulator (DSIM)

Used for the deeper understanding of individual systems and physical phenomenon studied in the form of laboratory exercises. DSIMs are flexibly derived from FSIMs and specific training tasks can be performed as individual training exercises.

Principal Process Simulators (PSIM)

Uses for a general understanding of different types of NPPs. PSIMs are simulating a principal behaviour of NPPs in a simplified fashion but contributing to the early understanding of NPPs extremely efficiently.

Severe Accident Simulators (HSIM)

Used for the training of a severe accident's handling. The same simulators are shared with the Emergency Preparedness Teams at NPPs for the exercising and accident assessment in the case of a real severe accident.

VR Simulation Environment

VR-based graphical environment coupled with the Full Scope Simulator. Using the VR-environment training is possible in a copy of FSIM without using an expensive hardwired replica of an actual control room.

