GSE’S GENERIC NUCLEAR PLANT SIMULATOR
Generic PWR: Control Room Simulator

Together We Can Find A Solution

Full-scope, high-fidelity, plant-specific simulators are integral parts of any nuclear plants’ operator training and licensing program.

The “experiential” learning that takes place is one of the best methods for knowledge retention. However, developing these custom simulators requires years of work, and millions of dollars, not to mention further challenges if your power plant has not yet been built.

GSE has solved these challenges with the development of the GPWR. The GPWR provides you with the high-fidelity models of an actual nuclear plant simulator that has successfully trained licensed operators. In addition to the simulator, you will also receive the plant procedures and training material needed to fully use your GPWR.

Now for a fraction of the cost of a new full scope simulator your students can:

- Experience the complex interactions between plant systems right in the classroom
- Practice typical plant procedures
- Develop team-based skills

You can determine whether your students can transition from the knowledge based environment of the classroom to the skills based environment of the plant control room.

Key Attributes

- Model accuracy fully compliant with ANS-3.5
- Scalable to fit your training needs
- Runs the full range of power plant operation
  - Normal
  - Abnormal
  - Transient

HFE Solutions That Work For You

Human Factors Engineering (HFE) is becoming more and more important as nuclear power plants are undergoing various forms of control room modernization:

- New Reactor & Systems Designs
- New control room technologies such as digital human-system-interfaces (HSI)
- New concepts of operations and the possible changes to NPP staffing configurations

Human performance simulation and testing is being used to understand the impact of modern control rooms on human responses.

GSE’s GPWR simulator provides you with a low-cost, real-time, high-fidelity platform for assessing your control room designs on operator effectiveness and response time.
Flexible Interface, Flexible Configurations

EXISTING FLEET
For the existing fleet of nuclear plants around the world, the traditional “analog” controls are available via GSE’s digitized softpanel interface. This solution can be run on a laptop computer or on GSE’s unique VPanel monitors.

SCALABILITY
The advantage of our VPanel solution is its scalability and ease of configuration for both team and individual training.

REAL-TIME
Touch-sensitive computer monitors manipulate control room conditions with real-time plant response, audible alarms, switch positioning and relay activation.

NEXT GENERATION
Digital Human System Interfaces can be constructed using GSE’s JDesigner tool enabling students to become familiar with the new DCS type control room environment.

The GPWR Has Been Successfully Used For...
- Operations Training of: Supervisors, Operators and Engineers
- Reinforcing Fundamental Concepts through Demonstration
- Control Room Human Factors Design

Visit www.GSES.com/training for more information
About GSE Systems

GSE Systems, Inc. is a world leader in real-time high-fidelity simulation, providing a wide range of simulation, training and engineering solutions to the power and process industries. Its comprehensive and modular solutions help customers achieve performance excellence in design, training and operations. GSE’s products and services are tailored to meet specific client requirements such as scope, budget and timeline. The Company has over four decades of experience, more than 1,100 installations, and hundreds of customers in over 50 countries spanning the globe.

Information about GSE Systems is available at www.gses.com.

Worldwide Locations