When you’re looking for improving your power plant’s performance and reliability, you’ll want the right simulation experience to get you there. One company has the dedication to produce true-to-life power plant simulators that ensure that your personnel have the knowledge required to safely and efficiently operate your power plant.

For more than 40 years, L-3 MAPPS has worked with leading utilities, plant designers and research organizations to create superior training and engineering systems and has established itself as the world’s pre-eminent manufacturer of power plant simulators. L-3 MAPPS is a company of people with ideas and vision, with a desire to create value through innovation and with the experience to achieve success.

**DOING IT RIGHT**

Providing more than just training devices, L-3 MAPPS’ simulator solutions - powered by the unparalleled Orchid® suite of simulation products - will elevate your operation and engineering teams to new heights in addressing plant design issues, procedural deficiencies and reliability improvements. L-3 MAPPS simulators provide superior real-world power plant training. L-3 MAPPS offers a variety of products and services, including full scope simulators, classroom simulators, engineering simulators, part-task trainers, severe accident simulation, simulator retrofits and upgrades, and more. L-3 MAPPS provides design to completion turnkey systems, specific components, and simulator design tools as required by the customer. The company’s simulators offer the highest quality in modeling fidelity and training to provide trainees and instructors with user-friendly tools for learning, operating and mastering complex power plant systems.

The superior training environments of L-3 MAPPS simulators provide clear advantages for obtaining operator licenses/certification, optimizing plant operating procedures and reducing costs. Operators trained on L-3 MAPPS simulator environments acquire the skills necessary to increase plant performance, minimize downtime, and provide confident emergency response. Real-time responses to operator actions and interactive instructor controls ensure maximum training effectiveness and adaptability.

Simulator uses include interactive team training, severe incident management, plant design testing, and start-up/shutdown optimization. Any scenario, no matter how complex or dangerous in a real plant, can be reproduced, monitored and varied in real time, providing a highly valuable tool for training, plant engineering and emergency response.

**USES AND ADVANTAGES**

Cost-effective training for
- Experienced operators and new recruits
- Overall plant and individual system operation and control
- Improving soft skills such as “command and control”, three-way communication, team interaction and performance in the most realistic simulator control room environment
- Emergency plan implementation and incident management
- Skilled response to equipment malfunction and plant transients
- I&C familiarization through DCS and plant process computer operation

More benefits
- Full visual implementation of whole plant simulation allowing users to have complete control over simulated plant design in an intuitive, easy-to-use manner
- State-of-the-art simulation environment for development, operation and management of your simulator with a fully visual, interactive graphic user interface including control room soft panels and plant system models
- Operations optimization with just-in-time training on plant start-up, shutdown and infrequently performed evolutions, etc.
- Fewer unplanned outages due to operator error or equipment malfunction
- Improved plant safety
- Analysis of plant response to equipment and/or instrument failure
- Efficient plant design planning and testing
- DCS and plant process computer verification and validation
- Ease of simulator upgrade and ability to keep current with plant
- Multiple configurations on one simulator
- Portability of simulation for classroom training
L-3 MAPPS entered the power plant simulation business in 1973. Today, L-3 MAPPS is the world’s foremost supplier of high-end full scale simulators for nuclear power plants of most manufacturers, as well as simulation solutions for coal, oil, and gas fired power plants. L-3 MAPPS’ Power Systems and Simulation business has been awarded Frost & Sullivan’s 2009 Global Excellence in Customer Value award for its customer-centric approach, technological superiority and value-added service in delivering best-in-class nuclear power plant simulators. Following is a sample of our customers globally.

**ARGENTINA**
Embalse

**BELGIUM**
Tihange 1

**BRAZIL**
Angra 1
Angra 2

**CANADA**
Bruce A
Bruce B
Candu Energy
Darlington
Gentilly-2
Pickering A
Pickering B
Point Lepreau

**CHINA**
Daya Bay
Hongyanhe Phase I Units 1, 2
Hongyanhe Phase I Units 3, 4
Ling Ao
Ling Ao Phase II
Qinshan Phase III

**FINLAND**
Olkiluoto 3

**FRANCE**
AREVA NP
Institut de Radioprotection et de Sûreté Nucléaire
Institut National des Sciences & Techniques Nucléaires

**GERMANY**
AREVA NP
Brunsbüttel
Isar
Leipzig
Philippsburg
Stade

**GREAT BRITAIN**
Hartlepool
Heysham 1
Hinkley Point B
RWE npower
Sizewell B

**IRELAND**
Moneypoint
Poolbeg

**KOREA**
Pyeongtaek
Wolsong 2

**QATAR**
Ras Abu Fontas B

**ROMANIA**
Cernavoda

**SAUDI ARABIA**
Qurayyah

**SLOVENIA**
Brestanica
Krško

**SOUTH AFRICA**
Koeberg

**SWITZERLAND**
ALSTOM (Switzerland) Ltd.
Beznau

**USA**
ANO-1
Brunswick
Callaway
Center for Advanced Engineering and Research
Clinton
Crystal River 3
Davis-Besse
Diablo Canyon
Enrico Fermi 2
Fort Calhoun
Idaho National Laboratory
McGuire
Oconee
Pilgrim
Prairie Island
Rancho Seco
San Onofre 1
San Onofre 2/3
St. Lucie 1
St. Lucie 2
South Texas Project
Susquehanna 1
Three Mile Island 1
Turkey Point
Waterford 3
Wolf Creek

L-3 MAPPS also supplies its simulation solutions for Engineering Simulators.