

ProcSee Deliveries

Last updated: January 2012

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1) Online Supervision and Control		
Customer	Application	Year of delivery
Institute for Energy Technology, Norway <i>Contact: Jan Porsmyr</i>	ProcSee used for GUI in Scorpio, a core surveillance system for nuclear power plants. For relevant installations, the national nuclear safety inspectorate has licensed the system for operation in the plant's control room. View screenshots... Scorpio deliveries include: <ul style="list-style-type: none"> - Kola nuclear power plant, unit 3&4, Russia - Bohunice nuclear power plant, unit 3&4, Slovakia - Scorpio BWR version for TIARA, Toden SW, Japan - Dukovany nuclear power plant, unit 1-4, Czech Rep. - Tihange nuclear power plant, training centre, Belgium - AIB-Vincotte Nuclear, Belgium - McGuire, Catawaba and Oconee NPPs, USA - Ringhals nuclear power plant, unit 2, Sweden - Sizewell-B nuclear power plant, United Kingdom 	1994 Updated 1994-2012 2004. Updated 2006 2001. Upd 2005-2009 1999. Upd 2000-2003 1998. Upd 2004-2009 1996 1996 1995 1995 1994
Kernkraftwerk Gösgen-Däniken AG, Switzerland <i>Contact: Wolfgang Fürst</i>	Monitoring nuclear power plant process data and historic trends. Used by operators in control room and by authorised personell from office PCs. Licenced for operation in control room by Swiss Federal Nuclear Safety Inspectorate in 2004. Identical system available at training simulator. Safety Parameter Display System as an add-on to the monitoring system described above. Monitoring physical access points and fire alarms at Gösgen-Däniken nuclear power plant.	2000 Updated 2000-2012 2002 Updated 2003-2012 2004 Updated 2005-2012
Fortum Power and Heat Oy, Loviisa nuclear power plant, Finland <i>Contact: Robert Valkama</i>	Emergency Process Information System for Loviisa nuclear power plant. Remote online visualisation of safety-important parameters at Finland's Radiation and Nuclear Safety Authority (STUK) and Fortum's emergency monitoring centre. Read more...	2010 Updated 2011
FMC Kongsberg Metering, Norway <i>Contacts: David Olaussen, Tore Følling</i>	ProcSee used for GUI in Fiscal Metering Systems for oil and gas production. FMC Kongsberg Metering considers IFE a strategic partner and has deployed fiscal meetering systems with ProcSee-based GUIs to more than 65 customers world wide in the period 2003-2011. ProcSee used for GUI for SCADA systems both onshore and offshore for PEMEX oil production platforms in the Mexican Gulf	1992 Updated 1993-2012 1993 Updated 1999

Institute for Energy Technology / OECD Halden Reactor Project, Norway <i>Contact: Øivind Fladeby</i>	Supervision of process parameters, in-core signals, radiation detectors and alarms at Halden Boiling Water Reactor. Used by operators in control room and by authorised persons from office PCs. Add-on to the above system enabling monitoring from mobile devices (PDAs). Read more...	1997 Updated 1998-2012 2007 Updated 2010
Institute for Energy Technology, Norway <i>Contact: Sigurd Brattheim</i>	ProcSee used for GUI to monitor and control equipment to measure absorption and release of hydrogen in materials.	2004 Updated 2005-2008
Westinghouse CE Nuclear Systems, USA <i>Contact: Gail Sibley</i>	ProcSee used to implement Plant Monitoring System for control room operators at the Korean nuclear power plants YGN-5, YGN-6, UCN-5 and UCN-6.	1994 Updated 1995-2005
Statnett, Norway <i>Contact: Ole Gjerde</i>	Supervision of Norway's electric power grid. Used by operators in Statnett's national control centre. Supervision of Norway's electric power grid. Used by managers in office environment.	1992 Updated 1992-2004 1996
Statkraft, Norway <i>Contact: Finn Borge</i>	ProcSee for supervision of electric power production versus commitment	1996 Updated 2000
British Energy, United Kingdom <i>Contact: Drew Moffat</i>	Full replica of existing plant graphics displays, trending and alarms for Advanced Gas Cooled Reactor power stations. Demonstrator system installed at Torness and Hunterston power stations.	1994 Updated 1995-2000
KFKI Atomic Energy Research Institute, Hungary <i>Contact: János Végh</i>	ProcSee used for GUI of on-line Safety Parameter Display System for Hungarian Nuclear Safety Directorate	1998
KEMA, The Netherlands <i>Contact: R. Schimmel</i>	ProcSee used for GUI in Plant Monitoring System for Doodeward nuclear power plant and training simulator	1994 Updated 1995-1998
Forsmark Kraftgrupp, Sweden <i>Contact: L. Kloow</i>	ProcSee used for GUI for process surveillance at Forsmark nuclear power plant	1992 Updated 1992-1995

2) Nuclear and Fossil Power Plant Simulators

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Customer	Application	Year of delivery
Institute for Energy Tecnology/ OECD Halden Reactor Project, Norway <i>Contact: Jon Kvaalem</i>	Operator interfaces for BWR and PWR full-scale nuclear power plant simulators in Halden Man-Machine Laboratory. Purpose is to study crew and operator performance and to develop, demonstrate and evaluate new operator interface designs to improve operational safety, reliability and efficiency. Implementation includes advanced large screen displays, process displays, alarm systems and computerized procedures. www.ife.no/hammlab Operator interface for oil production platform simulator focusing on innovative display design.	1990 Updated 1991-2012 1998 Updated 1999-2011

<p>Institute for Energy Tecnology/ OECD Halden Reactor Project, Norway</p> <p><i>Contact: William Beere</i></p>	<p>ProcSee to implement a graphics model builder in TEMPO, a tool for thermal performance monitoring and optimisation. www.ife.no/tempo</p> <p>TEMPO deliveries include:</p> <ul style="list-style-type: none"> - Temelin NPP, Czech Rep. (technology evaluation) - Olkiluoto NPP, unit 1&2, Finland - Electricité de France, France (validation studies) - Loviisa NPP, Finland, turbine cycle at unit 2 - Paks NPP, Hungary - Forsmark NPP, Sweden (2 applications) - Training simulator for Almaraz NPP, Spain 	<p>2000 Updated 2000-2012</p> <p>2007 2007 Upd 2009-2010 2006 2004 Upd 2006-2010 2003 2002-2003 2002</p>
<p>United States Nuclear Regulatory Commission, USA</p> <p><i>Contact: Janice Griffin</i></p>	<p>ProcSee used for GUI in 4 nuclear power plant training simulators</p> <p>ProcSee used for safety parameter displays system in training simulator</p> <p>ProcSee for GUI in Nuclear Engineering Workstation Simulator (classroom education)</p>	<p>1997 Updated 1997-2012</p> <p>1995 Updated 1995-2012</p> <p>1994 Updated 1994-2012</p>
<p>Korea Electric Power Corporation, Republic of Korea</p> <p><i>Contact: Jong Hyun Kim</i></p>	<p>Large screen display, process displays, alarm displays and computerized procedures for Advanced Power Reactor APR 1400 simulator. Used for verification and validation of control room operator interface design.</p> <p>Read more...</p>	<p>1997 Updated 1998-2010</p>
<p>Fortum, Finland</p> <p><i>Contact: Kari Porkholm</i></p>	<p>ProcSee as GUI tool for engineering and training simulators built using APROS.</p> <p>Simulators include:</p> <ul style="list-style-type: none"> - Compact Training Simulator for Thermal Power Plants, Anmol Solutions Pvt. Ltd., India - Engineering simulator for nuclear process education, Centre de Recherche Nucléaire d'Alger, Algeria - Engineering and training simulator for fossil-fuelled power plant, Honeywell Automation, India - Engineering simulator for nuclear process education, Energy Systems Technology Centre, Libya - Nuclear Power Plant Compact Training Simulator, St.Petersburg State Polytechnical University, Russia - Engineering simulator for nuclear process education, Nuclear Power Plants Authority, Egypt - Generic large scale CCGT simulator, Teluk Gong power plant, Malaysia - Severe accident management simulator, Loviisa nuclear power plant, Finland - Compact training simulator, CCGT, Laem Chabang thermal power plant, Thailand - Compact training simulator, Vanaja combined cycle gas turbine plant, Finland - Kola nuclear power plant, Russia 	<p>1994 Updated 1994 – 2012</p> <p>2012</p> <p>2010</p> <p>2009</p> <p>2008</p> <p>2006</p> <p>2002</p> <p>2002</p> <p>2001</p> <p>2001</p> <p>1997. Updated 2006</p> <p>1997</p>
<p>Fortum Nuclear Services, Finland</p> <p><i>Contact: Ville Nurmilaukas</i></p>	<p>Large-screen overview display for Loviisa R&D simulator. Design based on IFE's Information Rich Design (IRD) concept. Read more... View screenshots...</p>	<p>2007 Updated 2008</p>
<p>Fortum Power and Heat Ltd</p> <p><i>Contact: Karri Honkoila</i></p>	<p>Process diagram displays for the instructor's station of Loviisa NPP training and development simulator. The displays are used to monitor the process state and activate malfunctions during training session.</p>	<p>2010</p>

VTT, Finland <i>Contact: Kaj Juslin</i>	ProcSee as GUI for the APROS simulation tool. ProcSee displays are used to monitor and control the process state and are automatically generated from APROS model output. Read more...	1994 Updated 1994-2010
Idaho National Laboratory, USA <i>Contact: Ron Boring</i>	ProcSee to prototype HSI and alarm displays for the US Department of Energy's Light Water Reactor Sustainability Program	2011
Comisión Nacional de Energía Atómica, Argentina <i>Contact: Celso Flury</i>	ProcSee to develop Human Machine Interface of nuclear power plant simulator	2009 Updated 2010-2012
Japan Atomic Energy Agency, Japan <i>Contacts: Y. Yamaguchi, F. Tanabe</i>	ProcSee used to develop and test concept of ecological operator interfaces on full-scope nuclear power plant simulator.	1994 Updated 1995-2007
Rheinmetall Defence Electronics, Germany <i>Contact: Bernd Pahlmann</i>	ProcSee as GUI tool for nuclear power plant simulators	2004 Updated 2005
Electricité de France, CNEN, France <i>Contact: Eric Berard</i>	ProcSee as GUI tool for evaluation of operator interface design for future nuclear power plant design.	2002
Oak Ridge National Laboratory, USA <i>Contact: Richard Wood</i>	ProcSee as GUI tool in fault detection and isolation and automatic controller response system.	2000 Updated 2001-2002
Tecnatom s.a, Spain <i>Contact: Luis Fernandez Illobre</i>	ProcSee used for GUI in prototype of advanced alarm filtering system. Prototype installed and validated at full-scope simulators for Cofrentes and Almaraz nuclear power plants, and also in Almaraz control room.	1999 Updated 2000-2001
Korea Atomic Energy Research Institute, Korea <i>Contact: Kee-Choon Kwon</i>	ProcSee used for GUI of compact nuclear power plant simulator. The simulator is located at KAERI's nuclear training centre and is used for training of NSSS design engineers, maintenance personnel and regulatory body inspectors, and to test control algorithms and diagnostics methods. Read more...	1994 Updated 1995-2007
Risø National Laboratory, Denmark <i>Contact: Igor Kozine</i>	ProcSee for human factors studies	1994 Updated 1995-2000
KEMA, The Netherlands <i>Contact: P. Bakker</i>	ProcSee used as presentation module for data generated by MELCOR and TRAC severe accident simulators	1996 Updated 1997
Japan Nuclear Cycle Development Institute, Japan <i>Contact: Y. Iguchi</i>	ProcSee used for GUI of MAAP severe accident simulator for Fugen nuclear power plant	1997
KFKI Atomic Energy Research Institute, Hungary <i>Contact: János Végh</i>	ProcSee in GUI of prototype of a Critical Safety Functions monitoring system for VVER-400 reactors	1997



Paul Scherrer Institut, Switzerland <i>Contact: T. Bandurski</i>	ProcSee to visualize experimental data from PANDA, a large-scale facility for the investigation of passive Advanced Light Water Reactors containment phenomena and simulation of system response	1995
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3) Maritime Applications [Go to top](#)

Customer	Application	Year of delivery
Kongsberg Maritime AS, Norway <i>Contact: Øyvind Ibsen</i>	ProcSee to implement GUIs for operators and instructors of high fidelity ship engine room simulators. Since 2002, Kongsberg Maritime AS has deployed more than 1250 ProcSee licenses for their simulators to civil and navy maritime schools and training institutions world wide. View screenshots...	2000 Updated 2000-2012
	ProcSee as GUI tool for cargo handling simulators delivered world wide	1989 Updated 1990-2000
HITEC, Norway <i>Contact: Jørn Engen</i>	ProcSee for supervision in ship bridge system for naval vessel	1999
Meriturva / VTT, Finland <i>Contact: Kaj Juslin</i>	ProcSee used for GUI in training simulator for engine control room of the MS Finnhanza	1998
Kværner Ships Equipment, Norway <i>Contact: Wolfgang Trötscher</i>	ProcSee used for GUI in advanced electronic monitoring system at the bridge of Stena high speed super ferry	1995 Updated 1996
	ProcSee used for GUI in cargo handling system	1995

4) Environmental Monitoring Systems [Go to top](#)

Customer	Application	Year of delivery
Arctic Military Environmental Cooperation / Norwegian Defence Research Establishment, Norway <i>Contact: Monica Endregaard</i>	Supervision of radiation from dismantlement of Russian submarines. Installations at RTP Atomflot and Polyarninski Shipyard. Read more...	2000 Updated 2001-2005
Siemens AG, Germany <i>Contact: Axel Grobe</i>	Radioactivity monitoring system for the surroundings of nuclear power plants in Hessen	1995 Updated 2000, 2010

5) Emulation of Control Systems [Go to top](#)

Institute for Energy Technology has emulated process control systems from several vendors using ProcSee:

Customer	Application	Year of delivery
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Norsk Hydro Produksjon, Norway	Emulation of Siemens Teleperm M operator interface OS525 for Fram Vest to be included in Troll C training simulator	2002
Norsk Hydro Produksjon, Norway	Upgrade of the emulation of Siemens Teleperm M operator interface OS525 for Troll C training simulator	2002
Norsk Hydro Produksjon, Norway	Emulation of Siemens Teleperm M operator interface OS265 and AS235 control system for Oseberg A/B/D training simulator	2002
Norsk Hydro Produksjon, Norway	Emulation of Siemens Teleperm M operator interface OS265 and AS235 control system for Brage training simulator	2001
Norsk Hydro Produksjon, Norway	Emulation of ABB Advant operator interface and control system for Sture Crude Upgrading Project	2000
Norsk Hydro Produksjon, Norway	Emulation of Siemens Teleperm M operator interface OS525 for Troll C training simulator	1999
Norsk Hydro Produksjon, Norway	Emulation of Siemens Teleperm M operator interface OS265 for Oseberg gas production engineering simulator	1998
Norsk Hydro Produksjon, Norway	Emulation of operator interface for Honeywell TDC3000 process control system for Troll B training simulator	1998
Norsk Hydro, Norway	Emulation of operator interface for Honeywell TDC3000 process control system for Rafnes VCM simulator	1996
Shell Expro, United Kingdom	Emulation of operator interface of Honeywell TDC3000 for Nelson training simulator	1992
Shell Expro, United Kingdom	Emulation of operator interface of Honeywell TDC3000 for Tern training simulator	1992

6) Miscellaneous Go to top		
Customer	Application	Year of delivery
Technical University of Denmark <i>Contact: Prof. Morten Lind</i>	ProcSee to visualise multilevel flow modelling (MFM) models including end-user interaction, dynamic data input and internal propagation of MFM model results. ProcSee displays are automatically generated from MFM model database.	2010 Updated 2011-2012
Scandpower Information Technology / Thales, Norway <i>Contact: Bjørn Brevig</i>	ProcSee to monitor mobile military telecommunication networks (more than 200 installations)	1994 Updated 1995-2007
Anna University, India <i>Contact: Prof. Gopal</i>	ProcSee for Adaptive User Interfaces in medical and banking applications	2001 Updated 2003