Institute for Energy Technology

ProcSee Deliveries

Last updated: February 2019

ProcSee deliveries have been divided into the following categories:

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1) Online Supervision and Control

Customer	Application	Year of delivery
Institute for Energy Technology, Norway *Contact: Jan Porsmyr*	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: - 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 1994-2019 2004. Updated 2006 2001. Upd 2005-2009 1999. Upd 2000-2003 1998. Upd 2004-2015 1996 1996 1995 1995 1994
Kernkraftwerk Gösgen-Däniken AG, Switzerland *Contact: Marcel Huber*	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 2000-2019 2002 Updated 2003-2019 2004 Updated 2005-2019
Fortum Power and Heat Oy, Loviisa nuclear power plant, Finland *Contact: Robert Valkama*	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 2011-2014
Westinghouse Electric Company, USA *Contact: Jerry M. Stanley*	Westinghouse Electric Company uses ProcSee to implement GUIs in commercial projects worldwide.	2009 Updated 2010-2017

FMC Kongsberg Metering, Norway *Contacts: David Olaussen, Tore Følling*	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 worldwide. ProcSee used for GUI for SCADA systems both onshore and offshore for PEMEX oil production platforms in the Mexican Gulf	1992 Updated 1993-2017 1993 Updated 1999
Institute for Energy Technology / OECD Halden Reactor Project, Norway *Contact: Øivind Fladeby*	Large screen overview display for Halden research reactor, based on IFE's Information Rich Design concept. Used by control room operators to monitor key process parameters and trends. Supervision of process parameters, in-core signals, radiation detectors and alarms at Halden research reactor. Used by operators in control room and by authorised personnel from office PCs.	2012 Updated 2013-2018 1997 Updated 1998-2018
Institute for Energy Technology, Norway *Contact: Sigurd Brattheim*	ProcSee used for GUI to monitor and control equipment to measure absorption and release of hydrogen in materials.	2004 Updated 2005-2008
Statnett, Norway *Contact: Ole Gjerde*	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 *Contact: Finn Borge*	ProcSee for supervision of electric power production versus commitment	1996 Updated 2000
British Energy, United Kingdom *Contact: Drew Moffat*	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 *Contact: János Végh*	ProcSee used for GUI of on-line Safety Parameter Display System for Hungarian Nuclear Safety Directorate	1998
KEMA, The Netherlands *Contact: R. Schimmel*	ProcSee used for GUI in Plant Monitoring System for Doodeward nuclear power plant and training simulator	1994 Updated 1995-1998
Forsmark Kraftgrupp, Sweden *Contact: L. Kloow*	ProcSee used for GUI for process surveillance at Forsmark nuclear power plant	1992 Updated 1992-1995

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2) Nuclear and Fossil Power Plant Simulators

Customer	Application	Year of delivery
Institute for Energy Tecnology/ OECD Halden Reactor Project, Norway *Contact: Jon Kvalem*	Operator interfaces for BWR and PWR full-scale nuclear power plant simulators in Halden Man-Machine Laboratory. Objectives are 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, operator workstation displays, alarm systems and computerized procedures. www.ife.no/hammlab Operator interface for oil production platform simulator focusing on innovative display design.	1990 Updated 1991-2019 1998 Updated 1999-2011
Institute for Energy Tecnology/ OECD Halden Reactor Project, Norway *Contact: Emil Wingstedt*	ProcSee to implement a graphics model builder in TEMPO, a tool for thermal performance monitoring and optimisation. www.ife.no/tempo TEMPO deliveries include: - Lappeenranta University of Technology, Finland - 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 - VUJE, Slovakia - Paks NPP, Hungary - Forsmark NPP, Sweden (2 applications) - Training simulator for Almaraz NPP, Spain	2000 Updated 2000-2019 2010 Upd 2011-2015 2007 2007 Upd 2009-2010 2006 2004 Upd 2006-2015 2003 Upd 2004-2015 2003 2002-2003 2002
Institute for Energy Technology, Norway / Exitech Corporation, USA *Contacts: Håkon Jokstad (IFE), George McCullough (Exitech)*	ProcSee to implement Training Monitoring and Evaluation System, www.ife.no/teams TEAMS deliveries include: - Donald C Cook NPP, USA	2018 Updated 2019 2018
United States Nuclear Regulatory Commission, USA *Contact: Doug Eskins*	ProcSee used for GUI for plant information display system for nuclear power plant simulator ProcSee used for GUI for safety parameter display system for nuclear power plant simulator ProcSee for GUI for Nuclear Engineering Workstation Simulator (classroom education)	1997 Updated 1997-2019 1995 Updated 1995-2017 1994 Updated 1994-2010
Idaho National Laboratory, USA *Contact: Ron Boring*	ProcSee to prototype HSIs and alarm displays for the US Department of Energy's Light Water Reactor Sustainability Program	2011 Updated 2012-2018

Korea Hydro and Nuclear Power Company, Republic of Korea *Contact: Chan-ho Sung*	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. Read more… ProcSee used for GUI of Shin-Kori Unit 1&2 full-scope training simulator ProcSee used for GUI of Shin-Kori Unit 3&4 full-scope training simulator ProcSee used for GUI of Shin-Kori Unit 5&6 full-scope simulator for design validation	1997 Updated 1998-2010 2010 2012 2012 Updated 2013-2016
Korea Advanced Institute of Science and Technology (KAIST), Republic of Korea *Contact: Seung Min Lee*	ProcSee used for studies in human factors engineering and human-machine interfaces for nuclear power plants	2014
Fortum, Finland *Contacts: Kari Porkholm, Sami Tuuri*	ProcSee as GUI tool for engineering and training simulators built using APROS. Simulator deliveries include: - Training simulator for electricity and energy production from fossil and biomass gas, Sweden - 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	1994 Updated 1994 – 2019 2016. Updated 2017 2012 2010 2009 2008 2006 2002 2002 2001 2001 1997. Updated 2006 1997
Fortum Nuclear Services, Finland *Contact: Ville Nurmilaukas*	Large-screen overview display for Loviisa R&D simulator. Design based on IFE's Information Rich Design (IRD) concept. Read more… View screenshots...	2007 Updated 2008
Fortum Power and Heat Ltd, Finland *Contact: Karri Honkoila*	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 sessions.	2010
VTT, Finland *Contact: Matti Paljakka*	ProcSee as GUI for the APROS simulation tool. ProcSee displays are used to mointor and control the process state and are automatically generated from APROS model output.	1994 Updated 1994-2019

Comisión Nacional de Energía Atómica, Argentina *Contact: Celso Flury*	ProcSee to develop Human Machine Interface of nuclear power plant simulator	2009 Updated 2010-2012
Japan Atomic Energy Agency, Japan *Contacts: Y. Yamaguchi, F. Tanabe*	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 *Contact: Bernd Pahlmann*	ProcSee as GUI tool for nuclear power plant simulators	2004 Updated 2005
Electricité de France, CNEN, France *Contact: Eric Berard*	ProcSee as GUI tool for evaluation of operator interface design for future nuclear power plant design.	2002
Oak Ridge National Laboratory, USA *Contact: Richard Wood*	ProcSee as GUI tool in fault detection and isolation and automatic controller response system.	2000 Updated 2001-2002
Tecnatom s.a, Spain *Contact: Luis Fernandez Illobre*	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 in Almaraz control room.	1999 Updated 2000-2001
Korea Atomic Energy Research Institute, Korea *Contact: Kee-Choon Kwon*	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.	1997
Risø National Laboratory, Denmark *Contact: Igor Kozine*	ProcSee for human factors studies	1994 Updated 1995-2000
KEMA, The Netherlands *Contact: P. Bakker*	ProcSee used as presentation module for data generated by MELCOR and TRAC severe accident simulators	1996 Updated 1997
Japan Nuclear Cycle Development Institute, Japan *Contact: Y. Iguchi*	ProcSee used for GUI of MAAP severe accident simulator for Fugen nuclear power plant	1997
KFKI Atomic Energy Research Institute, Hungary *Contact: János Végh*	ProcSee in GUI of prototype of a Critical Safety Functions monitoring system for VVER-400 reactors	1997
Paul Scherrer Institut, Switzerland *Contact: T. Bandurski*	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

Customer	Application	Year of delivery
Kongsberg Digital AS, Norway *Contact: Øivind Ibsen*	ProcSee to implement GUIs for operators and instructors of high-fidelity ship engine room simulators. Kongsberg Digital has deployed more than 2350 ProcSee licenses for their simulators to civil and navy maritime schools and training institutions worldwide. View screenshots... ProcSee as GUI tool for cargo handling simulators delivered world wide	2000 Updated 2000-2019 1989 Updated 1990-2000
HITEC, Norway *Contact: Jørn Engen*	ProcSee for supervision in ship bridge system for naval vessel	1999
Meriturva / VTT, Finland *Contact: Kaj Juslin*	ProcSee used for GUI in training simulator for engine control room of the MS Finnhansa	1998
Kværner Ships Equipment, Norway *Contact: Wolfgang Trötscher*	ProcSee used for GUI in advanced electronic monitoring system at the bridge of Stena high speed super ferry ProcSee used for GUI in cargo handling system	1995 Updated 1996 1995

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4) Environmental Monitoring Systems

Customer	Application	Year of delivery
Kola Nuclear Power Plant *Contact: Alexandr Kuchin*	Supervision of radiation measurements within and nearby Kola Nulear Power Plant	2012 Updated 2013-2014
Arctic Military Environmental Cooperation / Norwegian Defence Research Establishment, Norway *Contact: Monica Endregaard*	Supervision of radiation from dismantlement of Russian submarines. Installations at RTP Atomflot and Polyarninski Shipyard. Read more…	2000 Updated 2001-2005
Siemens AG, Germany *Contact: Axel Grobe*	Radioactivity monitoring system for the surroundings of nuclear power plants in Hessen	1995 Updated 2000, 2010

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5) Miscellaneous

Customer	Application	Year of delivery
Technical University of Denmark *Contact: Prof. Morten Lind*	ProcSee to visualise multi-level 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. Prototyping HSIs for supervision of electrical power grids	2010 Updated 2011-2017 2013 Updated 2014
Scandpower Information Technology / Thales, Norway *Contact: Bjørn Brevig*	ProcSee to monitor mobile military telecommunication networks (more than 200 installations)	1994 Updated 1995-2007