Atos Origin

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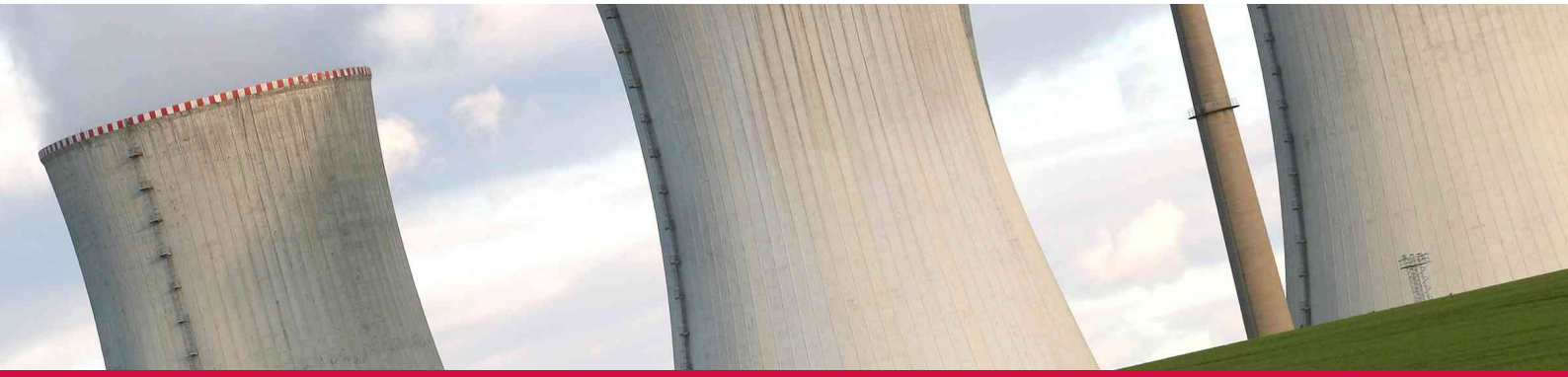

REAL TIME CONTROL SYSYTEMS »

BRINGING SAFETY, SUSTAINABILITY AND SUPERVISION TO NUCLEAR PLANTS

As natural resources become ever scarcer, there is renewed worldwide interest in nuclear power. And as the number of nuclear programs in the world increases, the potential grows for instrumentation and control systems for both new systems as well as the more than 200 existing reactors that will require refurbishment.

After 20 years of a nuclear development freeze, Atos Origin is one of a limited number of specialized players who have maintained and developed their expertise and resources in this field. Our Nuclear Instrumentation and Control offering, the ADACS-N, is a solution to equip nuclear plants with a fully Digitized Control System (DCS) to run plant procedures in a safe and reliable way. And, besides the Nuclear plants themselves, the solution also covers power grid management and the complete system used in the nuclear industry for simulation and for predictive maintenance.

PROVEN SOLUTIONS FOR NUCLEAR INSTRUMENTATION

Nuclear Instrumentation and Control solutions from Atos Origin provide utilities with monitoring and command control systems for Nuclear plants. In this important market where proven experience is critical, Atos Origin has expertise going back to 1977 with the upgrade of the monitoring system for the 1300MW French series. We also developed a unique computerized control system for the N4 EDF series.

The current Nuclear Instrumentation and Control offering is a solution to equip nuclear plants with a fully Digitized Control System (DCS). Our solution is the ADACS-N, a real-time system designed especially for Nuclear Plants and able to handle more than 40,000 I/O, and to perform all calculations required to guide an operator to run procedures in a safe and reliable way.

FULLY DIGITIZED CONTROL SOLUTION

The solution is based on the development of a fully digitized control system ADACS-N. It includes an embedded and innovative disaster recovery process which displays the correct alarms in order to allow the operator to react quickly and efficiently. This solution is also used to stimulate a full scope simulator for operator training and catastrophe recovery process improvement, “off-line” ADACS based system. The solution is hardware independent and results in an open computerized command platform. It provides utility companies with:

- Regulatory compliance
- Global I&C Integration
- Innovative technology transfer
- Vendor independence

It can also be adapted to address the refurbishment market. This is the renewal of the I&C system of a plant to extend its lifecycle beyond 25 years of operation up to 30 to 40 years, or even to 60years. This potentially concerns more than 200 reactors worldwide and Atos Origin has already begun carrying out work in this area for British Energy (UK).

OVER 30 YEARS PROVEN EXPERTISE

Our solution is unique in the market thanks to a long track record of operations including partnerships with major industrial companies like Westinghouse and Invensys. A key factor in our success has been our ability to demonstrate to the Nuclear Authorities the reliability that can be imposed by the system in place. We also offer:

- 30 years of I&C SI experience in a growing business where expertise is rare
- Independence from hardware manufacturers
- Unique availability record - a key factor for the Nuclear Authority
- The benefits from a long-term partnership with EDF, a key player in nuclear operations worldwide
- Proven reputation as Global Integrator of complex projects

EXCELLENCE IN SUPPORT AND RESOURCES

In this highly specialized area, Atos Origin can currently offer:

- 300 highly educated professionals, 60+ project managers
- Over 30 years of experience
- 300 monitoring and control systems over 100 nuclear sites
- 20 years partnership with, and the confidence of, one of the major European Utilities (EDF)
- CMMI 3: continuous practices improvement

To ensure continuous development in skills and support, Atos Origin has an established Centre of Excellence in France. This Centre supports projects around the globe and offers a full range of services from Consulting & Implementation to hosted Managed Services and maintenance.

NUCLEAR I&C SYSTEMS WORLDWIDE

Atos Origin has implemented many nuclear monitoring systems worldwide including:

- France - I&C real-time solutions in 58 Nuclear Reactors
- Russia - Kalinin NPP (prototype - unit 2) and Beloyarsk NPP (BN-600)
- People’s Republic of China – 5 Nuclear Reactors
- United Kingdom – 2 Nuclear Reactors and I&C Renovation

For More Information
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