



Altran Solutions offers a broad range of Digital Control System (DCS) engineering, programmatic and project management consulting services to meet the unique needs of nuclear and conventional power generation clients.

Altran Solutions' DCS consulting experience includes assessment of existing control system performance, analysis of susceptibility to obsolescence, development of comprehensive I&C Upgrade Strategic Plans, as well as technical and economic analysis of DCS platforms. Altran helped to develop the DCS Upgrade Licensing Guidelines with EPRI.

Altran also performs the detailed engineering to design and support complete DCS upgrades. At one nuclear utility Altran has participated in every DCS upgrade effort since 1985—a total of twenty-nine projects to date.

Clients include STARS and other nuclear facilities, Duke Energy, Pacific Gas & Electric Co, Sacramento Municipal Utility District, Mirant and others.

Services

- ❖ Long-term digital upgrade strategic plan development and support, including:
 - Assessment methodology development
 - Detailed assessment: priority ranking, risk and consequences, and economic evaluations
 - Alternatives and associated risks
 - Cost and schedule planning

- ❖ Comparative analysis of DCS platforms for safety-related applications
- ❖ Comparative analysis of DCS platforms for site-wide safety-related and non-safety applications
- ❖ Verification and Validation (V&V) support documents, including
 - Conceptual Design Document (CDD)
 - Functional Requirements Specification (FRS)
 - Hardware Requirements Specification (HRS)
 - Software Requirements Specification (SRS)
 - Software V&V Plan (IEEE 1012, RG 1.168)
 - Software Configuration Management Plan (SCMP)
- ❖ Performance degradation and obsolescence assessment
- ❖ Digital Architecture Plan
 - Communications protocols
 - Human-machine interfaces
 - Network design
 - Plant network integration
- ❖ Detailed Engineering
 - System design
 - Equipment selection
 - Configuration, programming, software QA, validation and verification, factory and field testing
 - Installation and startup
- ❖ Procurement assistance
- ❖ Project management
- ❖ Coordination of specialty suppliers



For more information on this capability, Please contact us at (617) 204-1000 or via e-mail at sales@altransolutions.com