Modernizing a Honeywell TDC 3000 Infrastructure with Honeywell’s World-Class Experion PKS Control System

In 2013, a large energy firm contracted control systems integrator Industrial Design Solutions to migrate the TDC 3000 control system running at one of their generating stations to the latest Honeywell Experion system.

BACKGROUND
A large power generating utility came to IDS for assistance migrating their obsolete TDC 3000 control system to a new Honeywell Experion system. Plant personnel wanted to extend the life of their control system, improve troubleshooting and increase system reliability.

SOLUTION
IDS worked closely with the utility and Honeywell to develop a state-of-the-art DCS migration solution. Along the way, IDS migrated HPM controllers to C300, while retaining existing Process Manager I/O (PMIO). Custom logic was either retained or improved, and the graphical interface was vastly updated to improve performance and become compliant with ASM standards.

THE BOTTOM LINE
IDS works closely with clients to provide major control system upgrades within plant schedules and budget constraints, ensuring customers are 100% satisfied 100% of the time.

SOLUTION BENEFITS
- Fully customized process control solution, using redundant and secure Honeywell Experion PKS Infrastructure
- Easy-to-read system logic documentation using SAMA-style symbols in Control Builder
- Ensured compliance with NERC-CIP regulations
- Close-knit customer and IDS team that ensured a clean control system migration meeting customer needs

SOLUTION ROI
- Extended equipment life reduces risk of unplanned outages and improves reliability
- NERC compliance reduces risk of audit failures
- Modernized troubleshooting infrastructure reduces maintenance costs

SOLUTION PLATFORM
- Honeywell Experion PKS control system with C300 controllers
- Combination of C300 I/O and Process Manager I/O
- Up-to-date Windows-based DCS with server and workstation virtualization

Project Duration: 18 months