

## Case Study

### Progress Energy Minimizes Hardware Cost with Experion PKS Virtualization



“We chose Honeywell for this project because of previous success with upgrade projects and because we have a long term goal of one common operator system in the main control room.”

- Dave Hooten, Supervisor of Major Projects, Electrical/I&C Design, Progress Energy, Harris Nuclear Plant, New Hill, NC

#### Background

Progress Energy, headquartered in Raleigh, N.C., is a subsidiary of Duke Energy and until its 2012 merger with that company was a Fortune 500 energy company with more than 21,000 megawatts of generation capacity and \$9 billion in annual revenues. Progress Energy includes two major electric utilities that serve approximately 3.1 million customers in the Carolinas and Florida.



Shearon Harris Nuclear Generation Station

#### Challenge

This project focuses on upgrading the radiation monitoring system to integrate with Experion PKS. The primary challenge to overcome in this implementation is replicating the plant design in the operator training simulator in a non-hardware intensive, cost-effective manner.

#### Benefits

Scheduled for completion by Fall 2013, the radiation monitoring system upgrade to Experion PKS will provide these primary benefits:

- Enables Progress Energy to retire certain aging legacy technology that is becoming increasingly unreliable and placing a burden on maintenance;
- Changing the topology of the system allows Progress Energy to eliminate some unneeded radiation monitors, thereby reducing operating and maintenance costs;
- Enables Progress Energy to replace older control room HMI technology with the Experion HMI.

#### Solution

“Using Honeywell’s virtualization technology, we were able to implement a lot of the project requirements using software to minimize the hardware cost. We had previously evaluated perhaps a dozen different available Distributed Control Systems and narrowed it down to three finalists,” said Dave Hooten.

“We chose Honeywell for this project based on previous successes with upgrade projects. In addition, our long-term goal is to integrate our instrumentation and control system upgrades into the Experion PKS so they have one common operator system in the main control room.”

#### Results

“We are very satisfied with the return on investment – not just from an immediate standpoint, but also from the way we are positioned to continue to benefit from the investment for future additions. The thing we like best about the Honeywell product and services is the continual innovation and advancement of the products. The service we get from our Account Manager is outstanding. Whenever there is an issue or a problem, we call him and, in no time at all, it seems that we have a solution and a resolution to the issue,” said Dave Hooten when asked to characterize the results of this project.

### About Experion PKS

Experion Process Knowledge System (PKS) integrates an advanced automation platform and innovative software applications to improve users' business performance and peace of mind. Unifying people with process, business and asset management, this distributed control system (DCS) helps process manufacturers increase profitability and productivity. It's the only automation system that focuses on people — making the most of the knowledge they hold. By integrating disparate data across facilities, making the most of resources and people, and feeding it all into a unified automation system, users can achieve an operation that's more proactive, efficient and responsive.

### About Experion PKS Virtualization

For many of today's manufacturers, the process control environment requires separate servers to support different applications. Virtualization resolves this issue by allowing a single server to run multiple operating systems and applications simultaneously. It also improves reliability by insulating these operating systems from hardware changes and the net benefit to users results in lower operational costs.

HPS' virtualization offerings are developed with VMware®, the world's largest supplier of virtualization products and solutions. These solutions help industrial plants reduce PC hardware requirements and minimize the frequency and impact of operating system and hardware changes while simplifying overall system management and improving availability, reliability and disaster recovery.

HPS' holistic approach to industrial virtualization encompasses the delivery and support of virtualization infrastructure uniquely tailored to the needs of the process control industry. Additionally, Honeywell provides a full range of applications that can be supported through virtualization, providing end users with a complete solution right out of the box.

### For More Information

Learn more about Honeywell's products and services, visit our website [www.honeywellprocess.com](http://www.honeywellprocess.com) or contact your Honeywell account manager.

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