



# Johnson Controls ESCO Qualification Sheet DOE Super ESPC

## Introduction to Johnson Controls

Johnson Controls has been a worldwide leader in building controls and efficiency for over 120 years (since 1885). Johnson Controls has developed, designed, installed, financed, measured, verified, operated, maintained, and guaranteed the savings for more than 2,500 projects for our diverse customer base worldwide. Under current Federal ESPC contracts, we have developed and implemented more than 75 projects for various agencies, including the Army, DOE, Air Force, Navy, General Services Administration, Department of Veterans Affairs, Justice Department, Department of the Interior, and others.

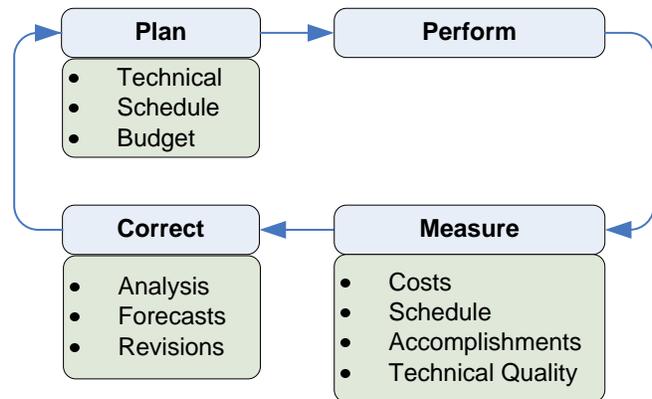
Johnson Controls manages a performance contracting portfolio in the U.S. of over \$4.3 billion

Our engineering, implementation and construction, and ongoing Operations and Maintenance (O&M) services and Maintenance and Verification (M&V) activities are performed through 500 branch offices located in 125 countries worldwide.

## Johnson Controls ESPC Approach

Our Energy Savings Performance Contracting (ESPC) Program requires the ability to analyze, design, implement, commission, operate, measure and verify, maintain and repair energy savings systems. It requires the resources to execute projects in any part of the United States and its possessions, often simultaneously. Our cost, schedule and technical control systems integrate our ESPC Program Office, local branch offices, subcontractors, and clients into a team, focused on completing a superior project on time and budget.

We place emphasis on creating a detailed budget, schedule, and technical plan, then carefully monitor actual performance and compare it to the plan. Where performance and plan deviate significantly, variances are reported and analyzed for appropriate management action, which may include revising the plan. Our controls have enabled us to deliver our ESPC projects on time and within budget, and rarely necessitate change orders.



ESPC Project Management System — Comprehensive Planning, Frequent Monitoring, and Preemptive Corrective Actions Keep ESPC Projects on Track

## Johnson Controls ESPC Experience

Johnson Controls has comprehensive capabilities in all 19 Technology Categories listed in the DOE contract. Our development and delivery model allows us to efficiently implement ECMs. We offer a wide range of development, engineering, installation, commissioning, M&V, and O&M capabilities. Our capabilities range from installing low-cost improvements such as installing optimum start controls to highly complex central plants using co-generation to serve heating and cooling needs for large scale campus style facilities.

## Project Experience Examples

<b>DOE Oak Ridge National Laboratory</b> 	Location	Oak Ridge, Tennessee
	Scope of Work	The biomass gasification system will take the place of the existing natural gas steam plant and steam distribution system. ORNL plans to showcase the biomass gasification system as an educational resource to augment their applied renewable energy research at the newly constructed Bioenergy Science Center at the site. The project also includes a Cleaver-Brooks Super Boiler and water conservation measures, which will also reduce water usage by more than 115 million gallons annually, resulting in a long-term reduction of 16%.
	Investment	\$88,110,334
	Annual Savings	\$8,723,219
<b>U.S. Army Aberdeen Proving Ground</b> 	Location	Aberdeen Proving Ground, Maryland
	Scope of Work	Johnson Controls has implemented several projects at the site. The first project encompassed improvements to the generation and distribution of central steam in the Southern Cantonment. The project included installation of advanced controls and related mechanical modifications to the Southern Cantonment's main plants. The project will optimize the co-production and distribution of steam between Aberdeen Proving Ground's steam plants and the Waste-to-Energy plant.  Subsequent projects have included further improvements to the steam distribution systems, boiler plant controls upgrades, high efficiency lighting and related controls, upgraded HVAC control systems, HVAC improvements, space consolidation, energy-efficient lighting upgrades, and electrical transformer replacement.
	Investment	\$39,312,719
	Annual Savings	\$4,041,739
<b>Marine Air-Ground Task Force Training Center Twentynine Palms</b> 	Location	Twentynine Palms, California
	Scope of Work	Johnson Controls implemented multiple projects at the site to install an indirect-fired absorption chiller, a 7 MW dual-fuel cogeneration plant, a solar photovoltaic generating plant, chiller upgrade, controls upgrades, and skylighting and daylighting control.
	Investment	\$69,297,826
	Annual Savings	\$6,744,548
<b>Keesler Air Force Base</b>	Location	Biloxi, Mississippi
	Scope of Work	This project involved steam plant decentralization, chilled water optimization, installation of programmable thermostats in three buildings and smart thermostats in 1,652 rooms in 9 buildings, the conversion of constant volume AHUs to Variable Air Volume Handling Units (VHUs) in four buildings, the conversion of multizone AHUs to VHUs, installation of a waterside economizer, energy-efficient lighting upgrades in over 100 buildings, the installation of VFDs in four buildings, and the installation water conservation technology.
	Investment	\$12,404,017
	Annual Savings	\$1,367,997
<b>Denver Federal Center</b> 	Location	Denver, Colorado
	Scope of Work	Johnson Controls has implemented two projects at the Denver Federal Center to incorporate solar hot water, chiller, chiller and boiler plant improvements, improvements to HVAC equipment, energy management and controls upgrades, lighting system improvements, and domestic water system improvements.
	Investment	\$4,221,863
	Annual Savings	\$444,125

 Denotes a project that includes a Renewable Energy component

## Contact Information

**Dave Howard**  
*ESPC Program Manager*

21033 Fowlers Mill Circle  
 Ashburn, VA 20147

[david.l.howard@jci.com](mailto:david.l.howard@jci.com)  
 Phone: (703) 729-1448  
 Cell: (571) 246-6748

[www.johnsoncontrols.com](http://www.johnsoncontrols.com)