



Poorly coordinated control system testing and commissioning can add financial and safety risks to control system projects. Ready knows how to individually track thousands of I/O signals from installation through start-up. The end result is that functionally verified and documented systems are released to Operations in the sequence and time needed for a successful plant start-up.

Ready does more than just provide skilled engineers and technicians for this critical part of a control system project. We take ownership of it. Throughout our involvement in a project, Ready identifies potential work scope gaps that present risks to the project and offer productive solutions to our customers. We recognize and share our customer's interest in the success of the project.

### **INDUSTRY EXPERTISE**

- Experience commissioning and coordinating projects with over 20,000 I/O points.
- Coordination and testing of complete facility instrumentation and controls systems (replacements or new installations).
- Responsible for team selection, training and management, ensuring that we have the properly qualified group to get the job done.
- Communication with all construction vendors to ensure coordination between electrical, mechanical, instrumentation and control system work scopes.
- Development of complete tracking processes, commissioning plans and procedures, data sheets, and progress reports.

### **BENEFITS**

- Accurate, real time project status during the transition from construction to start-up that allows risks and opportunities to be recognized.
- Reduced start-up delays and rework.
- Increased manpower productivity.
- Reduced risk of equipment damage.
- Reduced costs.

### **INDUSTRIES**

Nuclear Power Generation	Mining
Coal Fired Power Generation	Food and Beverage
Cogen Power Generation	Waste Treatment
Oil and Gas	

### **TYPICAL CLIENTS**

DAK Americas	Pioneer
Frito-Lay	TransAlta
Luscar	Westinghouse Electric
PacifiCorp	

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## **TYPICAL COMMISSIONING AND START-UP PROJECTS**

### **Nuclear Facility Control System Replacement, Sweden.**

Project recognized as the first complete control system replacement at a nuclear power plant and the largest ever controls upgrade in the industry. Ready provided teams responsible for improving, implementing, and tracking commissioning procedures, managed multiple troubleshooting teams, provided technical instrumentation and DCS support to commissioning teams, and provided commissioning and start-up project management and support. Using our commissioning experience, Ready quickly identified opportunities to increase efficiency, decrease bottlenecks, improve procedures and develop project tracking and controls. Ready provided the project team with expertise in the commissioning process and proactively identified project risks, proposed complete solutions, and provided short and long-term resources to implement these solutions.

### **Coal Power Plant - Owner's Engineer and Commissioning Manager, USA.**

As Commissioning Manager, Ready was responsible for scheduling, coordinating, and tracking over 3500 IO points as they passed through the construction, commissioning, testing, and start-up phases of the project. Ready was responsible for daily tracking and reporting, resource allocation, troubleshooting, and documentation during the shutdown and start-up. Tasks included coordinating several vendors, contractors, and owner stakeholders to coordinate work with other concurrent projects, identifying and minimizing conflicts and project risks.

### **Cogen Facility Commissioning and Start up support, USA.**

Filled role of I/C Commissioning Engineer for a 248MW cogeneration facility consisting of 4 GE LM6000's with a single MHI 80MW steam turbine. Developed loop test and function test procedures for each plant system. Managed I/C commissioning personnel and tracked progress to ensure systems were commissioned and turned over to operations to meet the plant start-up schedule.

### **Coal Preparation Plant 1200 tph Expansion Commissioning and Start up Manager, Canada.**

Ready was the commissioning and start-up lead for major mechanical, electrical and control automation upgrades of the Wash Plant, ROM/Breaker, Thermal Dryer, and Train Load Out processes of the Coal Preparation Plant. Ready was responsible for outage scheduling and establishing construction and commissioning plans, and performed daily coordination of equipment installation and commissioning. Ready managed the customer's risks during the construction and start-up phases of the project, and improved overall efficiency of the commissioning process.

### **Greenfield Agricultural Seed Cleaning Facility Construction, Canada.**

Ready was responsible for control system implementation for a Greenfield seed cleaning facility. Through thorough bench testing, loop and functional testing and field checks, plant start-up was achieved ahead of schedule with a minimal amount of technical issues and troubleshooting required.

### **Food Manufacturing Packaging Line Upgrade, Canada.**

As automation technical lead, Ready was responsible for ensuring vendor and third party systems integrated smoothly and operated as expected. I/O checks, network infrastructure and balance of plant interfacing issues were identified and efficiently addressed prior to and during shutdown to ensure the system was turned over to Operations ahead of schedule.

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