

Emerson Outage Services Save Customers Time and Money



RESULTS

- Calibration labor cut in half by preset calibrations and paperwork reduction
- Instrument calibration time is reduced by up to 50%
- Calibrated 123 devices complete with certification in 8-10 working days
- 90-plus valves evaluated and repaired as necessary during one outage



APPLICATION

Power industry customers frequently employ Emerson professional services to help improve production and assist in quality control. This often involves calibration of analog and digital transmitters, switches, and control valve positioners. Determining the operating condition and performance capabilities of control valves during planned outages is another valued service.

CUSTOMER

Three Emerson Process Management customers in New England periodically engage the local team of personnel from Emerson's Instrument and Valve Services (IVS) and New England Controls (NEC), an Emerson Local Business Partner, for outage services:

- Boston Generating Company, Mystic
- Boston Generating Company, Fore River Station
- Public Service Company of New Hampshire (PSNH), Newington, NH

CHALLENGE

Power stations frequently need to calibrate hundreds of field devices and examine dozens of control valves during a two-week outage.

It was always a challenge to complete calibration projects on time using old methods involving the use of a calibrator, pen, and paper, manually documenting what was done with each device and noting the results. The data later had to be transcribed onto a permanent record for each device. In some cases, field notes were keyed into a computer database. The process was slow and error-prone.

“The AMS Device Manager has helped us increase productivity through not having to keep paper documents in files. Bringing up ‘Cals’ and data is much easier, and we are less apt to lose or misplace precious calibration data. The AMS Device Manager has all but replaced the need for installing all the calibration documents and procedures into our Maintenance Management System (CMMS). In a plant that relies on nearly 8500 I/O points, that represents a huge time savings.”

Rodd Ligols
Maintenance Manager,
Boston Generating Company, Fore River Station

SOLUTION

Emerson's AMS™ Suite: Intelligent Device Manager can have a profound impact on the field calibration of instruments. According to Hakon Dybwad, NEC Field Service Engineer, "The time required to calibrate field devices and produce test results using AMS Device Manager has been reduced by between half and two-thirds, compared to older, more conventional methods."

Using AMS Device Manager Calibration Assistant, pre-planned calibration routes and calibration data for up to 220 devices are downloaded from the AMS Device Manager database to a documenting calibrator. A field service engineer then goes from instrument to instrument following an established calibration procedure. At the end of the day, data on all devices calibrated are quickly and easily uploaded to the database, creating a permanent, error-free record of each calibration.

Emerson outage services save customers time and money in many ways:

- Technicians from the Emerson team performed multiple calibrations in February and May, 2005. During each outage, approximately 350 devices were calibrated in about nine technician/days. In addition, the "ALERT MONITOR" feature of the AMS Device Manager was used with nearly 70 FIELDVUE® Digital Valve Controllers that are part of an online system connected through several multiplexers.
- Another customer has a 1000-tag off-line AMS Device Manager for which NEC provided on-the-job training for I&C technicians at the site. The training covered installation and commissioning, database layout, creation of test schemes, and calibration of some 200 devices.
- One facility has an online AMS Device Manager connected through an OVATION® control system. When the OVATION system was powered up, the AMS Device Manager was used for loop checking to "wring out" the points and simultaneously verify that the control system was correctly scaled and configured. A total of 123 devices were calibrated during an 8 to 10 day period.
- During Fall and Spring outages at one power plant, two or three technicians typically examine 90 or more control valves using the Emerson Flowscanner™ Valve Diagnostic System to identify valves needing maintenance. According to Peter DiSanto, area manager for IVS, "Without accurate information regarding the true condition of those valves, the company cannot know which valves to repair and could totally miss some valves. We provide that critically important information."

**Emerson Process Management
Asset Optimization Division**
12001 Technology Drive
Eden Prairie, MN 55344 USA
T 1(952) 828-3206
F 1(952) 828-3033
www.assetweb.com

©2006, Emerson Process Management.

The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.

All rights reserved. AMS™ Suite, PlantWeb®, ValveLink, FIELDVUE, Flowscanner and OVATION are marks of one of the Emerson Process Management group of companies. The Emerson logo is a trademark and service mark of Emerson Electric Co. All other marks are the property of their respective owners.

"Last year we started a preventive maintenance plan using a combination of AMS Device Manager and a documenting calibrator to calibrate our smart transmitters. The results have been great. The time we take for calibration is decreased greatly, sometimes by half, because of the preset calibrations and the absence of paperwork. The calibrations are loaded in the documenting calibrator electronically, and the results are uploaded the same way into the AMS Device Manager database. The Audit Trail option helps us also to keep a closer look on our instruments. It also keeps our data organized, up to date, and easy to access."

Jorge Avila and Dave Trieb
Boston Generating Company, Mystic,
Charlestown, MA



EMERSON
Process Management