**Is It Within Your Reach to Provide Adequate Information?**

*If a thing is humanly possible, consider it to be within your reach.*

What would Marcus Aurelius, the Roman emperor and Stoic philosopher, have said about the CRM requirement to “provide controllers with the information, tools, processes and procedures necessary for the controllers to carry out the roles and responsibilities?” Would he believe it is humanly possible and within your reach to provide adequate information? Do you believe it is humanly possible? Are you extending your reach to assist controllers?

I find it interesting to read the actual regulatory sentence above that appears all encompassing and then know that the emphasis is mostly on applying SCADA display standards in control rooms, performing point-to-point verifications, developing and testing plans for manual operations if all communications are lost, testing backup SCADA systems and control rooms, and implementing a shift change process with specific items included.

The results of our human factors assessments in control rooms in the USA, Canada, and Australia indicate that improvements could be made in providing controllers information, tools, processes, and procedures. But companies have struggled to reach compliance even with the five specific items in the “adequate information” section of the CRM rule.

Are you resistant to meeting the requirements in 2018, six years after the 2012 date of required implementation? Some items we have seen and still see are:

* Failing to include the items from API Recommended Practice 1168 in shift change practices/checklists and therefore those items are not discussed at shift change.
* Defining what constitutes an addition to or expansion of a SCADA system as a result of a change.
* Obtaining compliance with API Recommended Practice 1165 after making an addition to or expansion of the SCADA system.
* Developing internal documentation for compliance with API Recommended Practice 1165 so that compliance can be demonstrated.
* Defining what a safety-related point is for point-to-point verification.
* Wanting to begin at a point somewhere in between instead of beginning at the field device and ending at the SCADA display for point-to-point verification.
* Determining what is a “timely manner” for completion of point-to-point verification.
* Failing to have a comprehensive plan for manual operations of the pipeline in the event of a loss of communications.
* Failing to test the plan, if you have one, for manual operations of the pipeline in the event of a loss of communications.
* Denying that some backup SCADA servers are backup SCADA servers in order to avoid testing them.

You should have a goal of providing controllers all of the information they need in user-friendly ways. It does not make me feel good to watch pipeline company personnel have difficulties with these requirements and suffer, although not in silence. I will end with a quote from Seneca that is worthy of reflection for those suffering from CRM issues.

*We suffer more often in imagination than in reality.*