

## Staying Current on Regulations

This series of articles on CRM effectiveness has provided information on general program effectiveness, on roles and responsibilities, SCADA, and fatigue education. This month, I want to emphasize that an effective program is one that ensures new regulatory requirements are incorporated into a CRM Plan.

The January 23, 2017 Federal Register added two amendments to the CRM regulations. Have you read those amendments, implemented the one that is required now, and made plans to implement the one that is due by January 23, 2018?

The one amendment that is required now is that the CRM procedures define: *(b)(5) The roles, responsibilities and qualifications of others with the authority to direct or supersede the specific technical actions of a controller.* If your company has people (supervisors, analysts, managers) who have the authority to direct a controller and overrule their actions, then an effective CRM Plan defines people in that role, their responsibilities, and their qualifications. It is easy to write, in a CRM Plan, the role and responsibilities. Defining their qualifications and the subsequent training requirements is more difficult.

I am aware of control room organizations that have “qualified” supervisors to shut down a pipeline system in the event of an emergency, although that does not seem to be a best practice or a usual practice. Even though I understand the rationale, a person who is not familiar with the current pipeline system configuration and conditions might contribute to an accident. If a person is going to be given the responsibility (and authority) to direct or supersede a controller’s actions, shouldn’t that person have the same qualifications as the controller? That seems to be effective, if not efficient.

The second amendment is that the controller training program include: *(h) (6) Control room team training and exercises that include both controllers and other individuals, defined by the operator, who would reasonably be expected to operationally collaborate with controllers (control room personnel) during normal, abnormal or emergency situations. Companies must comply with the team training requirements under this paragraph no later than January 23, 2018.* That requirement seems to be causing, as the Bible says, weeping and gnashing of teeth.

One of the reasons for consternation and frustration is that PHMSA stated that they would provide guidance on team training and have not done so yet. It places companies in a tough situation, since the amendment sets a deadline for conducting the training.

Some guidance can be gleaned from the *NTSB Safety Recommendation P-12-08* to PHMSA that prompted the amendment to the CRM regulation and from the *PHMSA Advisory Bulletin “Pipeline Safety: Lessons Learned From the Release at Marshall, Michigan” PHMSA-2014-0020* that preceded the amendment:

- Develop requirements for team training of control center staff involved in pipeline operations similar to those used in other transportation modes. (NTSB)
- PHMSA advises operators to regularly train their control room teams and consider establishing a program to train control center staff as teams in the recognition of and response to emergency and unexpected conditions that include supervisory control and data acquisition indications and leak detection software. (Advisory Bulletin)
- PHMSA strongly encourages operators to review past and future NTSB recommendations that the NTSB provides to pipeline operators following incident investigations. Operators should proactively implement improvements to their pipeline safety programs based on these observations and recommendations so that the entire industry can benefit from the mistakes of one operator. (Advisory Bulletin)

Other guidance can be found by studying the *NTSB Accident Report Enbridge Incorporated Hazardous Liquid Pipeline Rupture and Release Marshall, Michigan July 25, 2010 (NTSB/PAR-12/01)* and certain sections of the final rule, including 4. *PHMSA Response on Control Room Management (Paragraphs 192.631 and 195.446).*

We regularly review current and pending CRM related regulations, NTSB reports and recommendations, and human factors information from other transportation modes and hazardous industries. While it is difficult to manage operations and stay current on regulations, effectiveness requires it.