Technology Section Feature

Technology Initiatives in the Short Line Industry

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The ASLRRA represents our nation's 550 short lines, which operate 38% of the national freight rail network. These railroads are entrepreneurial, small businesses that are a vital part of our economy, providing cost-effective, environmentally-efficient access for thousands of industries. In a wide portion of rural America, short lines are the only access to market, keeping jobs and industry local. One in four carloads is served in origin or destination by a short line railroad.

Short Lines are subject to the same rules and regulations as Class Is, yet have a vastly different operating reality. Most employees wear more than one hat; on average a short line's length is 91 miles, many as short as 10 miles, as opposed to the 95,000 mile network operated by the Class I railroads; short lines are often family-owned and thus are more challenged in raising capital than Class Is.

Technology has certainly helped small railroads be more efficient, and safe. Technologies that are particularly helpful are those that enable the small workforce to do more, such as online training programs, or software for yard management and scheduling. Other technologies, such as remote inspections, drive efficiencies while helping safety.

The Federal Rail Administration (FRA) is the oversight body for short lines as well as Class I freight railroads. ASLRRA is highly engaged in representing the interests of our members in rulemaking and adjudication. The recent Positive Train Control Regulation (49 CFR Part 236, Subpart I – Positive Train Control Systems) is one example of how ASLRRA was active in guiding rulemaking. However, the final rule is highly complex, and beyond the technical expertise, or capital structures of many short lines.

Many of our railroad members transport hazardous materials and will be required to be PTC equipped by the end of 2023. However, at least 92 short line and regional railroads are being told by their Class I host railroads that they have to be so equipped in 2017 and beyond.

To assist our short lines in complying with the rule, ASLRRA sought and received a PTC grant from the FRA. The $2.5 million grant was made available through FY 2016 Railroad Technology Grant Funds.

The objective of the ASLRRA in this project is to provide its members with a Crew Initialization Back Office Server System (CI-BOS) that meets the requirement that trains operating on any track segment equipped with a PTC system must be controlled by a locomotive equipped with an onboard PTC apparatus that is fully operative and functioning in accordance with the Federal PTC regulations. The problems facing short lines and regional railroads are significant and include the lack of funds to develop such a system, the lack of expertise to do so, the timing of developing a system in time to meet the requirements of both the

regulations and the host Class I railroads, and the lack of trained personnel to implement and maintain a system.

This project addresses and resolves all these problems by:

- collaborating between the railroad supplier (ASLRRA) and freight railroads (short line and regional railroads) particularly related to interoperability and other industry-wide PTC technical and management issues;
- allowing ASLRRA to develop and deploy the CI-BOS technology at a lower cost than would be the case if individual short lines tried to develop and deploy their own CI-BOS;
- accelerating implementation by having one entity implementing instead of multiple small railroads simultaneously trying to do so;
- increasing operability between the host Class I railroads as it will serve the tenant small railroads through one central location.

The proposed project will create a hosted service that will serve the needs of small railroads tasked with implementing PTC, particularly those tasked to implement PTC systems that interoperate with Class I railroads implementing Incremental Train Control (ITC) systems. The cost of developing the CI-BOS will be shared by federal funding and subscription payments from participating railroads so that no one railroad has to bear the entire development and implementation cost.

ASLRRA is engaged currently in the selection of a vendor for the project, and expects to approve the final implementation plan by year's end.

We look forward to continuing to update you on our progress.