

**TESTIMONY OF VINCENT G. VERNA  
VICE PRESIDENT AND NATIONAL LEGISLATIVE REPRESENTATIVE, BROTHERHOOD  
OF LOCOMOTIVE ENGINEERS AND TRAINMEN**

**BEFORE THE FEDERAL RAILROAD ADMINISTRATION  
DECEMBER 14, 2022**

Thank you for the opportunity for these comments. My name is Vincent G. Verna. I am Vice President and National Legislative Representative with the Brotherhood of Locomotive Engineers and Trainmen, a Division of the Teamster's Rail Conference. I have served as National Legislative Representative since 2020, prior to that I served as Director of Regulatory Affairs from 2011 to 2020 and prior to that I worked as a freight locomotive engineer for 18 years for Union Pacific Railroad.

We appreciate FRA holding this hearing and providing BLET an opportunity to testify.

First, we would like to give a brief history of what brings us here and why we believe the NPRM is a good idea. Then I will address some of the exceptions FRA has included in the NPRM and where they have asked for comment, and then wrap up our testimony. We will focus on safety of operations rather than market considerations or supply chain issues, but suffice it to say, we believe reducing freight train crew size is bad for business too.

**History and why we are here**

I'd like to start by reminding everyone the impetus for our testimony today, in fact the reason we are all here. We are here because 47 people lost their lives in Lac Megantic Canada on July 6, 2013. Forty-seven of the train's cars derailed causing multiple explosions and 2000 people to evacuate. As result of this disastrous accident, Transport Canada immediately banned single person operations on trains carrying hazardous materials.

Those 47 people should be alive today, but they are not, and the conditions that existed on the day of the accident left people in America asking: "Can that happen here?", "Is it true there is no law regulating crew size in America?", and "How can this be?". The bad news is nothing in the law prescribes a current minimum crew size in the US. The good news is that most trains do have a two-person crew due to practical considerations (primarily of the safety variety). But crew size is also driven by considerations for routine operations to get the job done, efficiency and for regulatory compliance and existing collective bargaining agreements. The post-2013, Lac Megantic era regarding crew size regulatory action at FRA is on its fourth Administrator.

A single person in the cab of the locomotive, who is at the controls of a locomotive (the locomotive engineer) is not a mobile member of the train crew. They are responsible for the physical manipulation of the controls of the locomotive and its appurtenances (computers, Positive Train Control ("PTC"), Fuel Saving Programs, etc.). To leave the locomotive cab unattended, the engineer must disable the controls, set the train airbrakes, and secure the locomotives and train hand brakes before leaving the cab. This is a time-consuming process and many of the rules that require confirmation of a proper securement (release of the air brakes to test the hand brakes)

require a person on the ground to see if a train moves. This is not readily apparent at the head end of a train. A person needs to see if the train moves anywhere and trains of today can be 4 miles long or more.

FRA responded to Lac Megantic by holding an emergency Rail Safety Advisory Committee (“RSAC”) meeting that would examine crew size among other issues, such as hazardous materials, car placement, and train securement. At that time in 2013, FRA concluded that there were many regulations that required multiple train crew members to comply, such as train securement, air brake tests, and mandatory directives, to name just a few. After a year’s long deliberation in RSAC meetings, railroad stakeholders could not reach consensus in part because of the introduction of Positive Train Control (“PTC”) being made part of the RSAC Task for Crew Size.

There is significant disagreement as to the role PTC should play in a crew size discussion. The people doing the work, who put their lives on the line, want PTC as a tool. However, although PTC offers safety enhancements on the job, train crews understand PTC alone does not do the job of another crew member. It simply has not been required, designed, or implemented to do so. PTC was designed to comply with the PTC Regulation to prevent train overspeed, prevent trains from colliding with other trains and to prevent incursions into work zones. These are important safeguards and train crews want them. However, PTC has not made a train crew’s jobs easier. Rather, it has introduced new complexities and levels of attention capture not seen prior to the implementation of PTC.

### **Administrators Szabo, Feinberg, Batory, and Bose**

To put it simply, former Administrator Szabo started it, former Administrator Feinberg wrote the proposed rule on March 16, 2016 and attempted to publish a crew size final rule (and it was sent back to FRA), former Administrator Batory squashed the rule and tied it to a negative-preemption theory, while current Administrator Bose has now helped usher in the discussion anew with the Notice of Proposed Rulemaking we are addressing today. We are here for unfinished business. Unfinished business that is now almost 10 years old. But really it is much older than that because the drive to reduce crew size is an old story with the railroads. The commercial considerations of railroads to raise profits by slashing their workforce is the oldest habit taught to management. However, in the rail industry, business decisions that may have little consequence in other industries can have outsized significance and negative safety impacts in the railroad industry.

On September 12, 2008, a single-person cab Metrolink train in Chatsworth, California collided with a Union Pacific train killing 25 people and injuring 136. The NTSB ruled that the one-man crew, Metrolink engineer was distracted. Distraction of a single person operating in the cab was also present in the Amtrak 188 train accident in 2013 when an Amtrak train went into a curve over speed and derailed killing 8 and injuring over 200 people outside of Philadelphia, Pennsylvania. A single person operation with an overspeed incident also occurred on Metro North on December 1, 2013, killing 9 and injuring 61.

### **Unplanned events**

BLET cautions that some in the rail industry, and indeed some regulators, see PTC and Fuel Savings software on a continuum and as parts of an overall automation fantasy. A place where railroad technology is only helpful and only sunny skies await ever increasing profits for eternity. When they think of railroad technology, they do not think cutting edge, they think of cutting crew size and cutting corners to do it.

People who work on trains do not see it that way. Locomotive engineers and conductors are realistic and down to earth; their lives and countless others' lives depend on it. Technology in rail operations can be great and improve safety when it works.

When it fails, rail technology is like any other form of technology, useless. The rail technology graveyard is crowded with former gizmos that failed to live up to their promise. Rail technology should also be seen as distinct from other general forms of technology in people's lives for the public to understand what is taking place. In freight operations, currently most of the technology train crews encounter is after-market (meaning placed on the locomotive after its manufacture and not necessarily made to work with a particular piece of equipment as it exists when it is put into service). This means that a lot of rail technology is "bolted on" rather than integrated. This has led to a locomotive cab that is very crowded with technology that has complicated the jobs of the operating crew.

Another point worth considering is that freight trains with less than two crew members are not an advancement in technology, but rather a failure to provide enough people to properly leverage current and future technologies for safety.

Simply cutting the size of a crew for more profits has nothing to do with technology and everything to do with avarice. There is nothing new about greed. Downsizing train crews while upsizing the length of trains is not some kind of scientific breakthrough, it is simply another distasteful feature of Precision Scheduled Railroading ("PSR").

Unplanned events must be contemplated when looking at any exceptions to two-person crews because, most of the time, the unplanned event will necessitate a person who is not the locomotive engineer to assess the problem and help remedy the situation in a team effort with the locomotive engineer at the controls of the locomotive to move it. Unplanned events can include Hours of Service expiration requiring a recrew, crossing gate failures that require protection, locomotive failures that may require switching locomotives within a locomotive consist, undesired emergency application of the train brakes ("UDEs"), hot wheel or hot box detector activations, dragging equipment detector activations, high-wide load detector activations, and train separations or break-in twos where a knuckle breaks or a draw bar is pulled out of a car. Detectors failing can also cause the need for inspection. This gets even more problematic when a railroad has sought and received inspection waivers because if a detector malfunctions and the inspections have been waived, there is no way to determine the health of the air brake system on a train.

### **Trains in other countries (comparison with U.S-quality of comparison)**

We may see some in the industry hold up foreign operations as examples to why single person operations, and sometime zero person operations, are preferable.

Anytime a comparison is made between U.S. railroads and train operations in other countries, there are a myriad of factors to consider. Considerations of terrain, proximity to population centers, train length and weight, type of signal system in use (if any), movement authority, type of equipment overall rail infrastructure and how it is accessed or overlaps with non-railroad infrastructure such as public roads, bridges, real estate near tracks. Simply put, comparisons between countries' freight rail operations often suffer from the fact that the operations and the countries being compared are not comparable. This could be due to a variety of factors as listed above. It could also be due to very different workforces and employee cultures on the job.

### **Areas where FRA is Seeking Comment**

#### **Positive Train Control**

Requiring a two-person crew at locations or on routes where PTC is not installed is a good idea but does not go far enough. Clarification is needed to ensure that if "railroad x" has PTC, they should also be required to have a two-person crew. The public should be reminded as many times as they can hear this fact. PTC was not designed to perform the tasks of a crew member. PTC installation or not, a second crew member is vital to safety.

As pointed out earlier, FRA's PTC regulation was promulgated to prevent train overspeed, prevent trains from colliding with other trains and to prevent incursions into work zones. These are important safeguards and train crews want them. They help place a backstop on human error. Many rail systems and other systems where there is a low incidence but high consequence of accidents are designed with fail safes (e.g., nuclear power, aviation). However, PTC has not made a train crew's job easier. It has introduced new complexities and levels of attention capture not seen prior to the implementation of PTC. As mentioned, the nature of how technology has been introduced into the locomotive cab has left train crews looking at more computer screens with more prompts and more electronic communications between the crew doing the work and the computers requiring attention and feedback from that crew. How people interact with hardware and software at work is classically referred to in human factors studies as human machine interface issues. As those issues become more prevalent, the need for a two-person crew becomes even greater.

#### **Railroad Safety Risk Reduction Systems**

This rule would require a railroad submitting a petition to operate with fewer than two crewmembers to consider and address the safety risks of such operations by conducting and submitting to the FRA a risk assessment of the proposed operation to ensure it meets acceptable rail safety standards. The proposed risk assessment requirement would follow accepted hazard analysis processes and provide for the mitigation of identified hazards to acceptable levels.

In this rule, the FRA also proposes to allow railroads to use an alternative risk assessment when submitting a petition if they demonstrate to the FRA that the methodology and procedures provide at least an equivalent assessment of risk as the specific methodology and processes proposed in this rule. BLET believes that allowing for an "alternative risk assessment" needs to be

appropriately defined on exactly what the word “alternative” means as far as what FRA finds acceptable and compliant with the regulation. We agree that railroads need to justify operating with less than two crewmembers, but the next step that allows for alternative risk assessment must not only provide an equivalent assessment, but also provide an equivalent level of safety.

### **Fatigue Risk Management Plans**

In 2022, FRA released its final rule on Fatigue Risk Management Plans (“FRMP”). The Rail Safety Improvement Act of 2008 (“RSIA”) mandated that certain rail carriers adopt FRMP’s as part of their overall Risk Reduction Plans (“RRP’s”). The RSIA was passed in response to the Metrolink accident in Chatsworth California that resulted in 25 deaths. It cannot be said with certainty that another crew member in the cab during Chatsworth accident would have prevented it from occurring. Still, it is not hard to conclude that another human inside the cab would have helped avert the accident.

BLET believes that the success of FRMP’s will depend on the success of what FRA refers to as the “consultation provision.” Due to the RSIA of 2008, it is required that railroads use “good faith and best efforts” to reach agreements with their employees and their organizations. This means that employees need to be considered and consulted when developing a FRMP plan on every railroad that is required to have a plan. Through this interaction, we are hopeful railroads will develop plans that acknowledge the safety that is enhanced by employees working in the cab. Engineer and conductor teamwork in the locomotive cab is key to safety. A strong FMRP will acknowledge a two-person crew as a core safety principle.

### **Risk Assessments**

Many times, the public and the employees will hear arguments from various railroad industry spokespersons that there is no data to demonstrate that operating with two person crews is safer than one. This self-serving argument is similar to that of the tobacco industry that maintained there were no dangers associated with smoking or the NFL denying any data related to head injuries. The fact is that authorities in Canada have concluded that single-person train operations have the “potential to degrade safety.” Canada’s Transportation Safety Board (“TSB”) makes this clear in their recommendation regarding Risk Assessments and crew size.

FRA points this out in the NPRM, stating:

However, TSB of Canada found that the risk of implementing single-person train operations is a risk that must be addressed because it is related to unsafe acts, unsafe conditions, or safety issues with the potential to degrade rail safety. TSB of Canada concluded that addressing the risk of one-person operations is essential to preventing future similar accidents, even if the risk itself cannot be determined to directly have led to this accident. TSB of Canada’s report also highlighted how “risk assessments are particularly crucial when a company makes a change to its operations, since this is when new risks may emerge” and that the railroad’s risk assessment in this instance “did not thoroughly identify and manage the risks to ensure safe operations.”

## **NPRM's Exceptions**

FRA has included in their NPRM exemptions that BLET believes deserve attention.

### ***Helper Service***

On the topic of helper service, the public and FRA should note when a locomotive is utilized to perform helper service, the helper service involves several steps and processes best done with a two-person crew.

The locomotive crew on the helper locomotive may have to run many miles to begin helper service (e.g., as far as necessary to reach a train that needs help over a hill). It may involve a locomotive consist that contains 10 locomotives or more when authorized.

Without a requirement for at least two crewmembers, a single person would be held responsible for securing their train and separating the locomotives from their train before helping the stranded train. This is not practical or safe.

By necessity, these operations occur in grade territory. So, it is hard to make such an operation feasible with a single person working using current railroad equipment and infrastructure. A single person could not comply with securement rules put in place to ensure safety.

It should be noted that FRA's assertion that a railroad has little incentive to dispatch a locomotive consist a great distance away misses the mark because helper service is usually done because a train could not make it up a hill.

Helper service is typically an unplanned event. The overall characterization of helper service oversimplifies the process and necessary rule compliance and air brake testing required when a locomotive consist needs to separate from a train, attach to another train and then return to the original train from which the helper locomotive consist cut away.

There is also an issue with trains consisting of a locomotive or a consist of locomotives (excluding diesel or electric multiple units (DMUs or EMUs)) not attached to any piece of equipment or attached only to a caboose. These are commonly referred to as "light locomotives" and they can be run by a single person, but typically are used in conjunction with another crew member when working on the main track because all of the railroad operating rules associated with main track operations have to be adhered to and that is most safely done with more than a single person. Locomotives not attached to a train can involve the most diligence by the locomotive engineer because they very easily get over speed because they are not pulling any weight and have less overall braking effort than a full train. Because of this, BLET cautions the public and FRA from being convinced that light locomotive operations are easier simply because they are not attached to a train. Light locomotives are more nimble and shorter and fit in most tracks. But they require the same vigilance when operated on the main track.

### ***Unit freight train loading and unloading operations***

Unit freight trains are defined as those composed of cars carrying a single type of commodity, being loaded, or unloaded in an assembly line manner while the train moves at 10 miles per hour or less on a track which is temporarily made inaccessible from the general railroad system of transportation. During the loading or unloading process, there must not be any duties requiring a second crewmember (e.g., no operation of a hand-operated switch, filling out paperwork, or calling of signal indications).

The trouble with this exemption is that unit freight trains nearly always require a second crew member. The exemption in §218.129(a) with unit trains states, there must not be any duties requiring a second crewmember with the condition “if the operation is overseen by another person, typically in a tower or on the ground, that person must have the capability of communicating with the locomotive engineer operating the train.”

See 45617.

The BLET is not sure what is trying to be accomplished with this statement. Unit trains, e.g., coal trains, may be dumped over a pit and require the separation of cars, or cuts of cars to facilitate moving cars through a facility (such as a power plant). Without a second crew member, how would this be accomplished? An employee of a facility may not have this training, and if they have had the necessary training, they are not a member of the crew because they do not work for the railroad.

The statement says there must not be any duties required and the next statement goes on to say there may be duties required such as overseeing or communicating with the locomotive engineer.

Thus, the BLET submits that the requirements set forth in §218.129(b) are not robust enough to cover the scenarios involving operating unit trains in a plant temporarily separated from a railroad system (i.e., use of derail, electronic switch).

### ***Small Railroads***

Turning to the exception in the NPRM for small railroad operations with fewer than 400,000 total employee work hours annually, which allows for operations with one crewmember at a maximum authorized speed not exceeding 25 miles per hour under certain conditions, BLET has some concerns regarding the relationship between safety and human resource considerations about payroll. BLET does not think there is a relationship between these items other than to say there are costs associated with every item when doing business. There is a cost of doing business that cannot go unaddressed when it comes to safety.

BLET does not believe the number of hours a railroad lists on its employee payroll records should dictate how they operate in terms of safe operating practices. A small railroad can have a big accident as we saw with Lac Megantic and the Montreal Maine and Atlantic Railroad, and their CEO at the time had a history of cutting crew size to increase profits.

### ***Work Trains***

Another exception in the NPRM is for work train operations where a non-revenue service train of 4,000 trailing tons or less is used for the administration and upkeep service of the railroad. This includes when such a work train is traveling to or from a work site. This could include over the entire system and hundreds of miles. This could be feasible if done on a corridor where other trains are not operating and where there are no grade crossings.

With a single person operating the train, a terrible scenario could develop when an accident with the public occurs. A work train might strike a pedestrian or automobile at a grade crossing. When this happens, getting help fast is critical. A situation develops where it would be difficult for a single person operating a train to leave the train unattended and aid victims and contact emergency services. Work trains have the same risk as any type of train when it comes to accidents at grade crossings or with trespassers.

### ***RCL Operations***

Another exception in the NPRM is for remote-control operations that meet existing requirements of operating at 15 mph or less. While FRA currently does not believe that such remote operations need a distance restriction, FRA would appreciate any comments on this issue. BLET believes that remote control operations need further regulation before any contemplation is given to running them with a single operator for any distance. FRA abandoned the RSAC Working Group for remote control operations without consulting labor in the prior Administration. We believe the current Administration will take a sober look at RCL operations that considers the SOFA related accidents before making any safety exceptions to RCL operations. There are currently not many exceptions to make due to the lack of regulatory activity that should govern RCL operations.

### **Closing**

We also recommend that FRA consider the importance of not only trains that carry hazardous materials but trains that run adjacent on multiple main tracks and sidings due to their proximity to hazardous materials trains and the need to consider the risks associated when there are train collisions between hazardous materials trains and trains and other equipment that are not carrying hazardous materials but are involved in the accident when it occurs.

This is borne out by the accident at Casselton, North Dakota on December 30, 2013, and the quick actions of the train crew who cut the train away from burning tank cars averting further damage and disaster. A single person operation would not have accomplished this in time to prevent the harm that was mitigated by a crew member who was present on the scene at the time of the event. The crewmember was recognized in the US Senate for his quick actions and bravery.

You do not have to take BLET's word for it—Congress just voted to send all railroad crafts back to work. Having two crew members in the locomotive cab is so important to the national economy Congress voted on a bipartisan basis to end any possibility of the railroad shutting down for lack of train crews. The United States needs us and FRA's NPRM is timed perfectly to acknowledge this fact. We appreciate FRA's willingness, the DOT's willingness and the current Administration's commitment to trains being staffed with a minimum of two people on their crews.



FRA has published numerous studies on fatigue in the railroad industry, cognitive task analysis of conductors and engineers in the cab, and the benefits teamwork has on safety. All these support the need for a two-person minimum crew size rule.

Determining train crew size and train size by the whims of the financial markets cannot be allowed. A railroad that attempts to game their operations according to a business model designed for other industries does so at their employees' and the public's peril. Railroad employees who work in the cab of the locomotive know best when it comes to safe train operations. Through their actions, train crews help safeguard lives and the lives of the public.