

STATE OF CALIFORNIA

Public Utilities Commission  
San Francisco

**M e m o r a n d u m**

**Date:** April 8, 2015

**To:** The Commission  
(Meeting of April 9, 2015)

**From:** Lynn Sadler, Director  
Office of Governmental Affairs (OGA) – Sacramento

**Subject:** **SB 730 (Wolk) – Railroads: movement of freight: trains or light engines: crew size.**  
**As introduced: February 27, 2015**

**RECOMMENDED POSITION:** SUPPORT

**SUMMARY OF BILL**

This bill would

- prohibit, on and after February 1, 2016, a railroad freight train from being operated unless it has a crew consisting of at least 2 individuals.
- authorize the California Public Utilities Commission (CPUC) to assess civil penalties for violations.

**CURRENT LAW**

- We are not aware of any existing law governing railroad train crew size.

**AUTHOR'S PURPOSE**

The author's fact sheet states: "SB 730 protects communities by requiring trains and light engines carrying freight within California to be operated with an adequate crew size for both public safety reasons and the protection of railroad workers."

**DIVISION ANALYSIS (Safety and Enforcement Division)**

CPUC inspectors would be responsible for enforcing this law. Enforcement would take extra person-hours, but likely could be incorporated into existing inspections.

Interest in this topic surfaced after the July 2013 Lac-Mégantic tragedy. In that accident, a train crewed by only one person was left on a grade above Lac-Mégantic, Quebec and the crew member retired for the night. The train was insufficiently secured, i.e., not enough hand brakes were applied to prevent runaway movement down the grade. Later that night, the train rolled uncontrolled down the grade and crashed and exploded in Lac-Mégantic resulting in 47 fatalities.

Some concluded that the work to sufficiently secure the train required at least a crew of two and that crewing that train with just one person was at least a contributing cause of the tragedy.

Legislative interest in this area likely stems from a desire to counter the expressed intent of major actors in the railroad industry to reduce personnel to single person operations.

Several studies have found that single-person train operations create risks compared with two-person train operations. In 2012, the National Research Council of Canada concluded that “reducing the train crew to one person without appropriate operational changes and technological intervention diminishes safety.”<sup>1</sup> A report prepared for the Federal Railroad Administration (FRA) found the following:<sup>2</sup>

- Conductors and locomotive engineers not only work together to monitor the operating environment outside the locomotive cab, they also work together to plan activities, to solve problems, and to plan and implement risk mitigation strategies.
- Operating in mountain grade territory can significantly alter the complexity of a conductor’s duties, introducing additional cognitive demands.
- When the conductor must handle unexpected situations, “these unanticipated situations impose cognitive as well as physical demands on the conductor.”
- New technologies, such as positive train control (PTC), will not account for all of the cognitive support that the conductor provides.

Following the Lac-Mégantic tragedy, the Federal Railroad Administration (FRA) attempted to craft a regulation setting a minimum crew size of two through its rulemaking committee of stakeholders, the Railroad Safety Advisory Committee (RSAC). That effort failed, and the FRA withdrew the task from RSAC. However, during

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<sup>1</sup> National Research Council of Canada, TP 15176E, *Identification and Evaluation of Risk Mitigating Countermeasures for Single-Person Train Operation*, prepared for Transport Canada, March 2011, quoted in Transportation Safety Board of Canada, *Railway Investigation Report R13d0054, Runaway And Main-Track Derailment, Montreal, Maine & Atlantic Railway, Freight Train MMA-002, Mile 0.23, Sherbrooke Subdivision, Lac-Mégantic, Quebec, 06 July 2013*, 2014 (TSB Report), p. 67-8.

<sup>2</sup> H. Rosenhand, E. Roth and J. Multer, DOT/FRA/ORD-12/13, *Cognitive and Collaborative Demands of Freight Conductors Activities: Results and Implications of a Cognitive Task Analysis* (Cambridge, MA: United States Department of Transportation, July 2012), available at [http://ntl.bts.gov/lib/46000/46100/46162/TR\\_Cognitive\\_Collaborative\\_Demands\\_Freight\\_Conductor\\_Activities\\_edited\\_FINAL\\_10\\_9\\_12.pdf](http://ntl.bts.gov/lib/46000/46100/46162/TR_Cognitive_Collaborative_Demands_Freight_Conductor_Activities_edited_FINAL_10_9_12.pdf). quoted in TSB report, *ibid*.

the RSAC sessions, the FRA stated its position that the FRA regulations were based on the assumption that a crew of two was necessary to ensure the regulations could be followed in the operation of a train.

FRA is working on a Notice of Proposed Rulemaking (NPRM) for Train Crew Staffing and Location. As of March 2015, the schedule for this NPRM was as follows:

Federal Railroad Administration

**Train Crew Staffing and Location**

**Popular Title:** Train Crew Staffing and Location

**RIN 2130-AC48**

**Stage:** NPRM

**Previous Stage:** None

**Abstract:** This rulemaking would add minimum requirements for the size of different train crew staffs depending on the type of operation. The minimum crew staffing requirements would reflect the safety risks posed to railroad employees, the general public, and the environment. This rulemaking would also establish minimum requirements for the roles and responsibilities of the second train crew member on a moving train, and promote safe and effective teamwork. Additionally, this rulemaking would permit a railroad to submit information to FRA and seek approval if it wants to continue an existing operation with a one-person train crew or start up an operation with less than two crew members.

**Effects:**

Regulatory Flexibility Act

**Prompting action:** Secretarial/Head of Operating Administration Decision

**Legal Deadline:** None

**Rulemaking Project Initiated:** 03/27/2014

**Docket Number:** FRA-2014-0033

**Dates for NPRM:**

Milestone	Originally Scheduled Date	New Projected Date	Actual Date
To OST		09/09/2014	09/09/2014
To OMB		12/17/2014	01/05/2015
OMB Clearance		04/06/2015	
Publication Date		04/16/2015	
End of Comment Period		06/16/2015	

**Explanation for any delay:** N/A

**Federal Register Citation for NPRM:** None

**SAFETY IMPACT**

The law would serve to ensure that trains had sufficient crew members to safely operate them in compliance with state and federal regulations.

**RELIABILITY IMPACT**

Ensuring train safety also enhances reliability of railroad freight service.

### **RATEPAYER IMPACT**

California railroads currently have two-person crews, with some exceptions. The railroads currently operate a number of single-person switching jobs using remote control locomotives. Unless amended, this bill would prohibit that single-person operation. It is conceivable that this could cause a slight increase in freight shipping rates that may be passed on to consumers.

### **FISCAL IMPACT**

CPUC enforcement of this law would likely be incorporated in existing inspections. Additionally, violations would likely be reported by the railroad unions.

### **ECONOMIC IMPACT**

Unless amended to allow single-person switching jobs using remote control locomotives, this law could add some labor costs to railroad switching.

### **LEGAL IMPACT**

The Federal Railroad Safety Act of 1970 preempts the states from adopting regulations if the FRA has covered the subject matter. At least one court has determined that the FRA has not covered the subject matter of crew size on freight trains except for localized yard movements.

From a congressional report:

In 1999 a 7th Circuit Court of Appeals case addressed whether a Wisconsin statute requiring a minimum of two crew members on freight trains was preempted. The court held that the state law was preempted with regard to crew size on two types of train operations, "holstering" and "helping," because the FRA had essentially approved, in an order, one-person crew size for those types of operations. However, the court held that the state statute was not preempted with regard to crew size when it came to "over-the-road" operations, which involve hauling train cars between terminals.<sup>3</sup>

### **LEGISLATIVE HISTORY**

The CPUC previously supported a similar bill (SB 200 O'Connell, 2000), which did not pass.

### **PROGRAM BACKGROUND**

The bill's requirements would become one more regulation among many for its inspectors to enforce. Since crewing trains is such a planned and deliberate act, it is unlikely that there would be many violations.

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<sup>3</sup> HOUSE BILL REPORT HB 2718, As Reported by House Committee On Labor & Workforce Development, February 5, 2014.

## **OTHER STATES' INFORMATION**

Wisconsin has a minimum crew size law for “over the road” trains, not for localized yard movements.

On March 9, 2015, the Washington State Senate passed a bill “that would require up to two railroad workers in the rear of trains carrying crude oil and other hazardous cargo. The provision comes from an amendment to the bill, [SB 5057](#), requiring trains carrying 20 cars or more of hazardous materials such as Bakken crude to have at least one worker positioned in the rear. If the train has more than 50 such cars, two workers would have to be stationed there.”<sup>4</sup>

Nebraska Legislative Bill 192, introduced in January 2015, would provide that

Section 1. (1) No train or light engine used in connection with the movement of freight may be operated unless it has a crew consisting of at least two individuals. For purposes of this section, train or light engine used in connection with the movement of freight does not include hostler service or utility employees.

There are also bills addressing minimum crew size in Iowa, Minnesota, and Tennessee in various stages of progress.

## **SUMMARY OF SUPPORTING ARGUMENTS FOR RECOMMENDATION**

This bill should be supported for the following reason(s):

- Safety dictates that trains be operated by at least two crew members due to the task demands required to operate the train safely and the formulation of current rules and standards based on the assumption of at least two crew members.

## **STATUS**

SB 730 is scheduled for hearing in the Senate and Industrial Relations Committee on April 8, 2015.

## **SUPPORT/OPPOSITION**

### Support:

Brotherhood of Locomotive Engineers and Trainmen  
United Transportation Union

### Opposition:

## **VOTES**

None.

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<sup>4</sup> Joseph O’Sullivan, *Bill would mandate larger crew on oil trains*, Seattle Times, March 10, 2015, <http://www.seattletimes.com/seattle-news/politics/bill-would-mandate-larger-crew-on-oil-trains/>

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**BILL LANGUAGE**

SB-730 Railroads: movement of freight: trains or light engines: crew size. (2015-2016)

**SEC. 1.**

*Section 6903 is added to the Labor Code, to read:*

**6903.**

*(a) Effective February 1, 2016, a train or light engine used in connection with the movement of freight shall not be operated unless it has a crew consisting of at least two individuals.*

*(b) For purposes of this section, the term "train or light engine used in connection with the movement of freight" shall not include hostler service or utility employees.*

*(c) The Public Utilities Commission may assess civil penalties against any person who willfully violates this section, according to the following schedule:*

*(1) A civil penalty of two hundred fifty dollars (\$250) to one thousand dollars (\$1,000) for the first violation.*

*(2) A civil penalty of one thousand dollars (\$1,000) to five thousand dollars (\$5,000) for the second violation within a three-year period.*

*(3) A civil penalty of five thousand dollars (\$5,000) to ten thousand dollars (\$10,000) for the third violation and each subsequent violation within a three-year period.*

*(d) The remedies available to the commission pursuant to this section are nonexclusive and do not limit the remedies available under all other laws or pursuant to contract.*

**SEC. 2.**

*No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.*