



U.S. Department
of Transportation

**Federal Railroad
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

VIA E-MAIL ONLY

September 11, 2020

Mr. Beau D. Price
Director Locomotive & Air Brake Systems
BNSF Railway
Beau.Price@BNSF.com

Re: Docket Number FRA-2020-0033

Dear Mr. Price:

This letter is in response to the April 17, 2020, request from BNSF Railway (BNSF) to the Federal Railroad Administration (FRA) seeking a waiver of compliance from certain provisions of the Federal railroad safety regulations contained in Title 49 Code of Federal Regulations (CFR) Part 215, Railroad Freight Car Safety Standards, relating to the combining of two existing trains, and any subsequent separation of the combined consist without the need for additional inspections of either consist. FRA assigned this request Docket Number FRA-2020-0033.

Specifically, BNSF requests relief from § 215.13, *Pre-departure inspection*, which requires freight cars to be inspected at each location where they are placed in a train. Because combining two separate consists (a consist includes one or more cars and one or more locomotives) as BNSF's request contemplates, results in the formation of a new train, § 215.13 requires cars in each consist to undergo a pre-departure inspection at the location where the consists are combined. BNSF's request is limited to combining existing train consists that have been properly inspected and tested in compliance with all applicable regulations (i.e., where both consists have had a Class I brake test (§ 232.205), Class IA brake test (§ 232.207), or have been designated as extended haul trains and are compliant with all requirements of § 232.213 and each individual consist has had a § 215.13 pre-departure inspection).

BNSF states that trains to be combined will include both trains operating with head-end locomotives and trains operating with locomotives equipped with LOCOTROL or Radio Controlled Distributed Power Technology (DP). Once trains are combined, if the train is longer than 10,000 feet, BNSF indicates it will operate the combined train as a DP train until the train is separated or reaches its destination. BNSF indicates that the "combined train will be allowed one pick-up and/or set-out" and the air slips for each initial train will be maintained from the point of combining through the duration of each train's trip. Further, BNSF indicates a Class III brake test will be performed before each train's departure.

In support of its request for relief, BNSF explains that an additional inspection when combining trains is redundant because each train has had a brake test and inspection and a § 215.13 pre-departure inspection. Further, BNSF states no cars will exceed the brake test mileage for which they were originally inspected. BNSF states that the requested relief will reduce exposure to potential hazards faced by train crews or mechanical inspectors when walking both sides of a pre-tested train being combined. BNSF also contends that the relief will encourage greater utilization of trains under DP configuration across its network, which may improve engineers' ability to control in train forces and improve overall braking characteristics by having multiple locations within a train with cut-in brake valves.

Six Labor Organizations (Labor)¹ posted a joint comment in opposition to BNSF's petition. The comment stated that Class I railroads have resisted upgrading their existing air brake technology, claiming that such upgrades are too costly and burdensome. Further, Labor stated that "adding locomotives to a train—whether within the train's consist or at the rear end—is as old as railroad operations in grade territory." Finally, Labor asserted BNSF's request does not comply with FRA's requirements that govern the filing of petitions for waivers of railroad safety regulations. Citing FRA's previous denial of a waiver request in Docket Number FRA-2015-0126, Labor asserted that FRA has long prohibited the "splitting" of Class I air brake inspections between two trains. *See* Docket Number FRA-2015-0126 on www.regulations.gov.

FRA does not concur with granting BNSF's petition in its entirety. BNSF has provided no data to justify the requested relief as applied to all trains. FRA finds that BNSF's assertion that the request for relief "promotes railroad safety . . . by reducing the exposure to potential hazards faced by train crews or mechanical inspectors . . . from having to walk both sides of a pretested train" may have merit, however, as applied to extended haul trains. Waivers granted to Union Pacific Railroad (FRA-2015-0036 for 1,680-mile extended haul trains) and BNSF (FRA-2006-24812 for 1,702-mile extended haul trains) have shown that when trains are inspected exclusively by qualified mechanical inspectors (QMI), they have lower rates of incidents than lesser mileage trains inspected by both QMI and qualified person inspectors. By regulation, extended haul trains are required to be inspected by QMIs. *See* 49 CFR § 232.213. Accordingly, FRA finds that granting the requested relief as applied to extended haul trains only, coupled with narrowly tailored conditions designed to gather data on train brake health is justified.

Because a Class III brake inspection will be performed each time trains are combined or separated under this waiver, train line continuity will be confirmed at the start of each trip and eliminating the requirement for railroad employees to walk trains operating under this waiver to conduct a Part 215 inspection, while the train is still within its allowed mileage under § 232.213, should reduce the number of injuries that can occur during otherwise-required Part 215 inspections. Notably, the conditions imposed in this waiver (including quarterly review of data and analysis) mirror many of the conditions of existing waivers (e.g., the waivers in Docket Numbers FRA-2018-0049 and FRA-2016-0018 (involving hot/cold wheel detection)) designed

¹ American Train Dispatchers Association, Brotherhood of Locomotive Engineers and Trainmen, Brotherhood of Maintenance of Way Employees Division, Brotherhood of Railroad Signalmen, Brotherhood Railway Carmen Division, and Sheet Metal, Air, Rail and Transportation.

to evaluate and gather data on the effectiveness of the different types of inspection under § 215.13 and different types of wayside detection equipment.

FRA has carefully considered Labor's concerns, but does not believe the concerns merit denying BNSF's request in its entirety. Citing the railroad industry's objection to a previous proposed rule that would have mandated certain trains be equipped with electronically controlled pneumatic brakes (ECP), Labor asserts that "railroads have resisted upgrading their existing air brake technology." Labor provides no evidence or explanation, however, as to how railroads' previous opposition to the proposed ECP rule relates to BNSF's current request for relief. FRA notes that while the railroad industry did oppose the use of ECP brake technology, as noted above, individual railroads are presently conducting test waivers designed to evaluate the effectiveness of various technologies to monitor brake health and the Association of American Railroads has passed rules to support mandatory automated four-pressure single car tests on freight cars within five years.

FRA also rejects Labor's assertions that changing the locomotive on a train should automatically trigger a new Class I air brake test and Part 215 inspection. FRA regulations permit changing or adding a locomotive with the requirement for only a Class III brake inspection. See § 232.205(a)(5)(iii), *Class I Brake Test - initial terminal inspection*; § 232.211(a)(1), *Class III brake tests - trainline continuity inspection*; and § 232.219, *Double heading and helper service*.

Moreover, regarding Labor's claim that BNSF's request is defective for failure to comply with the conditions of § 211.9, *Content of rulemaking and waiver petitions*, citing FRA-2015-0126, FRA notes that in that docket, FRA determined that the petitioner made no argument for equivalent safety in requesting to combine and split trains. Instead, the petitioner simply stated that FRA's interpretation of the regulation was incorrect, and thus it should be permitted to combine and split trains under the same principle as swapping blocks under § 232.205(b). By contrast, BNSF has addressed potential safety benefits, by citing the operational safety benefits through air brake performance and in-train forces of DP-hauled trains, and the reduction in employee injuries by limiting employee exposure to potentially redundant air brake tests.

FRA notes that it is excluding high-hazard flammable trains (HHFTs) as defined in 49 CFR § 171.8, from participation in this waiver. FRA notes that HHFTs already have consist and operational restrictions under 49 CFR § 174.310 which may be incompatible with the goals of this waiver.

FRA's Railroad Safety Board (Board) carefully reviewed the petition, public comments received, the results of FRA's field investigation, and technical staff findings. The Board determined that granting BNSF's request, in part, is in the public interest and consistent with railroad safety. Accordingly, the Board grants BNSF's request for relief in the form of a waiver allowing BNSF to combine and subsequently separate two individual extended haul trains operating in compliance with 49 CFR § 232.213 without conducting additional inspections under 49 CFR §§ 215.13 or 232.205, subject to the following conditions:

1. With the exception of high-hazard flammable trains (HHFTs) as defined in 49 CFR § 171.8, this waiver applies to the combining and subsequent separation of extended haul trains operating in accordance with 49 CFR § 232.213, and operated in distributed power (DP) mode. To operate under this waiver, a train must comply with all requirements of 49 CFR § 232.213 and be properly designated under paragraph (a)(1) of that section on a separate page of the required written designation and such designation must note that the train is operating under this waiver.
2. Each train operating under this waiver (including a combined consist and individual consists once separated) must be clearly identified by Docket Number FRA-2020-0033 on all subsequent lists of designated extended haul trains submitted to FRA under 49 CFR § 232.213(a)(1). Subsequent lists must also identify all locations where combination, separation, and train brake and mechanical inspections and tests (not only extended haul required tests) will be performed on each train. BNSF must provide a 24-hour hotline number (817-593-9128) to support FRA in identification of active trains operating under this waiver and to answer any additional operational questions.
3. Combined trains and separated trains must receive and pass a 49 CFR § 232.211, *Class III brake tests-trainline continuity inspection*, and a DP linking/delinking procedure after change of status.
4. The record of inspection required by 49 CFR § 232.205(e) must be maintained in the cab of the controlling locomotive. The record of both trains must be maintained in the cab of the controlling locomotive of the combined train; however, upon separation, the original record must be restored and maintained in the controlling cab of each individual train.
5. Combined and separated trains must not be reclassified (switched out) in any manner, except the trains may have one 49 CFR § 232.213(a)(5) pick-up and set-off (each, as separated trains) or one pick-up and set-off as a combined train; and the trains may set-out defective equipment per § 232.213(a)(5).
6. The mileage of any component of the combined or separate trains must not exceed 1,500 miles, or, if a train is operating under Docket Number FRA-2006-24812, the additional mileage permitted in that docket.
7. BNSF must review the list of trains operated under this waiver on a quarterly basis and, in consultation with FRA, may make adjustments to operations under this waiver and the metrics applied based on the analysis of safety data and other relevant circumstances arising from the operation of trains under this waiver.
8. BNSF must maintain a separate database of train accident/incident data and anomalies/defects identified through inspection and/or wayside detectors for all trains operating under this waiver. Before commencing train operations under this waiver, BNSF and FRA must agree on specific safety metrics to be collected that enable a statistical analysis of the brake health of trains operating under this waiver as compared

to the brake health of (1) extended haul trains that are not combined/separated under the terms of this waiver, and (2) non-extended haul trains.

- a. The data will include, but is not limited to, any wayside detector anomaly indications from, for example, hotbox or wheel impact load detectors, brake health effectiveness detectors, and any drawbar or generalized undesired emergency brake applications or line of road failures that have the potential to be detected by a QMI inspection. Because not all trains operating under this waiver will be evaluated by the same wayside detectors, prior to implementing this waiver, BNSF must develop a normalization factor to account for combined trains for which wayside detection data is not available.
 - b. Analysis of the data collected under this condition must be provided as part of the quarterly review under Condition No. 7. Additionally, the data and resulting analyses must be made available in the docket of this proceeding. (*See* 49 CFR § 209.11 if it is necessary for BNSF to submit any information and/or data to FRA confidentially).
 - c. Any change to the metrics initially developed and reported under Condition No. 7 can only be made through mutual agreement between FRA and BNSF and the basis for such change must be made public in the docket of this proceeding.
9. In the event of an emergency that alters normal train operations, such as a derailment or other unusual circumstance that adversely affects the safe operation of a train operating under this waiver, BNSF must use the process for Class IA brake test locations at 49 CFR § 232.207(c)(2) to notify FRA.
 10. The mechanical department personnel responsible for inspections and tests, as well as train crewmembers operating trains under this waiver, must be notified in writing regarding the conditions of this waiver. As required under 49 CFR § 232.213, these inspections and tests (except for Class III tests) must be performed by QMIs trained, qualified, and designated in compliance with 49 CFR § 232.203, *Training requirements*, and 49 CFR § 215.11, *Designated inspectors*.
 11. The mechanical department personnel physically responsible for inspections and tests of trains operating under this waiver must review a wayside detector data summary for the equipment prior to their inspection. The report must include all data exceeding industry accepted levels for watch status, trending, or alarms in the previous 30 days.² Wayside detector data reports for the designated extended haul trains and a table of the industry accepted levels must be made available to FRA inspectors upon request.
 12. For trains operating under this waiver, BNSF must provide notification identifying the location where all combination/separation, or train brake and mechanical inspections and

² BNSF currently refers to this required record as the Comprehensive Mechanical Equipment Health (CMEH) report.

tests will be performed to each crew, via work orders, from originating terminal, through crew change points to destination.

13. Except for the relief specified in these conditions, all other requirements of 49 CFR § 232.213 apply to trains operating under this waiver.
14. BNSF must report immediately to FRA's Office of Railroad Safety any accident, incident, and/or injury that occurs that is attributable to the requirements for which this waiver is granted herein.

This waiver expires five years from the date of this letter. At the conclusion of this period, FRA reserves the right to extend the waiver if conditions warrant, and if BNSF has made a written request for an extension at least 6 months prior to the expiration date. Any request for extension must comply with the requirements of 49 CFR § 211.7, *Filing requirements*, § 211.9, *Content of rulemaking and waiver petitions*, and must also be submitted via email to FRAWaivers@dot.gov.

FRA reserves the right to modify or rescind this waiver upon receipt of information pertaining to the safety of railroad operations or in the event of noncompliance with any condition of this waiver. Further, FRA reserves the right to take enforcement action under 49 U.S.C. § 20111 for noncompliance with any condition of this letter or applicable Federal regulations.

In any future correspondence regarding this waiver, please refer to Docket Number FRA-2020-0033. If you have any questions, please contact Mr. Steven Zuiderveen, FRA Motive Power & Equipment Specialist, at (202) 493-6337 or steven.zuiderveen@dot.gov.

Sincerely,

Karl Alexy
Associate Administrator for Railroad Safety
Chief Safety Officer