

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 18A-0532R

IN THE MATTER OF THE APPLICATION OF BOULDER COUNTY, FOR AUTHORITY TO INSTALL 4-QUADRANT RAILROAD GATES WITH FLASHING LIGHTS, BELLS, CONSTANT WARNING TIME CIRCUITRY, AND RAILROAD SIGNAL CABIN, AT TRACKS OWNED BY BNSF RAILWAY COMPANY CROSSING INDEPENDENCE ROAD, USDOT NO.244822L, IN BOULDER COUNTY, STATE OF COLORADO.

**RECOMMENDED DECISION OF
ADMINISTRATIVE LAW JUDGE
ROBERT I. GARVEY
GRANTING AMENDMENT**

Mailed Date: March 15, 2021

I. STATEMENT

1. This matter comes before the Commission for consideration of an application amendment (Amendment) filed by the County of Boulder (Boulder County or the County) on November 17, 2020, seeking to change the exit gate delay timing at the crossing of Independence Road with the tracks of the BNSF Railway Company (BNSF) at railroad milepost 32.329 on the Front Range Subdivision, National Inventory Number 244822L, near the City of Boulder, Boulder County, State of Colorado.

2. This proceeding began on August 2, 2018, when Boulder County filed an Application seeking approval of design plans to upgrade the subject crossing. Boulder County requested to install a four-quadrant gate system with timed exit gate operation of eight seconds between the time the entrance gate starts to descend and when the exit gate starts to descend. The original Application was granted by Recommended Decision No. R19-0732, issued September 5, 2019. After the filing of exceptions to the Recommended Decision, certain deadlines

were modified, but otherwise the Recommended Decision was adopted by Decision No. C19-0997, issued December 13, 2019.

3. On November 17, 2020, Boulder County filed its Amendment. Boulder County states that the Application approved by the Commission required the removal of existing approach gates and the installation of a four-quadrant gate system, with railroad gates installed parallel to the tracks. Under this configuration, there was to be a 30-foot distance between the entrance and exit gates.

4. According to Boulder County, BNSF has completed the installation of the four-quadrant gate system. However, BNSF installed the exit gates perpendicular to the roadway and directly opposite the location of the existing approach railroad gates, instead of parallel to the tracks as required by the Commission. Boulder County does not know if BNSF replaced the existing approach railroad gates.

5. Additionally, Boulder County states that the distance between the entrance and exit gates as installed is 60 feet, which is 30 feet longer than originally designed and approved. BNSF has requested that Boulder County update the exit gate delay calculations based on the four-quadrant gate system as it is installed.

6. Due to the differences between what was approved in Boulder County's Application and the crossing upgrade as it was installed, Boulder County seeks to amend its Application. Specifically, Boulder County requests its Application be amended to reflect the installation of railroad exit gates perpendicular to the roadway and the installation of approach railroad gates, if they are replaced, in the same location as the existing approach railroad gates and remaining perpendicular to the roadway. It also seeks to revise the approved exit gate timing

calculation and extend the exit gate delay timing from eight seconds to ten seconds to accommodate the additional 30 feet of distance between the entrance and exit gates.

7. The Amendment provides no information regarding the safety of the crossing upgrade as it was constructed by BNSF.

8. On December 28, 2020, by Decision No. C-20-0918-I, the Commission referred this matter to an Administrative Law Judge (ALJ).

9. On January 5, 2021, by Decision No. R21-0003-I, BNSF and Boulder County were ordered to make filings to answer Commission questions concerning the crossing upgrade.

10. On February 18, 2021, Boulder County filed its Response to ALJ Interim Decision.

11. On February 19, 2021, BNSF filed its Responses to Questions from Commission Regarding Boulder County's Request to Amend Application.

12. Pursuant to § 40-6-109, C.R.S., the ALJ now transmits to the Commission the record of the hearing and a written recommended decision in this proceeding.

II. RESPONSES OF PARTIES

13. BNSF was required to answer the following questions:

- a) Why did BNSF not construct the crossing as ordered by the Commission?
- b) Did BNSF install new entrance gates at the crossing?
- c) What is the storage distance for westbound vehicles between the exit gate as installed and the stop bar for the Independence Road/SH 119 intersection?
- d) If any changes need to be made at the crossing to mitigate any introduced safety issues, what are those costs and how should those costs be allocated between Boulder County and BNSF?
- e) Did Boulder County have anyone on site to inspect the work that BNSF did when installing the crossing equipment?
- f) What are the possible options to mitigate the safety issues?

14. The County of Boulder was required to answer questions (d) through (f).

A. BNSF Responses

15. BNSF responds that it did not intentionally perform modifications at the crossing in contravention of the Commission's Decision No. R19-0732. BNSF states that it constructed the modifications at the crossing in accordance with the agreements of the parties reached during the Diagnostic Meeting on January 17, 2017.

16. BNSF admits that the position of the gates does not comport with the design requested by the County, but does not believe that it has led to unsafe conditions at the crossing. BNSF states that the eight seconds of buffer time remains for operation of the gates at the crossing.

17. BNSF states it reused existing entrance gates installed previously because those entrance gates had not reached the end of their useful life.

18. BNSF states the storage distance from the westbound entrance gate to westbound exit gate equals 59 feet 4 inches and the distance from the westbound entrance gate stop line to the westbound exit gate equals 69 feet 2 inches.

19. BNSF does not believe any safety issues were introduced by the completed modifications to this crossing. BNSF states that eight seconds of buffer time remain for the operation of the gates and the crossing operates as intended in the application. Although if the Commission should determine that the full 10 seconds of buffer time is necessary, BNSF can make that change to equipment in the field at its own expense.

20. BNSF is not aware of any Boulder County personnel present during construction to inspect the work in progress.

21. BNSF does not believe there are any safety issues that require mitigation.

B. Boulder County Responses

22. Boulder County does not have estimates on the costs of changes to mitigate introduced safety issues. Although the County believes that any costs should be borne solely by BNSF. The County states it has paid all of BNSF's costs to install the new 4-quadrant railroad gates at the BNSF crossing of Independence Road so that the intersection could qualify as a quiet zone.

23. No Boulder County staff or agents were present on site to inspect the work that BNSF did when installing the crossing equipment because BNSF did not notify the County when it was installing the railroad gates.

24. The County proposes the following solutions if the Commission does not require BNSF to re-construct the crossing:

- a) BNSF install radar detection at this crossing to detect vehicles in the crossing, in the event of an approaching train.
- b) Modify striping by moving the west stop bar further west to allow for more storage, thereby returning the storage to what would have been achieved with the railroad gates installed per plan.
- c) Modify signing by adding Sign W10-11a in advance of the crossing in the westbound direction that identifies short storage on the other side of the tracks

III. DISCUSSION

25. On September 5, 2019, ALJ Adams issued Decision No. R19-0732 in the above-captioned proceeding. This Decision approved the application to upgrade the active warning equipment to flashing lights with four-quadrant gates, bells, constant warning time circuitry, and railroad signal cabin; relocation of advance warning signs; installation of pavement markings; and the addition of "No Train Horn" plaques at the existing crossing.

26. The costs of the project were entirely funded by Boulder County.¹

27. BNSF filed exceptions to the Recommended Decision, which only concerned extending deadlines in order to prepare and file a Construction and Maintenance Agreement.² The exceptions did not concern the configuration of the exit gates or the replacement of the gates.

28. The Amendment to the Application filed by the County on November 17, 2020, stated that BNSF had completed their installation of the 4-quadrant gate railroad system, by installing railroad exit gates perpendicular to the roadway, and directly opposite the existing location of the existing approach railroad gates. It was unknown if BNSF replaced the existing railroad gates as required in the application approved by the Commission.

29. The County also stated it was notified by BNSF on November 16, 2020, that the distance between the approach and exit gates is longer than originally designed and requested updated exit gate timing calculations from Boulder County.

30. The County amended information with regard to Commission Rule 7204(a)(X), 4 *Code of Colorado Regulations* (CCR) 723-7, and filed a revised Exit Gate Timing Calculation.

31. The Commission, in referring the proceeding to an ALJ, raised safety concerns with these changes and noted the lack of information as to why the crossing upgrade was not done in compliance with the Commission's order approving the Application.

32. BNSF in its responsive filing claims that it did not "intentionally perform modifications at the crossing in contravention of the Commission's Decision [No.] R19-0732."³

¹ Decision No. R19-0732, ¶ 27.

² BNSF Railway Company's Exceptions to Recommended Decision No. R19-0732, ¶ 7.

³ BNSF Railway Company's Responses to Questions from the Commission Regarding Boulder County's Request to Amend Application, p. 2.

BNSF then references a meeting with the County and claims that the minutes from this meeting show “agreements of the parties.”⁴

33. Apart from the fact that this in no way answers the question of why BNSF deviated from the approved application, an examination of the referenced minutes does not mention any discussion of gate placement at all.

34. The only mention of the crossing in question, which is contained on page 7 of the minutes, is as follows:

Independence Road-BNSF Crossing DOT# 244822L (Road Authority-Boulder County):

1. FRA Inventory Report indicates Constant Warning Time circuitry (to be confirmed by BNSF; along with version/type if CWT. The crossing is currently treated with approach railroad gates with cross bucks, flashers and a bell.
2. FHU noted that there is about 60 feet of storage between the BNSF track crossing and the parallel Hwy 119, along Independence Road.
3. BNSF suggested this may be a good crossing for Wayside Horns given the surrounding land use being mostly non-residential.
4. The County indicated that this roadway does not have a lot of large truck traffic, but more box truck size traffic.
5. FHU indicated that the striping reconfiguration to allow for a Raised Median or Channelizing Device option would require that the vehicles stay within the new striping. Because this area is within the right-of-way of Hwy 119, it would involve coordination with CDOT. The County indicated they are communicating with CDOT regarding the potential for striping changes.

Railroad Action Items BNSF confirmation of circuitry, and version (if CWT)

Roadway Action Items County communication with CDOT regarding potential for restriping the turn edge line

SSM Quiet Zone Options: • Wayside Horns – 1 on each approach • 4-Quadrant Gates (requires stub medians or channelizing devices to close gap due to skew)
 • Approach Gates with Raised Medians (requires restriping of edge lines or curb and gutter placement between tracks and Hwy 119 to clearly define 60 feet from approach gate)

⁴ *Id.*

- Approach Gates with Channelizing Devices (requires restriping of edge lines between tracks and Hwy 119 to clearly define 60 feet from approach gate)⁵

35. Not only does BNSF not answer the question of why it deviated from the approved application, but BNSF provided a document that it purports answers this question, yet does not even address the question. This lack of candor is concerning.

36. BNSF also does not answer the question of the length of storage distance between the exit gate as installed and the stop bar for the Independence Road/SH 119 intersection. Rather, BNSF provides information useless to addressing the storage distance question and fails to recognize the storage distance safety issue BNSF created with its changed gate installation.

37. The original distance between the BNSF tracks and SH 119 prior to any construction was 60 feet based on Exhibit A provided in BNSF's response to the Commission. The approved construction plans showing the four-quadrant gates parallel to the BNSF tracks reduced that distance some, but provided enough storage for a standard passenger vehicle or a box truck. These vehicles would be able to clear the crossing and exit gate with room to stop at the stop bar prior to turning on SH 119.

38. BNSF's installation of the four-quadrant gates parallel to the roadway at the location of the existing entrance gates created a safety issue by reducing storage distance further. Because BNSF failed to respond to the Commission's question requesting it to provide the storage distance resulting from the actual installation, the Commission must use the plans to estimate the storage distance. The measured distance from the location of the exit gate to the stop bar for the Independence Road/SH 119 is estimated at only 15 to 20 feet. This storage length does not provide

⁵ *Id.* at Exhibit A, p. 7.

a standard passenger vehicle, or a box truck, enough distance to pass completely through the crossing. Rather, with the timed exit gate approved by the Commission, such vehicles will be hit by the descending exit gate when stopped within the crossing while waiting to turn onto SH 119.

39. The answers filed by BNSF to the Commission's questions make clear that BNSF believes it need not follow the plans approved by the Commission. This belief could not be more in error.

40. The County has spent much time, effort, and money to provide a safe crossing while creating a quiet zone for its residents. The County provides three alternate solutions to a costly and time consuming re-construction of the crossing upgrade to cure the safety issue created by BNSF's failure to construct the upgrade to the crossing as approved by the Commission. The County proposes the following:

- a) BNSF install radar detection at this crossing to detect vehicles in the crossing, in the event of an approaching train.
- b) Modify striping by moving the west stop bar further west to allow for more storage, thereby returning the storage to what would have been achieved with the railroad gates installed per plan.
- c) Modify signing by adding Sign W10-11a in advance of the crossing in the westbound direction that identifies short storage on the other side of the tracks.

41. The County also believes that any of these measures should be paid for by BNSF due to their failure to construct the upgrade as approved by the Commission.

42. The undersigned ALJ agrees with Boulder County. It is shocking and very concerning that BNSF believes that it may unilaterally ignore decisions of this Commission. It is even more egregious if BNSF's actions endanger the public, as in this case.

43. The County has worked hard to provide a quiet zone to its residents and BNSF has already created an unacceptable delay. These upgrades should not be delayed any further. The

first and the third alternate solutions offered by the County should alleviate the safety issue created by BNSF's inability to follow the directions of the Commission.

44. BNSF is ordered to install a radar detection unit at the crossing to detect vehicles in the crossing at BNSF's expense.

45. The County shall modify signage by the installation of a W10-11 storage sign with a W10-11a placard, per the requirements of Commission Rule 7213(c), 4 CCR 723-7, and the Manual on Uniform Control Devices, in advance of the crossing in the westbound direction that identifies short storage on the other side of the tracks and the length of that storage.

IV. ORDER

A. The Commission Orders That:

1. The Amendment filed by the County of Boulder on November 17, 2020, is granted consistent with the discussion above.

2. BNSF Railway Company (BNSF) is ordered to comply with the amendments to the application consistent with the discussion above.

3. All cost for the mitigation efforts approved in this amendment shall be borne by BNSF.

4. This Recommended Decision shall be effective the day it becomes the Decision of the Commission, if that is the case, and is entered as of the Mailed Date above.

5. As provided by § 40-6-109, C.R.S., copies of this Recommended Decision shall be served upon the parties, who may file exceptions to it.

- a) If no exceptions are filed within 20 days after service or within any authorized extended period of time, or unless the decision is stayed by the

Commission upon its own motion, this Recommended Decision shall become the decision of the Commission and subject to the provisions of § 40-6-114, C.R.S.

- b) If a party seeks to amend, modify, annul, or reverse basic findings of fact in its exceptions, that party must request and pay for a transcript to be filed, or the parties may stipulate to portions of the transcript according to the procedure stated in § 40-6-113, C.R.S. If no transcript or stipulation is filed, this proceeding is bound by the facts set out by the Administrative Law Judge.

6. If exceptions to this Decision are filed, they shall not exceed 30 pages in length, unless the Commission for good cause shown permits this limit to be exceeded

(S E A L)



ATTEST: A TRUE COPY

Doug Dean,
Director

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

ROBERT I. GARVEY

Administrative Law Judge