BEFORE THE WASHINGTON STATE UTILITIES AND TRANSPORTATION COMMISSION

CHELAN COUNTY,)	DOCKET TR-061442
)	
Petitioner,)	
)	ORDER 04
v.)	
)	
THE BURLINGTON NORTHERN)	INITIAL ORDER DENYING
SANTA FE RAILWAY COMPANY,)	PETITION
)	
Respondent.)	
)	
)	

- Synopsis: This is an Administrative Law Judge's Initial Order that is not effective unless approved by the Commission or allowed to become effective pursuant to the notice at the end of this Order. If this Initial Order becomes final, the petition to allow the alteration and relocation of a highway rail under-crossing on Chumstick Highway in Chelan County, Washington, will be denied.
- Nature of the Proceedings. This proceeding involves Chelan County's (Chelan) petition to allow the alteration and relocation of a highway rail under-crossing on Chumstick Highway in Chelan County, Washington.
- Appearances. Louis Chernak, Deputy Prosecuting Attorney, Wenatchee, Washington, represents petitioner, Chelan. Bradley Scarp, attorney, and Kelsey Endres, attorney, Seattle, Washington, represent respondent Burlington Northern Santa Fe Railway Company (BNSF). Jonathan Thompson, Assistant Attorney General, Olympia, Washington, represents the Washington Utilities and Transportation Commission's regulatory staff (Commission Staff or Staff). ¹

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¹ In formal proceedings, such as this, the Commission's regulatory staff functions as an independent party with the same rights, privileges, and responsibilities as other parties to the proceeding. There is an "*ex parte* wall" separating the Commissioners, the presiding ALJ, and the Commissioners' policy and accounting advisors from all parties, including regulatory staff. *RCW 34.05.455*.

- Background and Procedural History. On September 11, 2006, Chelan filed with the Washington Utilities and Transportation Commission (Commission) a petition to allow the alteration and relocation of a highway rail under-crossing, and the allocation of its cost between the county and the railroad. On November 27, 2006, BNSF filed its answer opposing the petition. BNSF requested that the petition be dismissed asserting the Commission is preempted by federal law from approving this project or allocating costs associated with the project. BNSF further asserted that the petition was not ripe for decision because Chelan did not submit cost estimates for the project. In response, Chelan and the Commission Staff argued that the Commission has jurisdiction over these issues. By Order 02, Initial Order Denying Petition to Dismiss for Lack of Jurisdiction, entered August 20, 2007, Administrative Law Judge Theodora M. Mace concluded that the Commission has jurisdiction over these issues.
- On January 16, 2008, the Commission issued a notice reassigning this case to Administrative Law Judge Patricia Clark. The petition was heard upon due and proper notice to all interested parties on May 16, 2008, in Leavenworth, Washington. During the hearing, Chelan presented the testimony of Gregory J. Pezoldt, Chelan County Public Works Director and BNSF presented the testimony of Gary Norris, consultant; Danniel MacDonald, Manager Engineering, BNSF; Bruce Roper, Structures Supervisor, BNSF; and John Li, Manager Public Projects, BNSF. On July 3, 2008, the parties submitted post-hearing briefs in this matter.

DISCUSSION

- Applicable Law. The Commission's authority to regulate the safety of grade crossings is set forth in RCW 81.53. According to RCW 81.53.060, the legislative authority of a county may file with the Commission a petition alleging that "... the public safety requires ... an alteration ... in the style and nature of construction of [an] existing ... under-crossing."
- In ruling on the petition, the Commission must enter a written order specifying whether the style and nature of construction of an existing crossing shall be changed, or any other change the Commission may find advisable or necessary. *RCW* 81.53.070. If the Commission finds that an existing crossing should be changed, it must apportion the cost of those modifications "in such a manner as justice may require, regard being had for all facts relating to the establishment, reason for and construction of said improvement." *RCW* 81.53.110.

- **Burden of Proof.** Chelan has the burden of proving that the public safety requires an 8 alteration in the style and nature of construction of the existing under-crossing on the Chumstick Highway.
- **Public Safety.** The highway and under-crossing at issue in this proceeding were 9 designed and built in 1928.² The Chumstick Highway is currently a two-lane road that serves as the main route between State Highway 2 and Leavenworth, Washington, and the Plain/Lake Wenatchee area.³ The section of the Chumstick Highway preceding the under-crossing is a long straight roadway with a countyestablished speed limit of 50 miles per hour (mph).⁴ The roadway is interrupted by a sharp curve under the railway trestle with a cautionary traffic sign advising 25 mph.⁵ The roadway and shoulder underneath the railway trestle or bridge are 24 feet wide between the supporting columns of the bridge.⁶
- The railway track in question is part of BNSF's main line between Seattle and 10 Chicago and has heavy rail traffic that will be disrupted by improvements to the railway bridge. There are 22 freight trains and three passenger trains that travel this track every day.8
- BNSF designs its steel bridge structures for a minimum 100+ year service life.⁹ 11 According to this standard, the railway bridge in question has a minimum of 20 years remaining design life with potentially more service life. ¹⁰ BNSF inspects the bridge twice a year. 11 As the bridge does not have any structural defects and currently meets both BNSF and Federal Railway Administration (FRA) standards, BNSF does not plan to the replace the bridge in the foreseeable future. 12 BNSF asserts that the bridge does not constitute a railroad safety concern; any safety issues involve Chelan County and the highway. 13

² Pezoldt, Exh. No. 11 at 3.

³ *Id*. at 2 and 4. ⁴ *Id*. at 3.

⁵ *Id*.

⁶ *Id*. at 3.

⁷ *Id.* at 5.

⁸ Li, Exh. No. 25 at 3.

⁹ MacDonald, Exh. No. 29 at 3.

¹⁰ *Id*.

¹¹ Roper, Exh. No. 26 at 2.

¹² MacDonald, Exh. No. 29 at 3 and Roper, Exh. No. 26 at 3.

¹³ MacDonald, Exh. No. 29 at 3 and Roper, Exh. No. 26 at 6.

BNSF conducted a roadway traffic count and a speed study of the north and south roadway approaches to the railway under-crossing in 24-hour segments between March 17 and 20, 2008. The roadway traffic count study revealed that between 701 and 2,473 vehicles traveled on this stretch of roadway during each 24-hour period with an average weekday daily volume of 2,357 vehicles. Traffic volume increases on Friday to 2,473 vehicles per day. Adjusting the volume to reflect an annual average daily volume, the volume becomes 2,758 vehicles on the average weekday and 2,893 vehicles per day on Friday.

The speed study revealed motor vehicle speeds ranging from a minimum of 5.8 mph to a maximum of 93.1 mph with average speeds over the four-day study period ranging from 34.8 to 44.2 mph. ¹⁸ Vehicle speeds were measured in both the northbound and southbound directions and reflected vehicle speeds both entering and exiting the curve. ¹⁹ For the section of highway north of the under-crossing, the average speed was 40 mph entering the curve and approximately 38 mph exiting the curve. ²⁰ For the section of highway south of the under-crossing, the average speed of traffic entering the curve was approximately 44 mph and the average speed of traffic exiting the curve was 35 mph. ²¹

Chelan presented the reports of eight accidents in the vicinity of the under-crossing between February 2000 and December 2006.²² BNSF presented the results of individual State of Washington Police Traffic Collision reports during the same time period and noted that 88 percent of the accidents involved traffic violations.²³ Most of the collisions were limited to property damage rather than personal injury.²⁴ Using the traffic volumes from its traffic study, BNSF determined that this section of the Chumstick Highway has a collision rate of 1.30 collisions per one million vehicle miles.²⁵ The collision rate for all roads in Chelan County is 2.03 collisions per one million vehicle miles and the collision rate for state highways in Chelan County is

¹⁸ Norris, Exh. No. 23 at 10-27.

¹⁴ Norris, Exh. No. 21 at 4 and 6 and Exh. No. 23 at 1-27.

¹⁵ Norris, Exh. No. 21 at 6 and Exh. No. 23 at 1-9

¹⁶ Norris, Exh. No. 21 at 6.

¹⁷ *Id*.

¹⁹ Norris, Exh. No. 21 at 6-7.

²⁰ *Id*.

²¹ *Id*. at 7.

 $^{^{22}}$ Pezoldt, Exh. No. 18 at 1-4 and Exh. No. 19 at 8 – 19.

²³ Norris, Exh. No. 21 at 7.

²⁴ *Id*. at 8.

²⁵ *Id*.

1.78 collisions per one million vehicle miles.²⁶ BNSF concluded, from this data, that this section of the Chumstick Highway is relatively safe.²⁷

BNSF contends that Chelan has posted appropriate signage alerting motorists of the 15 impending curve: (1) there is a warning sign emphasized with a flashing beacon; (2) the posted speed limit in the curve is 25 mph; (3) there are chevrons through the curve to inform motorists of the sharpness of the curve; (4) there is a sign in advance of the railway trestle warning motorists of its clearance height; and (5) jersey barricades on both approaches to the trestle protect the bridge abutments.²⁸

Modification of Existing Under-crossing. Chelan is interested in altering and 16 relocating BNSF's existing under-crossing on the Chumstick Highway to accommodate a widened roadway and greater trestle clearance.²⁹ Chelan proposes to expand the roadway and shoulder from 24 feet to 32 feet and increase the radius of the curve under the trestle.³⁰ The trestle opening would need to be expanded to accommodate the wider roadway and shoulder.³¹ A shoo-fly³² would need to be built to minimize the disruption to rail service during the construction project.³³

Chelan does not propose a specific highway and railway bridge configuration, but 17 seeks BNSF's participation in developing a workable, mutually acceptable design.³⁴ Chelan prepared seven proposed designs for the proposed construction projects. 35

BNSF asserts that each of the seven proposed designs for the construction projects 18 has significant issues including the impacts on Chumstick Creek, an existing water well easement, the water table, right-of-way requirements, and relocating the Freund Canyon Road that must be addressed before any project can proceed.³⁶ BNSF contends that six of the seven options provide a substandard design according to the

²⁷ *Id*.

²⁶ *Id*.

²⁸ *Id*. at 5.

²⁹ Pezoldt, Exh. No. 19 at 2.

³⁰ Pezoldt, Exh. No. 11 at 3-4.

³¹ *Id*.at 4.

 $^{^{32}}$ A temporary railway track that bypasses the main railway track during construction or other impediment to railway traffic flow.

³³ Pezoldt, Exh. No. 11 at 5.

³⁴ *Id*.

³⁵ Norris, Exh. No. 21 at 10.

 $^{^{36}}Id$.

County Road Standards which require a curve radius of 835 feet for a 50 mph design speed limit.³⁷

- 19 BNSF contends that traffic circulation at this site could be improved without reconstructing the roadway by delineating the centerline and edge of the roadway in a manner that would withstand all weather conditions, installing a row of buttons across the lane at each warning sign, increasing the number of chevrons through the curve, and installing flashing beacons on the chevrons.³⁸
- 20 Chelan asserts that approximately 1.72 miles of the highway north of the BNSF trestle and 1.47 miles of the highway south of the trestle have been improved to current road standards.³⁹ The 0.14 mile portion of the highway north of, underneath, and south of the trestle remains to be improved.⁴⁰ BNSF counters that sections of the roadway that are supposed to have been improved still have substandard curves.⁴¹
- Project Costs. Chelan asserts that in 2002, BNSF provided the county with an estimate of \$1.75 million to construct a shoo-fly and altered and relocated railway trestle. Chelan proposes to fund the roadway design and construction and contribute \$1 million toward the alteration and relocation of the railway trestle. Chelan has obtained a \$1.44 million Rural Arterial Trust Account grant for this project which will expire in April 2011.
- BNSF asserts that until Chelan selects a design, the cost impact of this project is unknown. However, BNSF disputes the estimate of \$1.75 million for the entire project. Given current construction costs and labor market costs, it is likely that a temporary shoo-fly track alone would cost between \$2.5 to 3 million. BNSF recommended that Chelan retain the services of a qualified engineering consultant to determine the feasibility, design, and cost estimate for the project. In any event,

³⁸ Norris, Exh. No. 21 at 9.

³⁷ *Id*.

³⁹ *Id*.

⁴⁰ *Id*.

⁴¹ *Id*.

⁴² Pezoldt, Exh. No. 11 at 5.

⁴³ *Id*.

⁴⁴ Id.

⁴⁵ Norris, Exh. No. 21 at 10 and Li, Exh. No. 25 at 2.

⁴⁶ MacDonald, Exh. No. 29 at 6.

⁴⁷ *Id.* at 8 and Li, Exh. No. 25 at 2.

⁴⁸ Mac Donald, Exh. No. 29 at 6.

BNSF asserts that the County is the only party that stands to benefit from the alteration of the roadway and under-crossing and should bear all costs associated with the project.⁴⁹

DECISION

- By Order 02, Initial Order Denying Petition to Dismiss for Lack of Jurisdiction, Judge Mace found that the Commission has jurisdiction over this matter and that the "Chumstick Highway railway undercrossing at milepost 1.83 presents both highway and rail safety concerns that require amelioration." These findings were based on legal briefing and oral argument and without the benefit of an evidentiary hearing.
- The majority of the evidence adduced in this proceeding addresses the issue of whether the public safety requires alteration of the railway under-crossing on the Chumstick Highway. Based on the prefiled testimony presented by Chelan and BNSF, an evidentiary hearing, and cross-examination of witnesses during the hearing, the record justifies a different result.
- Chelan failed to meet its burden of proof that the public safety requires alteration to the nature and style of the existing under-crossing. The section of the Chumstick Highway in question is a two-lane road with a posted speed limit of 50 mph for the long straight portion of the highway. The posted speed limit in the curve preceding the under-crossing and through the under-crossing is reduced to 25 mph. There is no dispute that Chelan has posted appropriate signage for all relevant portions of the Chumstick Highway.
- Despite appropriate signage posted by the County, it appears that the average speed through the curve and under-crossing exceeds the posted limit. For the section of highway north of the under-crossing, traffic entering the curve averaged a speed of 40 mph and traffic exiting the curve averaged a speed of 38 mph. For the section of highway south of the under-crossing, traffic entering the curve averaged a speed of 44 mph and traffic exiting the curve averaged a speed of 35 mph. The average speed of traffic in both directions entering and exiting the curve exceeds the posted speed limit ranging from a minimum of 10 mph to a maximum of 19 mph. Given a posted speed

⁴⁹ *Id*. at 7.

⁵⁰ Order 02 at ¶ 44, Initial Order Denying Petition to Dismiss for Lack of Jurisdiction, entered August 20, 2007.

limit of 25 mph, the average speed both entering and exiting the curve and undercrossing significantly exceeds the speed limit.

This section of the Chumstick Highway has traffic flows ranging from an average 2,758 motor vehicles on a weekday to an average 2,893 vehicles on Friday. Despite this level of traffic and the evidence that the average speed of vehicles in the vicinity of the railway under-crossing exceeds the posted speed limit, there were only eight accidents in this area between the years 2000 to 2006. This level of traffic accidents computes to 1.30 accidents per one million miles in the vicinity of the under-crossing. This accident level is below the 2.03 accidents per one million miles experienced on all roads in Chelan County and the 1.78 accidents per one million miles experienced on state highways in Chelan County. While it is difficult to categorize any level of traffic accidents as "acceptable," the accident rate in the vicinity of the under-crossing indicates that this section of roadway is comparatively safer than other roadways in Chelan County.

Moreover, a review of the accident reports presented by Chelan demonstrates that the primary cause of the accidents was driver error rather than defective roadway design. According to the accident reports, four of the drivers were exceeding the posted speed limit, two drivers crossed the double yellow line and went over the jersey barrier, one driver failed to negotiate the curve, and one accident was attributed to icy road conditions. In addition, the accident reports reveal that alcohol was involved in two of the incidents. Modification of roadway and railway under-crossing design cannot prevent accidents caused by driver error.

Based on the foregoing evidence, the Commission concludes that the public safety does not require alteration in the style and nature of construction of the existing under-crossing on the Chumstick Highway.

Having concluded that Chelan failed to meet its burden of proof that the public safety requires alteration in the style and nature of construction of the existing undercrossing, it is unnecessary to present further analysis regarding the petition, including the allocation of costs. However, the Commission concludes that it would be appropriate to provide some guidance regarding the sufficiency of evidence regarding the issues of construction design and project cost for future petitions to modify existing under-crossings. The Commission must have sufficient evidence to evaluate

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⁵¹ MacDonald, Exh. No. 29 at 7.

⁵² Id

a proposed construction project to determine that a proposed design will ameliorate or eliminate the public safety concerns raised in a particular case. Accordingly, a petitioner must select a project design and present that design for Commission consideration. With respect to the cost of a project, the Commission needs a reasonably current cost estimate for a proposed project in order to make findings about the appropriate allocation of costs between a governmental entity and a railroad. Absent reasonably current cost estimates, the Commission is unable to make well-reasoned findings on this topic.

FINDINGS OF FACT

- Having discussed above in detail all matters material to the Commission's decision, and having stated general findings, the Commission now makes the following summary findings of fact. Those portions of the preceding discussion that include findings pertaining to the Commission's ultimate decisions are incorporated by this reference.
- The Washington Utilities and Transportation Commission is an agency of the State of Washington, vested by statute with authority to determine whether the public safety requires alteration in the style and nature of construction of an existing railway under-crossing.
- Chelan County filed a petition to modify an existing railway under-crossing on the Chumstick Highway.
- The Chumstick Highway is a two-lane road with a posted speed limit of 50 mph on the straight portions of the highway.
- The portion of the Chumstick Highway preceding the Burlington Northern Santa Fe Railway under-crossing has a sharp curve with a posted speed limit of 25 mph through the curve and the under-crossing.
- The average speed of vehicles entering and exiting the curve exceeds the posted speed limit by 10 to 19 mph.
- On weekdays, an average 2,758 motor vehicles traverse the Chumstick Highway.
- On Fridays, an average 2,893 motor vehicles traverse the Chumstick Highway.

- There were eight motor vehicle accidents in the vicinity of the Chumstick Highway under-crossing between the years 2000 and 2006.
- The accident rate per one million vehicle miles for this portion of the Chumstick Highway is below the accident rate per one million miles of all roads in Chelan County and below the accident rate per one million miles for state highways in Chelan County.
- 41 (10) The accidents at the Chumstick Highway under-crossing were primarily caused by driver error.
- 42 (11) Chelan County did not present a proposed design for altering the style and nature of the railway under-crossing.
- Chelan County did not present a current cost estimate for altering the style and nature of the railway under-crossing.

CONCLUSIONS OF LAW

- Having discussed above in detail all matters material to the Commission's decision, and having stated general findings and conclusions, the Commission now makes the following summary conclusions of law. Those portions of the preceding detailed discussion that state conclusions pertaining to the Commission's ultimate decisions are incorporated by this reference.
- The Washington Utilities and Transportation Commission has jurisdiction over the subject matter of, and parties to, these proceedings, according to RCW 81.53.
- (2) Chelan County has the burden of proof in this proceeding.
- 47 (3) Chelan County failed to meet its burden of proof that the public safety requires an alteration in the style and nature of construction of the existing railway under-crossing on the Chumstick Highway. RCW 81.53.060

48 (4) The petition filed by Chelan County to alter the style and nature of construction of the Burlington Northern Santa Fe Railway under-crossing on the Chumstick Highway should be denied.

ORDER

THE COMMISSION ORDERS THAT the petition filed by Chelan County to alter the style and nature of construction of the Burlington Northern Santa Fe Railway crossing on the Chumstick Highway is denied.

Dated at Olympia, Washington, and effective October 21, 2008.

PATRICIA CLARK Administrative Law Judge

NOTICE TO THE PARTIES

This is an Initial Order. The action proposed in this Initial Order is not yet effective. If you disagree with this Initial Order and want the Commission to consider your comments, you must take specific action within the time limits outlined below. If you agree with this Initial Order, and you would like the order to become final before the time limits expire, you may send a letter to the Commission, waiving your right to petition for administrative review.

WAC 480-07-825(2) provides that any party to this proceeding has twenty (20) days after the entry of this Initial Order to file a *Petition for Administrative Review*. What must be included in any Petition and other requirements for a Petition are stated in WAC 480-07-825(3). WAC 480-07-825(4) states that any party may file an *Answer* to a Petition for review within (10) days after service of the Petition.

WAC 480-07-830 provides that before entry of a Final Order any party may file a Petition To Reopen a contested proceeding to permit receipt of evidence essential to a decision, but unavailable and not reasonably discoverable at the time of hearing, or for other good and sufficient cause. No Answer to a Petition To Reopen will be accepted for filing absent express notice by the Commission calling for such answer.

RCW 80.01.060(3) provides that an Initial Order will become final without further Commission action if no party seeks administrative review of the Initial Order and if the Commission does not exercise administrative review on its own motion. You will be notified if this order becomes final.

One copy of any Petition or Answer filed must be served on each party of record with proof of service as required by WAC 480-07-150(8) and (9). An original and eight copies of any Petition or Answer must be filed by mail delivery to:

Attn: David W. Danner, Executive Director and Secretary Washington Utilities and Transportation Commission P.O. Box 47250
Olympia, Washington 98504-7250