

213447

March 1, 2005

*Via Hand Delivery*

The Honorable Vernon A. Williams  
Secretary  
Surface Transportation Board  
1925 K St. N.W.  
Washington, D.C. 20423



RE: STB Docket No. 42071, *Otter Tail Power Company v. The Burlington Northern and Santa Fe Railway Company*

Dear Secretary Williams:

Please find enclosed for filing the original and ten (10) copies of Complainant's Supplemental Evidence in Response to the Board's December 13, 2004 Order in the above referenced proceeding. Also enclosed are three (3) compact disks containing the electronic version of the written text in WordPerfect, electronic version of the exhibits and workpapers in either Lotus format or Excel format. **Please note that the electronic exhibits and workpapers are HIGHLY CONFIDENTIAL.**

Due to circumstances beyond Complainant's control, it will be necessary for Complainant to submit an Errata within a few days. During the preparation of evidence using the RTC Model, Complainant encountered a program error that it immediately brought to the attention of the software vendor, Berkeley Simulation. The error in the program logic forced a series of trains into a loop, but the program did not have sufficient logic to get the trains out of the loop. Complainant discovered this error when attempting to make the following adjustments to its RTC Model:

1. Resolve minor variations between empty on-SARR times and BNSF actual empty on-SARR times.
2. Change the adhesion factor for certain trains from a setting of 10 (perfect track) to a setting of 5.
3. Correct a misaligned switch at the Cordero and Black Thunder mines.

On Sunday, February 27, 2005, Berkeley Simulation provided a program update to the RTC Model to **ALL** subscribers that fixes this problem. Unfortunately, however, this update was not received in sufficient time for Complainant to submit its evidence today based on the corrected RTC Model. Therefore, Complainant intends to submit an Errata within the next few days that makes the adjustments referenced above, using the corrected RTC Model.

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An extra copy of this filing is enclosed for stamping and returning to our offices.

Should you have any questions regarding the foregoing, please do not hesitate to contact the undersigned.

Sincerely,



Nicholas J. DiMichael  
Jeffrey O. Moreno  
*Counsel for Complainant*

cc: Counsel for Defendant

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**I**  
**SUMMARY**  
**AND ARGUMENT**

## PART I

### COUNSEL'S ARGUMENT AND SUMMARY OF EVIDENCE

Complainant, Otter Tail Power Company ("Otter Tail") hereby submits supplemental evidence in response to the December 13, 2004 order ("Dec. 13<sup>th</sup> Order") of the Surface Transportation Board ("Board"), as clarified in a February 18, 2005 order. This submission adheres to the format prescribed in the Board's March 12, 2001 decision in STB Ex Parte No. 347 (Sub-No. 3), General Procedures for Presenting Evidence in Stand-Alone Rate Cases.

#### A. Introduction and Background.

In the December 13<sup>th</sup> order, the Board directed Otter Tail "to file supplemental evidence showing the effect if the disputed rerouted northern non-coal traffic were *excluded* from its traffic group," and it directed BNSF Railway Company ("BNSF") "to file supplemental evidence showing the effect if the disputed southbound coal traffic originating south of Cordero were *included* in the traffic group." Dec. 13<sup>th</sup> Order at 2-3 [emphasis added]. The Board also directed both parties "to address how we might assure that any rate prescription resulting from the SAC analysis would not reflect an impermissible cross-subsidy." Id. at 3. Finally, the Board invited Otter Tail to "submit its evidence based on the Rail Traffic Controller [RTC] model used by BNSF, in lieu of its string model." Id.

Otter Tail has accepted the Board's invitation to submit its supplemental evidence using the RTC Model. In the following evidence, therefore, Otter Tail has used the RTC Model to show the effect upon the SAC analysis of excluding rerouted northern non-coal traffic from its traffic group. In addition, Otter Tail has based its cross-subsidy analysis upon the RTC Model.

Since its January 4, 2004 Supplemental Opening Evidence, Otter Tail has presented two alternative SAC analyses. Otter Tail's "Base Case" employs actual market-based divisions to

determine the allocation of cross-over coal traffic revenue. Otter Tail's "Alternative Case" uses the modified straight-mileage pro-rate ("MSP") method to allocate cross-over revenue. Due to differences between the two methodologies, the Alternative Case includes 31.7 million more tons of coal traffic than the Base Case.<sup>1</sup> Otter Tail continues to present a Base Case and an Alternative Case in this round of supplemental evidence.

**B. What is the Impact on the SAC Analysis, Based Upon The RTC Model, of Excluding the Rerouted Northern Non-Coal Traffic from Otter Tail's Traffic Group?**

In order to show the impact upon the SAC analysis of excluding the rerouted northern non-coal traffic from its traffic group, Otter Tail has used the RTC Model to model its traffic group, less the rerouted non-coal traffic, on the stand-alone railroad, called the Otter Tail Railroad ("OTRR"). Otter Tail has performed this analysis in both its Base and Alternative Cases.

Otter Tail has used the data from the RTC Model to determine the investment and operating units for the Base Case and Alternative Case OTRR, without the rerouted non-coal traffic. Otter Tail then has applied these revised units to its appropriate Rebuttal Evidence unit costs to generate total operating and investment costs. Those costs have been incorporated into a DCF model to show the effect on the SAC analysis of excluding the rerouted northern non-coal traffic from Otter Tail's traffic group for both its Base and Alternative Cases.

**C. How to Ensure that the SAC Analysis does not Reflect an Impermissible Cross-Subsidy?**

The second issue raised by the Board is "whether including this [southbound coal traffic from the southern PRB] would create an impermissible cross-subsidy of the infrastructure that

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<sup>1</sup> See OTP Opening Evidence at III-A-19, note 24 (filed June 13, 2003) and OTP Supplemental Opening Evidence at I-2 to 3 (filed Jan. 9, 2004) for a full explanation of the reasons for excluding 31.7 million tons of coal from the "Base Case."

would be needed north of Converse Junction.” Dec. 13<sup>th</sup> Order at 3. The Board directed both parties to address how it “might assure that any rate prescription resulting from the SAC analysis would not reflect an impermissible cross subsidy.” Id. The Board posed this issue in the context of its cross-subsidy analysis in PPL Montana, LLC v. The Burlington Northern and Santa Fe Ry. Co., STB Docket No. 42054 (served Aug. 20, 2002) at 10-13 (“PPL”). Dec. 13<sup>th</sup> Order at 3.

Since the entire OTRR lies north of Converse Junction, there cannot be a cross-subsidy of the OTRR north of Converse Junction by any portion to the south. Furthermore, under the PPL cross-subsidy test, if there was no cross-subsidy before adding southbound coal traffic from the southern PRB, the addition of that traffic cannot create a cross-subsidy. Thus, Otter Tail is uncertain why the Board has posed the cross-subsidy question in the context of infrastructure needed “north of Converse Junction” and of adding southbound coal traffic from the southern PRB.

However, since the Board also has posed the cross-subsidy question in the context of the PPL test, specifically citing the pages containing the actual analysis performed by the Board, Otter Tail presumes that the Board intended for the parties to perform a similar analysis to determine if the OTRR’s highest density lines in the PRB cross-subsidize its lines north of the PRB.

In responding to this question, Otter Tail has used the same procedures and methodologies to perform a cross-subsidy analysis of the OTRR that it used in its Rebuttal Evidence and that the Board employed in the PPL case. Otter Tail has performed the PPL cross-subsidy analysis for both its Base and Alternative Cases.

Otter Tail has performed the PPL analysis at two key points along the OTRR. The first point is at Campbell, Wyoming. Otter Tail selected Campbell because that is the same point at

which the Board performed its cross-subsidy test in PPL. Moreover, if any point south of Campbell were chosen as the dividing point for the PPL analysis, the line north of that point would pass the PPL cross-subsidy test by an even greater margin. The second point is Glendive, Montana, which Otter Tail also used in its Rebuttal Evidence. Otter Tail chose Glendive in order to determine whether a cross-subsidy was created on the line segment east of Glendive by excluding the rerouted non-coal traffic from Otter Tail's traffic group. If the Board desires to use other line segments, Otter Tail has provided information in its workpapers to perform the same analysis at any point along the OTRR.

Otter Tail's PPL analyses using the RTC model demonstrate that there is no impermissible cross-subsidy between any line segments on the OTRR, without the rerouted northern non-coal traffic, in both Otter Tail's Base Case and Alternative Case.

**D. Otter Tail's Application of the RTC Model is Superior to BNSF's Application Because Otter Tail has Modeled the Complete OTRR.**

Otter Tail has modeled the complete OTRR using the RTC Model. In stark contrast, BNSF has not done so. Rather, BNSF has chosen to model only two unconnected line segments between Oriva, WY and Converse, WY, and between Glendive, MT and Fargo, ND.<sup>2</sup> BNSF chose not to model the SARR from Oriva, WY to Glendive, MT and from Fargo, ND to Big Stone, SD.<sup>3</sup> See BNSF Reply Evid. at III.B-7 to 8 (filed Oct. 8, 2003). For these latter two segments, BNSF simply accepted Otter Tail's capacity evidence, stating that it did so because the OTRR's capacity was similar to the real-world BNSF capacity over those segments, even though

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<sup>2</sup> Although BNSF originally modeled a third line segment from Glendive, MT to Snowden, MT, it eliminated that line when it subsequently excluded all rerouted northern non-coal traffic. See BNSF Supplemental Reply Evidence at III.B-1 (filed March 22, 2004).

<sup>3</sup> BNSF did run a single train over the Fargo to Big Stone line segment on the RTC Model, but did not otherwise model all of the traffic on that line or link the RTC Model of that line segment with the RTC Model of the adjoining line segment from Fargo to Glendive.

the OTRR handles less traffic than these real-world BNSF line segments. See BNSF Reply Evid. at III.B-7 to 8 (filed Oct. 8, 2004).

In modeling just two unconnected segments on the OTRR, BNSF has not properly linked the traffic flows between the various line segments and is unable to measure the impact of changes that occur on one line segment upon other line segments. Otter Tail has thoroughly addressed this issue at pages III-B-25 to 27 and III-B-40 to 42 of its April 29, 2004 Rebuttal Evidence and will not repeat those arguments here.

Apart from modeling the entire OTRR, Otter Tail has endeavored to adhere to the same assumptions that BNSF used in its application of the RTC Model. The exceptions are due to Otter Tail's continued adherence to its Rebuttal Evidence, or they are necessitated because Otter Tail modeled the complete SARR, whereas BNSF modeled only segments of the SARR.

There are five key differences. First, Otter Tail has continued to use the same operational dwell times in yard for inspections, fueling, crew changes, and interchange as it presented in its Rebuttal Evidence. Second, Otter Tail's peak traffic period is different from BNSF's peak traffic period. Otter Tail's peak traffic period reflects traffic moving on the busiest week on the PRB Converse-Campbell line segment, which is the densest line segment on the OTRR, while BNSF's peak traffic period reflects traffic moving over the Glendive-Fargo line segment, which has a far lower density than the PRB Converse-Campbell line segment, particularly after the rerouted northern non-coal traffic is excluded. Third, Otter Tail has linked real-world empty trains with real-world loaded trains at PRB mines, which BNSF failed to do in its RTC simulations. Fourth, because BNSF did not model all of the traffic on the Fargo-Benson line segment, it did not develop on-SARR times for empty trains at Benson. Therefore, Otter Tail had to interpolate this information from empty coal train arrival times at Fargo, ND. Finally, at

pages III-B-27 to 29 of its Rebuttal Evidence, Otter Tail identified several flaws and anomalous data in BNSF's application of the RTC Model, such as trains that start and stop instantaneously and inconsistent elevations, which Otter Tail has corrected in its application of the RTC Model.

Otter Tail's SAC analyses based upon the RTC Model produce SAC rates, in both the Base and Alternative Cases, excluding the rerouted northern non-coal traffic, that are well below the rate that BNSF is charging Otter Tail, and that are consistent with Otter Tail's evidence of the unreasonableness of the rate in its Rebuttal Base and Rebuttal Alternative case. This fact suggests that BNSF's decision not to model the complete SARR in this case was a tactical decision intended to inflate the SAC rate, because BNSF could not obtain the result it desired by modeling the complete SARR on the RTC Model.

Respectfully submitted,



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Dated: March 1, 2005

**III-A**  
**STAND-ALONE**  
**TRAFFIC GROUP**

### **III-A. TRAFFIC GROUP**

Otter Tail's calculation of the maximum lawful rate under the Stand-Alone Cost ("SAC") constraint of the Surface Transportation Board's ("STB" or "Board") Coal Rate Guidelines-Nationwide ("Guidelines") is based upon a hypothetical rail carrier, named the Otter Tail Railroad ("OTRR"). Otter Tail presented its determination of maximum lawful rates on June 13, 2003 in its Opening Evidence; on January 9, 2004 in its Supplemental Opening Evidence; and on April 29, 2004 in its Rebuttal Evidence.

As described in detail in Section III-B of Otter Tail's Opening and Rebuttal Evidence, the OTRR is designed: (1) to transport coal from mines in the Powder River Basin ("PRB") to the Big Stone Generating Station; (2) to transport coal from PRB mines to interchange with BNSF for delivery to other destinations; and (3) to transport general freight trains in overhead service for interchange with the residual BNSF. The interchange points with the residual BNSF for coal and general freight are located at Donkey Creek and Converse, Wyoming; Moran Junction, Terry and Snowden, Montana; and Fargo, North Dakota, Benson, MN. The OTRR's traffic group consists of coal movements in unit trains and general freight trains moving in overhead service.

In its December 13, 2004 and February 18, 2005 decisions in this proceeding ("Decisions"), the STB identified two areas of difference in the parties' respective traffic groups for the OTRR. The Board stated that Otter Tail, in its Supplemental Opening evidence, designed the OTRR to handle 233 million tons of traffic in the 2002 base year and BNSF, in its Supplemental Reply Evidence, designed the system to handle 135 million tons of traffic in the base year. The difference in the two traffic groups is primarily related to Otter Tail's inclusion and BNSF's exclusion of 13.7 million tons of rerouted non-coal traffic moving between Fargo, North Dakota and Snowden, Montana, and 85

million tons of coal traffic that originates in the PRB at mines south of Cordero, which then moves in a southerly direction to interchange with BNSF at Converse, Wyoming.

The STB directed the parties to submit supplemental evidence that addresses these two areas of differences. Otter Tail was directed to file supplemental evidence to show the effect of excluding the 13.7 million tons of rerouted non-coal traffic and BNSF was directed to file supplemental evidence showing the effect of including the southbound coal in its traffic group.

The STB also directed both parties to address how the Board can assure that any rate prescription resulting from the SAC analysis would not reflect an impermissible cross-subsidy similar to that found by the Board in Docket No. 42054, PPL Montana, LLC. v. Burlington Northern and Santa Fe Railway (“PPL”).

The STB also stated, “If it wishes, Otter Tail may submit its evidence based on the Rail Traffic Controller model used by BNSF, in lieu of its string model.” December 13, 2004 Decision at 3. Otter Tail has elected to use the RTC Model in this supplemental evidence.

In order to comply with the Board’s directives, Otter Tail prepared two scenarios which are presented in this filing and compared to Otter Tail’s Rebuttal Base Case and Rebuttal Alternative Case. The two scenarios presented here are the Rebuttal Base Case using the RTC model and excluding the rerouted non-coal traffic (“RTC Base Case – Exclusions”) and the Rebuttal Alternative Case using the RTC model and excluding the rerouted non-coal traffic (“RTC Alternative Case – Exclusions”).

#### **1. Traffic and Revenues**

As explained in its Rebuttal evidence, Otter Tail is submitting a primary or “Base Case” and an “Alternative Case”. The difference in its two cases is related to the calculation of revenues on cross-

over traffic. In Otter Tail's Base Case, SARR revenues from "cross-over" traffic included in the traffic group are allocated by using an algorithm that is based on BNSF's actual market-based divisions. Otter Tail used market-based divisions in response to a decade of precedent in Stand-Alone Cost proceedings in which the Board stated a preference for market-based divisions.

As fully addressed in Otter Tail's Rebuttal evidence, the Board in its November 6, 2003 decision in Docket No. 42069, Duke Energy Corp. v. Norfolk Southern Ry. Co. ("Duke/NS"), introduced the use of a Modified Straight-Mileage Prorate ("MSP") to calculate divisions on cross-over traffic. As a result, revenues on cross-over traffic in Otter Tail's Alternative Case are allocated by the Board's MSP methodology.

As explained in Otter Tail's Rebuttal evidence, use of actual market-based divisions, in its Base Case, requires the exclusion of 31.7 million tons of coal traffic that otherwise would be included in the OTRR traffic group when using the MSP methodology to allocate revenues from cross-over traffic. Thus there is a difference in both revenues and traffic between Otter Tail's Base Case and its Alternative Case. Otter Tail's supplemental evidence shows the effect of removing the 13.7 million tons of rerouted non-coal traffic on the OTRR from both the Base Case and the Alternative Case.

All other elements of Otter Tail's traffic group and revenues presented in this supplemental evidence remain the same as presented in Otter Tail's Rebuttal evidence. Table III-A-10,<sup>1</sup> below, compares the 2002 base year traffic tons and revenues, for both the Rebuttal Base Case and the Rebuttal Alternative Case, to these scenarios using the RTC simulation and excluding the 13.7

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<sup>1</sup> Tables III-A-1 to III-A-9 are included in Otter Tail's April 29, 2004 Rebuttal evidence.

million tons of non-coal rerouted traffic.<sup>2</sup>

| <u>Scenario</u>                      | <u>Tons</u><br>(millions) | <u>Revenues</u><br>(millions) |
|--------------------------------------|---------------------------|-------------------------------|
| (1)                                  | (2)                       | (3)                           |
| 1. Rebuttal Base Case                | 201.5                     | \$832.2                       |
| 2. Rebuttal Alternative Case         | 233.3                     | \$675.1                       |
| 3. RTC Base Case – Exclusions        | 187.8                     | \$735.4                       |
| 4. RTC Alternative Case – Exclusions | 219.6                     | \$583.0                       |

## **2. PPL Cross-Subsidy Analysis**

As stated previously, the STB directed both parties to address how the Board can assure that any rate prescription resulting from the SAC analysis would not reflect an impermissible cross-subsidy as defined by the STB in PPL.

In its Opening Evidence at page III-A-26, Otter Tail performed a threshold cross-subsidy analysis, using the Board's PPL cross-subsidy methodology, to demonstrate that all segments of the OTRR are self-sustaining and do not contain an impermissible cross-subsidy similar to the Board's calculation in PPL.

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<sup>2</sup> The details supporting the OTRR traffic and revenues for the two Rebuttal scenarios were included in Otter Tail's April 29, 2004 Rebuttal electronic workpapers as follows: 1) Rebuttal Base Case files contained in the III-A folder in the "OTP Rebuttal" directory; and 2) Rebuttal Alternative Case files contained in the III-A folder under the "Alternative" folder in the "OTP Rebuttal" directory. The details supporting the OTRR traffic and revenues for the two supplemental scenarios are included in Otter Tail's March 1, 2005 Supplemental electronic workpapers as follow: 1) RTC Base Case – Exclusions files contained in the III-A folder in the "OTP Reb XGF" directory; and 2) RTC Alternative Case – Exclusions files contained in the III-A folder under the "Alternative" folder in the "OTP REB XGF" directory.

Otter Tail does not believe that the cross-subsidy test used by the Board in PPL properly reflects the existence of a cross-subsidy. When a railroad (or any company) evaluates whether or not to handle new traffic (or a new line of business), it compares the revenues that will be generated by the new traffic to the economic costs (i.e., attributable, avoidable, variable, incremental or marginal costs) of handling the new traffic. As long as the revenues from the new traffic are greater than the economic costs of handling the new traffic, the railroad (or any company) is better off with the new traffic. This same theoretical approach is used to evaluate whether or not a railroad should continue to handle existing or theoretical traffic movements.<sup>3</sup>

To properly determine the economic costs associated with handling new traffic, one must consider the capital costs associated with the new traffic and the variable operating expenses associated with handling this new traffic. The Board's PPL methodology erroneously considers both the fixed and variable portions of the operating costs associated with the new traffic, rather than only the long-run variable portion of these costs.

It is well recognized that operating costs contain both variable and fixed components and that the fixed components cannot be directly attributable to individual movements. The long-run variable operating costs can be estimated by applying the Uniform Rail Costing System ("URCS") regression coefficients to the total traffic on the SARR system for each of the expense categories of operating cost and, in doing so, determine the portion of the SARR operating cost that are long-run variable operating costs. It is only the long-run variable portion of operating cost that are appropriately included in the cross-subsidy analysis.

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<sup>3</sup> This is also consistent with Ex Parte 347 (Sub No. 2) where the STB stated, "As a general rule, it is better for a railroad to carry any traffic that covers its own attributable costs and makes any contribution (no matter how slight) to the joint and common costs." 1 S.T.B. 1004 (1996).

Use of long-run variable costs is consistent with Ex Parte 347 (Sub No. 2), Coal Rate Guidelines, Nationwide, where the Interstate Commerce Commission (“ICC”) states, “The long-run marginal cost (LRMC) is the economic measure of long-term attributable cost of each service.” 1 I.C.C. 2d at 536. The ICC then defines LRMC as:

The marginal cost of a service is the additional cost that would be incurred in supplying an additional unit, or the saving in total cost that would be made possible by supplying one less unit. As such, the marginal cost of a rail service is the per-unit opportunity cost to the rail carrier of the service. Here the term “opportunity cost” refers to the value a resource can contribute if it is used in some alternative occupation instead of the one to which it is currently assigned by the railroad. Thus, marginal cost is similar in meaning to a unit incremental cost and to the true economic variable cost.

I.C.C. 2d at 537, note 43.

In contrast to this definition of LRMC (and thereby long-term attributable cost), the Board’s PPL methodology incorrectly includes the fixed portion of the operating costs that cannot be directly allocated to a unit or units of traffic.

Even though Otter Tail disagrees with the Board’s PPL methodology, in Rebuttal, Otter Tail performed the cross-subsidy test using that methodology on the segments east of Glendive, Montana and west of Campbell, Wyoming for both its Base Case traffic group and its Alternative Case traffic group. The results of the cross-subsidy analyses, labeled “Campbell West” and “Glendive East,” showed that the revenues attributable to the traffic moving on each distinct segment exceed the attributable cost as defined by the Board in PPL on a cumulative basis over the twenty-year DCF period. Thus, no impermissible cross-subsidy exists for these subsets of traffic using the Board’s PPL cross-subsidy methodology.

In this supplemental evidence, Otter Tail has again performed the Campbell West<sup>4</sup> and Glendive East cross-subsidy tests, using the Board's PPL methodology, for both the RTC Base Case – Exclusions and RTC Alternative Case – Exclusions. The results of these analyses also show that the revenues attributable to the traffic moving on each distinct segment exceed the attributable cost when the rerouted traffic is excluded from the OTTR traffic group.<sup>5</sup>

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<sup>4</sup> If a point south or east of Campbell were to be used as the starting point, the results of that particular PPL cross-subsidy analysis would produce a greater difference between attributable revenues and attributable costs than the results of the Campbell West cross-subsidy analysis.

<sup>5</sup> The detail supporting the Otter Tail's PPL tests for the two Rebuttal scenarios were included in Otter Tail's April 29, 2004 Rebuttal electronic workpapers as follows: 1) Rebuttal Base Case files contained in the "Campbell West" and "Glendive East" folders in the III-H folder; and 2) Rebuttal Alternative Case files contained in the "Campbell West" and "Glendive East" folders in the III-H under the "Alternative" folder in the "OTP Rebuttal" directory. The details supporting the Otter Tail's PPL tests for the two supplemental scenarios are included in Otter Tail's March 1, 2005 Supplemental electronic workpapers as follow: 1) RTC Base Case – Exclusions files contained in the "Campbell West" and "Glendive East" folders in the III-H folder in the "OTP Reb XGF" directory; and 2) RTC Alternative Case – Exclusions files contained in the "Campbell West" and "Glendive East" folders in the III-H folder under the "Alternative" folder in the "OTP REB XGF" directory.

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**III-B**  
**STAND-ALONE**  
**RAILROAD SYSTEM**

### **III-B. STAND-ALONE RAILROAD SYSTEM**

On Rebuttal, Otter Tail presented its stand-alone railroad system, the OTRR, for its base case and its alternative case. As discussed in Section III-A, *supra*, the STB, on December 13, 2004, issued a decision requesting that Otter Tail file supplemental evidence using the RTC Model and demonstrating the impact of eliminating rerouted non-coal traffic between Fargo, ND and Snowden, MT. The STB also issued a decision on February 18, 2005 providing further instructions as to the content of the supplemental evidence. In complying with the STB's two decisions, Otter Tail has developed the two previously-described presentations: (1) RTC Base Case - Exclusions; and (2) RTC Alternative Case - Exclusions. The changes to the OTRR system necessitated by the STB's decisions are discussed below.

#### **1. Route and Mileage**

Otter Tail discussed the route miles of the OTRR for its base case and alternative case at pages III-B-4 to III-B-7 of its Rebuttal Evidence. On Rebuttal, the route miles of the OTRR equaled 1,283.84 for both the base case and the alternative case. For the RTC Base Case - Exclusions and RTC Alternative Case - Exclusions, there is a change in route miles of the OTRR, i.e., the elimination of the Glendive to Snowden branch (78.64 route miles). This change reduces the OTRR's configuration to 1,205.20 route miles for the two exclusion scenarios.

#### **2. Track Miles**

Otter Tail discussed main line and branch line track miles at pages III-B-7 to III-B-11 of its Rebuttal Evidence. The Rebuttal facility plan for the OTRR was contained in Exhibit III-B-2.

For the RTC Base Case - Exclusions and RTC Alternative Case - Exclusions, all of the track and associated infrastructure between Glendive and Snowden were eliminated. In addition, many

### **III-C. OPERATING PLAN**

As stated in Section III-A., the STB directed Otter Tail to submit supplemental evidence showing the effect of excluding the rerouted non-coal traffic from its traffic group. In addition, the STB stated, “If it wishes, Otter Tail may submit its evidence based on the Rail Traffic Controller model used by BNSF, in lieu of its string model.” December 13, 2004 Decision at 3. As stated previously, Otter Tail has chosen to submit its supplemental evidence using the RTC model. This section of Otter Tail’s supplemental evidence provides the detail of the application of the RTC model to the OTRR traffic group for the RTC Base Case – Exclusions and the RTC Alternative Case – Exclusions.

#### **1. General Parameters**

Otter Tail discussed the general parameters of the OTRR at pages III-C-3 to III-C-17 of its Rebuttal evidence. Otter Tail continues to use these same general parameters in its supplemental evidence using the RTC model.

#### **2. Capacity and Cycle Time**

As Otter Tail addressed in its Rebuttal evidence, BNSF failed to use the RTC model to simulate operations over the complete OTRR system. Instead, BNSF chose to model only the OTRR segments between Converse and Oriva, Wyoming and between Glendive, Montana and Fargo, North Dakota.<sup>1</sup> By contrast, Otter Tail’s supplemental evidence is based on the RTC model to simulate operations over the complete OTRR system.

In using the RTC model, Otter Tail accepted, as a starting point, the OTRR infrastructure

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<sup>1</sup> BNSF also used the RTC model to determine transit times for one train on the OTRR system from Fargo to Big Stone, South Dakota, but as BNSF did not model all of the trains operating over this segment in its peak period, its analysis is incomplete.

contained in BNSF's version of the RTC model for the Converse to Oriva and the Glendive to Fargo segments modeled by BNSF. In addition, Otter Tail followed much of BNSF's RTC modeling assumptions in developing and running trains through the RTC model in the simulation period. Each of Otter Tail's RTC modeling assumptions and the differences between Otter Tail's assumptions and those of BNSF are discussed below.

**a. Peak-Period**

In Otter Tail's Opening and Rebuttal evidence, the peak operating day was determined to be October 18, 2021 because this day has the highest number of trains that are dispatched from the mines served by the OTRR. Otter Tail's Opening and Rebuttal simulations used an eight day model period, which commenced on October 11 and finished on October 18, the peak day.

In contrast, BNSF selected a peak period of November 14 to November 27, 2021 because this period has the greatest number of trains traversing the Glendive to Fargo line segment. In using the RTC model, BNSF simulated trains moving from November 15 through November 25, which includes a two day warm-up period, a seven day modeling period to calculate average transit times, and a two day cool down period.

Otter Tail has accepted BNSF's use of a warm-up period, a seven day modeling period to calculate average transit times and other operating statistics, and a cool down period. In using the RTC model, Otter Tail simulated trains running from October 8 to October 23, 2021. This includes a four day warm-up period, a seven day modeling period (October 12 to October 18), and a four day cool down period.

Otter Tail believes that the BNSF's selection of the peak week based on the Glendive to Fargo segment is incorrect because it has a far lower density than the PRB, especially when the rerouted

non-coal traffic is removed from the OTRR traffic group.

**b. Coal Train Cycles**

In Otter Tail's Opening and Rebuttal evidence, coal train cycles in the String model began with the dispatch of loaded coal trains from a mine served by the OTRR.

In contrast, BNSF began coal train cycles when the empty coal trains arrived on the OTRR system. BNSF's empty trains then traveled to their origin mines, where BNSF linked the empty trains with loaded coal trains. The loaded coal trains were then dispatched by the RTC model from the mines and traveled to their off-SARR location completing the OTRR train cycle.

In applying the RTC model, Otter Tail accepts BNSF's train cycle methodology. Coal train cycles now begin when empty coal trains enter the OTRR system and link with loaded coal trains at the OTRR served mines.

**c. Linking Loaded and Empty Coal Trains at OTRR Served Mines**

In using the RTC model, BNSF identified empty coal trains entering the SARR system from its revenue and train movement files. The RTC model moved these empty trains to the origin mines where they were loaded and dispatched by the RTC model from the origin mine back to the same interchange location where the empty train entered the OTRR system.

In both of Otter Tail's RTC scenarios presented herein, the RTC model moved empty trains to the OTRR served mines during the study period. The empty trains were linked to the subsequent loaded train, which the RTC model dispatched after loading, and traveled over the same route the train followed in the real world.<sup>2</sup> Otter Tail's method of linking empty trains to loaded trains is

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<sup>2</sup> BNSF did not provide data in discovery that linked loaded and empty trains at the mines. The linking process used by Otter Tail is described in Supplemental electronic workpaper "RTC Coal Train List.xls".

superior to BNSF's method because Otter Tail is modeling the actual routing of both loaded and empties, whereas BNSF does not model the actual route of the loaded train. BNSF's method assumes that all loaded trains exit the OTRR system at the same location that the actual empty entered the OTRR system regardless of the actual route of movement. For example, BNSF assumes that an empty train that enters the system at Converse will leave the system at Converse as a loaded train even though the actual loaded train may have traveled to Fargo to exit the system.

**d. Empty Coal Train On-SARR Arrival Times**

**i. Actual trains**

In using the RTC model, BNSF identified from its train event files the time an empty train arrived at an OTRR-BNSF interchange station, and used this as the on-SARR time for the empty coal train. In Otter Tail's RTC simulation, it adopted BNSF's approach and began evaluating the movement of the empty trains on the day it arrived at the on-SARR station, i.e., Otter Tail identified the day an empty coal train arrived at an OTRR – BNSF interchange station from BNSF train event data provided in discovery.

BNSF has two exceptions to this general rule for the assignment of on-SARR arrival times for coal trains. First, BNSF's train event files do not list Converse as an event location. The closest event location at which BNSF's files report this information is Bill, WY. To develop estimated Converse arrival times, BNSF subtracted an average of nine (9) minutes from the each train's Bill event time to develop a Converse arrival time. Otter Tail has accepted BNSF's methodology for estimating on-SARR arrival times for trains at Converse Yard.

Second, BNSF did not model all segments of the OTRR system. BNSF's omission included the Fargo to Benson line segment, and, therefore, BNSF did not develop on-SARR times for empty

per hour only three seconds after it had been at a full stop. Otter Tail's RTC simulation does not contain these unrealistic changes in speed.

Otter Tail also showed that BNSF's RTC model contains inconsistent elevations for Moorhead Junction in its RTC simulations of the Snowden to Fargo segment and the Big Stone to Fargo segment. Because Otter Tail modeled the entire OTRR system rather than only portions of the OTRR system, its RTC simulation does not contain these inconsistencies.

### **3. Number of Locomotives**

In Otter Tail's Opening and Rebuttal evidence, the number of SD70MAC road locomotives in coal service and the number of C44-9 road locomotives in non-coal service were derived from the number of locomotive unit hours that were output from the String model. In this supplemental evidence, the number of road locomotives has been determined from the train hours produced by the RTC simulation model and has been increased by the same spare margin and peaking factors used in Otter Tail's Rebuttal evidence.

The number of helper locomotives in Otter Tail's Opening and Rebuttal evidence was based on the number of trains helped on the peak day in the String model simulation. The RTC Model does not provide as an output, the number of helper units required during the peak period. In this supplemental evidence, Otter Tail accepts BNSF's helper unit consists, as discussed in its Reply at pages III-C-15 to III-C-17, at all locations except Glendive and Fryburg. As fully explained in Otter Tail's Rebuttal at pages III-C-12 to III-C-15, the Glendive to Fryburg helper service is not required.

Finally, when the rerouted non-coal traffic is excluded, the traffic that received I&I switching at Fargo yard is no longer handled by the OTRR.<sup>3</sup> Therefore, the two SD40 switch locomotives

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<sup>3</sup> In BNSF's October 8, 2003 Reply Evidence, the OTRR performs this I&I switching at Glendive.

assigned to the Fargo yard to perform I&I switching service are no longer needed.

Table III-C-6,<sup>4</sup> below, compares the number of SD70MAC, C44-9 and SD40 locomotives included in Otter Tail’s Rebuttal evidence to the number of locomotives needed when using the RTC model and excluding the rerouted non-coal traffic for the two RTC scenarios presented in this supplemental evidence.<sup>5</sup>

Table III-C-6  
**Comparison of OTRR Locomotive Units**

| <u>Scenario</u>                      | <u>Road Locomotives</u> |              |                    |                    |
|--------------------------------------|-------------------------|--------------|--------------------|--------------------|
|                                      | <u>SD70MAC</u>          | <u>C44-9</u> | <u>SD70 Helper</u> | <u>SD40 Switch</u> |
| (1)                                  | (2)                     | (3)          | (4)                | (5)                |
| 1. Rebuttal Base Case                | 120                     | 47           | 21                 | 6                  |
| 2. Rebuttal Alternative Case         | 131                     | 47           | 21                 | 6                  |
| 3. RTC Base Case – Exclusions        | 137                     | 15           | 11                 | 4                  |
| 4. RTC Alternative Case – Exclusions | 147                     | 16           | 11                 | 4                  |

#### 4. Railcars

In Otter Tail’s Opening and Rebuttal evidence, the number of railcars the OTRR provides for coal service was derived from the number of car hours for railroad-provided equipment that were output from the String model. In this supplemental evidence, the number of railcars in coal service provided by the OTRR are determined from the coal car hours produced by the RTC model for

<sup>4</sup> Tables III-C-1 to III-C-4 are included in Otter Tail’s Opening Evidence and Table III-C-5 appears in Otter Tail’s Rebuttal Evidence.

<sup>5</sup> The detail supporting the OTRR locomotive requirements for the two Rebuttal scenarios were included in Otter Tail’s April 29, 2004 Rebuttal electronic workpapers as follows: 1) Rebuttal Base Case – “Exhibit III-C-3.123” contained in the “III-C” folder in the “OTP Rebuttal” directory; and 2) Rebuttal Alternative Case – “Exhibit III-C-3.123” contained in the III-C folder under the “Alternative” folder in the “OTP Rebuttal” directory. The details supporting the OTRR locomotive requirements for the two supplemental scenarios are included in Otter Tail’s March 1, 2005 Supplemental electronic workpapers as follow: 1) RTC Base Case – Exclusions – “Service Units\_XGF.123” contained in the III-C folder in the “OTP Reb XGF” directory; and 2) RTC Alternative Case – Exclusions – “Service Units\_XGF.123” contained in the III-C folder under the “Alternative” folder in the “OTP REB XGF” directory.

railroad-provided equipment. The number of coal cars is then increased to reflect the same spare margin and peaking factors used in Otter Tail’s Rebuttal evidence. Table III-C-7, below, compares the number of OTRR provided coal railcars in Otter Tail’s Rebuttal evidence to the car requirements produced when using the RTC model after excluding the rerouted non-coal traffic for the two RTC scenarios presented in this supplemental evidence.<sup>6</sup>

| <u>Scenario</u><br>(1)               | <u>Coal Cars</u><br>(4) |
|--------------------------------------|-------------------------|
| 1. Rebuttal Base Case                | 643                     |
| 2. Rebuttal Alternative Case         | 644                     |
| 3. RTC Base Case – Exclusions        | 706                     |
| 4. RTC Alternative Case – Exclusions | 710                     |

**5. Other**

In the String model simulation contained in Otter Tail’s Rebuttal, all empty coal trains moving through Donkey Creek were inspected at Donkey Creek, including those empty coal trains that had been received in interchange at Benson and Fargo and which were inspected in Glendive. The second inspection of empty coal trains at Donkey Creek, which previously had occurred at Glendive,

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<sup>6</sup> The detail supporting the OTRR car requirements for the two Rebuttal scenarios were included in Otter Tail’s April 29, 2004 Rebuttal electronic workpapers as follows: 1) Rebuttal Base Case – “Exhibit III-C-3.123” contained in the “III-C” folder in the “OTP Rebuttal directory; and 2) Rebuttal Alternative Case – “Exhibit III-C-3.123” contained in the III-C folder under the “Alternative” folder in the “OTP Rebuttal” directory. The details supporting the OTRR car requirements for the two supplemental scenarios are included in Otter Tail’s March 1, 2005 Supplemental electronic workpapers as follow: 1) RTC Base Case – Exclusions – “Service Units\_XGF.123” contained in the III-C folder in the “OTP Reb XGF” directory; and 2) RTC Alternative Case – Exclusions – “Service Units\_XGF.123” contained in the III-C folder under the “Alternative” folder in the “OTP REB XGF” directory.

213447

March 1, 2005

*Via Hand Delivery*

The Honorable Vernon A. Williams  
Secretary  
Surface Transportation Board  
1925 K St. N.W.  
Washington, D.C. 20423



RE: STB Docket No. 42071, *Otter Tail Power Company v. The Burlington Northern and Santa Fe Railway Company*

Dear Secretary Williams:

Please find enclosed for filing the original and ten (10) copies of Complainant's Supplemental Evidence in Response to the Board's December 13, 2004 Order in the above referenced proceeding. Also enclosed are three (3) compact disks containing the electronic version of the written text in WordPerfect, electronic version of the exhibits and workpapers in either Lotus format or Excel format. **Please note that the electronic exhibits and workpapers are HIGHLY CONFIDENTIAL.**

Due to circumstances beyond Complainant's control, it will be necessary for Complainant to submit an Errata within a few days. During the preparation of evidence using the RTC Model, Complainant encountered a program error that it immediately brought to the attention of the software vendor, Berkeley Simulation. The error in the program logic forced a series of trains into a loop, but the program did not have sufficient logic to get the trains out of the loop. Complainant discovered this error when attempting to make the following adjustments to its RTC Model:

1. Resolve minor variations between empty on-SARR times and BNSF actual empty on-SARR times.
2. Change the adhesion factor for certain trains from a setting of 10 (perfect track) to a setting of 5.
3. Correct a misaligned switch at the Cordero and Black Thunder mines.

On Sunday, February 27, 2005, Berkeley Simulation provided a program update to the RTC Model to **ALL** subscribers that fixes this problem. Unfortunately, however, this update was not received in sufficient time for Complainant to submit its evidence today based on the corrected RTC Model. Therefore, Complainant intends to submit an Errata within the next few days that makes the adjustments referenced above, using the corrected RTC Model.

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An extra copy of this filing is enclosed for stamping and returning to our offices.

Should you have any questions regarding the foregoing, please do not hesitate to contact the undersigned.

Sincerely,



Nicholas J. DiMichael  
Jeffrey O. Moreno  
*Counsel for Complainant*

cc: Counsel for Defendant

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**I**  
**SUMMARY**  
**AND ARGUMENT**

## PART I

### COUNSEL'S ARGUMENT AND SUMMARY OF EVIDENCE

Complainant, Otter Tail Power Company ("Otter Tail") hereby submits supplemental evidence in response to the December 13, 2004 order ("Dec. 13<sup>th</sup> Order") of the Surface Transportation Board ("Board"), as clarified in a February 18, 2005 order. This submission adheres to the format prescribed in the Board's March 12, 2001 decision in STB Ex Parte No. 347 (Sub-No. 3), General Procedures for Presenting Evidence in Stand-Alone Rate Cases.

#### A. Introduction and Background.

In the December 13<sup>th</sup> order, the Board directed Otter Tail "to file supplemental evidence showing the effect if the disputed rerouted northern non-coal traffic were *excluded* from its traffic group," and it directed BNSF Railway Company ("BNSF") "to file supplemental evidence showing the effect if the disputed southbound coal traffic originating south of Cordero were *included* in the traffic group." Dec. 13<sup>th</sup> Order at 2-3 [emphasis added]. The Board also directed both parties "to address how we might assure that any rate prescription resulting from the SAC analysis would not reflect an impermissible cross-subsidy." Id. at 3. Finally, the Board invited Otter Tail to "submit its evidence based on the Rail Traffic Controller [RTC] model used by BNSF, in lieu of its string model." Id.

Otter Tail has accepted the Board's invitation to submit its supplemental evidence using the RTC Model. In the following evidence, therefore, Otter Tail has used the RTC Model to show the effect upon the SAC analysis of excluding rerouted northern non-coal traffic from its traffic group. In addition, Otter Tail has based its cross-subsidy analysis upon the RTC Model.

Since its January 4, 2004 Supplemental Opening Evidence, Otter Tail has presented two alternative SAC analyses. Otter Tail's "Base Case" employs actual market-based divisions to

determine the allocation of cross-over coal traffic revenue. Otter Tail's "Alternative Case" uses the modified straight-mileage pro-rate ("MSP") method to allocate cross-over revenue. Due to differences between the two methodologies, the Alternative Case includes 31.7 million more tons of coal traffic than the Base Case.<sup>1</sup> Otter Tail continues to present a Base Case and an Alternative Case in this round of supplemental evidence.

**B. What is the Impact on the SAC Analysis, Based Upon The RTC Model, of Excluding the Rerouted Northern Non-Coal Traffic from Otter Tail's Traffic Group?**

In order to show the impact upon the SAC analysis of excluding the rerouted northern non-coal traffic from its traffic group, Otter Tail has used the RTC Model to model its traffic group, less the rerouted non-coal traffic, on the stand-alone railroad, called the Otter Tail Railroad ("OTRR"). Otter Tail has performed this analysis in both its Base and Alternative Cases.

Otter Tail has used the data from the RTC Model to determine the investment and operating units for the Base Case and Alternative Case OTRR, without the rerouted non-coal traffic. Otter Tail then has applied these revised units to its appropriate Rebuttal Evidence unit costs to generate total operating and investment costs. Those costs have been incorporated into a DCF model to show the effect on the SAC analysis of excluding the rerouted northern non-coal traffic from Otter Tail's traffic group for both its Base and Alternative Cases.

**C. How to Ensure that the SAC Analysis does not Reflect an Impermissible Cross-Subsidy?**

The second issue raised by the Board is "whether including this [southbound coal traffic from the southern PRB] would create an impermissible cross-subsidy of the infrastructure that

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<sup>1</sup> See OTP Opening Evidence at III-A-19, note 24 (filed June 13, 2003) and OTP Supplemental Opening Evidence at I-2 to 3 (filed Jan. 9, 2004) for a full explanation of the reasons for excluding 31.7 million tons of coal from the "Base Case."

would be needed north of Converse Junction.” Dec. 13<sup>th</sup> Order at 3. The Board directed both parties to address how it “might assure that any rate prescription resulting from the SAC analysis would not reflect an impermissible cross subsidy.” Id. The Board posed this issue in the context of its cross-subsidy analysis in PPL Montana, LLC v. The Burlington Northern and Santa Fe Ry. Co., STB Docket No. 42054 (served Aug. 20, 2002) at 10-13 (“PPL”). Dec. 13<sup>th</sup> Order at 3.

Since the entire OTRR lies north of Converse Junction, there cannot be a cross-subsidy of the OTRR north of Converse Junction by any portion to the south. Furthermore, under the PPL cross-subsidy test, if there was no cross-subsidy before adding southbound coal traffic from the southern PRB, the addition of that traffic cannot create a cross-subsidy. Thus, Otter Tail is uncertain why the Board has posed the cross-subsidy question in the context of infrastructure needed “north of Converse Junction” and of adding southbound coal traffic from the southern PRB.

However, since the Board also has posed the cross-subsidy question in the context of the PPL test, specifically citing the pages containing the actual analysis performed by the Board, Otter Tail presumes that the Board intended for the parties to perform a similar analysis to determine if the OTRR’s highest density lines in the PRB cross-subsidize its lines north of the PRB.

In responding to this question, Otter Tail has used the same procedures and methodologies to perform a cross-subsidy analysis of the OTRR that it used in its Rebuttal Evidence and that the Board employed in the PPL case. Otter Tail has performed the PPL cross-subsidy analysis for both its Base and Alternative Cases.

Otter Tail has performed the PPL analysis at two key points along the OTRR. The first point is at Campbell, Wyoming. Otter Tail selected Campbell because that is the same point at

which the Board performed its cross-subsidy test in PPL. Moreover, if any point south of Campbell were chosen as the dividing point for the PPL analysis, the line north of that point would pass the PPL cross-subsidy test by an even greater margin. The second point is Glendive, Montana, which Otter Tail also used in its Rebuttal Evidence. Otter Tail chose Glendive in order to determine whether a cross-subsidy was created on the line segment east of Glendive by excluding the rerouted non-coal traffic from Otter Tail's traffic group. If the Board desires to use other line segments, Otter Tail has provided information in its workpapers to perform the same analysis at any point along the OTRR.

Otter Tail's PPL analyses using the RTC model demonstrate that there is no impermissible cross-subsidy between any line segments on the OTRR, without the rerouted northern non-coal traffic, in both Otter Tail's Base Case and Alternative Case.

**D. Otter Tail's Application of the RTC Model is Superior to BNSF's Application Because Otter Tail has Modeled the Complete OTRR.**

Otter Tail has modeled the complete OTRR using the RTC Model. In stark contrast, BNSF has not done so. Rather, BNSF has chosen to model only two unconnected line segments between Oriva, WY and Converse, WY, and between Glendive, MT and Fargo, ND.<sup>2</sup> BNSF chose not to model the SARR from Oriva, WY to Glendive, MT and from Fargo, ND to Big Stone, SD.<sup>3</sup> See BNSF Reply Evid. at III.B-7 to 8 (filed Oct. 8, 2003). For these latter two segments, BNSF simply accepted Otter Tail's capacity evidence, stating that it did so because the OTRR's capacity was similar to the real-world BNSF capacity over those segments, even though

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<sup>2</sup> Although BNSF originally modeled a third line segment from Glendive, MT to Snowden, MT, it eliminated that line when it subsequently excluded all rerouted northern non-coal traffic. See BNSF Supplemental Reply Evidence at III.B-1 (filed March 22, 2004).

<sup>3</sup> BNSF did run a single train over the Fargo to Big Stone line segment on the RTC Model, but did not otherwise model all of the traffic on that line or link the RTC Model of that line segment with the RTC Model of the adjoining line segment from Fargo to Glendive.

the OTRR handles less traffic than these real-world BNSF line segments. See BNSF Reply Evid. at III.B-7 to 8 (filed Oct. 8, 2004).

In modeling just two unconnected segments on the OTRR, BNSF has not properly linked the traffic flows between the various line segments and is unable to measure the impact of changes that occur on one line segment upon other line segments. Otter Tail has thoroughly addressed this issue at pages III-B-25 to 27 and III-B-40 to 42 of its April 29, 2004 Rebuttal Evidence and will not repeat those arguments here.

Apart from modeling the entire OTRR, Otter Tail has endeavored to adhere to the same assumptions that BNSF used in its application of the RTC Model. The exceptions are due to Otter Tail's continued adherence to its Rebuttal Evidence, or they are necessitated because Otter Tail modeled the complete SARR, whereas BNSF modeled only segments of the SARR.

There are five key differences. First, Otter Tail has continued to use the same operational dwell times in yard for inspections, fueling, crew changes, and interchange as it presented in its Rebuttal Evidence. Second, Otter Tail's peak traffic period is different from BNSF's peak traffic period. Otter Tail's peak traffic period reflects traffic moving on the busiest week on the PRB Converse-Campbell line segment, which is the densest line segment on the OTRR, while BNSF's peak traffic period reflects traffic moving over the Glendive-Fargo line segment, which has a far lower density than the PRB Converse-Campbell line segment, particularly after the rerouted northern non-coal traffic is excluded. Third, Otter Tail has linked real-world empty trains with real-world loaded trains at PRB mines, which BNSF failed to do in its RTC simulations. Fourth, because BNSF did not model all of the traffic on the Fargo-Benson line segment, it did not develop on-SARR times for empty trains at Benson. Therefore, Otter Tail had to interpolate this information from empty coal train arrival times at Fargo, ND. Finally, at

pages III-B-27 to 29 of its Rebuttal Evidence, Otter Tail identified several flaws and anomalous data in BNSF's application of the RTC Model, such as trains that start and stop instantaneously and inconsistent elevations, which Otter Tail has corrected in its application of the RTC Model.

Otter Tail's SAC analyses based upon the RTC Model produce SAC rates, in both the Base and Alternative Cases, excluding the rerouted northern non-coal traffic, that are well below the rate that BNSF is charging Otter Tail, and that are consistent with Otter Tail's evidence of the unreasonableness of the rate in its Rebuttal Base and Rebuttal Alternative case. This fact suggests that BNSF's decision not to model the complete SARR in this case was a tactical decision intended to inflate the SAC rate, because BNSF could not obtain the result it desired by modeling the complete SARR on the RTC Model.

Respectfully submitted,



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Dated: March 1, 2005

**III-A**  
**STAND-ALONE**  
**TRAFFIC GROUP**

### **III-A. TRAFFIC GROUP**

Otter Tail's calculation of the maximum lawful rate under the Stand-Alone Cost ("SAC") constraint of the Surface Transportation Board's ("STB" or "Board") Coal Rate Guidelines-Nationwide ("Guidelines") is based upon a hypothetical rail carrier, named the Otter Tail Railroad ("OTRR"). Otter Tail presented its determination of maximum lawful rates on June 13, 2003 in its Opening Evidence; on January 9, 2004 in its Supplemental Opening Evidence; and on April 29, 2004 in its Rebuttal Evidence.

As described in detail in Section III-B of Otter Tail's Opening and Rebuttal Evidence, the OTRR is designed: (1) to transport coal from mines in the Powder River Basin ("PRB") to the Big Stone Generating Station; (2) to transport coal from PRB mines to interchange with BNSF for delivery to other destinations; and (3) to transport general freight trains in overhead service for interchange with the residual BNSF. The interchange points with the residual BNSF for coal and general freight are located at Donkey Creek and Converse, Wyoming; Moran Junction, Terry and Snowden, Montana; and Fargo, North Dakota, Benson, MN. The OTRR's traffic group consists of coal movements in unit trains and general freight trains moving in overhead service.

In its December 13, 2004 and February 18, 2005 decisions in this proceeding ("Decisions"), the STB identified two areas of difference in the parties' respective traffic groups for the OTRR. The Board stated that Otter Tail, in its Supplemental Opening evidence, designed the OTRR to handle 233 million tons of traffic in the 2002 base year and BNSF, in its Supplemental Reply Evidence, designed the system to handle 135 million tons of traffic in the base year. The difference in the two traffic groups is primarily related to Otter Tail's inclusion and BNSF's exclusion of 13.7 million tons of rerouted non-coal traffic moving between Fargo, North Dakota and Snowden, Montana, and 85

million tons of coal traffic that originates in the PRB at mines south of Cordero, which then moves in a southerly direction to interchange with BNSF at Converse, Wyoming.

The STB directed the parties to submit supplemental evidence that addresses these two areas of differences. Otter Tail was directed to file supplemental evidence to show the effect of excluding the 13.7 million tons of rerouted non-coal traffic and BNSF was directed to file supplemental evidence showing the effect of including the southbound coal in its traffic group.

The STB also directed both parties to address how the Board can assure that any rate prescription resulting from the SAC analysis would not reflect an impermissible cross-subsidy similar to that found by the Board in Docket No. 42054, PPL Montana, LLC. v. Burlington Northern and Santa Fe Railway (“PPL”).

The STB also stated, “If it wishes, Otter Tail may submit its evidence based on the Rail Traffic Controller model used by BNSF, in lieu of its string model.” December 13, 2004 Decision at 3. Otter Tail has elected to use the RTC Model in this supplemental evidence.

In order to comply with the Board’s directives, Otter Tail prepared two scenarios which are presented in this filing and compared to Otter Tail’s Rebuttal Base Case and Rebuttal Alternative Case. The two scenarios presented here are the Rebuttal Base Case using the RTC model and excluding the rerouted non-coal traffic (“RTC Base Case – Exclusions”) and the Rebuttal Alternative Case using the RTC model and excluding the rerouted non-coal traffic (“RTC Alternative Case – Exclusions”).

#### **1. Traffic and Revenues**

As explained in its Rebuttal evidence, Otter Tail is submitting a primary or “Base Case” and an “Alternative Case”. The difference in its two cases is related to the calculation of revenues on cross-

over traffic. In Otter Tail's Base Case, SARR revenues from "cross-over" traffic included in the traffic group are allocated by using an algorithm that is based on BNSF's actual market-based divisions. Otter Tail used market-based divisions in response to a decade of precedent in Stand-Alone Cost proceedings in which the Board stated a preference for market-based divisions.

As fully addressed in Otter Tail's Rebuttal evidence, the Board in its November 6, 2003 decision in Docket No. 42069, Duke Energy Corp. v. Norfolk Southern Ry. Co. ("Duke/NS"), introduced the use of a Modified Straight-Mileage Prorate ("MSP") to calculate divisions on cross-over traffic. As a result, revenues on cross-over traffic in Otter Tail's Alternative Case are allocated by the Board's MSP methodology.

As explained in Otter Tail's Rebuttal evidence, use of actual market-based divisions, in its Base Case, requires the exclusion of 31.7 million tons of coal traffic that otherwise would be included in the OTRR traffic group when using the MSP methodology to allocate revenues from cross-over traffic. Thus there is a difference in both revenues and traffic between Otter Tail's Base Case and its Alternative Case. Otter Tail's supplemental evidence shows the effect of removing the 13.7 million tons of rerouted non-coal traffic on the OTRR from both the Base Case and the Alternative Case.

All other elements of Otter Tail's traffic group and revenues presented in this supplemental evidence remain the same as presented in Otter Tail's Rebuttal evidence. Table III-A-10,<sup>1</sup> below, compares the 2002 base year traffic tons and revenues, for both the Rebuttal Base Case and the Rebuttal Alternative Case, to these scenarios using the RTC simulation and excluding the 13.7

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<sup>1</sup> Tables III-A-1 to III-A-9 are included in Otter Tail's April 29, 2004 Rebuttal evidence.

million tons of non-coal rerouted traffic.<sup>2</sup>

| <u>Scenario</u>                      | <u>Tons</u><br>(millions) | <u>Revenues</u><br>(millions) |
|--------------------------------------|---------------------------|-------------------------------|
| (1)                                  | (2)                       | (3)                           |
| 1. Rebuttal Base Case                | 201.5                     | \$832.2                       |
| 2. Rebuttal Alternative Case         | 233.3                     | \$675.1                       |
| 3. RTC Base Case – Exclusions        | 187.8                     | \$735.4                       |
| 4. RTC Alternative Case – Exclusions | 219.6                     | \$583.0                       |

## **2. PPL Cross-Subsidy Analysis**

As stated previously, the STB directed both parties to address how the Board can assure that any rate prescription resulting from the SAC analysis would not reflect an impermissible cross-subsidy as defined by the STB in PPL.

In its Opening Evidence at page III-A-26, Otter Tail performed a threshold cross-subsidy analysis, using the Board's PPL cross-subsidy methodology, to demonstrate that all segments of the OTRR are self-sustaining and do not contain an impermissible cross-subsidy similar to the Board's calculation in PPL.

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<sup>2</sup> The details supporting the OTRR traffic and revenues for the two Rebuttal scenarios were included in Otter Tail's April 29, 2004 Rebuttal electronic workpapers as follows: 1) Rebuttal Base Case files contained in the III-A folder in the "OTP Rebuttal" directory; and 2) Rebuttal Alternative Case files contained in the III-A folder under the "Alternative" folder in the "OTP Rebuttal" directory. The details supporting the OTRR traffic and revenues for the two supplemental scenarios are included in Otter Tail's March 1, 2005 Supplemental electronic workpapers as follow: 1) RTC Base Case – Exclusions files contained in the III-A folder in the "OTP Reb XGF" directory; and 2) RTC Alternative Case – Exclusions files contained in the III-A folder under the "Alternative" folder in the "OTP REB XGF" directory.

Otter Tail does not believe that the cross-subsidy test used by the Board in PPL properly reflects the existence of a cross-subsidy. When a railroad (or any company) evaluates whether or not to handle new traffic (or a new line of business), it compares the revenues that will be generated by the new traffic to the economic costs (i.e., attributable, avoidable, variable, incremental or marginal costs) of handling the new traffic. As long as the revenues from the new traffic are greater than the economic costs of handling the new traffic, the railroad (or any company) is better off with the new traffic. This same theoretical approach is used to evaluate whether or not a railroad should continue to handle existing or theoretical traffic movements.<sup>3</sup>

To properly determine the economic costs associated with handling new traffic, one must consider the capital costs associated with the new traffic and the variable operating expenses associated with handling this new traffic. The Board's PPL methodology erroneously considers both the fixed and variable portions of the operating costs associated with the new traffic, rather than only the long-run variable portion of these costs.

It is well recognized that operating costs contain both variable and fixed components and that the fixed components cannot be directly attributable to individual movements. The long-run variable operating costs can be estimated by applying the Uniform Rail Costing System ("URCS") regression coefficients to the total traffic on the SARR system for each of the expense categories of operating cost and, in doing so, determine the portion of the SARR operating cost that are long-run variable operating costs. It is only the long-run variable portion of operating cost that are appropriately included in the cross-subsidy analysis.

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<sup>3</sup> This is also consistent with Ex Parte 347 (Sub No. 2) where the STB stated, "As a general rule, it is better for a railroad to carry any traffic that covers its own attributable costs and makes any contribution (no matter how slight) to the joint and common costs." 1 S.T.B. 1004 (1996).

Use of long-run variable costs is consistent with Ex Parte 347 (Sub No. 2), Coal Rate Guidelines, Nationwide, where the Interstate Commerce Commission (“ICC”) states, “The long-run marginal cost (LRMC) is the economic measure of long-term attributable cost of each service.” 1 I.C.C. 2d at 536. The ICC then defines LRMC as:

The marginal cost of a service is the additional cost that would be incurred in supplying an additional unit, or the saving in total cost that would be made possible by supplying one less unit. As such, the marginal cost of a rail service is the per-unit opportunity cost to the rail carrier of the service. Here the term “opportunity cost” refers to the value a resource can contribute if it is used in some alternative occupation instead of the one to which it is currently assigned by the railroad. Thus, marginal cost is similar in meaning to a unit incremental cost and to the true economic variable cost.

I.C.C. 2d at 537, note 43.

In contrast to this definition of LRMC (and thereby long-term attributable cost), the Board’s PPL methodology incorrectly includes the fixed portion of the operating costs that cannot be directly allocated to a unit or units of traffic.

Even though Otter Tail disagrees with the Board’s PPL methodology, in Rebuttal, Otter Tail performed the cross-subsidy test using that methodology on the segments east of Glendive, Montana and west of Campbell, Wyoming for both its Base Case traffic group and its Alternative Case traffic group. The results of the cross-subsidy analyses, labeled “Campbell West” and “Glendive East,” showed that the revenues attributable to the traffic moving on each distinct segment exceed the attributable cost as defined by the Board in PPL on a cumulative basis over the twenty-year DCF period. Thus, no impermissible cross-subsidy exists for these subsets of traffic using the Board’s PPL cross-subsidy methodology.

In this supplemental evidence, Otter Tail has again performed the Campbell West<sup>4</sup> and Glendive East cross-subsidy tests, using the Board's PPL methodology, for both the RTC Base Case – Exclusions and RTC Alternative Case – Exclusions. The results of these analyses also show that the revenues attributable to the traffic moving on each distinct segment exceed the attributable cost when the rerouted traffic is excluded from the OTTR traffic group.<sup>5</sup>

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<sup>4</sup> If a point south or east of Campbell were to be used as the starting point, the results of that particular PPL cross-subsidy analysis would produce a greater difference between attributable revenues and attributable costs than the results of the Campbell West cross-subsidy analysis.

<sup>5</sup> The detail supporting the Otter Tail's PPL tests for the two Rebuttal scenarios were included in Otter Tail's April 29, 2004 Rebuttal electronic workpapers as follows: 1) Rebuttal Base Case files contained in the "Campbell West" and "Glendive East" folders in the III-H folder; and 2) Rebuttal Alternative Case files contained in the "Campbell West" and "Glendive East" folders in the III-H under the "Alternative" folder in the "OTP Rebuttal" directory. The details supporting the Otter Tail's PPL tests for the two supplemental scenarios are included in Otter Tail's March 1, 2005 Supplemental electronic workpapers as follow: 1) RTC Base Case – Exclusions files contained in the "Campbell West" and "Glendive East" folders in the III-H folder in the "OTP Reb XGF" directory; and 2) RTC Alternative Case – Exclusions files contained in the "Campbell West" and "Glendive East" folders in the III-H folder under the "Alternative" folder in the "OTP REB XGF" directory.

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**III-B**  
**STAND-ALONE**  
**RAILROAD SYSTEM**

### **III-B. STAND-ALONE RAILROAD SYSTEM**

On Rebuttal, Otter Tail presented its stand-alone railroad system, the OTRR, for its base case and its alternative case. As discussed in Section III-A, *supra*, the STB, on December 13, 2004, issued a decision requesting that Otter Tail file supplemental evidence using the RTC Model and demonstrating the impact of eliminating rerouted non-coal traffic between Fargo, ND and Snowden, MT. The STB also issued a decision on February 18, 2005 providing further instructions as to the content of the supplemental evidence. In complying with the STB's two decisions, Otter Tail has developed the two previously-described presentations: (1) RTC Base Case - Exclusions; and (2) RTC Alternative Case - Exclusions. The changes to the OTRR system necessitated by the STB's decisions are discussed below.

#### **1. Route and Mileage**

Otter Tail discussed the route miles of the OTRR for its base case and alternative case at pages III-B-4 to III-B-7 of its Rebuttal Evidence. On Rebuttal, the route miles of the OTRR equaled 1,283.84 for both the base case and the alternative case. For the RTC Base Case - Exclusions and RTC Alternative Case - Exclusions, there is a change in route miles of the OTRR, i.e., the elimination of the Glendive to Snowden branch (78.64 route miles). This change reduces the OTRR's configuration to 1,205.20 route miles for the two exclusion scenarios.

#### **2. Track Miles**

Otter Tail discussed main line and branch line track miles at pages III-B-7 to III-B-11 of its Rebuttal Evidence. The Rebuttal facility plan for the OTRR was contained in Exhibit III-B-2.

For the RTC Base Case - Exclusions and RTC Alternative Case - Exclusions, all of the track and associated infrastructure between Glendive and Snowden were eliminated. In addition, many

### **III-C. OPERATING PLAN**

As stated in Section III-A., the STB directed Otter Tail to submit supplemental evidence showing the effect of excluding the rerouted non-coal traffic from its traffic group. In addition, the STB stated, “If it wishes, Otter Tail may submit its evidence based on the Rail Traffic Controller model used by BNSF, in lieu of its string model.” December 13, 2004 Decision at 3. As stated previously, Otter Tail has chosen to submit its supplemental evidence using the RTC model. This section of Otter Tail’s supplemental evidence provides the detail of the application of the RTC model to the OTRR traffic group for the RTC Base Case – Exclusions and the RTC Alternative Case – Exclusions.

#### **1. General Parameters**

Otter Tail discussed the general parameters of the OTRR at pages III-C-3 to III-C-17 of its Rebuttal evidence. Otter Tail continues to use these same general parameters in its supplemental evidence using the RTC model.

#### **2. Capacity and Cycle Time**

As Otter Tail addressed in its Rebuttal evidence, BNSF failed to use the RTC model to simulate operations over the complete OTRR system. Instead, BNSF chose to model only the OTRR segments between Converse and Oriva, Wyoming and between Glendive, Montana and Fargo, North Dakota.<sup>1</sup> By contrast, Otter Tail’s supplemental evidence is based on the RTC model to simulate operations over the complete OTRR system.

In using the RTC model, Otter Tail accepted, as a starting point, the OTRR infrastructure

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<sup>1</sup> BNSF also used the RTC model to determine transit times for one train on the OTRR system from Fargo to Big Stone, South Dakota, but as BNSF did not model all of the trains operating over this segment in its peak period, its analysis is incomplete.

contained in BNSF's version of the RTC model for the Converse to Oriva and the Glendive to Fargo segments modeled by BNSF. In addition, Otter Tail followed much of BNSF's RTC modeling assumptions in developing and running trains through the RTC model in the simulation period. Each of Otter Tail's RTC modeling assumptions and the differences between Otter Tail's assumptions and those of BNSF are discussed below.

**a. Peak-Period**

In Otter Tail's Opening and Rebuttal evidence, the peak operating day was determined to be October 18, 2021 because this day has the highest number of trains that are dispatched from the mines served by the OTRR. Otter Tail's Opening and Rebuttal simulations used an eight day model period, which commenced on October 11 and finished on October 18, the peak day.

In contrast, BNSF selected a peak period of November 14 to November 27, 2021 because this period has the greatest number of trains traversing the Glendive to Fargo line segment. In using the RTC model, BNSF simulated trains moving from November 15 through November 25, which includes a two day warm-up period, a seven day modeling period to calculate average transit times, and a two day cool down period.

Otter Tail has accepted BNSF's use of a warm-up period, a seven day modeling period to calculate average transit times and other operating statistics, and a cool down period. In using the RTC model, Otter Tail simulated trains running from October 8 to October 23, 2021. This includes a four day warm-up period, a seven day modeling period (October 12 to October 18), and a four day cool down period.

Otter Tail believes that the BNSF's selection of the peak week based on the Glendive to Fargo segment is incorrect because it has a far lower density than the PRB, especially when the rerouted

non-coal traffic is removed from the OTRR traffic group.

**b. Coal Train Cycles**

In Otter Tail's Opening and Rebuttal evidence, coal train cycles in the String model began with the dispatch of loaded coal trains from a mine served by the OTRR.

In contrast, BNSF began coal train cycles when the empty coal trains arrived on the OTRR system. BNSF's empty trains then traveled to their origin mines, where BNSF linked the empty trains with loaded coal trains. The loaded coal trains were then dispatched by the RTC model from the mines and traveled to their off-SARR location completing the OTRR train cycle.

In applying the RTC model, Otter Tail accepts BNSF's train cycle methodology. Coal train cycles now begin when empty coal trains enter the OTRR system and link with loaded coal trains at the OTRR served mines.

**c. Linking Loaded and Empty Coal Trains at OTRR Served Mines**

In using the RTC model, BNSF identified empty coal trains entering the SARR system from its revenue and train movement files. The RTC model moved these empty trains to the origin mines where they were loaded and dispatched by the RTC model from the origin mine back to the same interchange location where the empty train entered the OTRR system.

In both of Otter Tail's RTC scenarios presented herein, the RTC model moved empty trains to the OTRR served mines during the study period. The empty trains were linked to the subsequent loaded train, which the RTC model dispatched after loading, and traveled over the same route the train followed in the real world.<sup>2</sup> Otter Tail's method of linking empty trains to loaded trains is

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<sup>2</sup> BNSF did not provide data in discovery that linked loaded and empty trains at the mines. The linking process used by Otter Tail is described in Supplemental electronic workpaper "RTC Coal Train List.xls".

superior to BNSF's method because Otter Tail is modeling the actual routing of both loaded and empties, whereas BNSF does not model the actual route of the loaded train. BNSF's method assumes that all loaded trains exit the OTRR system at the same location that the actual empty entered the OTRR system regardless of the actual route of movement. For example, BNSF assumes that an empty train that enters the system at Converse will leave the system at Converse as a loaded train even though the actual loaded train may have traveled to Fargo to exit the system.

**d. Empty Coal Train On-SARR Arrival Times**

**i. Actual trains**

In using the RTC model, BNSF identified from its train event files the time an empty train arrived at an OTRR-BNSF interchange station, and used this as the on-SARR time for the empty coal train. In Otter Tail's RTC simulation, it adopted BNSF's approach and began evaluating the movement of the empty trains on the day it arrived at the on-SARR station, i.e., Otter Tail identified the day an empty coal train arrived at an OTRR – BNSF interchange station from BNSF train event data provided in discovery.

BNSF has two exceptions to this general rule for the assignment of on-SARR arrival times for coal trains. First, BNSF's train event files do not list Converse as an event location. The closest event location at which BNSF's files report this information is Bill, WY. To develop estimated Converse arrival times, BNSF subtracted an average of nine (9) minutes from the each train's Bill event time to develop a Converse arrival time. Otter Tail has accepted BNSF's methodology for estimating on-SARR arrival times for trains at Converse Yard.

Second, BNSF did not model all segments of the OTRR system. BNSF's omission included the Fargo to Benson line segment, and, therefore, BNSF did not develop on-SARR times for empty

per hour only three seconds after it had been at a full stop. Otter Tail's RTC simulation does not contain these unrealistic changes in speed.

Otter Tail also showed that BNSF's RTC model contains inconsistent elevations for Moorhead Junction in its RTC simulations of the Snowden to Fargo segment and the Big Stone to Fargo segment. Because Otter Tail modeled the entire OTRR system rather than only portions of the OTRR system, its RTC simulation does not contain these inconsistencies.

### **3. Number of Locomotives**

In Otter Tail's Opening and Rebuttal evidence, the number of SD70MAC road locomotives in coal service and the number of C44-9 road locomotives in non-coal service were derived from the number of locomotive unit hours that were output from the String model. In this supplemental evidence, the number of road locomotives has been determined from the train hours produced by the RTC simulation model and has been increased by the same spare margin and peaking factors used in Otter Tail's Rebuttal evidence.

The number of helper locomotives in Otter Tail's Opening and Rebuttal evidence was based on the number of trains helped on the peak day in the String model simulation. The RTC Model does not provide as an output, the number of helper units required during the peak period. In this supplemental evidence, Otter Tail accepts BNSF's helper unit consists, as discussed in its Reply at pages III-C-15 to III-C-17, at all locations except Glendive and Fryburg. As fully explained in Otter Tail's Rebuttal at pages III-C-12 to III-C-15, the Glendive to Fryburg helper service is not required.

Finally, when the rerouted non-coal traffic is excluded, the traffic that received I&I switching at Fargo yard is no longer handled by the OTRR.<sup>3</sup> Therefore, the two SD40 switch locomotives

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<sup>3</sup> In BNSF's October 8, 2003 Reply Evidence, the OTRR performs this I&I switching at Glendive.

assigned to the Fargo yard to perform I&I switching service are no longer needed.

Table III-C-6,<sup>4</sup> below, compares the number of SD70MAC, C44-9 and SD40 locomotives included in Otter Tail’s Rebuttal evidence to the number of locomotives needed when using the RTC model and excluding the rerouted non-coal traffic for the two RTC scenarios presented in this supplemental evidence.<sup>5</sup>

| <u>Scenario</u>                      | <u>Road Locomotives</u> |              |                    |                    |
|--------------------------------------|-------------------------|--------------|--------------------|--------------------|
|                                      | <u>SD70MAC</u>          | <u>C44-9</u> | <u>SD70 Helper</u> | <u>SD40 Switch</u> |
| (1)                                  | (2)                     | (3)          | (4)                | (5)                |
| 1. Rebuttal Base Case                | 120                     | 47           | 21                 | 6                  |
| 2. Rebuttal Alternative Case         | 131                     | 47           | 21                 | 6                  |
| 3. RTC Base Case – Exclusions        | 137                     | 15           | 11                 | 4                  |
| 4. RTC Alternative Case – Exclusions | 147                     | 16           | 11                 | 4                  |

#### 4. Railcars

In Otter Tail’s Opening and Rebuttal evidence, the number of railcars the OTRR provides for coal service was derived from the number of car hours for railroad-provided equipment that were output from the String model. In this supplemental evidence, the number of railcars in coal service provided by the OTRR are determined from the coal car hours produced by the RTC model for

<sup>4</sup> Tables III-C-1 to III-C-4 are included in Otter Tail’s Opening Evidence and Table III-C-5 appears in Otter Tail’s Rebuttal Evidence.

<sup>5</sup> The detail supporting the OTRR locomotive requirements for the two Rebuttal scenarios were included in Otter Tail’s April 29, 2004 Rebuttal electronic workpapers as follows: 1) Rebuttal Base Case – “Exhibit III-C-3.123” contained in the “III-C” folder in the “OTP Rebuttal” directory; and 2) Rebuttal Alternative Case – “Exhibit III-C-3.123” contained in the III-C folder under the “Alternative” folder in the “OTP Rebuttal” directory. The details supporting the OTRR locomotive requirements for the two supplemental scenarios are included in Otter Tail’s March 1, 2005 Supplemental electronic workpapers as follow: 1) RTC Base Case – Exclusions – “Service Units\_XGF.123” contained in the III-C folder in the “OTP Reb XGF” directory; and 2) RTC Alternative Case – Exclusions – “Service Units\_XGF.123” contained in the III-C folder under the “Alternative” folder in the “OTP REB XGF” directory.

railroad-provided equipment. The number of coal cars is then increased to reflect the same spare margin and peaking factors used in Otter Tail’s Rebuttal evidence. Table III-C-7, below, compares the number of OTRR provided coal railcars in Otter Tail’s Rebuttal evidence to the car requirements produced when using the RTC model after excluding the rerouted non-coal traffic for the two RTC scenarios presented in this supplemental evidence.<sup>6</sup>

| <u>Scenario</u><br>(1)               | <u>Coal Cars</u><br>(4) |
|--------------------------------------|-------------------------|
| 1. Rebuttal Base Case                | 643                     |
| 2. Rebuttal Alternative Case         | 644                     |
| 3. RTC Base Case – Exclusions        | 706                     |
| 4. RTC Alternative Case – Exclusions | 710                     |

**5. Other**

In the String model simulation contained in Otter Tail’s Rebuttal, all empty coal trains moving through Donkey Creek were inspected at Donkey Creek, including those empty coal trains that had been received in interchange at Benson and Fargo and which were inspected in Glendive. The second inspection of empty coal trains at Donkey Creek, which previously had occurred at Glendive,

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<sup>6</sup> The detail supporting the OTRR car requirements for the two Rebuttal scenarios were included in Otter Tail’s April 29, 2004 Rebuttal electronic workpapers as follows: 1) Rebuttal Base Case – “Exhibit III-C-3.123” contained in the “III-C” folder in the “OTP Rebuttal directory; and 2) Rebuttal Alternative Case – “Exhibit III-C-3.123” contained in the III-C folder under the “Alternative” folder in the “OTP Rebuttal” directory. The details supporting the OTRR car requirements for the two supplemental scenarios are included in Otter Tail’s March 1, 2005 Supplemental electronic workpapers as follow: 1) RTC Base Case – Exclusions – “Service Units\_XGF.123” contained in the III-C folder in the “OTP Reb XGF” directory; and 2) RTC Alternative Case – Exclusions – “Service Units\_XGF.123” contained in the III-C folder under the “Alternative” folder in the “OTP REB XGF” directory.