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June 21, 2006

Vernon A. Williams  
Secretary  
Surface Transportation Board  
1925 K Street, N.W.  
Suite 700  
Washington, DC 20423

Writer's Direct Access  
**Martin W. Bercovici**  
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Re: Rail Fuel Surcharges, STB Ex Parte No. 661, Response to Union Pacific Reply;  
REDACTED—For Public File

Dear Secretary Williams:

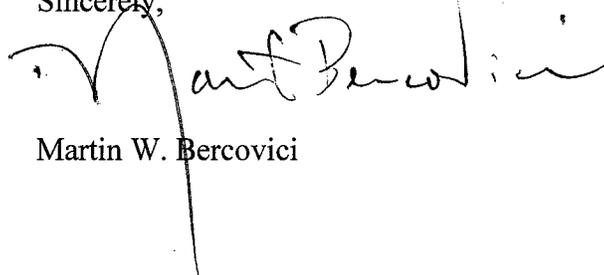
Enclosed, please find the response of the Arkansas Electric Cooperative Corporation (“AECC”) to the Reply of the Union Pacific Railroad (UP) filed on June 5, 2006, to AECC’s Rail Fuel Use and Surcharges study submitted to the Board on May 15, 2006.

The statement associated herewith is the redacted version, with confidential information removed. This statement may be treated as public. A confidential version is being submitted contemporaneously herewith, in accordance with the Board’s Decision served June 8, 2006.

The Board is respectfully requested to accept this response to assure the record in this proceeding is complete and accurate.

A copy of this letter and the public version of the response is being served this date on counsel for UP and Entergy via electronic mail.

Sincerely,



Martin W. Bercovici

Enclosure

cc: Louise A. Rinn, Counsel to Union Pacific Railroad  
Sandra L. Brown, Counsel to Entergy

***PUBLIC – REDACTED***  
**BEFORE THE**  
**SURFACE TRANSPORTATION BOARD**

**STB EX PARTE NO. 661**

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**RAIL FUEL SURCHARGES**

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**STATEMENT OF MICHAEL A. NELSON**  
**REGARDING FUEL SURCHARGE STUDY**

**PREPARED ON BEHALF OF**  
**ARKANSAS ELECTRIC COOPERATIVE CORPORATION**

**131 North Street**  
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**June 20, 2006**

**STATEMENT OF MICHAEL A. NELSON  
REGARDING FUEL SURCHARGE STUDY**

**1. Qualifications**

My name is Michael A. Nelson. I am an independent transportation systems analyst with over 25 years of experience advising clients on rail transportation issues. My office is in Dalton, Massachusetts.

I have directed or participated in numerous consulting assignments and research projects in the general field of transportation. My work typically involves developing and applying methodologies based on operations research, microeconomics, statistics and/or econometrics to solve specialized analytical problems.

Over the past 22 years, I have provided testimony before this Board and its predecessor regarding numerous railroad issues. Of particular relevance to this statement, I have studied unit coal train cost and productivity issues, and have assisted many coal users in the economic analysis of rail transportation options for existing and new facilities.

I received my bachelor's degree from the Massachusetts Institute of Technology in 1977. In 1978, I received two master's degrees from MIT, one in Civil Engineering (Transportation Systems) and one from the Alfred P. Sloan School of Management, with concentrations in economics, operations research, transportation systems analysis and public sector management. Prior to February 1984, I was a Senior Research Associate at Charles River Associates, an economic consulting firm in Boston, Massachusetts. My qualifications and experience are described further in Exhibit A of the written testimony I submitted May 1, 2006 on behalf of Arkansas Electric Cooperative Corporation (AECC) in STB Ex Parte No. 657 (Sub-No. 1), Major Issues in Rail Rate Cases.

## **2. Scope of Statement**

I have been asked by AECC to respond to comments made by Union Pacific Railroad Company (UP) regarding a study I recently performed for AECC.<sup>1</sup> This Study addressed rail fuel use and surcharge practices as they relate, or would prospectively relate, to shipments of Powder River Basin (PRB) coal moving to two plants in which AECC has an ownership interest.<sup>2</sup> The Study used public information to investigate the degree to which fuel surcharges administered under the published surcharge programs of UP and BNSF Railway Company (BNSF) may exceed the actual fuel cost changes experienced by the railroads (i.e., “over-recovery”). It was submitted to the Board by AECC in response to an invitation from Chairman Buttrey made during the public hearing on fuel surcharge issues.

It is noted that UP’s comments explicitly address only issues related to over-recovery by UP,<sup>3</sup> and do not purport to address over-recovery under the BNSF surcharge program. To date, the analysis of the BNSF program contained in the Study has not been contested. This statement therefore focuses on the issues raised by UP regarding over-recovery under its program.

## **3. Response to UP Comments**

UP’s comments are styled as criticisms of the Study, and purport to show that “...there is no over-recovery of fuel expense due to fuel surcharge mechanisms.”<sup>4</sup> However, closer examination reveals that UP’s comments do not support that conclusion.

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<sup>1</sup> The study is Rail Fuel Use and Surcharges for White Bluff and Independence Plants, May 15, 2006 (hereafter, “Study”). UP’s comments are contained in Union Pacific Reply to Arkansas Electric Cooperative Corporation, June 5, 2006 (hereafter, “UP Comments”).

<sup>2</sup> The White Bluff plant at Redfield, AR and the Independence plant at Newark, AR.

<sup>3</sup> UP Comments at 3, footnote 2.

<sup>4</sup> UP Comments at 2.

While some of UP's comments are misleading or irrelevant, most in fact corroborate the Study and its findings. Individual elements of UP's comments are addressed below.

a. Incidence of Surcharges on AECC

UP's first criticism is that "AECC bears no fuel surcharge on UP moves of PRB coal."<sup>5</sup> To back this up, UP cites {-----  
-----**REDACTED**-----  
-----}.

This criticism is devoid of significance, as neither AECC nor the Study claimed that {-----**REDACTED**-----}. UP alleges that AECC's representative at the May 11 public hearing (Steve Sharp) claimed that the over-recovery discussed in the Study is {---**REDACTED**---}. However, the video record clearly shows that Mr. Sharp's references to over-recovery relate to the situation that would exist when rates are subject to the railroads' fuel surcharge practices. Indeed, while highlighting the difficulties associated with predicting future conditions, UP effectively concedes that the Study may relate to such conditions.<sup>6</sup> The full text of the portion of the Study excerpted by UP removes any ambiguity regarding the applicability of the Study results:

"It is important to note that this analysis does not disclose, discuss or depend upon any confidential information regarding any actual coal transportation contract or surcharge payments. Rather, it relies on publicly available information regarding the railroads' surcharge practices and the circumstances of the subject movements. In some instances, the analysis may reflect the current actual situation. In other circumstances, the analysis may reflect the situation that is expected to exist upon the expiration of existing contracts."<sup>7</sup>

UP's comments in this area are simply misplaced.

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<sup>5</sup> UP Comments at 3.  
<sup>6</sup> UP Comments at 4.  
<sup>7</sup> Study at 1.

b. Applicability of Study to Future Circumstances

In attempting to criticize the Study as a basis for assessing future circumstances, UP lists five specific reasons for the Board to “be wary”<sup>8</sup>. The specific reasons cited by UP and relevant responsive considerations are presented in Table 1. As shown in Table 1, UP’s comments highlight both the need for the forward-looking view taken in the Study, and the conservative nature of the estimates presented therein.

c. Alleged Errors

UP argues that the results of the Study should be viewed as unreliable due to four “serious errors”<sup>9</sup>. Details regarding these alleged errors, along with relevant responsive considerations, are presented in Table 2. For example, Table 2 shows how a UP criticism regarding the accuracy of fuel price information used in the Study in fact rests on a misreading by UP of data contained in its own website, and how use of correct data invalidates UP’s criticism. Overall, Table 2 shows how UP’s allegations corroborate the reasonableness and possible conservative nature of the Study findings.

d. Fuel Use Estimates

UP attempts to discredit the fuel use estimates developed and applied in the Study.<sup>10</sup> However, UP’s attempt to invoke “elementary physics” undermines its argument, and reinforces the validity of the analysis presented in the Study.

UP is certainly correct in citing the proposition that energy = mass x distance. What UP apparently doesn’t grasp is that in the case of gravitational potential energy, the distance involved is the vertical distance (i.e., elevation change).<sup>11</sup>

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<sup>8</sup> UP Comments at 4.

<sup>9</sup> UP Comments at 4-5.

<sup>10</sup> UP Comments at 5.

<sup>11</sup> See, for example, <http://hyperphysics.phy-astr.gsu.edu/hbase/gpot.html>.

For a railroad, the overriding importance of gravitational potential energy and vertical distance is manifest in ruling grades against loads. UP's own comments highlight the difficulty of moving a loaded PRB coal train up the 1% grade at Logan Hill. This corroborates the importance of elevation changes in fuel consumption, as described in the Study. It also lends support to the numerical portion of the fuel-use analysis presented in the Study, which finds that by far the highest fuel use (per train-mile) on the subject moves occurs on the segment north of Shawnee Junction.<sup>12</sup> No one disputes – and the Study fully accounts for – the significant fuel use associated with the movement of PRB unit coal trains over virtually all types of terrain.

One of the most noteworthy features of UP's comments on fuel use is the absence of any hard data. UP is in a better position than AECC or the Board to know – or reliably estimate - what its actual fuel use is on specific moves. The fact that it offers no data in reply can reasonably be interpreted as an indication that the fuel use estimates developed and applied in the Study are no lower than the estimates UP would make on its own. To the extent that the fuel use estimates developed in the Study are high compared to actual fuel use, the estimates of over-recovery developed in the Study are understated (i.e., since the quantity of fuel purchased by the railroad would be less than the amount assumed in the Study, and the surcharge the railroad collects is not determined by actual fuel use).

#### **4. Summary**

While UP's comments contain a lot of rhetoric, the data and other substantive points they raise corroborate the reasonableness – and possible conservative nature – of the Study and its findings. The Board may therefore rely on the Study as a credible assessment of actual and potential fuel surcharge impacts for the subject plants.

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<sup>12</sup> Study at 11.

Table 1

Issues Regarding Future Conditions

UP Comments	Responsive Considerations
No one can know whether...	
1. UP would still apply a fuel surcharge	- A desirable effect of the current STB proceeding would be to foster change in surcharge practices where warranted. It is encouraging that UP leaves open the possibility that it will change its fuel surcharge practices in the future. Information of the type developed in the Study can help to inform decisions regarding the need for such change.
2. How such a fuel surcharge would be structured	- Same as #1 (above).
3. What rates would apply to UP transportation to either plant	- The rates used in the Study are comparable to those {----- ----- <b>REDACTED</b> -----} and low relative to those being experienced by shippers under public pricing. With growing volumes and tightening capacity constraints, upward pressure on rates can reasonably be projected into the future. To the extent that actual rates in the future would be higher than those used in the Study, the over-recovery associated with UP's percentage-based surcharge would be higher as well.
4. Whether UP will still carry coal to White Bluff	- The fact that White Bluff enjoys a degree of rail competition does not negate the need to examine fuel surcharge practices. The Study examines such practices by both UP and BNSF in the context of movements to White Bluff, and finds that both entail a degree of over-recovery.
5. What fuel will cost UP	- The current proceeding examines and seeks to ensure the correspondence between surcharge amounts and actual fuel cost changes. The fact that future fuel costs may change is a reason to ensure the accuracy of surcharge methods, and not a reason to disregard studies that seek to do so.

Table 2

Alleged Study Errors

Alleged Error	Response
<p>1. Assuming the Independence rate is nearly 14 percent greater than the White Bluff rate</p>	<p>- The Study analyzes rates for each plant on the basis of their competitive circumstances. This is necessitated by the possibility – cited by UP (see Table 1) – that UP may not always serve both plants. The fact that {----- ----- -----<b>REDACTED</b>----- ----- -----} UP’s submission thereby corroborates the reasonableness of the rate estimates used for these two plants in the Study.</p>
<p>2. Incorporating an amortization allowance for a buildout to reach BNSF</p>	<p>- UP argues that BNSF serves the plant via trackage rights, and therefore has no need to construct a buildout. However, UP’s citation to SP Merger Decision No. 19 only encompasses BNSF’s ability to reach the connecting point for a buildout to the plant (i.e., Pine Bluff), and not the plant itself. In footnote 17 on the page cited by UP, the Board explicitly noted that “BNSF’s direct access to [the White Bluff plant] was part of a settlement of Entergy’s private lawsuit against UP for events occurring during the UP/SP service crisis in the aftermath of the merger.” The terms of that settlement, including fees and/or possible time limitations associated with the exercise of BNSF’s direct access rights, were not included in UP’s submission, and are not known to be publicly available. In the absence of such documentation, it is not reasonable to assume the perpetual, low-cost access postulated by UP. Rather, it is most reasonable to assume that usage fees for BNSF’s direct access and/or the eventual expiration of the negotiated rights will continue to provide UP with an element of pricing latitude for this plant.</p>
<p>3. Understating UP’s current cost of diesel fuel</p>	<p>- UP argues that the Study is inaccurate because it substantially understates UP’s current fuel cost. However, this criticism results from UP’s misreading of data from its own website, and not from the alleged inaccuracy of the Study. The figure of \$1.889/gallon was derived (on page 5 of the Study) by subtracting the historical differential between HDF and rail fuel cost (\$0.586/gallon) from the “April 2006” HDF value (\$2.475/gallon). As shown on UP’s website, the “April 2006” HDF value of \$2.475/gallon is derived from HDF data gathered in the “Basis Month” of February 2006. (See <a href="http://www.uprr.com/customers/surcharge/surcharge_coal.shtml">http://www.uprr.com/customers/surcharge/surcharge_coal.shtml</a>.) The Study methodology assumes that the corresponding rail fuel cost would be \$1.889/gallon (i.e., in February 2006). For the calendar month of April 2006, the HDF value was \$2.728/gallon. From this value, the Study methodology would impute a rail fuel cost of (\$2.728 – 0.586 =) \$2.142, which closely approximates the \$2.10/gallon figure cited by UP. UP may wish to criticize the time delay in its own surcharge mechanism, but its claims corroborate, rather than undermine, the reliability of the Study.</p>

Alleged Error	Response
4. Overstating the “normal” price of fuel where no surcharge would apply	- The Study methodology computes the “Fuel Cost Increase at the Current Price Level” on the basis of the <u>change</u> in fuel price, and not on an absolute level. The existence of a small differential between the estimated and actual rail fuel prices therefore does not affect the results, provided that such a differential is consistent between the “normal” and “current” observations. In this case, the information supplied by UP suggests that the differential at the normal price (\$0.013/gallon) may have increased somewhat as of April 2006 (to \$0.042 [= \$2.142-2.10], as described above). All else equal, this would cause the Study methodology to <u>understate</u> the amount of over-recovery (i.e., because the actual rail fuel price increase was less than the estimated increase). <sup>13</sup>

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<sup>13</sup> If the differential between the HDF index and actual rail fuel price varies systematically with the price level, the validity of the entire surcharge mechanism based on HDF would be called into question.